

**\*\* Per Governor's emergency [Proclamation 20-28.11](#) issued October 2, 2020, agencies are required to meet completely remotely without providing for a physical location.**

**\*\* Per Section 3 of Anacortes [Resolution 2082](#) Ratifying Proclamation of Emergency and Providing Temporary Procedures to Respond to the COVID-19 Epidemic, adopted by the Anacortes City Council on March 16, 2020, and [Resolution 3000](#), adopted September 21, 2020, extending the duration of Resolution 2082 through December 31, 2020, all in-person Committee meetings of the City Council are cancelled. Council and committee meetings may be held telephonically regardless of whether the City has the capability of video recording meetings.**

- Meetings may be viewed live or viewed after the fact on the [City of Anacortes website](#) or on [Channel 10](#).
- The public may watch, listen to, or participate in the meeting live by visiting <https://us02web.zoom.us/j/89255646791> or by telephoning 1-253-215-8782 and entering Meeting ID 892 5564 6791.
- The public is encouraged to comment via email to [cityclerk@cityofanacortes.org](mailto:cityclerk@cityofanacortes.org), via written comment addressed to City Clerk, P.O. Box 547, Anacortes, WA 98221, or via [eComment](#). Public comments received prior to 3:00 p.m. the day of the meeting will become part of the record for the meeting, just as if presented in person.
- Complete guidelines for public participation in virtual Anacortes City Council meetings are available [here](#). View the quick video example for connecting to the meeting [here](#).



**Anacortes City Council**  
**Municipal Building Council Chambers**  
**\*\* This meeting will be held electronically only \*\***

**October 12, 2020**

**6:00 p.m.**

**PRELIMINARY AGENDA**

**[Packet Materials](#) / [Watch Meeting](#)**

- 1. Call to Order**
- 2. Announcements and Committee Reports**
  - a. Planning Commission Appointment Confirmation (Action)
  - b. COVID-19 Update
  - c. Port/City Liaison Committee
  - d. Public Safety Committee
  - e. Fiber Committee
  - f. Housing Affordability & Community Services Committee
  - g. Planning Committee
- 3. Public Comment**
- 4. Consent Agenda (Action)**
  - a. Minutes of October 5, 2020
  - b. Approval of Claims in the amount of: \$1,527,388.84
  - c. Contract Award: Outside Bond Counsel Services #20-208-FIN-001
- 5. Public Hearings**
  - a. Closed Record Decision Hearing: LPS-2020-0001 - The Crossings Cottages Preliminary Plat & Site Plan (Action)
  - b. \* Public Hearing on Ordinance 3076: Extending Ordinance 3054, an Interim Ordinance Declaring an Emergency and Adopting a Moratorium on the Acceptance of Certain Land Use Applications in R4 Zone (Action)
- 6. Other Business**
  - a. Resolution 3005: Updating a Work Plan for Height Bonus in R4 Zone (Action)
  - b. Contract Award: Grandview Cemetery Expansion - Phase 1 #19-092-PRK-002 (Action)
  - c. Contract Award: 2020 Asphalt Overlay Project #20-192-TRN-001 (Action)
- 7. Adjournment**

***Per Resolution 2044, citizens wishing to comment on items not on the agenda may do so under the Public Comment portion of the agenda. Citizens wishing to comment on agenda items indicated with an asterisk (\*) may do so as those items are considered by Council during the course of the meeting.***

The City of Anacortes is committed to making public meetings available and accessible to all members of the community.  
For assistance with special needs, please contact the City Clerk at 360-299-1960 in advance of the meeting.





## Anacortes City Council

### Proposed Agenda Items for the Next Eight Weeks Beginning October 19, 2020

*Subjects listed below have been tentatively suggested for consideration by the Anacortes City Council on the dates indicated. Items may be added to, removed from or rearranged on this list. Routine business such as approval of minutes and vouchers are not included. The complete Preliminary Agenda for each meeting is published at 3:00 on the Wednesday prior to the meeting. Published Agendas are subject to change and may be updated following the posting period. For additional information on agenda topics, please contact the City Clerk's office at 360-299-1960 to be directed to the sponsoring staff member.*

#### **October 19, 2020**

- Contract Modification: Municipal Broadband Network - Library To MSTs Aerial Areas #19-175-FBR-003 (Consent)
- Public Hearing on Budgeted Revenue Sources, including 1% Property Tax Increase (Discussion)
- Review of 2021 Budget (Discussion)
- Access Anacortes Fiber Internet Update (Discussion)

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#### **October 26, 2020**

- Thompson Train Purchase Proposals (Discussion / Possible Action)
- Review of 2021 Budget (Discussion)

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#### **November 2, 2020**

- Public Hearing: 2021 Budget (Discussion)

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#### **November 9, 2020**

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#### **November 16, 2020**

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#### **November 23, 2020**

- Resolution: Making a Declaration of Substantial Need for Setting the Property Tax Levy for 2021 (Action)
- Resolution \_\_\_\_: Setting the City's Year 2021 Property Tax Regular Levy Increase (Action)
- Ordinance \_\_\_\_: Adopting the 2021 Budget (Discussion/Possible Action)

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#### **December 7, 2020**

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#### **December 14, 2020**

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#### **Upcoming City Council Committee Meetings**

*The public is welcome to attend City Council Committee Meetings.*

- Housing Affordability & Community Services, Monday, Oct 12, 2020, 4:00 PM, Teleconference
- Planning, Monday, Oct 12, 2020, 5:00 PM, Teleconference
- Finance, Wednesday, Oct 14, 2020, 5:00 PM, Teleconference
- Public Works, Monday, Oct 19, 2020, 5:00 PM, Teleconference
- Fiber, Thursday, Oct 22, 2020, 2:30 PM, Teleconference
- Planning, Monday, Oct 26, 2020, 5:00 PM, Teleconference
- Finance, Wednesday, Oct 28, 2020, 5:00 PM, Teleconference
- Public Works, Monday, Nov 2, 2020, 5:00 PM, Teleconference

\*\*\*\*\*



**Laurie Gere, Mayor**

**CITY OF ANACORTES**

904 6<sup>th</sup> Street Anacortes, WA 98221

Office: 360-299-1950

[laurieg@cityofanacortes.org](mailto:laurieg@cityofanacortes.org)

[www.anacorteswa.gov](http://www.anacorteswa.gov)

# City Council Memo

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TO: Anacortes City Council  
FROM: Laurie Gere, Mayor  
DATE: October 5, 2020  
RE: Appointment Planning Commission and Confirmations

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## Summary Statement:

The following appointment to the Planning Commission is being presented at the regular City Council meeting on October 12, 2020. I appreciate the contribution of this volunteer and their willingness to serve our community. If you have any questions or feedback you wish to provide, please contact me prior to the meeting. The appointee's application material is attached for your reference.

## Appointed by the Mayor Requiring Confirmation by City Council

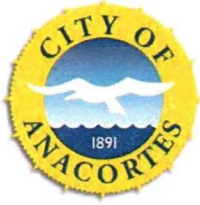
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### Appointments

Planning Commission

- Linda Martin (Appointment Term: September 24, 2020 – December 31, 2024)

**Recommended Motion:** I move that Linda Martin be appointed to the Planning Commission.



**Laurie Gere, Mayor**

**CITY OF ANACORTES**

904 6<sup>th</sup> Street Anacortes, WA 98221

Office: 360-299-1950

[laurieg@cityofanacortes.org](mailto:laurieg@cityofanacortes.org)

[www.anacorteswa.gov](http://www.anacorteswa.gov)

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September 23, 2020

Linda Martin  
3818 W 12th St.  
Anacortes, WA 98221

Dear Ms. Martin:

I am pleased to appoint you to the Anacortes Planning Commission for a term effective September 24, 2020 until December 31, 2024. This appointment requires approval by the City Council. I will publicly announce your appointment at the City Council meeting on October 12, 2020. You are welcome to attend virtually. Please see the City of Anacortes website on how to virtually attend City Council meetings.

The Planning Commission meets the second and fourth Wednesdays each month at 6pm in the Council Chambers. If you have any questions, please contact Don Measamer, Director of Planning and Community Development at 360-299-1942.

The Open Government Trainings Act requires training for some local government officials in the fundamentals of the Open Public Meetings Act, the Public Records Act, and records retention requirements. The training is available online at <http://www.atg.wa.gov/open-government-training>. As a City of Anacortes Board member, you must complete this training within ninety days of your date of appointment.

Thank you for your willingness to serve the people of the City of Anacortes. The continued success of our city depends on dedicated citizens like you who are willing to volunteer their time and expertise.

My Best,

Laurie Gere, Mayor  
City of Anacortes

*Congratulations! + welcome.*

**From:** [noreply@civicplus.com](mailto:noreply@civicplus.com)  
**To:** [coa.mayor](mailto:coa.mayor)  
**Subject:** Online Form Submittal: Talent Bank Application for Public Involvement  
**Date:** Monday, July 27, 2020 6:04:30 PM

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## Talent Bank Application for Public Involvement

The City of Anacortes strives to build a productive working relationship between community members and city departments. Community members who serve on boards and commissions help to enhance diversity and ensure quality services to meet the needs of our city. We invite you to learn more about the community members who comprise these groups as they represent the voice of the community. If you would like to become an active part of any of the boards and commissions that the City of Anacortes offers please complete the talent bank application form or contact us with any questions you might have. If you're not selected right away, remember that many people apply and that there are not always openings available. The city keeps all letters of application on file for two years and reviews them whenever there is an opening. Most appointments are made by the Mayor and confirmed by the City Council. Thank you for your interest.

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|--------------------------------------------------------------|---------------------|
| What position(s) are you interested in being considered for? | Planning Commission |
|--------------------------------------------------------------|---------------------|

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| First Name | Field not completed. |
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| Last Name | Field not completed. |
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| State | Field not completed. |
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| Biography / Resume attached? | No |
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| Uploaded Biography / Resume | Field not completed. |
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| Skills / Training |  |
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|                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Please describe your reasons for wanting to volunteer with the City of Anacortes                                                                                                  | I am interested in serving the community where I live. It is important to me that we maintain the excellent quality of living that we enjoy in Anacortes. I have recently retired, and have time to give to this worthy endeavor.                                                                                                                                                                                                                                                                                                    |
| Please summarize your job-related skills, specialized training, or volunteer experience                                                                                           | I served for two years on the planning commission in Monroe, WA when we lived there (2007-2009). I do not have other significant property related experience, but I am a good listener, I have common sense, and I am willing to learn.                                                                                                                                                                                                                                                                                              |
| List professional, trade, business, or civic associations and any offices held                                                                                                    | I spent 7 years as the superintendent and principal of the Thorp School District. Prior to that I was superintendent on Lopez Island, and prior to that I was an elementary school principal in the Monroe School District. I was elected as president of the WASA Region 105 superintendents group, was awarded by my peers the recognition of Washington small school superintendent of the year, served on several boards and advisory councils, and have volunteered as a teacher and children's ministry director at my church. |
| List any additional information you would like us to consider                                                                                                                     | I currently serve as the treasurer of the Rock Ridge community association. I am a proud member of the Fidalgo Pool and Fitness Center, and I am a believer in supporting the local community. My husband and I have determined that Anacortes is our forever home, and so we have a vested interest in contributing to the community in a positive way. I believe that I will be an asset to the Planning Commission. I will do my homework, speak my opinion, and be a team player in every way.                                   |
| <b>References</b><br><i>Give the name and telephone number of two references who are knowledgeable about your qualifications and skills relative to volunteering at the City.</i> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| First Name                                                                                                                                                                        | Lisa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Last Name                                                                                                                                                                         | Pendley                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Organization                                                                                                                                                                      | Thorp School District (retired)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Title                                                                                                                                                                             | Administrative Assistant                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Work Phone Number                                                                                                                                                                 | <i>Field not completed.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Other Phone Number                                                                                                                                                                | 509-929-2243                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| First Name                                                                                                                                                                        | Diane                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Last Name                                                                                                                                                                         | Bobko                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                                                                                                                                                                   | Family Life Assembly                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

## Organization

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|       |                  |
|-------|------------------|
| Title | Associate Pastor |
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|                   |              |
|-------------------|--------------|
| Work Phone Number | 360-293-2219 |
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|                    |              |
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| Other Phone Number | 360-391-2393 |
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### Acknowledgements

*My signature affirms that all information contained herein is true to the best of my knowledge, and I understand that any misstatement of fact or misrepresentation of credentials may result in this application being disqualified from further consideration.*

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|             |              |
|-------------|--------------|
| E-Signature | Linda Martin |
|-------------|--------------|

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| Date | 7/27/2020 |
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Email not displaying correctly? [View it in your browser.](#)



# Instructions for Virtual Attendance at Anacortes City Council Meetings

## How the Meeting Will Work

City Council meetings will be held via Zoom Webinar. The City Council Liaison is the **host** of the meeting, the Anacortes Mayor and City Councilmembers are **panelists**, Anacortes residents and other members of the public – as well as City staff – are **attendees**.

Webinar **attendees** do not interact with one another; they join in listen-only mode, and the host will unmute one or more attendees as needed.

## How to View the Meeting

To view the live meeting without participating:

- Visit [Watch Meetings](https://www.anacorteswa.gov/700/Watch-Meetings) on the City of Anacortes website (<https://www.anacorteswa.gov/700/Watch-Meetings>)

To view the recorded meeting after it concludes:

- Visit [Watch Meetings](https://www.anacorteswa.gov/700/Watch-Meetings) on the City of Anacortes website (<https://www.anacorteswa.gov/700/Watch-Meetings>) or
- Watch the meeting Tuesdays and Sundays on [Channel 10](#)

## How to Participate in the Meeting

- Click [this link](#) or copy/paste this URL into your browser: <https://us02web.zoom.us/j/89255646791> or
- Dial in to the meeting by phone: Dial in the US: +1 253-215-8782, enter the Meeting ID 892 5564 6791

*If you are new to Zoom, view video instructions for connecting from your computer, phone or tablet [here](#)!*

## How to Provide Public Comment

Comments received before 3:00 p.m. on the day of a City Council meeting will be distributed to the mayor and all councilmembers in advance of the meeting. You may use any of the methods below.

- **Email:** Email the City Clerk at [cityclerk@cityofanacortes.org](mailto:cityclerk@cityofanacortes.org). Include the subject line *Public Comment for the City Council Meeting on [date]*.
- **Mail:** Mail comments to City Clerk, PO Box 547, Anacortes, WA 98221
- **eComment:** Visit [Watch Meetings](#) on the City of Anacortes website and click the eComment link beside the agenda for the meeting you wish to comment on.
- **Live Public Comment:** If you are unable to provide a written comment in advance of the meeting, you may join the webinar as an attendee to comment during the public comment portion of the agenda or during consideration of specific agenda items marked for public comment. See **How to Participate in the Meeting** above.

## Public Participation Guidelines

Below are recommendations for use by members of the public in meetings conducted via Zoom Webinar.

- **Identification:** Upon entering the webinar, please enter your name, number or other chosen identifier, so that the host can call upon you during the public comment period.



- **Raise Hand (pictured above):** You have the ability to virtually raise your hand for the duration of the meeting but you will not be acknowledged until you are called on during the public comment period.

NOTE: If you have used your telephone to access the Zoom meeting, **you may press \*9** to “raise your hand”. The host will unmute you when it’s your turn to speak.

- **Public Comment Period:** Use “Raise Hand” to be called upon by the host. The host will announce your name when it’s your turn.
- **Mute/Unmute:** Attendees will be muted and not audible to the Council except during times they are designated to speak. When you are announced, you will be able to unmute yourself.
- **Time limit:** Those testifying or providing audience comment will be limited to three (3) minutes per speaker unless an exception is granted by the Council.
- **Use headphones/mic** for better sound quality and less background noise, if possible.

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Members of the public who require special assistance to participate in or access the meetings may contact the [City Clerk](#) 24 hours before the meeting to make special arrangements. Dial 360-299-1960.

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Revised August 12, 2020

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## INSTRUCTIONS FOR VIRTUAL ATTENDANCE AT ANACORTES PLANNING COMMISSION MEETINGS

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### How the Meeting Will Work

Planning Commission meetings will be held via Zoom Webinar. The Planning Commission Liaison is the **host** of the meeting, the Anacortes Planning Commissioners are **panelists**, Anacortes residents and other members of the public – as well as City staff – are **attendees**.

Webinar **attendees** do not interact with one another; they join in listen-only mode, and the host will unmute one or more attendees as needed.

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- Watch the meeting Mondays and Wednesdays on [Channel 10](#)

### How to Participate in the Meeting

- Click [this link](https://us02web.zoom.us/j/85918981678) or copy/paste this URL into your browser: <https://us02web.zoom.us/j/85918981678> or
- Dial in to the meeting by phone: Dial in the US: + 1 253 215 8782, enter the Meeting ID 859 1898 1678

### How to Provide Public Comment

Comments received before 3:00 p.m. on the day of a Planning Commission meeting will be distributed to all Commissioners in advance of the meeting. You may use any of the methods below.

- **Email:** Email the Planning Department at [pced@cityofanacortes.org](mailto:pced@cityofanacortes.org) before 3:00 p.m. on the day of a Planning Commission meeting. Include the subject line *Public Comment for the Planning Commission Meeting on [date]*.
- **Mail:** Mail comments to Planning Department, PO Box 547, Anacortes, WA 98221
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- **Mute/Unmute:** Attendees will be muted and not audible to the Commission except during times they are designated to speak. When you are announced, you will be able to unmute yourself.
- **Time limit:** Those testifying or providing audience comment will be limited to three (3) minutes per speaker unless an exception is granted by the Commission Chair.
- **Use headphones/mic** for better sound quality and less background noise, if possible.

## **Anacortes City Council Minutes – October 5, 2020**

Mayor Laurie Gere called to order the Anacortes City Council meeting of October 5, 2020 at 6:00 p.m. Councilmembers Jeremy Carter, Anthony Young, Ryan Walters, Carolyn Moulton, Christine Cleland-McGrath, Bruce McDougall and Matt Miller all participated in the meeting in absentia via video conference.

### **Announcements and Committee Reports**

Mayor's Budget Message: Mayor Gere read her budget message for the 2021 budget. [The message is included in its entirety at the end of the minutes for this meeting.] Finance Director Steve Hoglund then summarized the highlights of the proposed budget and the schedule for consideration and adoption of the budget. Mr. Hoglund's slide presentation was added to the packet materials for the meeting.

COVID-19 Update: Mayor Gere shared current case statistics for Anacortes, Skagit County, Washington State, and the nation. The mayor compared Skagit County case counts to the metrics required to move to Phase 3 of the Safe Start Washington Plan.

Public Works Committee: Mr. Walters and Mr. Young reported from the committee meeting earlier in the evening. They summarized the discussion of the strategy for procurement for the outfall project, the transfer of the South Fidalgo water system from Skagit PUD to City of Anacortes, and the waterline replacement schedule.

### **Public Comment**

No members of the public wished to address the Council on any topic not on the agenda.

### **Consent Agenda**

Mr. Miller moved, seconded by Mr. Young, to approve the following Consent Agenda items. The motion carried unanimously by voice vote.

- a. Minutes of September 28, 2020
- b. Approval of Claims in the amount of: \$2,427,684.26

The following vouchers/checks were approved for payment:  
EFT numbers: 98281 through 98311, total \$108,972.51  
Check numbers: 98312 through 98324, total \$2,316,711.40  
Wire transfer numbers: 274244 through 274403, total \$2,000.35

### **Closed Record Decision Hearing: CUP-2020-0001 - 1015 18th St. Parking Lot CUP**

Senior Planner Libby Grage presented an application from Madrona Real Estate Investors X LLC for a conditional use permit for the construction of a private parking lot at 1015 18<sup>th</sup> Street, a parcel located partially within the R4 zone where a CUP is required according to AMC Table 19.41.040. Ms. Grage's slides were added to the packet materials for the meeting.

Ms. Grage summarized the project history and the packet enclosures. She explained the site plan, access routes, and the landscaping plan. She summarized the few public comments received on the application, which concerned stormwater impacts, traffic congestion, and documentation of the need for parking. Ms. Grage said that all procedural requirements for a CUP had been met. She summarized the Planning Commission's recommendation of approval with six conditions.

Mayor Gere invited parties of record to address the Council. No such parties wished to speak.

Ms. Grage and Senior Engineering Technician Steve Lange responded to councilmember questions about the stormwater treatment plan, about the reason(s) for the split vote on the Planning Commission recommendation, and about potential future expansion of the parking lot under a separate CUP.

Mr. Walters moved, seconded by Mr. Miller, to approve Conditional Use Permit CUP-2020-0001 subject to the conditions recommended by the Planning Commission. Vote: Ayes – Young, Walters, Cleland-McGrath, Moulton, McDougall, Miller and Carter. Motion carried.

There being no further business, at approximately 7:10 p.m. the Anacortes City Council meeting of October 5, 2020 was adjourned.

## Mayor's Budget Message

October 5, 2020

Honorable City Council and Members of our Community:

I am pleased to present to you the City's 2021 proposed annual budget. This budget continues our commitment to balance fiscal responsibility while meeting City Council and community priorities of public safety, essential services, and infrastructure that allows for growth. Our world is evolving and changing, and it is our responsibility as your City leadership to make the strategic decisions that will support sustainability, technological progress, and preserve the quality of life that is the hallmark of Anacortes.

The City's financial roadmap for 2021 has been created in a time mired by economic uncertainty brought on by the Coronavirus. I acknowledge this uncertainty and reinforce our commitment to creating a budget that reflects our commitment to moving our community forward by maintaining and building essential infrastructure and providing efficient, quality services while being conscientious of our financial position and in compliance with RCW 35A.33.

Perhaps the most significant change in the 2021 budget is the transition from a biennial budget to an annual budget. We are leveraging the best available information and revenue projections to establish this annual budget. An annual budget will allow us to concentrate on the short-term economic indicators and be nimble in our response to the uncertainty of the current economic condition.

Expenditure budgets must be balanced against revenue projections, and those projections for budget year 2021 are tempered against the effects of Coronavirus in 2020. Sales tax is one of the largest tax revenue streams funding City functions. The City has seen an average monthly decrease in sales tax revenue of 11 percent, and in the recent 2 months we have seen a decreasing impact on sales tax revenues. To develop the sales tax projections, we make assumptions based on available data. Our information indicates that we will continue to improve throughout the remainder of the year, this means we project to see sales tax revenue bounce back to be 3 percent higher than the prior year by 4<sup>th</sup> quarter.

The other two major tax revenue streams, property tax and utility tax, remain consistent compared to prior years. Some other revenues streams that are dependent on user access, such as recreation and library fees, were kept at moderate levels compared to prior years. As the economy reopens, we expect those revenue streams to return to normal levels. In preparation for the 2021 budget we shifted property tax revenue to the General Fund, so the funds can be administrated to ensure adequate resources are available to support essential services.

Early in my administration we adopted a fiscal policy that put on the books a rainy-day fund cash reserve in the General Fund. That reserve fund increases or decreases as the City Budget grows or shrinks. For Fiscal Year 2020, that reserve stands at over \$5.4 million dollars and is available to support general operations. Other operating funds have their own reserves as well; each of the Utility Funds have rainy-day reserves that represent 10 percent of that Fund's annual expenditures and exceeds \$2.2 million dollars for 2020. Additionally, the Equipment Rental Fund has over \$7.6 million dollars set aside for future equipment replacement.

The financial impact of the Coronavirus and the City's commitment to investing in our technological infrastructure guided the framework of this year's budget. Funding priorities have been reassessed and we made tough decisions. My perennial focus is to provide services to every Anacortes resident and build the infrastructure that is our foundation for a vibrant future for generations to come. It is the duty of your City leadership to envision the needs of the City long term, making decisions that will benefit our community's future. I look forward to working with you all on the 2021 budget and I affirm my resolve to employ sound business practices that are efficient, effective, and responsive to the delivery of all City services.

### Budget Landscape

This coming year many departments budgets will remain static. Due to the economic landscape and projected decreases in revenue there are accompanying changes to departmental budgets. Several departments are utilizing what we have called a "hold the line" budget in which they remain staffed at their current level, continue to provide efficient high quality services, and move already established projects forward – beyond that, budgets remain static from the previous year.

## Public Safety

### Anacortes Police and Fire Department

Our Police and Fire Departments have been on the front lines of the Coronavirus pandemic. The focus of these departments has been to prevent and respond to crimes and emergency situations professionally and with integrity. They have cultivated partnerships with other agencies and strengthened our community's readiness and reliance. The City supports our public safety departments and remains committed to providing staff with the tools and resources needed to keep our community safe.

In the 2021 budget we have budgeted to fully staff our Police Department and focus on investing in de-escalation and bias training for all our commissioned police officers. To facilitate physical distancing and provide a safe contactless way to process fingerprints the City, a new machine will be in place when the Public Safety building reopens to the public. This will process the nearly 100 applications for fingerprinting that are currently backlogged.

The Anacortes Fire Department experienced budget cuts in 2020 to account for the projected revenue losses associated with the Coronavirus. The budgetary priority for 2021 will be to focus on reinstituting training and education forgone in 2020.

## Infrastructure

### Access Anacortes Fiber

The 2021 budget reflects a significant investment in Access, Anacortes Fiber Internet. In 2021, the City will continue to expand broadband access by extending fiber to the premise to an additional 1,815 residents and businesses. Reliable, affordable, and municipally managed high-speed internet service is a necessary and important investment in our community.

The growth of Access, Anacortes Fiber Internet improves quality of life in our community. Widely available broadband access supports job searches, online learning, telemedicine, and remote employment. Building a broadband network for our community is like building the electric networks in the 1920s. It provides a building block for a creative and innovative economy while establishing the platform for business development and expansion.

Our daily lives are now driven by technology from our work, to how we meet and talk with medical providers, to how we obtain education for our children and ourselves, and the way in which we safely stay connected with our friends and families. The greatest asset to the City of Anacortes is each of you who build our community. Building a fiber infrastructure in our community will position Anacortes as we move toward an increasingly digital future.

Anacortes is bridging the digital divide, and the 2021 budget reflects this investment in Access Anacortes Fiber as we work actively working toward our service goals. By the end of 2021, we project revenues will offset our operational expenses. Staff is actively pursuing grant opportunities to offset costs associated with the network expansion as we continue to support local businesses and residents.

### Public Works

Public Works is the City's largest department and is responsible for managing the construction and maintenance of streets, water, sewer, and stormwater lines; the production and distribution of water to the region; purchasing and maintaining the City's vehicle fleet; maintenance, repair and construction of City-owned buildings; and resource conservation.

The 2021 budget focuses on many capital improvements and maintenance of infrastructure. The Raw Water Pipeline Project which drills a 2000 ft bore drill under the Skagit river has begun and will be a major focus in 2021. In addition, the completion of the Clearwell project will provide redundancy to our Water Treatment Plan, furthering the resiliency and security of our regional water system. These combined projects are budgeted at \$12 million dollars paid for with a Utility Revenue Bond.

Another priority for 2021 is the Waste Water Treatment Plan Outfall, which strives to eliminate or reduce Surface Sewer Overflow and Combined Sewer Overflows. This project is budgeted at \$20 million dollars. The City is currently working with FEMA to apply for and obtain grant funding to assist with funding a portion of this project. The balance will be paid with a Utility Revenue Bond.

My ongoing priority is to take care of our streets and in 2021 our pavement restoration program and roadway improvements continues. Projects will alleviate safety concerns at 12th and Commercial and 32<sup>nd</sup> and M Avenue. Estimates for the 12<sup>th</sup> and Commercial project currently are \$3.3 million dollars, and 32<sup>nd</sup> and M project are at \$1.3 million dollars. Both projects will be paid for with a combination of grants and local dollars.



The “A” Avenue Landfill cleanup project will be funded by Public Works’ Solid Waste Fund. The City is following the guidelines laid out by the Department of Ecology under the Model Toxics Control Act.

## Essential Services

### Planning, Community, and Economic Development

The Planning, Community, and Economic Development department will maintain focus on ongoing projects in 2021. They will complete the update of the Critical Areas Regulations, and the Shoreline Master Program. Another primary focus will be to work with the community to address concerns relating to the R4 Zone Height Bonus and updating Development Regulations as needed.

This department has been the keystone of success for telework at the City. Throughout this year the department has been reviewing and issuing Single-Family Residential and Single-Family Residential Alterations permits, surpassing the number of permits issued in 2019. To facilitate the anticipated continued high levels of permit applications and increasing workload the budget reflects a commitment to funding equipment that will facilitate telework for employees.

In February of 2020, City voters approved a 1/10<sup>th</sup> of 1% sales tax increase the proceeds of which would go towards affordable housing, as outlined in RCW 82.14.530. Current estimates put that revenue at \$536,000 for 2021. The projects will fund construction of housing by the Anacortes Housing Authority, and the Anacortes Family Center. The issue of affordable housing is one that our community is taking on together and it is important for the future of our community.

### Public Defense and Municipal Court

The City employs a full-time public defender and legal assistant to meet the state-mandated standards for delivery of public defense services. This budget maintains the commitment enabling this team to continue to serve this community to the highest standards. Our Municipal Court will continue to serve the community and through the newly created Community Court our criminal justice system will continue to explore innovative alternatives to incarceration for those who need resources in our community. Skagit County applied for a grant to offset the costs associated with Community Court and in the 2021 budget the City of Anacortes has committed to a financial contribution of \$7,202.18.

## City Business

### City Attorney’s Office

The City Attorney’s Office provides in-house counsel to City leaders and staff. The Legal Department works to ensure the City meets the highest legal standards. A primary focus of this department in 2021 is to make the Laserfiche Forms process interactive with the public to provide transparency and accessibility to the public. Additionally, the City Attorney’s Office will evaluate and build on City processes for responding to public records requests to promote transparency and ensure compliance with information requests. As the work in the City Attorney’s Office continues to grow, the department will evaluate and assess opportunities in future budgets to bring on an Assistant City Attorney.

## Human Resources

Our Human Resources Department is committed to developing and maintaining a professional, highly qualified, and service-oriented workforce. That commitment translates to reaffirming the City's committed to a culture of inclusion and diversity by providing staff with opportunities to engage in training about understanding bias and building inclusivity in our organization.

The City is currently in the process of hiring for a Human Resources and Labor Relations Director. This new Department Head will oversee labor relations with our four collective bargaining units. These contract negotiations will begin shortly to address 2021 wages and then will transition to other items specified as part of the 2020 bargaining agreement. In 2021, contract negotiations will commence with the IAFF 1537 and the Fraternal Order of Police, our commissioned officers, and the Fraternal Order of Police, our non-commissioned officers.

## Information Technology

The Information Technology department supports the City's computing and networking requirements. Throughout this year, they have played a pivotal role in keeping the City's business moving forward as many staff transitioned to working remotely. Their adaptability, professionalism, and resilience are not often seen by the public. The behind the scenes work of this department is crucial to the success of the City of Anacortes. The 2021 budget includes funding for continuing services that provide Managed Detection and Response to network intrusions on a 24/7 basis – keeping our data and information protected. They will be updating our systems to transition to a hyperconvergence environment and the 2021 budget for IT also includes a reorganization of the department and the hiring of a Systems Administrator. The department is funded through interfund charges from the departments that use its services based on the number of electronic devices the department has. The interfund charges pay for the department's operating costs as well as the replacement charges for future computers.

# Enrichment

## Parks and Recreation

Our Parks and Recreation staff have been innovative and adaptable in the face of the many Coronavirus restrictions, which inhibited in person services and programs. Outdoor recreation has become a crucial part of assuring residents have access to safe socially distant opportunities for physical activity and that translates into the budget through a continued commitment to trail maintenance and expansion.

The 2021 budget for this department reflects a commitment to completing the Depot Plaza Restroom and as well as the continued improvements to the Washington Park Campground including replacing aging electrical infrastructure. The budget also facilitates the initial clearing and construction of the Grandview Cemetery Expansion. The City is also working with the Samish Nation and Department of Natural Resources on ways to improve the health of Fidalgo Bay for salmon habitat.

## Library

The Library is preparing for the eventual reopening of City facilities and getting back to serving the community in person in 2021 (or sooner). Staff time will be focused on a safe reopening, continued partnerships to support students, exploring opportunities to expand digital resources, and strengthening



partnerships with the Friends of the Library and the Library Foundation whose support has been crucial during these uncertain economic times.

### Museum

The Anacortes Museum continues to focus on the high level of customer service and expansion of engagement on their increasingly in-demand digital platform. The recent reopening of the Carnegie Gallery has been a success that the City hopes to replicate in other City facilities as our community begins to reopen.

## Conclusion

It is my fiscal responsibility to continuously evaluate City revenue and expenditures with a view of maintaining a strong financial position while providing quality municipal services. Now, more than ever we face challenges in our community. This budget has been created in the shadow of a devastating Public Health crisis. I could not be prouder of the City's response to this crisis. This budget reflects our unwavering commitment to serving each and every resident to the highest standard and protecting the strong fiscal position of the City. We commit to providing our front-line public safety professionals with the resources and tools they need, continuously maintaining and improving our public infrastructure and facilities, and most of all – assuring that every resident enjoys the quality of life that is the hallmark of our community.

**The following claims against the City of Anacortes have been preaudited and certified by the Clerk-Treasurer as ready for City Council approval at the October 12, 2020 City Council meeting:**  
[Download this file in OpenDocument spreadsheet format.](#)

| Invoice Doc # | Transaction Date | Invoice #    | Vendor Full Name                | Description                                   | Total Amount | Approval Queue |
|---------------|------------------|--------------|---------------------------------|-----------------------------------------------|--------------|----------------|
| 274519        | 5/28/2020        | 7120167-00   | WESTERN EQUIPMENT, C/O TURFSTAR | V BELT #706                                   | \$ 72.73     | dshop          |
| 273327        | 6/29/2020        | 3-271-63994  | FEDEX                           | DELIVERY FEES                                 | \$ 148.79    | fibercc        |
| 273328        | 7/4/2020         | 3-283-01988  | FEDEX                           | DELIVERY FEES                                 | \$ 1,159.53  | fibercc        |
| 274675        | 7/10/2020        | 16223        | SALVATION ARMY                  | CDBG SALVATION ARMY WALK IN REFRIGERATION     | \$ 59,971.79 | plan           |
| 272111        | 7/28/2020        | 20-23616     | EDGE ANALYTICAL, INC            | LAB TESTING - DEWATERED SLUDGE METALS MERCURY | \$ 32.30     | dwwtp          |
| 273022        | 8/1/2020         | 1361146      | SURETY PEST CONTROL             | PEST CONTROL- OPS FACILITY                    | \$ 65.28     | dshop          |
| 273013        | 8/5/2020         | 1361840      | SURETY PEST CONTROL             | CEMETERY RODENT CONTROL                       | \$ 50.05     | pwfac          |
| 273014        | 8/8/2020         | 1358892      | SURETY PEST CONTROL             | RODENT CONTROL FOR CITY HALL                  | \$ 43.52     | pwfac          |
| 272829        | 8/10/2020        | 1991864415   | ARAMARK                         | WWTP LAUNDRY SERVICE                          | \$ 75.59     | dwwtp          |
| 273034        | 8/10/2020        | 20-25569     | EDGE ANALYTICAL, INC            | LAB TESTING - SLUDGE MONITORING               | \$ 423.30    | dwwtp          |
| 273035        | 8/11/2020        | 20-25758     | EDGE ANALYTICAL, INC            | LAB TESTING MERCURY TESTING                   | \$ 1,553.80  | dwwtp          |
| 274080        | 8/12/2020        | 1991868405   | ARAMARK                         | STA 3 MAT/MOP SERVICE: 1/2                    | \$ 21.74     | medic          |
| 274077        | 8/13/2020        | 1991870290   | ARAMARK                         | STA 1 MAT/MOP SERVICE                         | \$ 21.74     | medic          |
| 274082        | 8/13/2020        | 1991870289   | ARAMARK                         | STA 2 MAT/MOP SERVICE: 1/2                    | \$ 21.74     | medic          |
| 272892        | 8/13/2020        | 29991        | BRAUN NORTHWEST, INC            | HVAC ACCUMULATOR #203                         | \$ 88.97     | dshop          |
| 273189        | 8/13/2020        | 0551681866   | HONEY BUCKET                    | MT ERIE 08/13-09/09                           | \$ 145.50    | parksccl       |
| 273037        | 8/17/2020        | 1991873903   | ARAMARK                         | WWTP LAUNDRY SERVICE                          | \$ 75.66     | dwwtp          |
| 272887        | 8/18/2020        | 131107       | FRONTIER FORD                   | SENSOR ASSEMBLY- #022                         | \$ 45.16     | dshop          |
| 273677        | 8/18/2020        | 1706         | JAMIE'S SIGNS                   | JAMIES SIGNS A-BOARDS                         | \$ 500.00    | plan           |
| 273015        | 8/19/2020        | 300-10076244 | ALL BATTERY SALES & SERVICE     | COVID-19 PPE NITRILE GLOVES                   | \$ 1,060.58  | pwfac          |
| 273049        | 8/19/2020        | 3360760      | DAILY JOURNAL OF COMMERCE       | PUBLISH REQUEST FOR QUALIFICATIONS 20-127-TRN | \$ 378.00    | finance        |
| 273036        | 8/19/2020        | 20-27543     | EDGE ANALYTICAL, INC            | LAB TESTING MERCURY                           | \$ 65.45     | dwwtp          |
| 272944        | 8/20/2020        | 1991879691   | ARAMARK                         | APD NYLON MATS CLEANED                        | \$ 16.32     | apd            |
| 273023        | 8/20/2020        | 1991879700   | ARAMARK                         | OPS: MAT CLEANING                             | \$ 41.67     | dshop          |
| 273122        | 8/20/2020        | 1991879699   | ARAMARK                         | OPS & PARKS LAUNDRY SVC FOR                   | \$ 72.42     | finance        |
| 273018        | 8/21/2020        | 20-28893     | EDGE ANALYTICAL, INC            | WATER SAMPLES- 1609 TARTAN PL                 | \$ 15.00     | wdist          |
| 273020        | 8/22/2020        | 8180317728   | SHRED-IT USA, LLC               | OLD RECORDS DESTROYED - APD 8/3/20            | \$ 58.83     | apd            |
| 273028        | 8/22/2020        | 8180320001   | SHRED-IT USA, LLC               | CONTAINER SHREDDING - CITY HALL 8/3/20        | \$ 51.84     | finance        |
| 273159        | 8/24/2020        | F44619/1     | ACE HARDWARE                    | MAINTENANCE REPAIR                            | \$ 18.20     | wwtpcc         |
| 273133        | 8/24/2020        | 1991883304   | ARAMARK                         | WWTP LAUNDRY SERVICE                          | \$ 78.89     | dwwtp          |
| 273156        | 8/24/2020        | 221962-5     | BIRCH EQUIPMENT CO., INC        | FUEL- ROLLER RENTAL                           | \$ 14.14     | wdistcc        |

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|---------------|------------------|---------------------|-------------------------------|-------------------------------------------------------------|--------------|----------------|
| 273154        | 8/24/2020        | 58722               | CEDAR CREEK LUMBER            | FACILITY USE ITEMS - PARKS                                  | \$ 718.90    | pwfacc         |
| 273155        | 8/24/2020        | 161-00027187        | CISCO WEBEX                   | CISCO WEBEX PLUS MONTHLY 8/23-9/22/20<br>NEED INVOICE       | \$ 260.47    | infosyscc      |
| 273162        | 8/24/2020        | 1659-8198           | FIREFIGHTER INSPIRATION       | OFFICER/LEADERSHIP TRAINING - BERG                          | \$ 395.00    | afdcc          |
| 273157        | 8/24/2020        | 0589659-IN          | NATIONAL SAFETY, INC          | SAFETY SUPPLIES                                             | \$ 112.02    | wwtpcc         |
| 273160        | 8/24/2020        | G80077              | SEBO'S DO-IT CENTER           | CONDUIT, TOOLS AND SUPPLIES                                 | \$ 119.96    | fibercc        |
| 273161        | 8/24/2020        | G80080              | SEBO'S DO-IT CENTER           | CONDUIT                                                     | \$ 6.70      | fibercc        |
| 273163        | 8/24/2020        | G80038              | SEBO'S DO-IT CENTER           | SUPPLIES                                                    | \$ 9.79      | fibercc        |
| 273138        | 8/25/2020        | 300-10076475        | ALL BATTERY SALES & SERVICE   | WIRE, CABLE TIES, BATTERIES- SHOP                           | \$ 172.12    | dshop          |
| 273158        | 8/25/2020        | 112-8753472-6149014 | AMAZON.COM SERVICES, INC      | COVID-19 PPE - MASKS                                        | \$ 431.66    | pwfacc         |
| 273182        | 8/25/2020        | 113-4287544-8352256 | AMAZON.COM SERVICES, INC      | WEB CAMS                                                    | \$ 391.62    | infosyscc      |
| 273180        | 8/25/2020        | 1161                | AMERICAN PLANNING ASSOCIATION | SENIOR PLANNER - ORGANIZATIONS-AMERICAN<br>PLANNING ASSOCIA | \$ 100.00    | hrcc1          |
| 273213        | 8/25/2020        | 859530              | BAYSHORE OFFICE PRODUCTS INC  | COVID - PPE STORAGE CABINET                                 | \$ 561.02    | pwfacc         |
| 273215        | 8/25/2020        | 0188-512139         | CONSOLIDATED ELECTRICAL       | MAINTENANCE SUPPLIES                                        | \$ 25.98     | wwtpcc         |
| 273184        | 8/25/2020        | WAANA128050         | FASTENAL COMPANY              | ANTI-FOG WIPES                                              | \$ 24.38     | wtppcc         |
| 273217        | 8/25/2020        | 8563 02 89173       | HOME DEPOT                    | TOOLS                                                       | \$ 129.92    | fibercc        |
| 273183        | 8/25/2020        | GMNK68CKN25         | MUNICIPAL RESEARCH &          | WEBINAR - BUCKENMEYER                                       | \$ 35.00     | pwfacc         |
| 273186        | 8/25/2020        | XFNTBJPSPXK         | MUNICIPAL RESEARCH &          | TRAINING; PRA DEEP DIVE LE RECORDS;<br>RECORDS SUPER INGRAM | \$ 35.00     | apdcc          |
| 273185        | 8/25/2020        | 1370628             | RITE AID                      | PARKS USE ITEMS                                             | \$ 23.00     | pwfacc         |
| 273181        | 8/25/2020        | G80574              | SEBO'S DO-IT CENTER           | BROOM                                                       | \$ 15.86     | wdistcc        |
| 273187        | 8/25/2020        | G80735              | SEBO'S DO-IT CENTER           | AA BATTERIES                                                | \$ 10.87     | wdistcc        |
| 273190        | 8/25/2020        | 613                 | UNITED STATES POSTAL SERVICE  | POSTAGE                                                     | \$ 8.80      | museumcc       |
| 273755        | 8/25/2020        | 13819093            | WILBUR-ELLIS COMPANY, LLC     | WILBUR ELLIS PARK SUPPLIES                                  | \$ 41.23     | parksccl       |
| 273218        | 8/26/2020        | F45870/1            | ACE HARDWARE                  | TOOLS AND SUPPLIES                                          | \$ 148.91    | fibercc        |
| 273188        | 8/26/2020        | 111-6487964-9090621 | AMAZON.COM SERVICES, INC      | FILE FOLDERS                                                | \$ 28.68     | afdcc          |
| 273367        | 8/26/2020        | 1991887239          | ARAMARK                       | STA 3 MAT/MOP SERVICE: 8/26                                 | \$ 21.76     | medic          |
| 273345        | 8/26/2020        | 859803              | BAYSHORE OFFICE PRODUCTS INC  | WASH PARK PARK SUPPLIES                                     | \$ 52.19     | parksccl       |
| 273219        | 8/26/2020        | WR20026602          | BLAUER                        | UNIFORM PANTS - NT                                          | \$ 239.97    | afdcc          |
| 273211        | 8/26/2020        | 0188-512145         | CONSOLIDATED ELECTRICAL       | FACILITY USE ITEM                                           | \$ 94.11     | pwfacc         |
| 273268        | 8/26/2020        | 152146              | FIDALGO ANIMAL MEDICAL CENTER | K9 T-BONE WELLNESS EXAM                                     | \$ 91.91     | apdcc          |
| 273216        | 8/26/2020        | I75494              | FRONTIER BUILDING SUPPLY      | MAINTENANCE - INFLUENT STEM REPAIR                          | \$ 64.10     | wwtpcc         |
| 273212        | 8/26/2020        | 037192              | LOU'S GLOVES, INC             | MAINTENANCE SUPPLIES                                        | \$ 222.00    | wwtpcc         |
| 273255        | 8/26/2020        | 3216750             | NURNBERG SCIENTIFIC           | LAB SUPPLIES                                                | \$ 519.05    | wwtpcc         |
| 273214        | 8/26/2020        | G81209              | SEBO'S DO-IT CENTER           | TAPE, BRUSH                                                 | \$ 10.21     | shopcc         |
| 273220        | 8/26/2020        | G81490              | SEBO'S DO-IT CENTER           | MAINTENANCE SUPPLIES                                        | \$ 9.99      | wwtpcc         |
| 273261        | 8/27/2020        | F46500/1            | ACE HARDWARE                  | FASTENERS                                                   | \$ 11.51     | shopcc         |

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|---------------|------------------|---------------------|--------------------------------|------------------------------------------------------------------|--------------|----------------|
| 273263        | 8/27/2020        | 111-6946017-6356204 | AMAZON.COM SERVICES, INC       | MAINTENANCE SUPPLIES                                             | \$ 108.18    | wwtpcc         |
| 273266        | 8/27/2020        | 112-5176943-5725012 | AMAZON.COM SERVICES, INC       | J-HOOKS (TOOL STORAGE)                                           | \$ 97.89     | afdcc          |
| 273227        | 8/27/2020        | 1991889113          | ARAMARK                        | OPS: MAT CLEANING                                                | \$ 34.99     | dshop          |
| 273232        | 8/27/2020        | 1991889112          | ARAMARK                        | OPS & PARKS LAUNDRY SVC FOR                                      | \$ 72.42     | finance        |
| 273234        | 8/27/2020        | 1991889105          | ARAMARK                        | APD NYLON MATS CLEANED                                           | \$ 16.32     | apd            |
| 273368        | 8/27/2020        | 1991889101          | ARAMARK                        | STA 2 MAT/MOP SERVICE: 8/27                                      | \$ 21.76     | medic          |
| 273369        | 8/27/2020        | 1991889102          | ARAMARK                        | STA 1 MAT/MOP SERVICE: 8/27                                      | \$ 21.76     | medic          |
| 273267        | 8/27/2020        | INV05245            | BLUE CARD                      | ADDITIONAL USER SUBSCRIPTION (MV)                                | \$ 346.50    | afdcc          |
| 273256        | 8/27/2020        | AN 74695            | CENTRAL WELDING SUPPLY CO, INC | MAINTENANCE                                                      | \$ 52.51     | wwtpcc         |
| 273260        | 8/27/2020        | B76178              | COASTAL FARM &                 | WORK BOOTS, L. JORDAN                                            | \$ 99.99     | shopcc         |
| 273262        | 8/27/2020        | I75871              | FRONTIER BUILDING SUPPLY       | WOOD, SPF MIX                                                    | \$ 53.74     | wdistcc        |
| 273259        | 8/27/2020        | 1095122378          | MALVERN PANALYTICAL, INC.      | ZETA TUBING, PUMP HEAD X 2                                       | \$ 390.22    | wtpcc          |
| 273320        | 8/27/2020        | 71058               | OHD, LLLP                      | POWER CORD FOR FIT TESTER                                        | \$ 66.92     | afdcc          |
| 273264        | 8/27/2020        | 650094794           | SERVOMEX CO                    | MAINTENANCE - INCINERATOR                                        | \$ 674.86    | wwtpcc         |
| 273265        | 8/27/2020        | 3467                | SHIFT CALENDARS                | 2021 SHIFT CALENDARS                                             | \$ 274.56    | afdcc          |
| 273329        | 8/27/2020        | 1362206             | SURETY PEST CONTROL            | PEST CONTROL AT SHOP                                             | \$ 41.34     | wtpcc          |
| 273258        | 8/27/2020        | 1ZTGR8090336856050  | UNITED PARCEL SERVICE, INC     | SHIPPED RETURNED ITEMS TO BLUEBOOK                               | \$ 91.00     | wtpcc          |
| 273257        | 8/27/2020        | 114-10856559        | UNITED SITE SERVICES, INC      | INTAKE PORTA POTI RENTAL 7/22-8/21/20                            | \$ 57.98     | wtpcc          |
| 274659        | 8/27/2020        | 2743                | WELCH BROTHERS CONSTRUCTION    | PUMP STATION 11 HATCH COVER REPAIR                               | \$ 24,015.13 | dwwtp          |
| 273335        | 8/28/2020        | 111-2677462-2109069 | AMAZON.COM SERVICES, INC       | LOCKING GUN RACK VEH #043A                                       | \$ 23.59     | shopcc         |
| 273342        | 8/28/2020        | 112-1340522-8264269 | AMAZON.COM SERVICES, INC       | HEAVY DUTY VEHICLE BRACKET                                       | \$ 50.97     | afdcc          |
| 273318        | 8/28/2020        | 000518024           | AMERICAN HEART ASSOCIATION     | CPR ANDREW O                                                     | \$ 52.00     | infosyscc      |
| 273344        | 8/28/2020        | 860162              | BAYSHORE OFFICE PRODUCTS INC   | OFFICE SUPPLIES                                                  | \$ 10.05     | wwtpcc         |
| 273319        | 8/28/2020        | AN 74504            | CENTRAL WELDING SUPPLY CO, INC | RENTAL LINCOLN RANGER 305G                                       | \$ 414.22    | wdistcc        |
| 273331        | 8/28/2020        | 662 12 273 78       | COSTCO WHOLESALE CORPORATION   | PATROL SUPPLIES                                                  | \$ 128.48    | apdcc          |
| 273321        | 8/28/2020        | 01-06642-00064      | EBAY                           | IPADS CASES - FIBER                                              | \$ 282.86    | fibercc        |
| 273343        | 8/28/2020        | 593 7 154 3230      | SAFeway INC                    | COVID SUPPLIES                                                   | \$ 13.59     | wwtpcc         |
| 273339        | 8/28/2020        | G82347              | SEBO'S DO-IT CENTER            | SUPPLIES- WATER DEPT                                             | \$ 32.28     | wdistcc        |
| 273330        | 8/28/2020        | 1362205             | SURETY PEST CONTROL            | PEST CONTRAOL AT ROCKRIDGE BOOSTER STATION                       | \$ 41.34     | wtpcc          |
| 273767        | 8/28/2020        | 1358893             | SURETY PEST CONTROL            | PEST CONTROL LIBRARY                                             | \$ 66.37     | pwfacc         |
| 273768        | 8/28/2020        | 1361417             | SURETY PEST CONTROL            | WA PARK INSECT AND RODENT CONTROL                                | \$ 70.72     | pwfacc         |
| 273332        | 8/29/2020        | 113-1153055-2673064 | AMAZON.COM SERVICES, INC       | INVESTIGATIONS; LARGE USB DRIVES FOR DIGITAL EVIDENCE COLLECTION | \$ 107.67    | apdcc          |
| 273336        | 8/29/2020        | 111-7906522-3965838 | AMAZON.COM SERVICES, INC       | SPEAKER FOR CONF ROOM                                            | \$ 141.43    | shopcc         |

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|---------------|------------------|---------------------|---------------------------|------------------------------------------------------------|---------------|----------------|
| 273337        | 8/29/2020        | 111-5873672-1705805 | AMAZON.COM SERVICES, INC  | PENCIL DRAWER                                              | \$ 35.35      | shopcc         |
| 273341        | 8/29/2020        | 111-0096624-9689034 | AMAZON.COM SERVICES, INC  | FIRST AID CREAM                                            | \$ 10.87      | shopcc         |
| 273340        | 8/29/2020        | B76865              | COASTAL FARM &            | WORK BOOTS                                                 | \$ 121.73     | wdistcc        |
| 273323        | 8/29/2020        | 94266               | LANCER SALES USA, INC     | LAB SUPPLIES                                               | \$ 1,169.14   | wwtpcc         |
| 273333        | 8/29/2020        | G82928              | SEBO'S DO-IT CENTER       | EXTENSION CORDS                                            | \$ 130.54     | afdcc          |
| 273338        | 8/30/2020        | 111-5224151-6206617 | AMAZON.COM SERVICES, INC  | TRAILER JACK VEH 872                                       | \$ 35.77      | shopcc         |
| 273322        | 8/30/2020        | 931995              | PANTHEON SYSTEMS, INC     | SUBSCRIPTION WEB HOSTING 8/30-9/30/20                      | \$ 38.09      | infosyscc      |
| 273334        | 8/30/2020        | G83569              | SEBO'S DO-IT CENTER       | MAINTENANCE SUPPLIES                                       | \$ 7.78       | wwtpcc         |
| 273435        | 8/31/2020        | 111-2989911-2548256 | AMAZON.COM SERVICES, INC  | OFFICE SUPPLIES                                            | \$ 13.07      | wwtpcc         |
| 273436        | 8/31/2020        | 111-3484895-8075432 | AMAZON.COM SERVICES, INC  | OFFICE SUPPLIES                                            | \$ 71.03      | wwtpcc         |
| 273418        | 8/31/2020        | 1991892650          | ARAMARK                   | WWTP LAUNDRY SERVICE                                       | \$ 75.66      | dwwtp          |
| 273431        | 8/31/2020        | 222542-5            | BIRCH EQUIPMENT CO., INC  | ROLLER RENTAL- CAP SANTE AREA                              | \$ 350.06     | shopcc         |
| 273476        | 8/31/2020        | FIBER-200831A       | CONSOLIDATED ELECTRICAL   | SUPPLIES                                                   | \$ 12.46      | fibercc        |
| 273432        | 8/31/2020        | WAANA128204         | FASTENAL COMPANY          | SHOVELS- WATER DEPT                                        | \$ 120.57     | pwfacc         |
| 273433        | 8/31/2020        | I76814              | FRONTIER BUILDING SUPPLY  | SCREWS                                                     | \$ 32.53      | pwfacc         |
| 274652        | 8/31/2020        | Pay App 3           | IMCO GENERAL CONSTRUCTION | SKAGIT RIVER RAW WATER PIPELINE AND CLEARWELL PROJECT      | \$ 996,884.52 | pw1            |
| 273468        | 8/31/2020        | 35029243            | INDEED, INC.              | DIRECT MARKETER-INDEED - RECRUITMENT FOR IS TECHNICIAN     | \$ 495.05     | hrcc1          |
| 274168        | 8/31/2020        | IN937148            | NOANET                    | FIBER NETWORK OPS, GIS, AND ENGINEERING SUPPORT - AUG 2020 | \$ 367.50     | fiber          |
| 274170        | 8/31/2020        | IN937147            | NOANET                    | MUNICIPAL FIBER NETWORK COORDINATED SERVICES - AUG 2020    | \$ 1,510.00   | fiber          |
| 274655        | 8/31/2020        | IN937179            | NOANET                    | MUNICIPAL FIBER NETWORK COORDINATED SERVICES - AUGUST 2020 | \$ 2,993.96   | fiber          |
| 273429        | 8/31/2020        | G84080              | SEBO'S DO-IT CENTER       | FACILITY USE ITEM                                          | \$ 50.04      | pwfacc         |
| 273430        | 8/31/2020        | G84282              | SEBO'S DO-IT CENTER       | PARK SUPPLIES                                              | \$ 5.06       | parksc1        |
| 273434        | 8/31/2020        | G84125              | SEBO'S DO-IT CENTER       | CEMETERY SUPPLIES                                          | \$ 14.92      | parksc1        |
| 273550        | 8/31/2020        | USS-70053           | UNITED SITE SERVICES, INC | PORTA POTTY RENTAL 08/01-08/31                             | \$ 1,210.04   | parksc1        |
| 273437        | 8/31/2020        | B58JB-06A33-5H1     | VISTAPRINT                | PARK OFFICE SUPPLIES                                       | \$ 45.68      | parksc1        |
| 273469        | 9/1/2020         | 113-6790509-8187465 | AMAZON.COM SERVICES, INC  | IPADS FIBER                                                | \$ 918.62     | infosyscc      |
| 273477        | 9/1/2020         | 112-0061090-5370605 | AMAZON.COM SERVICES, INC  | NITRILE GLOVES- STREET DEPT                                | \$ 140.90     | shopcc         |
| 273478        | 9/1/2020         | 111-9174301-2257001 | AMAZON.COM SERVICES, INC  | WIREBOUND NOTEBOOKS                                        | \$ 41.86      | shopcc         |

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| 273481        | 9/1/2020         | 111-9413043-9296266 | AMAZON.COM SERVICES, INC       | OPERATING SUPPLIES                     | \$ 124.36    | wwtpcc         |
| 273535        | 9/1/2020         | 860517              | BAYSHORE OFFICE PRODUCTS INC   | REC OFFICE SUPPLIES                    | \$ 3.11      | pkreccc        |
| 273536        | 9/1/2020         | 860327              | BAYSHORE OFFICE PRODUCTS INC   | BARRIER COUNTER                        | \$ 1,414.40  | pwfaccc        |
| 273472        | 9/1/2020         | 222542-5            | BIRCH EQUIPMENT CO., INC       | FUEL- ROLLER RENTAL FOR CAP SANTE AREA | \$ 12.73     | shopcc         |
| 273653        | 9/1/2020         | INV05638            | BLUE CARD                      | NEW SUBSRIPTION ADDED: JP              | \$ 346.50    | medic          |
| 273474        | 9/1/2020         | 000022              | CLEAN AND CLIP                 | K9 T-BONE GROOMING                     | \$ 50.00     | apdcc          |
| 273475        | 9/1/2020         | 133368475325        | CRESTRON ELECTRONICS, INC.     | CRESTON FOR IPAD BUSINESS              | \$ 108.79    | infosyscc      |
| 273470        | 9/1/2020         | 000065991           | INDUSTRIAL SAFETY CO           | MAINTENANCE SUPPLIES                   | \$ 330.68    | wwtpcc         |
| 273466        | 9/1/2020         | 94483               | LANCER SALES USA, INC          | LAB SUPPLIES                           | \$ 475.45    | wwtpcc         |
| 273467        | 9/1/2020         | 94473               | LANCER SALES USA, INC          | LAB SUPPLIES                           | \$ 77.23     | wwtpcc         |
| 273473        | 9/1/2020         | G85097              | SEBO'S DO-IT CENTER            | MAINTENANCE                            | \$ 13.85     | wwtpcc         |
| 273758        | 9/1/2020         | 1366183             | SURETY PEST CONTROL            | PEST CONTROL OPS                       | \$ 65.28     | dshop          |
| 273471        | 9/1/2020         | 1925                | THRIFTY CLEANERS               | JULY/AUGUST LAUNDRY                    | \$ 142.72    | afdcc          |
| 273491        | 9/1/2020         | 34684               | THRIFTY CLEANERS               | UNIFORM CLEANING; 8/2/20-9/1/20        | \$ 226.86    | apd            |
| 273479        | 9/1/2020         | 154053971           | THRIVE COMMUNITY FITNESS       | SEPTEMBER: 2 MEMBERSHIPS               | \$ 43.42     | afdcc          |
| 273480        | 9/1/2020         | 154065344           | THRIVE COMMUNITY FITNESS       | SEPTEMBER - VOLUNTEER MEMBERSHIP       | \$ 21.71     | afdcc          |
| 273537        | 9/2/2020         | 112-8930121-7846665 | AMAZON.COM SERVICES, INC       | NITRILE GLOVES- STREET DEPT            | \$ 104.98    | shopcc         |
| 273539        | 9/2/2020         | 112-0165050-5213014 | AMAZON.COM SERVICES, INC       | PUSH PINS                              | \$ 2.76      | shopcc         |
| 273543        | 9/2/2020         | 113-1194628-5646632 | AMAZON.COM SERVICES, INC       | 3 PART PAPER                           | \$ 30.45     | courtcc        |
| 273545        | 9/2/2020         | 111-0096624-9689034 | AMAZON.COM SERVICES, INC       | FIRST AID CREAM                        | \$ 10.87     | shopcc         |
| 273541        | 9/2/2020         | 149407              | ATTORNEY & NOTARY SUPPLY OF    | NOTARY SUPPLY - BOOK & STAMP (4 YEARS) | \$ 89.27     | financecc      |
| 273534        | 9/2/2020         | RND6NWJAP2          | FACEBOOK                       | FACEBOOK ADVERTISING                   | \$ 35.00     | fibercc        |
| 273530        | 9/2/2020         | 877610              | FRONTIER BUILDING SUPPLY       | WOOD FOR INVENTORY SHED                | \$ 216.58    | wdistcc        |
| 273546        | 9/2/2020         | I77657              | FRONTIER BUILDING SUPPLY       | PARK SUPPLIES                          | \$ 56.54     | parksccl       |
| 273531        | 9/2/2020         | 09/02/2020          | GOOGLE ANALYTICS               | SAFE AND CLEAN WATER.COM               | \$ 6.36      | infosyscc      |
| 273532        | 9/2/2020         | E0500BZ1WF          | MICROSOFT CORPORATION          | AZURE PAY AS YOU GO 7/16-8/15/20       | \$ 24.28     | infosyscc      |
| 273533        | 9/2/2020         | E0500BYT3V          | MICROSOFT CORPORATION          | AZURE DEVELOPER SUPPORT 7/16-8/15/20   | \$ 29.00     | infosyscc      |
| 273605        | 9/2/2020         | 593 8 43 3230       | SAFeway INC                    | LAB SUPPLIES                           | \$ 50.94     | wwtpcc         |
| 273529        | 9/2/2020         | G85445              | SEBO'S DO-IT CENTER            | MAINTENANCE                            | \$ 47.95     | wwtpcc         |
| 273547        | 9/2/2020         | G85639              | SEBO'S DO-IT CENTER            | PARK SUPPLIES                          | \$ 13.85     | parksccl       |
| 273548        | 9/2/2020         | G85547              | SEBO'S DO-IT CENTER            | PARK SUPPLIES                          | \$ 15.22     | parksccl       |
| 273544        | 9/2/2020         | 2FMLF-06A93-408     | VISTAPRINT                     | BUISNESS CARDS, LUDEMANN               | \$ 21.76     | shopcc         |
| 273549        | 9/2/2020         | 217625              | WILLIAMS CONCRETE ACCESSORIES  | MAINTENANCE                            | \$ 32.45     | wwtpcc         |
| 273538        | 9/2/2020         | INV39419206         | ZOOM VIDEO COMMUNICATIONS INC. | SUBSCRIPTION 9/2-10/1/20               | \$ 16.30     | parksccl       |

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| 273542        | 9/2/2020         | INV39457045          | ZOOM VIDEO COMMUNICATIONS INC. | ZOOM VIDEO COMMUNICATIONS INC                     | \$ 16.30     | courtcc        |
| 273588        | 9/3/2020         | F51032/1             | ACE HARDWARE                   | LEVERLOCK TAPE MEASURE                            | \$ 10.87     | shopcc         |
| 273593        | 9/3/2020         | F50775/1             | ACE HARDWARE                   | SMALL TOOLS                                       | \$ 97.91     | wwtpcc         |
| 273600        | 9/3/2020         | F50665/1             | ACE HARDWARE                   | SMALL TOOLS                                       | \$ 63.59     | wwtpcc         |
| 273540        | 9/3/2020         | 112-0165050-5213014  | AMAZON.COM SERVICES, INC       | BULLETIN BOARDS                                   | \$ 115.28    | shopcc         |
| 273592        | 9/3/2020         | 112-5550019-0760269  | AMAZON.COM SERVICES, INC       | COVID-19 PPE DISINFECTING WIPES                   | \$ 70.15     | pwfacc         |
| 273595        | 9/3/2020         | 113-4224898-9517807  | AMAZON.COM SERVICES, INC       | STEERING WHEEL COVER- #100                        | \$ 17.40     | shopcc         |
| 273596        | 9/3/2020         | 112-2955800-5765847  | AMAZON.COM SERVICES, INC       | FLASHLIGHT                                        | \$ 113.10    | shopcc         |
| 273503        | 9/3/2020         | 1991898418           | ARAMARK                        | APD NYLON MATS CLEANED                            | \$ 16.32     | apd            |
| 273560        | 9/3/2020         | 1991898426           | ARAMARK                        | OPS & PARKS LAUNDRY SVC FOR                       | \$ 72.42     | finance        |
| 273561        | 9/3/2020         | 1991898427           | ARAMARK                        | OPS: MAT CLEANING                                 | \$ 41.67     | dshop          |
| 273594        | 9/3/2020         | I77771               | FRONTIER BUILDING SUPPLY       | MAINTENANCE SUPPLIES                              | \$ 95.43     | wwtpcc         |
| 273591        | 9/3/2020         | 0590794-IN           | NATIONAL SAFETY, INC           | SAFETY SUPPLIES                                   | \$ 433.02    | wwtpcc         |
| 273585        | 9/3/2020         | G85827               | SEBO'S DO-IT CENTER            | PARK SUPPLIES                                     | \$ 13.85     | parkscc1       |
| 273586        | 9/3/2020         | G86236               | SEBO'S DO-IT CENTER            | SMALL TOOLS                                       | \$ 67.15     | wwtpcc         |
| 273598        | 9/3/2020         | G86228               | SEBO'S DO-IT CENTER            | FASTENERS- #704                                   | \$ 37.50     | shopcc         |
| 273601        | 9/3/2020         | G96117               | SEBO'S DO-IT CENTER            | MAINTENANCE SUPPLIES                              | \$ 18.10     | wwtpcc         |
| 273602        | 9/3/2020         | G86039               | SEBO'S DO-IT CENTER            | SOCCER CUBE CITY LEAGUE SUPPLIES                  | \$ 76.65     | pkreccc        |
| 273603        | 9/3/2020         | G86044               | SEBO'S DO-IT CENTER            | DRYER VENT DUCT REPAIR                            | \$ 14.34     | afdcc          |
| 273604        | 9/3/2020         | G86082               | SEBO'S DO-IT CENTER            | DRYER VENT DUCT REPAIR                            | \$ 10.43     | afdcc          |
| 273633        | 9/3/2020         | 192969               | SKAGIT REGIONAL HEALTH         | CDL PHYSICAL - BRANDON D                          | \$ 92.00     | shopcc         |
| 273590        | 9/3/2020         | 200780               | T-SHIRTS BY DESIGN             | PRINT ON SAFETY VESTS- WATER                      | \$ 156.67    | wdistcc        |
| 273589        | 9/3/2020         | 83144982047637888376 | UNITED PARCEL SERVICE, INC     | SHIPPING FEES- PART FOR AMPLIFIER TO GET REPAIRED | \$ 14.50     | wdistcc        |
| 273599        | 9/3/2020         | LPONG-06A76-7Q4      | VISTAPRINT                     | BUSINESS CARDS - M JACKSON                        | \$ 25.02     | shopcc         |
| 273587        | 9/3/2020         | INV39614217          | ZOOM VIDEO COMMUNICATIONS INC. | SUBSCRIPTION 9/3-10/2/20                          | \$ 59.82     | execc          |
| 273642        | 9/4/2020         | F51533/1             | ACE HARDWARE                   | 1.5" CLIP SPRING- #044                            | \$ 9.99      | shopcc         |
| 273597        | 9/4/2020         | 111-5574782-4488204  | AMAZON.COM SERVICES, INC       | FILE CABINETS- OPS                                | \$ 390.60    | shopcc         |
| 273725        | 9/4/2020         | 2-598288             | DIAMOND RENTALS, INC.          | PORTA POTTY SKYHAWKS CAMP                         | \$ 158.52    | pkreccc        |
| 273941        | 9/4/2020         | 41600368045          | LES SCHWAB TIRE CENTERS        | MACHINE REPAIR                                    | \$ 99.98     | parkscc1       |
| 273905        | 9/4/2020         | 1720007263           | PATEL DDS, RAMAN               | DENTAL SERVICES - LEOFF I RETIREE HEIN            | \$ 133.00    | hr             |
| 273645        | 9/4/2020         | 038081               | PISTON SERVICE OF ANACORTES    | MAINTENANCE                                       | \$ 21.48     | wwtpcc         |
| 273634        | 9/4/2020         | 112634               | PORT OF ANACORTES              | FUEL- STREET DEPT SMALL EQUIPMENT                 | \$ 18.28     | shopcc         |
| 273646        | 9/4/2020         | 112658               | PORT OF ANACORTES              | NON-ETHANOL FUEL                                  | \$ 3.88      | afdcc          |
| 273641        | 9/4/2020         | 24241020             | PURCELL TIRE AND SERVICE CENTE | SERVICE- #706                                     | \$ 238.98    | shopcc         |
| 273639        | 9/4/2020         | G86344               | SEBO'S DO-IT CENTER            | COVID-19 PPE FASTENERS                            | \$ 13.84     | pwfacc         |



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| 273643        | 9/4/2020         | G86675              | SEBO'S DO-IT CENTER          | HAMMER & SAW BLADE                                 | \$ 67.14     | pwfacc         |
| 273644        | 9/4/2020         | G86911              | SEBO'S DO-IT CENTER          | 1/2" X 21' BLACK PIPE- #513                        | \$ 5.09      | shopcc         |
| 273647        | 9/4/2020         | G86916              | SEBO'S DO-IT CENTER          | MAINTENANCE SUPPLIES                               | \$ 4.34      | wwtpcc         |
| 273635        | 9/5/2020         | B80604              | COASTAL FARM &               | GLOVES                                             | \$ 24.99     | wtpcc          |
| 273640        | 9/6/2020         | 112-4017225-8649041 | AMAZON.COM SERVICES, INC     | FACILITY USE ITEM                                  | \$ 118.54    | pwfacc         |
| 273636        | 9/6/2020         | MZGB5X6AP2          | FACEBOOK                     | FACEBOOK ADVERTISING                               | \$ 12.90     | fibercc        |
| 273689        | 9/7/2020         | 113-0547236-9886641 | AMAZON.COM SERVICES, INC     | SUPPLIES                                           | \$ 264.52    | fibercc        |
| 273785        | 9/7/2020         | 1991901995          | ARAMARK                      | WWTP LAUNDRY SERVICE                               | \$ 75.66     | dwwtp          |
| 273723        | 9/8/2020         | 112-7807434-2998608 | AMAZON.COM SERVICES, INC     | IPHONE CASE                                        | \$ 19.55     | infosyscc      |
| 273744        | 9/8/2020         | 495170              | COUNTRYWIDE FENCE CENTER     | FACILITY USE ITEMS - PICKED UP IN MOUNT            | \$ 135.80    | pwfacc         |
| 273726        | 9/8/2020         | 37863               | DIAMOND RENTALS, INC.        | PORTA POTTY 8/9-9/9/20                             | \$ 379.00    | parksccl       |
| 273720        | 9/8/2020         | ANA01               | EDGE ANALYTICAL, INC         | WTP WATER ANALYSIS - 12 INVOICES                   | \$ 2,043.00  | wtpcc          |
| 273745        | 9/8/2020         | 3217142             | NURNBERG SCIENTIFIC          | LAB SUPPLIES                                       | \$ 215.90    | wwtpcc         |
| 273746        | 9/8/2020         | 3217160             | NURNBERG SCIENTIFIC          | LAB SUPPLIES                                       | \$ 264.78    | wwtpcc         |
| 273747        | 9/8/2020         | 3217161             | NURNBERG SCIENTIFIC          | LAB SUPPLIES                                       | \$ 150.08    | wwtpcc         |
| 273748        | 9/8/2020         | 3217162             | NURNBERG SCIENTIFIC          | LAB SUPPLIES                                       | \$ 103.79    | wwtpcc         |
| 273716        | 9/8/2020         | R0012736            | PAINTER'S ALLEY, LLC         | PAINTER'S ALLEY PARK SUPPLIES                      | \$ 74.80     | parksccl       |
| 273717        | 9/8/2020         | 00082685            | RATCHET STRAPS USA           | RACHET STRAPS (HOSE PACKS)                         | \$ 177.30    | afdcc          |
| 273727        | 9/8/2020         | G89799              | SEBO'S DO-IT CENTER          | MAINTENANCE SUPPLIES                               | \$ 28.04     | wwtpcc         |
| 273753        | 9/8/2020         | 193507              | SKAGIT REGIONAL HEALTH       | CDL PHYSICAL- MATT K                               | \$ 92.00     | shopcc         |
| 273750        | 9/8/2020         | 1362203             | SURETY PEST CONTROL          | PEST CONTROL POINT BOOSTER STATION                 | \$ 41.34     | wtpcc          |
| 273754        | 9/8/2020         | 1362118             | SURETY PEST CONTROL          | STA 1 - AUGUST SERVICE                             | \$ 65.28     | afdcc          |
| 274668        | 9/8/2020         | 331 0536839         | UNIFIRST CORPORATION         | UNIFORM LAUNDRY                                    | \$ 8.96      | fiber          |
| 273722        | 9/8/2020         | NQ9CN-06A41-3M5     | VISTAPRINT                   | BUSINESS CARDS; OFC HATCHER                        | \$ 22.84     | apdcc          |
| 273721        | 9/8/2020         | WAPRO               | WASHINGTON ASSOCIATION OF    | WAPRO 2020 FALL VIRTUAL CONFERENCE; REC SUP INGRAM | \$ 25.00     | apdcc          |
| 273719        | 9/9/2020         | 112-6946734-7192247 | AMAZON.COM SERVICES, INC     | COVID-19 PPE MASKS                                 | \$ 217.56    | pwfacc         |
| 273724        | 9/9/2020         | 112-8576423-7409848 | AMAZON.COM SERVICES, INC     | FLASH DRIVES                                       | \$ 14.13     | infosyscc      |
| 273749        | 9/9/2020         | 112-6059675-3566620 | AMAZON.COM SERVICES, INC     | COVID-19 PPE DISINFECTING WIPES                    | \$ 68.69     | pwfacc         |
| 273752        | 9/9/2020         | 112-8576423-7409848 | AMAZON.COM SERVICES, INC     | FLASH DRIVES                                       | \$ 43.04     | infosyscc      |
| 273812        | 9/9/2020         | 861206              | BAYSHORE OFFICE PRODUCTS INC | COVID-19 PPE LIBRARY ACRYLIC BARRIER               | \$ 299.20    | pwfacc         |
| 273811        | 9/9/2020         | SI491592            | DLT SOLUTIONS, LLC           | AUTODESK FOR GIS COORDINATOR                       | \$ 1,190.57  | infosyscc      |
| 273751        | 9/9/2020         | FS200908134987      | FS.COM, INC.                 | FIBER OPTIC JUMPER CABLES                          | \$ 152.86    | fibercc        |
| 273994        | 9/9/2020         | 1727                | JAMIE'S SIGNS                | JAMIES SIGN PUBLIC NOTICE SIGNS                    | \$ 408.00    | plancc         |

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| 273817        | 9/9/2020         | 1362204             | SURETY PEST CONTROL            | PEST CONTROL AT CASTILLEJA BOOSTER                                              | \$ 41.34     | wtpcc          |
| 273813        | 9/10/2020        | 112-5532835-6914656 | AMAZON.COM SERVICES, INC       | COVID-19 PPE MASKS                                                              | \$ 69.03     | pwfacc         |
| 273814        | 9/10/2020        | 112-0275279-8706679 | AMAZON.COM SERVICES, INC       | COVID-19 PPE MASKS                                                              | \$ 165.28    | pwfacc         |
| 273818        | 9/10/2020        | 113-8303407-3128269 | AMAZON.COM SERVICES, INC       | SUPPLIES                                                                        | \$ 65.26     | fibercc        |
| 273819        | 9/10/2020        | 111-3285028-6606635 | AMAZON.COM SERVICES, INC       | COFFEE FILTERS                                                                  | \$ 23.12     | shopcc         |
| 273825        | 9/10/2020        | 113-3693983-0250619 | AMAZON.COM SERVICES, INC       | VELCRO STRAPS FOR RESCUE 42 STRAPS                                              | \$ 16.31     | afdcc          |
| 273762        | 9/10/2020        | 1991907757          | ARAMARK                        | OPS: MAT CLEANING                                                               | \$ 34.99     | dshop          |
| 273765        | 9/10/2020        | 1991907756          | ARAMARK                        | OPS & PARKS LAUNDRY SVC FOR                                                     | \$ 70.17     | finance        |
| 274088        | 9/10/2020        | 1991907750          | ARAMARK                        | APD NYLON MATS CLEANED                                                          | \$ 16.32     | apd            |
| 273877        | 9/10/2020        | 847772              | BAYSHORE OFFICE PRODUCTS INC   | COVID-19 PPE COUNTERTOP BARRIERS                                                | \$ 1,319.53  | pwfacc         |
| 273891        | 9/10/2020        | 861639              | BAYSHORE OFFICE PRODUCTS INC   | OFFICE SUPPLIES                                                                 | \$ 3.36      | museumcc       |
| 273820        | 9/10/2020        | I79727              | FRONTIER BUILDING SUPPLY       | 1X4 16' UTILITY SPF MIX                                                         | \$ 54.72     | wdistcc        |
| 274145        | 9/10/2020        | 0551723149          | HONEY BUCKET                   | PORTA POTTY SERVICE 09/10-10/07/20                                              | \$ 145.50    | parksccl       |
| 273889        | 9/10/2020        | 593 3 19 5587       | SAFeway INC                    | COVID SUPPLIES                                                                  | \$ 21.06     | wwtpcc         |
| 273810        | 9/10/2020        | G90231              | SEBO'S DO-IT CENTER            | FACILITY USE ITEMS                                                              | \$ 20.22     | pwfacc         |
| 273822        | 9/10/2020        | G90513              | SEBO'S DO-IT CENTER            | OPERATING SUPPLIES- #2926                                                       | \$ 16.96     | shopcc         |
| 273823        | 9/10/2020        | G90517              | SEBO'S DO-IT CENTER            | FUEL #2926                                                                      | \$ 17.39     | shopcc         |
| 273824        | 9/10/2020        | G90037              | SEBO'S DO-IT CENTER            | ACFL SUPPLIES                                                                   | \$ 49.03     | parksccl       |
| 273826        | 9/10/2020        | G90040              | SEBO'S DO-IT CENTER            | OPERATING SUPPLIES                                                              | \$ 63.06     | wwtpcc         |
| 273880        | 9/10/2020        | 1362207             | SURETY PEST CONTROL            | PEST CONTROL AT FIDALGO BAY BOOSTER                                             | \$ 41.34     | wtpcc          |
| 273729        | 9/10/2020        | 14031IN4255         | TCC                            | OTTERBOX DEFENDER CASE IPHONE8                                                  | \$ 65.27     | pw1            |
| 273821        | 9/10/2020        | 279353              | U.S. MOWER                     | TWO BOLT BEARINGS- #704                                                         | \$ 71.63     | shopcc         |
| 273815        | 9/11/2020        | 112-9783446-5915428 | AMAZON.COM SERVICES, INC       | COVID-19 PPE MASKS                                                              | \$ 66.66     | pwfacc         |
| 273816        | 9/11/2020        | 112-7176324-4690655 | AMAZON.COM SERVICES, INC       | COVID-19 PPE MASKS                                                              | \$ 60.76     | pwfacc         |
| 273875        | 9/11/2020        | 113-0148281-8538669 | AMAZON.COM SERVICES, INC       | WEBCAMS FOR VIRTUAL MEETINGS                                                    | \$ 326.35    | infosyscc      |
| 273878        | 9/11/2020        | 861718              | BAYSHORE OFFICE PRODUCTS INC   | COVID-19 PPE DISINFECTANT                                                       | \$ 67.76     | pwfacc         |
| 273879        | 9/11/2020        | 861772              | BAYSHORE OFFICE PRODUCTS INC   | OFFICE EQUIPMENT - INFO SYS                                                     | \$ 292.67    | pwfacc         |
| 273886        | 9/11/2020        | I80209              | FRONTIER BUILDING SUPPLY       | 1" PAINTED SCREWS                                                               | \$ 24.39     | pwfacc         |
| 274653        | 9/11/2020        | 1200294235          | HDR ENGINEERING, INC           | SK RIVER RAW WATER PIPELINE/CLEARWELL PROJECT - CONSTRUCTION MNGMNT 8/2-8/29/20 | \$ 47,588.25 | pw1            |
| 273882        | 9/11/2020        | 24240803            | PURCELL TIRE AND SERVICE CENTE | TIRES- #842                                                                     | \$ 517.49    | shopcc         |
| 273874        | 9/11/2020        | G90645              | SEBO'S DO-IT CENTER            | OPERATING SUPPLIES                                                              | \$ 99.07     | wdistcc        |
| 273887        | 9/11/2020        | G90668              | SEBO'S DO-IT CENTER            | HOSE NOZZLE                                                                     | \$ 13.05     | afdcc          |

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| 273888        | 9/11/2020        | G90794              | SEBO'S DO-IT CENTER            | PARK SUPPLIES                                    | \$ 6.56      | parksccl       |
| 273881        | 9/11/2020        | 1ZTGR8091212092448  | UNITED PARCEL SERVICE, INC     | SHIPPING TURB TO HACH FOR REPAIR                 | \$ 82.60     | wtpcc          |
| 273883        | 9/12/2020        | 111-5119928-8909052 | AMAZON.COM SERVICES, INC       | SUPPLIES- OPS                                    | \$ 44.74     | shopcc         |
| 273884        | 9/12/2020        | 111-3836202-4467421 | AMAZON.COM SERVICES, INC       | SUPPLIES - OPS                                   | \$ 16.25     | shopcc         |
| 273885        | 9/12/2020        | 112-3611630-5784251 | AMAZON.COM SERVICES, INC       | 2021 ERASABLE WALL CALENDAR- FLEET               | \$ 21.54     | shopcc         |
| 273945        | 9/12/2020        | 41600368887         | LES SCHWAB TIRE CENTERS        | REMOVE SCREW FLAT TIRE #031                      | \$ 21.76     | dshop          |
| 273769        | 9/12/2020        | 1366778             | SURETY PEST CONTROL            | CEMETERY RODENT CONTROL                          | \$ 50.05     | pwfacc         |
| 273890        | 9/13/2020        | 111-1323806-1173009 | AMAZON.COM SERVICES, INC       | MAINTENANCE SUPPLIES                             | \$ 87.54     | wwtpcc         |
| 273936        | 9/14/2020        | 113-8426353-1207465 | AMAZON.COM SERVICES, INC       | WEBCAMS FOR VIRTUAL MEETINGS                     | \$ 200.84    | infosyscc      |
| 273939        | 9/14/2020        | 112-2389228-8533830 | AMAZON.COM SERVICES, INC       | 2021 ERASABLE CALENDAR- SOLID WASTE              | \$ 29.26     | shopcc         |
| 274020        | 9/14/2020        | 1991911286          | ARAMARK                        | LAUNDRY SERVICE                                  | \$ 75.66     | dwwtp          |
| 273935        | 9/14/2020        | 630618725200882     | ASSOCIATION OF WASHINGTON      | HR DIRECTOR JOB POSTING ANNOUNCEMENT-AWC WEBSITE | \$ 100.00    | hrcc1          |
| 273955        | 9/14/2020        | 861722              | BAYSHORE OFFICE PRODUCTS INC   | COVID-19 PPE STORAGE CABINET                     | \$ 561.02    | pwfacc         |
| 273959        | 9/14/2020        | 861949              | BAYSHORE OFFICE PRODUCTS INC   | OFFICE SUPPLIES                                  | \$ 18.14     | museumcc       |
| 274516        | 9/14/2020        | 909954706           | BSN SPORTS, LLC                | FUSION ADJUSTABLE MASK YTH SOCCER TRAINING       | \$ 685.44    | pkrec          |
| 273957        | 9/14/2020        | 8563 62 25973       | HOME DEPOT                     | IT USE SUPPLIES                                  | \$ 27.51     | infosyscc      |
| 273934        | 9/14/2020        | G92946              | SEBO'S DO-IT CENTER            | OPERATING SUPPLIES                               | \$ 16.72     | wwtpcc         |
| 273940        | 9/14/2020        | G92569              | SEBO'S DO-IT CENTER            | CAULK                                            | \$ 8.08      | wdistcc        |
| 273937        | 9/14/2020        | 14031IN4300         | TCC                            | CELL PHONE CASE                                  | \$ 54.39     | fibercc        |
| 273958        | 9/15/2020        | 112-9212990-4169022 | AMAZON.COM SERVICES, INC       | 2021 DESK CALENDARS- SOLID WASTE                 | \$ 23.70     | shopcc         |
| 273956        | 9/15/2020        | 000545694           | AMERICAN HEART ASSOCIATION     | CPR AND BBP CLASSES X 4                          | \$ 104.00    | wtpcc          |
| 273938        | 9/15/2020        | 100944895           | INTERNATIONAL CODE COUNCIL,INC | FIRE INSPECTOR 1 CERTIFICATION                   | \$ 219.00    | afdcc          |
| 273990        | 9/15/2020        | 3217463             | NURNBERG SCIENTIFIC            | LAB SUPPLIES                                     | \$ 46.14     | wwtpcc         |
| 273991        | 9/15/2020        | 3217464             | NURNBERG SCIENTIFIC            | LAB SUPPLIES                                     | \$ 192.05    | wwtpcc         |
| 273992        | 9/15/2020        | 3217465             | NURNBERG SCIENTIFIC            | LAB SUPPLIES                                     | \$ 103.46    | wwtpcc         |
| 274691        | 9/15/2020        | 001-477392          | PISTON SERVICE OF ANACORTES    | LEAD SUBSTITUE (ANTIQU ENGINE)                   | \$ 4.34      | medic          |
| 273954        | 9/15/2020        | 97002               | PORT OF ANACORTES              | DINGHY DOCK STORAGE SPACE FOR SAILBOATS          | \$ 392.97    | pkreccc        |
| 274665        | 9/15/2020        | T19-013.05          | TUTTLE ENGINEERING AND MGMT    | GRAND VIEW CEMETERY EXPANSION - PHASE 1 - DESIGN | \$ 2,086.50  | parks1         |
| 273996        | 9/16/2020        | 112-4555865-1038622 | AMAZON.COM SERVICES, INC       | SAFETY SUPPLIES                                  | \$ 118.45    | wwtpcc         |

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| 274002        | 9/16/2020        | 112-1830932-4312235 | AMAZON.COM SERVICES, INC     | RED DIARY FOR 2021                                 | \$ 39.85     | shopcc         |
| 273998        | 9/16/2020        | 000546927           | AMERICAN HEART ASSOCIATION   | CPR/BBP CLASSES FOR SETH SCHUH                     | \$ 52.00     | wtpcc          |
| 273999        | 9/16/2020        | 000547287           | AMERICAN HEART ASSOCIATION   | CPR/BBP CLASSES FOR BRIAN MCDANIEL                 | \$ 52.00     | wtpcc          |
| 274055        | 9/16/2020        | 862290              | BAYSHORE OFFICE PRODUCTS INC | COVID-19 PPE DISINFECTANT WIPES                    | \$ 219.08    | pwfacc         |
| 274471        | 9/16/2020        | 232953              | CONTROL FACTORS-SEATTLE INC  | MAINTENANCE SUPPLIES                               | \$ 651.71    | dwwtp          |
| 274091        | 9/16/2020        | 3361450             | DAILY JOURNAL OF COMMERCE    | PUBLISH DJC AD 388069                              | \$ 105.60    | finance        |
| 274092        | 9/16/2020        | 3361451             | DAILY JOURNAL OF COMMERCE    | PUBLISH DJC AD 388070                              | \$ 79.20     | finance        |
| 274006        | 9/16/2020        | ANA05               | EDGE ANALYTICAL, INC         | LAB TESTING                                        | \$ 3,456.10  | wwtpcc         |
| 273989        | 9/16/2020        | I81421              | FRONTIER BUILDING SUPPLY     | FACILITY USE ITEMS                                 | \$ 94.96     | pwfacc         |
| 274003        | 9/16/2020        | I81341              | FRONTIER BUILDING SUPPLY     | INVENTORY SHOP PANELING                            | \$ 109.22    | pwfacc         |
| 274664        | 9/16/2020        | 1200295238          | HDR ENGINEERING, INC         | WWTP OUTFALL PRE-DESIGN - PHASE 2 - 8/2/20-8/29/20 | \$ 81,055.51 | pw1            |
| 273988        | 9/16/2020        | 092020              | MUNICIPAL RESEARCH &         | INCLUSIVE PUBLIC ENGAGEMENT STRATEGIES             | \$ 35.00     | executive      |
| 273997        | 9/16/2020        | 113598              | PORT OF ANACORTES            | NON-ETHANOL FUEL                                   | \$ 12.64     | afdcc          |
| 273993        | 9/16/2020        | G93939              | SEBO'S DO-IT CENTER          | FASTENERS                                          | \$ 1.96      | shopcc         |
| 274000        | 9/16/2020        | G93872              | SEBO'S DO-IT CENTER          | PAINT                                              | \$ 14.06     | fibercc        |
| 274001        | 9/16/2020        | G93724              | SEBO'S DO-IT CENTER          | COUPLING 4 X 4                                     | \$ 38.34     | shopcc         |
| 274004        | 9/16/2020        | G93895              | SEBO'S DO-IT CENTER          | PARK SUPPLIES                                      | \$ 21.93     | parksc1        |
| 274069        | 9/16/2020        | 194976              | SKAGIT REGIONAL HEALTH       | SKAGIT REGIONAL CDL EXAM                           | \$ 92.00     | parksc1        |
| 273962        | 9/16/2020        | 114-10950622        | UNITED SITE SERVICES, INC    | RESTROOM FOR FIBER CREW 08/04- 09/03/20            | \$ 57.98     | wdist          |
| 274057        | 9/17/2020        | 113-7787532-2482643 | AMAZON.COM SERVICES, INC     | SAFETY VESTS                                       | \$ 86.28     | fibercc        |
| 274059        | 9/17/2020        | 113-9460167-6609824 | AMAZON.COM SERVICES, INC     | TOOLS                                              | \$ 152.22    | fibercc        |
| 274060        | 9/17/2020        | 112-8047483-8386617 | AMAZON.COM SERVICES, INC     | 2021 DAILY DIARIES- STREET DEPT                    | \$ 130.63    | shopcc         |
| 274061        | 9/17/2020        | 112-3160938-5433819 | AMAZON.COM SERVICES, INC     | PART FOR VEH 211                                   | \$ 58.27     | shopcc         |
| 274062        | 9/17/2020        | 112-8047483-8386617 | AMAZON.COM SERVICES, INC     | 2021 MONTHLY WALL CALENDAR- STREET DEPT            | \$ 49.94     | shopcc         |
| 274063        | 9/17/2020        | 112-9397301-8240214 | AMAZON.COM SERVICES, INC     | MONTHLY DESK PAD CALENDARS                         | \$ 26.86     | shopcc         |
| 274065        | 9/17/2020        | 111-6784979-3265862 | AMAZON.COM SERVICES, INC     | RECEIPT PAPER FOR CHECKOUT PRINTERS                | \$ 102.26    | libcc          |
| 274067        | 9/17/2020        | 114-0792000-9800265 | AMAZON.COM SERVICES, INC     | OUTDOOR SECURITY LIGHTS                            | \$ 157.76    | pwfacc         |
| 274008        | 9/17/2020        | 1991917038          | ARAMARK                      | OPS: MAT CLEANING                                  | \$ 41.67     | dshop          |
| 274009        | 9/17/2020        | 1991917037          | ARAMARK                      | OPS & PARKS LAUNDRY SVC                            | \$ 64.80     | finance        |
| 274089        | 9/17/2020        | 1991917029          | ARAMARK                      | APD NYLON MATS CLEANED                             | \$ 16.32     | apd            |

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| 274129        | 9/17/2020        | B861206-1           | BAYSHORE OFFICE PRODUCTS INC   | COVID-19 PPE ACRLYIC BARRIER                        | \$ 59.84     | pwfacc         |
| 274070        | 9/17/2020        | 1709011271          | COCONUT KENNY'S                | LUNCH FOR OFF -SITE EXTRICATION CLASS (10 STUDENTS) | \$ 109.18    | afdcc          |
| 274134        | 9/17/2020        | 0188-512692         | CONSOLIDATED ELECTRICAL        | CABLE PULLING GRIP                                  | \$ 77.94     | fibercc        |
| 274120        | 9/17/2020        | 100006984903        | FAMILY CARE NETWORK PLLC       | OPERATOR CDL PHYSICAL                               | \$ 160.00    | wwtpcc         |
| 274056        | 9/17/2020        | FS200916420681      | FS.COM, INC.                   | FIBER OPTIC SPLITTERS                               | \$ 92.49     | fibercc        |
| 274058        | 9/17/2020        | FS200916740562      | FS.COM, INC.                   | FIBER OPTIC SPLITTERS                               | \$ 220.97    | fibercc        |
| 273995        | 9/17/2020        | 100946450           | INTERNATIONAL CODE COUNCIL,INC | MEMBERSHIP                                          | \$ 115.00    | bldgcc         |
| 274132        | 9/17/2020        | 1095123131          | MALVERN PANALYTICAL, INC.      | ZETA CELLS X 2                                      | \$ 459.28    | wtpcc          |
| 274049        | 9/17/2020        | E0500C8XVH          | MICROSOFT CORPORATION          | AZURE DEVELOPER SUPPORT 8/16-9/15/20                | \$ 29.00     | infosyscc      |
| 274050        | 9/17/2020        | E0500C8WFK          | MICROSOFT CORPORATION          | AZURE PAY AS YOU GO 8/16-9/15/20                    | \$ 24.18     | infosyscc      |
| 274071        | 9/17/2020        | 786768              | MY TAILOR                      | PATCHES ON UNIFORM                                  | \$ 18.00     | afdcc          |
| 274052        | 9/17/2020        | 1435-1083           | NATIONAL CRIMINAL JUSTICE      | TRAINING REGISTRATION FEE; DET SGT NATIONS          | \$ 39.00     | apdcc          |
| 274054        | 9/17/2020        | 0592113-IN          | NATIONAL SAFETY, INC           | SAFETY SUPPLIES                                     | \$ 368.78    | wwtpcc         |
| 274064        | 9/17/2020        | G94166              | SEBO'S DO-IT CENTER            | PAINT & SANDPAPER                                   | \$ 37.93     | wdistcc        |
| 274066        | 9/17/2020        | G94475              | SEBO'S DO-IT CENTER            | COUPLER/NIPPLE SET                                  | \$ 8.26      | afdcc          |
| 274068        | 9/17/2020        | G94319              | SEBO'S DO-IT CENTER            | PARK SUPPLIES                                       | \$ 3.82      | parksccl       |
| 274005        | 9/17/2020        | 124407478           | ULINE, INC.                    | MAINTENANCE SUPPLIES                                | \$ 483.47    | wwtpcc         |
| 274072        | 9/17/2020        | 114-10948633        | UNITED SITE SERVICES, INC      | LITTLE CRANBERRY PORTA POTTY                        | \$ 68.94     | parksccl       |
| 274047        | 9/17/2020        | WSAMA2020           | WASHINGTON STATE ASSOCIATION   | SWETNAM WSAMA MEMBERSHIP                            | \$ 30.00     | legal          |
| 274048        | 9/17/2020        | R48516239           | YOURMEMBERSHIP.COM, INC.       | SHRM HR JOB POSTING - HR DIRECTOR                   | \$ 299.00    | hrcccl         |
| 274142        | 9/18/2020        | F59553/1            | ACE HARDWARE                   | STEP LADDER                                         | \$ 48.95     | shopcc         |
| 274128        | 9/18/2020        | 112-4555865-1038611 | AMAZON.COM SERVICES, INC       | SAFETY SUPPLIES                                     | \$ 65.28     | wwtpcc         |
| 274136        | 9/18/2020        | 112-0062589-4884223 | AMAZON.COM SERVICES, INC       | RED DIARY                                           | \$ 40.73     | shopcc         |
| 274677        | 9/18/2020        | 21-WAR055549-1      | DEPARTMENT OF ECOLOGY          | FY2021 NPDES PERMIT FEE                             | \$ 8,172.22  | pw1            |
| 274144        | 9/18/2020        | 153006              | FIDALGO ANIMAL MEDICAL CENTER  | K9 T-BONE MEDICATION                                | \$ 42.28     | apdcc          |
| 274143        | 9/18/2020        | I82129              | FRONTIER BUILDING SUPPLY       | BROOM                                               | \$ 51.13     | pwfacc         |
| 274123        | 9/18/2020        | E0600C384J          | MICROSOFT CORPORATION          | AZURE DISASTER AND RECOVERY 8/2-9/1/20              | \$ 466.75    | infosyscc      |
| 274122        | 9/18/2020        | D9NMRHPCB3          | MUNICIPAL RESEARCH &           | WSAMA FALL VIRTUAL CONFERENCE                       | \$ 102.96    | execc          |
| 274053        | 9/18/2020        | 1184-7485           | NATIONAL LAW ENFORCEMENT       | TRAINING REGISTRATION FEE; OFC DILLS                | \$ 39.00     | apdcc          |
| 274130        | 9/18/2020        | G94742              | SEBO'S DO-IT CENTER            | FACILITY USE ITEMS                                  | \$ 34.28     | pwfacc         |
| 274135        | 9/18/2020        | G94721              | SEBO'S DO-IT CENTER            | POTTING MIX                                         | \$ 76.00     | fibercc        |
| 274141        | 9/18/2020        | G94759              | SEBO'S DO-IT CENTER            | YELLOW PAINT, RATCHET WRENCH                        | \$ 31.29     | shopcc         |
| 274124        | 9/18/2020        | 0021863135          | STOWES, INC                    | RAIN GEAR                                           | \$ 81.35     | shopcc         |
| 274139        | 9/18/2020        | INV000755072        | TRAFFIC SAFETY STORE           | STREET CONES, WORK ZONE SIGNS                       | \$ 1,393.65  | pwfacc         |
| 274137        | 9/19/2020        | 112-8248450-1501022 | AMAZON.COM SERVICES, INC       | 2021 DAILY DIARY- WATER DEPT                        | \$ 26.51     | wdistcc        |

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| 274138        | 9/19/2020        | 112-8248450-1501022 | AMAZON.COM SERVICES, INC       | 2021 WALL CALENDARS- WATER DEPT          | \$ 49.74     | wdistcc        |
| 274127        | 9/19/2020        | 100948000           | INTERNATIONAL CODE COUNCIL,INC | MEMBERSHIP RENEWALS                      | \$ 215.00    | bldgcc         |
| 274131        | 9/19/2020        | G95624              | SEBO'S DO-IT CENTER            | FACILITY USE ITEMS                       | \$ 132.98    | pwfacc         |
| 274121        | 9/20/2020        | F60958/1            | ACE HARDWARE                   | MAINTENANCE SUPPLIES                     | \$ 29.35     | wwtpcc         |
| 274126        | 9/20/2020        | 112-3639838-9460232 | AMAZON.COM SERVICES, INC       | HARD PHONE CASE; CAPT FULLER             | \$ 16.31     | apdcc          |
| 274140        | 9/20/2020        | 114-7626912-1385827 | AMAZON.COM SERVICES, INC       | SHOP LIGHTS                              | \$ 206.71    | pwfacc         |
| 274208        | 9/21/2020        | 113-8854235-4921822 | AMAZON.COM SERVICES, INC       | CONDUIT                                  | \$ 29.92     | fibercc        |
| 274213        | 9/21/2020        | 8055443             | AMAZON.COM SERVICES, INC       | 2 SMALL PELICAN CASES                    | \$ 97.92     | afdcc          |
| 274164        | 9/21/2020        | 862863              | BAYSHORE OFFICE PRODUCTS INC   | OFFICE SUPPLIES                          | \$ 66.29     | hr             |
| 274235        | 9/21/2020        | 862858              | BAYSHORE OFFICE PRODUCTS INC   | SUPPLIES                                 | \$ 2.35      | fibercc        |
| 274515        | 9/21/2020        | 910036444           | BSN SPORTS, LLC                | FUSION NECK BUFF FOR YTH SOCCER TRAINING | \$ 742.56    | pkrec          |
| 274206        | 9/21/2020        | GQVXKX6AP2          | FACEBOOK                       | FACEBOOK ADVERTISING                     | \$ 35.00     | fibercc        |
| 274243        | 9/21/2020        | 593 3 23 4291       | SAFEWAY INC                    | COVID SUPPLIES                           | \$ 11.96     | wwtpcc         |
| 274557        | 9/21/2020        | 551551531           | SIGMA-ALDRICH, INC.            | WTP PROFICIENCY TESTING SAMPLES          | \$ 314.84    | dwtpp          |
| 274242        | 9/21/2020        | 1364284             | SURETY PEST CONTROL            | PEST CONTROL STATION 2                   | \$ 44.61     | afdcc          |
| 274212        | 9/21/2020        | 834595              | YSI INCORPORATED (XYLEM)       | MAINTENANCE SUPPLY                       | \$ 257.68    | wwtpcc         |
| 274207        | 9/22/2020        | 111-9901281-1672216 | AMAZON.COM SERVICES, INC       | DAILY JOURNAL                            | \$ 11.00     | fibercc        |
| 274209        | 9/22/2020        | 112-9713204-8148239 | AMAZON.COM SERVICES, INC       | 2021 DESK CALENDARS- FLEET DEPT          | \$ 26.91     | shopcc         |
| 274236        | 9/22/2020        | IN102009220241      | FS.COM, INC.                   | FIBER OPTIC SPLITTER                     | \$ 334.02    | fibercc        |
| 274237        | 9/22/2020        | 3240581             | LITTLE GIANT LADDER SYSTEMS    | LADDER                                   | \$ 598.39    | fibercc        |
| 274240        | 9/22/2020        | 24241560            | PURCELL TIRE AND SERVICE CENTE | SERVICE- #304                            | \$ 93.30     | shopcc         |
| 274284        | 9/22/2020        | 593 8 302 0219      | SAFEWAY INC                    | COVID-19 PPE DISINFECTANT SPRAY          | \$ 45.63     | pwfacc         |
| 274233        | 9/22/2020        | G97361              | SEBO'S DO-IT CENTER            | REC SUPPLIES                             | \$ 6.47      | pkreccc        |
| 274234        | 9/22/2020        | G97293              | SEBO'S DO-IT CENTER            | COVID-19 PPE LIBRARY                     | \$ 111.89    | pwfacc         |
| 274238        | 9/22/2020        | G97314              | SEBO'S DO-IT CENTER            | TOOLS AND SUPPLIES                       | \$ 276.23    | fibercc        |
| 274241        | 9/22/2020        | G97144              | SEBO'S DO-IT CENTER            | OPERATING SUPPLIES- WATER DEPT           | \$ 20.22     | wdistcc        |
| 274566        | 9/22/2020        | 100355              | SUNLAND BARK & TOPSOILS        | TOPSOIL- STREET DEPT                     | \$ 118.32    | dshop          |
| 274472        | 9/22/2020        | 331 0538943         | UNIFIRST CORPORATION           | WATER CREW LAUNDRY                       | \$ 45.49     | wdist          |
| 274666        | 9/22/2020        | 331 0538984         | UNIFIRST CORPORATION           | UNIFORM LAUNDRY                          | \$ 28.80     | fiber          |
| 274239        | 9/22/2020        | KKGFD-16A52-1L1     | VISTAPRINT                     | BUSINESS CARDS; OFC SCHEEPERS            | \$ 22.84     | apdcc          |
| 274291        | 9/23/2020        | F62326/1            | ACE HARDWARE                   | LAWN SEED- WATER DEPT                    | \$ 78.33     | wdistcc        |
| 274286        | 9/23/2020        | 1067437843          | B & H PHOTO - VIDEO            | PHOTO EQUIPMENT FOR VIRTUAL PROGRAMS     | \$ 3,769.60  | libcc          |
| 274289        | 9/23/2020        | X36394              | COASTAL FARM &                 | RAIN GEAR                                | \$ 273.90    | fibercc        |

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| 274290        | 9/23/2020        | 114495272            | DEPARTMENT OF LICENSING             | LICENSING FEES- #872                                                        | \$ 57.00     | shopcc         |
| 274293        | 9/23/2020        | 183312               | FRONTIER BUILDING SUPPLY            | CEDAR FENCING WA PARK                                                       | \$ 7.04      | parksccl       |
| 274278        | 9/23/2020        | 94751                | LANCER SALES USA, INC               | LAB SUPPLIES                                                                | \$ 492.27    | wwtpcc         |
| 274662        | 9/23/2020        | 32068                | MATERIALS TESTING & CONSULTING      | SKAGIT RIVER RAW WATER PIPELINE/CLEARWELL PROJECT - SPECIALIZED INSPECTIONS | \$ 3,231.25  | pw1            |
| 274663        | 9/23/2020        | PSWO0138195          | N C POWER SYSTEMS CO                | WTP POWER GENERATION - TSP/HMI MODERNIZATION UPGRADE                        | \$ 69,270.46 | dwtpp          |
| 274295        | 9/23/2020        | 09/23/2020           | NATIONAL BARRICADE CO., LLC         | CONSTRUCTION SIGN RENTAL                                                    | \$ 118.27    | pwfacccl       |
| 274296        | 9/23/2020        | 629546               | NATIONAL BARRICADE CO., LLC         | CONSTRUCTION SIGN RENTAL                                                    | \$ 671.12    | pwfacccl       |
| 274280        | 9/23/2020        | 19133602             | RUNNERINN, TRADEINN RETAIL SERVICES | UNIFORM BOOTS                                                               | \$ 116.48    | apdcc          |
| 274279        | 9/23/2020        | G97771               | SEBO'S DO-IT CENTER                 | FASTENERS- #158                                                             | \$ 7.72      | shopcc         |
| 274282        | 9/23/2020        | G92650               | SEBO'S DO-IT CENTER                 | CHAINSAW CHAIN AND OIL                                                      | \$ 29.35     | wtpcc          |
| 274292        | 9/23/2020        | G97556               | SEBO'S DO-IT CENTER                 | SUPPLIES                                                                    | \$ 112.39    | fibercc        |
| 274294        | 9/23/2020        | G97589               | SEBO'S DO-IT CENTER                 | PARK SUPPLIES                                                               | \$ 4.79      | parksccl       |
| 274676        | 9/23/2020        | 1215826              | SKAGIT PUBLISHING LLC               | PUBLISH AA-2033536 AA-2033608 AA-2033687 AA-2033691 AA-2034132              | \$ 454.72    | finance        |
| 274285        | 9/23/2020        | 482695               | STRINGKING                          | COVID-19 PPE MASKS                                                          | \$ 2,632.88  | pwfacccl       |
| 274287        | 9/23/2020        | 124681297            | ULINE, INC.                         | SPRING LIFTS FOR BASKET TRUCK                                               | \$ 128.38    | libcc          |
| 274288        | 9/23/2020        | 124681298            | ULINE, INC.                         | CANVAS BASKETS FOR BOOK RETURNS                                             | \$ 1,572.56  | libcc          |
| 274281        | 9/24/2020        | 112-3944609-9638642  | AMAZON.COM SERVICES, INC            | OPERATING SUPPLIES                                                          | \$ 89.21     | wwtpcc         |
| 274670        | 9/24/2020        | 400002845255         | PUGET SOUND ENERGY INC              | ENGINEERING FEE, POLE ATTACHMENT                                            | \$ 708.35    | fiber          |
| 274754        | 9/25/2020        | 3RD QTR PROBATION    | SKAGIT COUNTY DISTRICT COURT        | 3RD QTR PROBATION SERVICES                                                  | \$ 6,250.00  | court          |
| 274555        | 9/26/2020        | 138311               | LAKESIDE INDUSTRIES, INC.           | ROCK SALES 5/8 & 3/4                                                        | \$ 833.61    | wdist          |
| 274752        | 9/26/2020        | 138310               | LAKESIDE INDUSTRIES, INC.           | GRAVEL                                                                      | \$ 206.97    | fiber          |
| 274570        | 9/28/2020        | 789374               | CASCADE COLUMBIA DISTRIBUTION       | SODIUM FLUORIDE - 1 PALLET/40 BAGS                                          | \$ 1,860.00  | dwtpp          |
| 274551        | 9/28/2020        | 5032534026           | CINTAS CORPORATION                  | FIRST AID SUPPLIES - VARIOUS DEPTS                                          | \$ 861.30    | finance        |
| 274708        | 9/28/2020        | 9317992213           | GRAYBAR ELECTRIC COMPANY, INC       | FIBER OPTIC SPLICE CLOSURE PARTS                                            | \$ 1,847.77  | fiber          |
| 274647        | 9/28/2020        | BMS90397             | OVERHEAD DOOR CO                    | REPAIR DAMAGED BAY DOOR (29-1)                                              | \$ 602.75    | medic          |
| 274679        | 9/28/2020        | 2803                 | SKAGIT 911                          | 2ND QTR 2020 SPILLMAN FEES                                                  | \$ 2,404.46  | medic          |
| 274688        | 9/28/2020        | 2020 Q3-Ana          | SKAGIT COUNTY DEM                   | 3RD QTR SHARED COSTS                                                        | \$ 12,890.94 | medic          |
| 274711        | 9/28/2020        | 9863779142           | VERIZON WIRELESS                    | City Cell Phones 8/28-9/28/20                                               | \$ 9,993.41  | finance        |
| 274511        | 9/28/2020        | 360-293-6427-0218975 | ZIPLY FIBER                         | CITY HALL 911 9/28-10/27/20                                                 | \$ 79.37     | finance        |
| 274518        | 9/28/2020        | 360-293-3725-0501135 | ZIPLY FIBER                         | DEPOT PHONE 09/28-10/27/20                                                  | \$ 62.92     | parksl         |
| 274552        | 9/28/2020        | 360-299-3674-0214175 | ZIPLY FIBER                         | OPS 9/28-10/27/20                                                           | \$ 70.57     | dshop          |

| Invoice Doc # | Transaction Date | Invoice #            | Vendor Full Name               | Description                                                 | Total Amount | Approval Queue |
|---------------|------------------|----------------------|--------------------------------|-------------------------------------------------------------|--------------|----------------|
| 274618        | 9/28/2020        | 360-299-0813-1017915 | ZIPLY FIBER                    | WWTP 9/28-10/27/20                                          | \$ 313.17    | dwwtp          |
| 274637        | 9/28/2020        | 360-299-6615-0615165 | ZIPLY FIBER                    | APD 911 LINE 9/28-10/27/20                                  | \$ 73.00     | apd            |
| 274638        | 9/28/2020        | 360-588-9248-0619005 | ZIPLY FIBER                    | APD BACKUP LINE 9/28-10/27/20                               | \$ 207.36    | apd            |
| 274640        | 9/28/2020        | 360-588-1422-0822015 | ZIPLY FIBER                    | APD BUSINESS LINE 9/28-10/27/20                             | \$ 301.38    | apd            |
| 274641        | 9/28/2020        | 360-293-4900-0912865 | ZIPLY FIBER                    | APD BAC LINE 9/28-10/27/20                                  | \$ 85.79     | apd            |
| 274682        | 9/28/2020        | 360-293-9063-0926075 | ZIPLY FIBER                    | STA 3 PHONE, FAX, INTERNET 9/28-10/27/20                    | \$ 82.74     | medic          |
| 274643        | 9/29/2020        | 5171                 | ANACORTES TOWING, LLC          | TOWING; APD CASE 20-A06393                                  | \$ 163.20    | apd            |
| 274625        | 9/29/2020        | 283958B              | BAY CITY SUPPLY                | COVID-19 PPE HAND HELD CORDLESS SPRAYER<br>FIRE DEPT        | \$ 2,388.27  | pwfac          |
| 274626        | 9/29/2020        | 282360               | BAY CITY SUPPLY                | COVID-19 PPE DISINFECTANT WIPES                             | \$ 456.96    | pwfac          |
| 274474        | 9/29/2020        | 2765724              | FOSTER GARVEY PC               | WTP 2017 MATTER NO. 102                                     | \$ 675.20    | legal          |
| 274475        | 9/29/2020        | 2765706              | FOSTER GARVEY PC               | SOLID WASTE/WASTE MNGMT MATTER NO.74                        | \$ 840.00    | legal          |
| 274478        | 9/29/2020        | 2765723              | FOSTER GARVEY PC               | WTP MATTER NO. 96                                           | \$ 12,337.65 | legal          |
| 274649        | 9/29/2020        | 1038632              | LIFE ASSIST, INC               | I-GEL RESUS PACKS, MEGAMOVERS                               | \$ 920.97    | medic          |
| 274473        | 9/29/2020        | 195021               | NAPA                           | HYDRAULIC HOSE #511                                         | \$ 73.36     | dshop          |
| 274567        | 9/29/2020        | 194974               | NAPA                           | MISC FILTERS- #7-923                                        | \$ 42.61     | dshop          |
| 274568        | 9/29/2020        | 194972               | NAPA                           | MISC FILTERS- #7-920                                        | \$ 25.30     | dshop          |
| 274671        | 9/29/2020        | 220015149234         | PUGET SOUND ENERGY INC         | 8147 S MARCH PT RD 8/28 - 9/29/20                           | \$ 25.94     | dshop          |
| 274639        | 9/29/2020        | 331 0540014          | UNIFIRST CORPORATION           | WATER CREW LAUNDRY                                          | \$ 45.49     | wdist          |
| 274667        | 9/29/2020        | 331 0540044          | UNIFIRST CORPORATION           | UNIFORM LAUNDRY                                             | \$ 28.80     | fiber          |
| 274630        | 9/29/2020        | 101841               | VECA ELECTRIC & TECHNOLOGIES   | FACILITY REPAIRS CITY HALL                                  | \$ 2,321.67  | pwfac          |
| 274507        | 9/29/2020        | 2209075              | WASHINGTON TRACTOR, INC        | FLANGE & BEARING #422                                       | \$ 50.22     | dshop          |
| 274650        | 9/30/2020        | 116371               | A-1 MOBILE LOCK AND KEY, INC.  | REPLACE DEADLATCH @ 29-2                                    | \$ 136.00    | medic          |
| 274763        | 9/30/2020        | 293                  | BUBBA SUDZ CAR WASH, INC.      | SEPTEMBER CAR WASHES- 6                                     | \$ 54.00     | dshop          |
| 274645        | 9/30/2020        | 5785028              | CARDINAL HEALTH 110, INC.      | PHARMACEUTICALS                                             | \$ 37.56     | medic          |
| 274686        | 9/30/2020        | AN 75278             | CENTRAL WELDING SUPPLY CO, INC | O2 FOR AMBULANCE                                            | \$ 59.12     | medic          |
| 274707        | 9/30/2020        | FB-1407              | CITY OF BURLINGTON             | DARK FIBER LEASE                                            | \$ 350.00    | fiber          |
| 274683        | 9/30/2020        | WAANA128860          | FASTENAL COMPANY               | MAINTENANCE SUPPLIES                                        | \$ 49.03     | dwwtp          |
| 274629        | 9/30/2020        | 138951               | LAKESIDE INDUSTRIES, INC.      | DUMP FEES- STREET DEPT                                      | \$ 46.44     | dshop          |
| 274622        | 9/30/2020        | 1039008              | LIFE ASSIST, INC               | COVID-19 PPE GLOVES POLICE                                  | \$ 1,813.15  | pwfac          |
| 274651        | 9/30/2020        | 1039078              | LIFE ASSIST, INC               | PEDIATRIC DOSING CHARTS                                     | \$ 141.00    | medic          |
| 274520        | 9/30/2020        | 195147               | NAPA                           | BLOWER MOTOR #009                                           | \$ 43.84     | dshop          |
| 274700        | 9/30/2020        | 195054               | NAPA                           | FUEL FILTER- #7923                                          | \$ 6.88      | dshop          |
| 274657        | 9/30/2020        | IN937609             | NOANET                         | MUNICIPAL FIBER NETWORK COORDINATED<br>SERVICES - SEPT 2020 | \$ 3,108.31  | fiber          |



| Invoice Doc # | Transaction Date | Invoice #            | Vendor Full Name               | Description                                                                 | Total Amount | Approval Queue |
|---------------|------------------|----------------------|--------------------------------|-----------------------------------------------------------------------------|--------------|----------------|
| 274755        | 9/30/2020        | 2338                 | NORTHWEST CORROSION            | SKAGIT RIVER RAW WATER PIPELINE AND CLEARWELL PROJECT - COATING INSPECTIONS | \$ 410.74    | pw1            |
| 274642        | 9/30/2020        | 25499                | NORTHWEST SOLUTIONS, INC       | COVID-19 PPE HAND SANITIZER/WIPES/DISPENSERS/N95 MASK/DISPENSER STAND       | \$ 4,763.26  | pwfac          |
| 274761        | 9/30/2020        | 23582                | ORCA INFORMATION, INC          | EMPLOYMENT REPORT KNIGHT, MORGAN                                            | \$ 102.00    | hr             |
| 274674        | 9/30/2020        | 9009                 | PETDATA, INC                   | PETDATA LICENSING FEES SEPTEMBER                                            | \$ 77.90     | finance        |
| 274446        | 9/30/2020        | OU25551              | PLATT ELECTRIC SUPPLY INC      | PUMP STATION SUPPLIES                                                       | \$ 127.43    | dwwtp          |
| 274656        | 9/30/2020        | 022563               | REECE, STORMIE                 | CLEANING OF DEPOT SEPT 2020                                                 | \$ 396.00    | parks1         |
| 274765        | 9/30/2020        | CL13532              | REISNER DISTRIBUTOR INC        | VEHICLE FUEL - SEPTEMBER                                                    | \$ 15,026.61 | finance        |
| 274562        | 9/30/2020        | 331 0540182          | UNIFIRST CORPORATION           | WTP LAUNDRY SERVICE                                                         | \$ 87.97     | dwwtp          |
| 274553        | 9/30/2020        | 0090110              | UTILITIES UNDERGROUND LOCATION | SEPT LOCATE TICKETS                                                         | \$ 393.45    | dshop          |
| 274654        | 9/30/2020        | COURT & BUILDING FEE | WASHINGTON STATE TREASURER     | COURT & BLDG FEES TO STATE - QTR 3                                          | \$ 23,879.73 | finance        |
| 274509        | 9/30/2020        | 026P14017            | WESTERN TRUCK CENTER           | HOSES FOR #511                                                              | \$ 206.51    | dshop          |
| 274627        | 10/1/2020        | 283958C              | BAY CITY SUPPLY                | COVID-19 PPE HAND HELD CORDLESS SPRAYER                                     | \$ 1,194.13  | pwfac          |
| 274628        | 10/1/2020        | 277324A              | BAY CITY SUPPLY                | COVID-19 PPE TOUCHLESS SANITIZER DISPENSERS                                 | \$ 504.69    | pwfac          |
| 274759        | 10/1/2020        | 515                  | BLUE COW CARWASH               | CAR WASHES: 04/01- 09/30/20                                                 | \$ 1,040.00  | dshop          |
| 274684        | 10/1/2020        | WAANA128894          | FASTENAL COMPANY               | PS 18 MAINTENANCE                                                           | \$ 42.76     | dwwtp          |
| 274697        | 10/1/2020        | 50690                | KRIEG CONSTRUCTION, INC        | 3/8 HMA                                                                     | \$ 3,624.54  | dshop          |
| 274624        | 10/1/2020        | 1039144              | LIFE ASSIST, INC               | COVID-19 PPE POLICE GLOVES                                                  | \$ 897.60    | pwfac          |
| 274692        | 10/1/2020        | 195179               | NAPA                           | IDLER PULLEY #13-932                                                        | \$ 39.05     | dshop          |
| 274757        | 10/1/2020        | 195230               | NAPA                           | OIL ABSORBENT PADS- #7913                                                   | \$ 70.72     | dshop          |
| 274758        | 10/1/2020        | 195176               | NAPA                           | OIL & FUEL FILTERS- #7915                                                   | \$ 89.69     | dshop          |
| 274661        | 10/1/2020        | 0920                 | NELSON, BONNIE                 | AGING MASTERY PROGRAM ADMINISTRATION - SEPTEMBER 2020                       | \$ 400.00    | parks1         |
| 274512        | 10/1/2020        | 3974                 | NW CLEANERS                    | LTAC HEART RESTROOM MAINTENANCE                                             | \$ 550.00    | plan           |
| 274559        | 10/1/2020        | 5060507945           | RICOH USA, INC                 | CITY WIDE 7/1-9/30/20                                                       | \$ 398.85    | finance        |
| 274563        | 10/1/2020        | 5060507265           | RICOH USA, INC                 | S/N C86152062 HR COPIES 9/1-9/30/20                                         | \$ 9.13      | finance        |
| 274635        | 10/1/2020        | 5060507724           | RICOH USA, INC                 | S/N C86138599 APD FRONT OFFICE COPIES 9/1-9/30/20                           | \$ 23.04     | apd            |
| 274550        | 10/1/2020        | 1201602              | SIGNATURE FORMS, INC           | AP CHECK STOCK                                                              | \$ 190.25    | finance        |
| 274753        | 10/1/2020        | 1206                 | THE CLEAN TEAM                 | TOMMY THOMPSON TRAIL 22ND ST BATHROOM MAINTENANCE - SEPT 2020               | \$ 600.00    | pw1            |
| 274522        | 10/1/2020        | RefundTomobobin      | TOMOBODIN, KAY                 | WA PARK CAMPGROUND REFUND TOMOBODIN                                         | \$ 81.00     | parks1         |
| 274762        | 10/1/2020        | GB00100301           | TRANSAMERICA LIFE INS CO       | LEOFF LONG-TERM CARE INSURANCE (OCT)                                        | \$ 634.98    | hr             |
| 274623        | 10/1/2020        | POB 410              | UNITED STATES POSTAL SERVICE   | PO BOX 410 1 YR RENEWAL                                                     | \$ 364.00    | finance        |
| 274560        | 10/1/2020        | 48760029             | UNIVAR USA INC                 | CAUSTIC SODA                                                                | \$ 4,078.52  | dwwtp          |

| Invoice Doc # | Transaction Date | Invoice #            | Vendor Full Name             | Description                                   | Total Amount | Approval Queue |
|---------------|------------------|----------------------|------------------------------|-----------------------------------------------|--------------|----------------|
| 274523        | 10/1/2020        | 123385               | VENTEK INTERNATIONAL         | OCTOBER SERVER HOSTING AND CELL CARRIER       | \$ 135.00    | parks1         |
| 274521        | 10/1/2020        | 112719               | WALTON BEVERAGE COMPANY, INC | OPS BREAKROOM SUPPLY                          | \$ 87.50     | dshop          |
| 274524        | 10/1/2020        | 112715               | WALTON BEVERAGE COMPANY, INC | CITY HALL BREAK ROOM SUPPLIES                 | \$ 262.50    | finance        |
| 274619        | 10/1/2020        | 112716               | WALTON BEVERAGE COMPANY, INC | WWTP BREAKROOM SUPPLIES                       | \$ 52.50     | dwwtp          |
| 274634        | 10/1/2020        | 112718               | WALTON BEVERAGE COMPANY, INC | AFD BREAKROOM SUPPLIES                        | \$ 147.75    | medic          |
| 274621        | 10/1/2020        | 2193277-0043-7       | WASTE MANAGEMENT             | WTP TRASH, RECYCLE 9/1-9/30/20                | \$ 123.79    | dwwtp          |
| 274517        | 10/1/2020        | 102853701-0008415    | WAVE                         | FIBER LEASE WTP TO CITY HALL 10/1-10/31/20    | \$ 1,796.02  | finance        |
| 274648        | 10/1/2020        | 360-293-1900-0122885 | ZIPLY FIBER                  | CITY MAIN PHONE 10/1-10/31/20                 | \$ 1,283.95  | finance        |
| 274689        | 10/1/2020        | 360-293-0045-0223175 | ZIPLY FIBER                  | STATION 1 BACK-UP LINES 10/1-10/31/20         | \$ 155.27    | medic          |
| 274561        | 10/2/2020        | 248 984 6277 5       | CASCADE NATURAL GAS CORP.    | WTP 8/29-9/30/20                              | \$ 398.31    | dwwtp          |
| 274681        | 10/2/2020        | 8498 30 017 0319913  | COMCAST                      | LIBRARY INTERNET ACCESS 10/9-11/8/20          | \$ 182.10    | fiber          |
| 274565        | 10/2/2020        | RefundHamlin         | HAMLIN, DONNA                | WA PARK CAMPGROUND REFUND HAMLIN              | \$ 84.00     | parks1         |
| 274695        | 10/2/2020        | U2016049483          | HB JAEGER                    | RISERS                                        | \$ 260.40    | dshop          |
| 274564        | 10/2/2020        | RefundHeaphy         | HEAPHY, SANDRA               | WA PARK CAMPGROUND REFUND HEAPHY              | \$ 39.00     | parks1         |
| 274669        | 10/2/2020        | 300000290043         | PUGET SOUND ENERGY INC       | STREET LIGHTING 8/1/20-8/31/2020              | \$ 17,052.01 | dshop          |
| 274672        | 10/2/2020        | 300000006951         | PUGET SOUND ENERGY INC       | STREET LIGHTS 8/28-9/29/20                    | \$ 270.27    | dshop          |
| 274696        | 10/2/2020        | 300000325005         | PUGET SOUND ENERGY INC       | STREET LIGHTS- 08/07-09/04/20                 | \$ 72.79     | dshop          |
| 274698        | 10/2/2020        | 300000340004         | PUGET SOUND ENERGY INC       | STREET LIGHTS: 08/28- 09/29/2020              | \$ 66.83     | dshop          |
| 274678        | 10/2/2020        | 2472                 | SOUND LAW CENTER, LLC        | EVERGREEN ISLAND CRITICAL AREAS ORD           | \$ 725.00    | plan           |
| 274694        | 10/3/2020        | 195368               | NAPA                         | AIR FILTER, HOSE, FUEL FILTER #11903          | \$ 41.51     | dshop          |
| 274633        | 10/3/2020        | 00005W5A83400        | UNITED PARCEL SERVICE, INC   | UPS SHIPPING CHARGES; WEEK ENDING 10-3-20     | \$ 19.32     | apd            |
| 274646        | 10/5/2020        | 5796746              | CARDINAL HEALTH 110, INC.    | PHARMACEUTICALS                               | \$ 263.20    | medic          |
| 274685        | 10/5/2020        | 180398               | OASYS INC                    | PLOTTER CHARGE BASE AND CONTRACT 10/9-11/8/20 | \$ 54.40     | pw1            |
| 274632        | 10/5/2020        | 21001694             | WASHINGTON STATE PATROL      | BACKGROUND CHECKS; SEPTEMBER 2020             | \$ 106.00    | apd            |
| 274706        | 10/6/2020        | 19-175-FBR-0021      | ROBINSON BROTHERS            | RETAINAGE RELEASE                             | \$ 12,140.49 | pw1            |
| 274764        | 10/7/2020        | 31-C20054596:1       | MAVAR, HUNTER                | REFUND AMBULANCE OVERPAYMENT                  | \$ 554.40    | finance        |

**Total** **\$1,527,388.84**



# *City Council Contract Agenda Bill*

**Meeting Date:** 10/12/2020    **Agenda Item:** 4c

**Subject:** Contract #20-208-FIN-001 for Outside Bond Counsel Services

**Staff Contact:** Steve Hoglund, Darcy Swetnam

|                                                                              |
|------------------------------------------------------------------------------|
| <b>Approved for Submittal to Council by:</b><br>Darcy Swetnam, City Attorney |
|------------------------------------------------------------------------------|

|                                    |
|------------------------------------|
| <b>Action Type:</b> Contract Award |
|------------------------------------|

**Summary Statement:** The city has used a Stradling Yocca Carlson & Rauth attorney for Bond Counsel services for the past 15 years. This contract updates the existing agreement to include ongoing disclosure requirements for the recently issued 2020 utility system bond.

**Background:**

The City is required to use outside council for bond issues, and our current bond counsel has provided those services to Anacortes for over 15 years. As part of that representation provides our counselor provides guidance on ongoing bond disclosure requirements and updates, and addresses ad hoc questions as they arise. The City is not invoiced for those ongoing disclosure guidance and questions, the only time the attorney are paid is when the City does a bond issue, this has been a good deal for the City.

**Previous Council/Committee Action:** N/A

**Competing Viewpoints Considered:** N/A

**Recommended Motion:** I move that City Council authorize the Mayor to sign contract 20-208-FIN-001 with Stradling Yocca Carlson & Rauth for Bond Counsel services.

**Alternative Actions:** Don't award contract.

**Attachments:** Contract 20-208-FIN-001



STRADLING YOCCA CARLSON & RAUTH A PROFESSIONAL CORPORATION  
601 UNION STREET, SUITE 2424  
SEATTLE, WA 98101  
SYCR.COM

CALIFORNIA  
LOS ANGELES  
NEWPORT BEACH  
SACRAMENTO  
SAN DIEGO  
SAN FRANCISCO  
SANTA BARBARA

COLORADO  
DENVER

NEVADA  
LAS VEGAS  
RENO

WASHINGTON  
SEATTLE

ALICE OSTDIEK  
206.829.3002  
AOSTDIEK@SYCR.COM

September 21, 2020

Steve Hoglund  
Finance Director  
City of Anacortes  
P.O. Box 547  
Anacortes, WA 98221

**Re: City of Anacortes, Washington  
2020-22 Bond Counsel Fees**

Dear Steve:

In preparing for the City's upcoming bond transactions, I discovered that we had last updated our fee and engagement letter with the City in 2017. This letter provides written confirmation regarding Bond Counsel services for bond issuances during 2020-22. The fee schedules for bond counsel described in this letter remain unchanged from as the fee arrangements under the 2017-2018 engagement letter. Our disclosure counsel fees were not described in the prior letter. I am very much looking forward to continuing to work with the City.

### **Scope of Bond Counsel Engagement**

Bond counsel services include the tasks identified in the "Bond Counsel Scope of Services" document, which is attached.

In general, when engaged as bond counsel, we expect to perform the following duties: (i) subject to the completion of proceedings to our satisfaction, render our approving legal opinion (the "Opinion") regarding the validity and binding effect of the Bonds, the source of payment and security for the Bonds, and the excludability of interest on the Bonds from gross income for federal income tax purposes; (ii) prepare and review documents necessary or appropriate to the authorization, issuance and delivery of the Bonds, and coordinate the authorization and execution of such documents; and (iii) review legal issues relating to the structure of the bond issue.

The Opinion will be addressed to the City and will be delivered by us on the date the Bonds are issued in exchange for its purchase price (the "Closing"). The Opinion will be based on facts and law existing as of its date. In rendering our Opinion, we will rely upon the certified proceedings and other certifications of public officials and other persons furnished to us without undertaking to verify the same by independent investigation, and we will assume continuing compliance by the City after the Bond is issued with applicable laws relating to the Bonds. During the course of this engagement, we will rely on the City to provide us with complete and timely information on all developments pertaining to any aspect of the Bonds and the security for payment. We understand that officials and employees of the City will cooperate with us in this regard.

## 2020-22 Bond Counsel Fees and Services

Work on each financing will conclude when the bond issue has closed and we have sent out the transcripts of the bond issue to the City and to the other participants in the transaction. For our work as bond counsel during 2020-22, our fees will be flat fees based on the size and nature of the transaction, calculated using the formulas below:

### General Obligation Bonds

| Par Amount            | Base Fee | Fee per additional \$1,000 par amount    |
|-----------------------|----------|------------------------------------------|
| Under \$1 MM          | \$ 9,500 | <i>Not Applicable</i>                    |
| \$1 MM to \$4.99 MM   | 11,200   | + \$2.50 per \$1,000 above \$1 million   |
| \$5 MM to \$9.99 MM   | 21,200   | + \$1.85 per thousand above \$5 million  |
| \$10 MM to \$24.99 MM | 30,450   | + \$1.50 per thousand above \$10 million |
| \$25 MM to \$49.99 MM | 52,950   | + \$0.90 per thousand above \$25 million |
| Above \$50 MM         | 75,450   | + negotiable                             |

### Utility Revenue Bonds

| Par Amount            | Base Fee  | Fee per additional \$1,000 par amount    |
|-----------------------|-----------|------------------------------------------|
| Under \$1 MM          | \$ 12,350 | <i>Not Applicable</i>                    |
| \$1 MM to \$4.99 MM   | 14,550    | + \$3.25 per \$1,000 above \$1 million   |
| \$5 MM to \$9.99 MM   | 27,550    | + \$2.40 per thousand above \$5 million  |
| \$10 MM to \$24.99 MM | 39,550    | + \$1.95 per thousand above \$10 million |
| \$25 MM to \$49.99 MM | 68,850    | + \$1.15 per thousand above \$25 million |
| Above \$50 MM         | 98,050    | + negotiable                             |

Fees would be rounded to the nearest \$100.

For current refunding bonds, we would add 10% to the fee as calculated above. For advance refundings, forward delivery or other alternatives to advance refunding structures, we would add 25% to the fee calculated above.

For short-term or interim financings, such as a bond anticipation note, our fees would be 50% of the above-calculated fee for the initial issuance of the note, and 40% of the fee for any extension that does not involve modifications that would result in a “reissuance” for federal tax purposes. The fee for a reissuance would be treated like an initial issuance (i.e., 50% of the calculated fee).

Fees for bank direct placements not involving the review or preparation of an Official Statement or private placement memorandum will be 75% of the fees calculated based on the table above.

We will charge the bond counsel fee only if and when the bonds are issued. However, if we begin substantial work on bonds that are not issued with our approving legal opinion after 18 months, we would expect to be compensated on an hourly basis at our normal hourly rates for the work that we have performed in an amount not to exceed the fees calculated using the tables above (unless we have an expectation that the transaction will close within a reasonable time).

## Other Services

The attached “Scope of Bond Counsel Services” document describes certain “Other Services” that may be requested in connection with a particular financing.

In connection with the utility financing that is underway, we have been asked to provide disclosure counsel services and to compile the Official Statement and provide a standard disclosure counsel letter regarding the Official Statement, and particularly those sections describing the bonds and applicable

provisions of state and federal law, and as to other matters, the form of which is to be negotiated in the bond purchase contract. In providing such an opinion, we do not undertake to independently verify information set forth in the Official Statement, but would rely upon certifications provided by the City as to factual matters and would rely upon the cooperation of the City, PFM (the City's Municipal Advisor) and the other members of the financing team, including the scheduling of appropriate conference calls and/or meetings to discuss the disclosure and obtain appropriate signoff from City officials with knowledge of the matters described. Our standard fee for this service when we are also serving as bond counsel is \$10,000 per transaction.

### **Conflicts of Interest**

As you know, Stradling's Seattle office provides municipal and public finance services and does not represent private developers or similar types of clients likely to be adverse to the City. We do not currently have any of these types of engagements that represent a conflict of interest with the City. However, we do represent other political subdivisions and other types of governmental entities in transactions unrelated to the City. While none of these represent current conflicts of interest, in the event that such a representation arises in the future that would present a conflict of interest with the City we would consult with you and, if necessary and appropriate, obtain written conflict waivers.

In addition, as you know from prior engagements with the City, our Firm does from time to time represent underwriters, banks or other financial institutions in transactions unrelated to the City (e.g., representing an underwriter or bank in the purchase of bonds issued by an entity other than the City). We would, of course, only represent those financial institutions in transactions for other bond issuers, i.e., transactions that are *unrelated* to the City. To the extent that these representations may represent a technical conflict of interest, the Rules of Professional Conduct allow clients to waive conflicts of interest when: (a) the lawyer reasonably believes the representation of the one client will not adversely affect the relationship with the other client, and (b) all clients consent in writing after full disclosure of the material facts. We have considered conflicts of the type described here and the factors set forth above, and we believe that it is appropriate to ask for confirmation of the City's waiver of this type of technical conflict.

If the terms of this letter are acceptable, I would appreciate it if you would have the enclosed copy of this letter signed by you or another appropriate City official and returned to me at your convenience. Thanks again. It is always a pleasure to work with you and the City.

Best regards,

STRADLING YOCCA CARLSON & RAUTH, PC



Alice M. Ost diek

APPROVED AND ACCEPTED:

CITY OF ANACORTES, WASHINGTON

By: \_\_\_\_\_

Title: \_\_\_\_\_

## **SCOPE OF BOND COUNSEL SERVICES**

The range of services provided by bond counsel can be narrow or broad, and frequently varies from financing to financing. In addition, the amount of work necessary to perform the same services can be quite different depending upon the nature and complexity of the financing. In the following, we use the term “bonds” to include any obligation of the issuing local government (the “Issuer”) for which we are asked to serve as bond counsel.

### **A. BOND COUNSEL SERVICES**

Those services which Stradling Yocca Carlson & Rauth, P.C. traditionally provides as bond counsel to the Issuer include:

1. Advising the Issuer and its consultants on the legal requirements applicable to and, when requested, participating with those consultants and Issuer’s staff in planning, the financing of a project, including advice on state law and federal income tax and securities laws.
2. Reviewing the transcripts relating to the prior issuance by the Issuer of related outstanding obligations (typically revenue obligations), to assure conformity of the bonds with applicable covenants and conditions.
3. Based on facts provided by the Issuer, performing the necessary legal analysis to determine, in financings in which the bonds are intended to be tax-exempt, whether interest on the bonds will qualify for an exclusion from gross income for federal income tax purposes, and preparing tax exemption and nonarbitrage certificates.
4. Drafting the ordinances/resolutions and other documents necessary to authorize the bonds to be sold and issued (including, where applicable, ballot title ordinances/resolutions).
5. Attending certain meetings relating to the sale and issuance of the bonds.
6. When requested by the Issuer or Issuer’s financial advisor or underwriter, forwarding Issuer financing documents to bond rating agencies and/or bond insurers, and explaining legal provisions of those documents to agency and insurer representatives.
7. When requested by the Issuer or Issuer’s financial advisor or underwriter, reading those portions of drafts of the official statement, offering circular or other sales material relating to the bonds prepared by the Issuer’s investment bankers necessary to assure the accuracy only of the description of the bonds, the source of payment and security for the bonds, the description of the new continuing disclosure undertaking, and the federal tax treatment of the interest on the bonds.
8. Preparing closing documents necessary to support the issuance of the bonds and assembling the transcript after the closing.
9. Subject to the completion of proceedings to our satisfaction, furnishing the firm’s approving legal opinion for the bonds regarding the validity and binding effect of the bonds and the excludability of interest on the bonds from gross income for federal income tax purposes.

Our bond opinion will be based on facts and law existing as of its date, and will constitute the expression of our professional judgment on the matters expressly addressed and not a guarantee of result. In rendering that opinion, we will rely upon the certified proceedings and other certifications of public officials and other persons furnished to us without undertaking to verify the same by independent investigation, and we will assume the Issuer’s continuing compliance, after the issue date, with applicable laws relating to the bonds. During the course of this engagement, we will rely on the Issuer to provide us with complete and timely information on all developments pertaining to any aspect of the bonds and their security, as well as the expected use of bond proceeds. We understand and expect that officers and employees of the Issuer will cooperate with us in this regard.

## **B. OTHER SERVICES**

Traditional bond counsel services described above do not include the following additional bond and project-related work for the Issuer which we would be pleased to perform on request, working with the Issuer's attorney or other designated representatives. The provision of these services should be agreed upon on a case-by-case basis and involves appropriate fee arrangements.

1. The preparation of or review for accuracy of portions of any official statement, offering circular or other sales material relating to the issuance of the bonds prepared by the Issuer or its underwriter or otherwise used in connection with such bonds.
2. Drafting or negotiating of bond purchase agreements (though as a matter of course as bond counsel we typically review such agreements to assure that they conform to the Issuer's bond authorization documents).
3. Negotiation and drafting of repurchase agreements, investment contracts, custodial agreements, swap agreements, credit enhancement or liquidity facilities (other than bond insurance), and related contracts (including contracts with developers or owners of property included within local improvement districts formed by the Issuer).
4. Preparation of supplemental opinions required of bond counsel by the Issuer or the underwriter of bonds in connection with their issuance, which may include a legal opinion regarding the accuracy of certain sections of the Official Statement to the extent that those sections purport to describe certain provisions of the bonds or of applicable law, or a legal opinion confirming that in the course of our participation in the preparation of an Official Statement, nothing has come to our attention that caused us to believe that the Official Statement (except those sections as to which we express no view) as of its date, contained any untrue statement of a material fact or omitted to state any material fact required to be stated therein for the purposes for which the Official Statement is to be used or necessary in order to make the statements therein, in light of the circumstances under which they were made, not misleading.
5. Drafting special assessment district formation and assessment documents and attending special assessment hearings.
6. Work in connection with seeking or obtaining governmental assistance or approvals from governmental agencies other than the Issuer, necessary for carrying out the purposes of the bond issue, including the drafting or obtaining of state or federal legislation.
7. Representing the Issuer in Internal Revenue Service examinations or inquiries, or Securities and Exchange Commission investigations.
8. After closing, providing continuing advice to the Issuer or any other party concerning any actions necessary to assure that interest paid on the bonds will continue to be excludable from gross income for federal income tax purposes (e.g., our engagement as bond counsel does not include rebate calculations for the bonds, dealing with changes of use or delays in the expenditure of proceeds).
9. Providing advice to the Issuer relating to its continuing disclosure obligations under its continuing disclosure undertakings, consistent with applicable securities laws.
10. Addressing any other matter not specifically set forth above that is not required to furnish our bond opinion.

## **C. FILE MANAGEMENT**

After the transaction is concluded, we will deliver to the Issuer a complete copy of the transcript of the transaction. A transcript is delivered generally within 30 to 60 days after closing. We then close our files regarding the matter, and our representation on the transaction is completed. Additional services after closing would be addressed under Part B, above.





# City Council

Closed Record Decision Hearing

**LPS-2020-0001: The Crossings Cottages**

*October 12, 2020 @ 6:00 PM*

Libby Grage, Planning Manager

# LPS-2020-0001:

## The Crossings Cottages

|                             |                                                                                                                                 |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| <b>Applicant:</b>           | Anacopper LLC                                                                                                                   |
| <b>Land Owner:</b>          | Anacopper LLC                                                                                                                   |
| <b>Location:</b>            | 1905 Anacopper Mine Road                                                                                                        |
| <b>Zone:</b>                | R2                                                                                                                              |
| <b>Application Type(s):</b> | Preliminary Unit Lot Subdivision (divide site into 21 lots, 4 tracts)<br>Site Plan review (18 unit cottage housing development) |

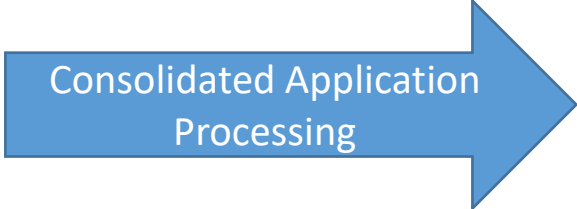
# LPS-2020-0001:

## The Crossings Cottages

### Types of Review:

- Site Plan Review (Level 2) = Type 2-Admin
- Preliminary unit lot/ long subdivision = Type 4-CC

Consolidated Application  
Processing



Type 4-CC

- Planning Commission: Public Hearing and Recommendation
- City Council: Makes Decision

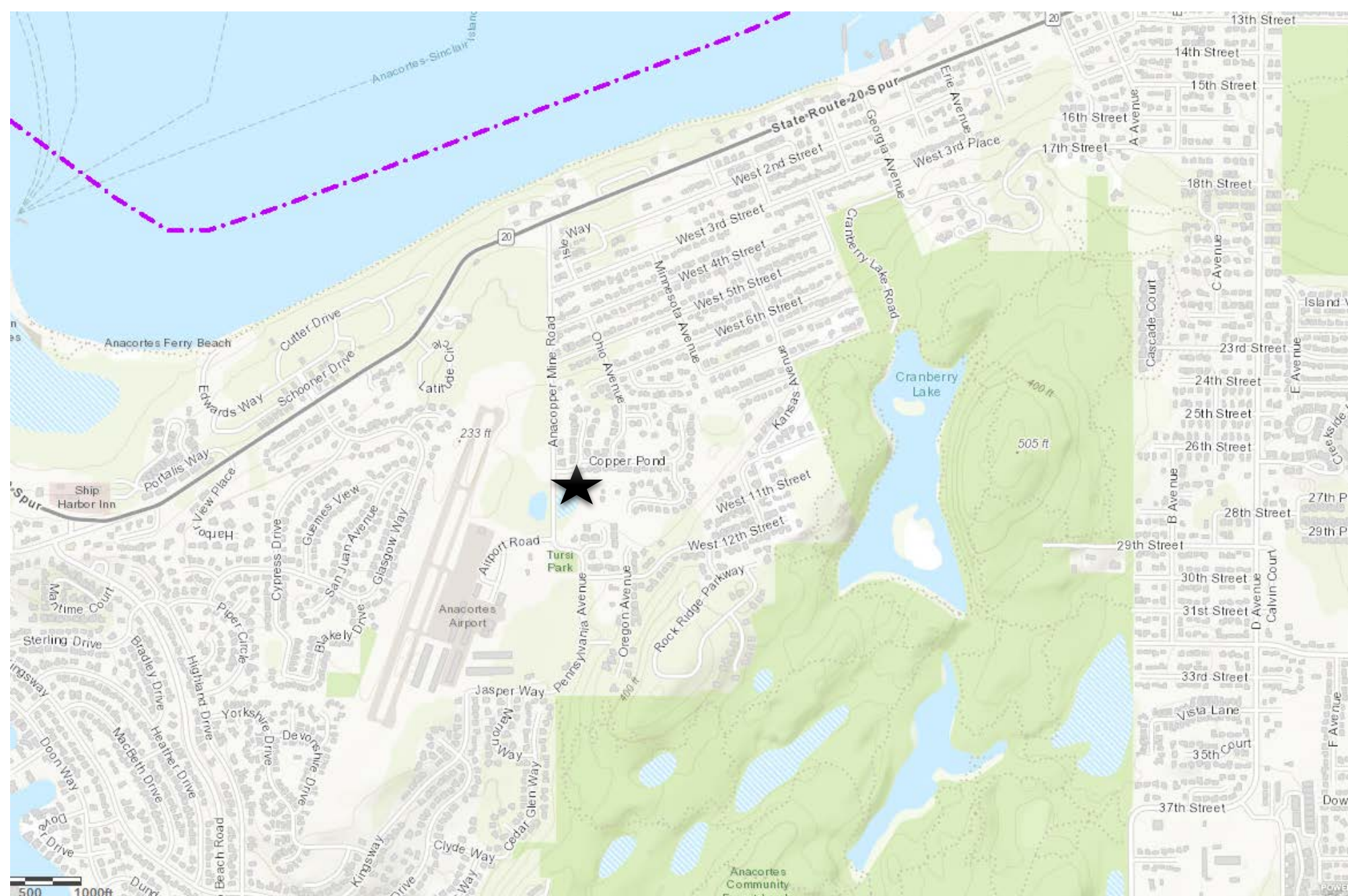
### Project History & Public Notice:

- |                                                       |                              |
|-------------------------------------------------------|------------------------------|
| • Preapplication /Development review group meeting    | Nov. 19, 2019                |
| • Preapplication neighborhood meeting                 | Jan. 16, 2020 & Feb. 4, 2020 |
| • Complete application submitted                      | Feb. 21, 2020                |
| • Notice Of Application w/ 21 day comment period      | Apr. 1, 2020                 |
| • Route to City departments and agencies for comments | Mar. 25, 2020                |
| • SEPA DNS, no appeals                                | Sept. 2, 2020                |
| • Notice Of Hearing                                   | Sept. 2, 2020                |
| • PC Public Hearing & Recommendation to Approve       | Sept. 23, 2020               |

# Exhibits

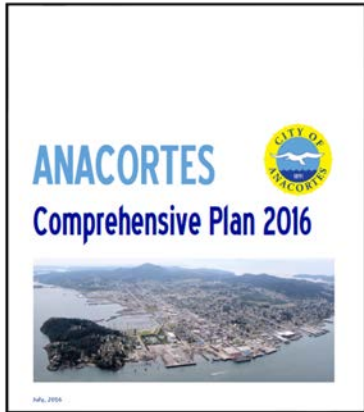
- Exhibit 1 Staff Report
  - Exhibit 2 Application Documents
  - Exhibit 3 Vicinity Map
  - Exhibit 4 Preliminary unit lot subdivision map
  - Exhibit 5 Cottage site plan
  - Exhibit 6 Notices
  - Exhibit 7 City department comments
  - Exhibit 8 Agency Comments
  - Exhibit 9 Public Comments
  - Exhibit 10 Issued SEPA MDNS
  - Exhibit 11 Project correspondence
  - Exhibit 12 Site photos
  - Exhibit 13 Building elevations
  - Exhibit 14 Draft CCRs for Lots 19-21
  - Exhibit 15 Tree credit matrix
  - Exhibit 16 Additional public comments (rec'd as of 3:00 PM 9/23/20)
- Planning Commission Recommendation
  - PC hearing slide presentation

# Project Location



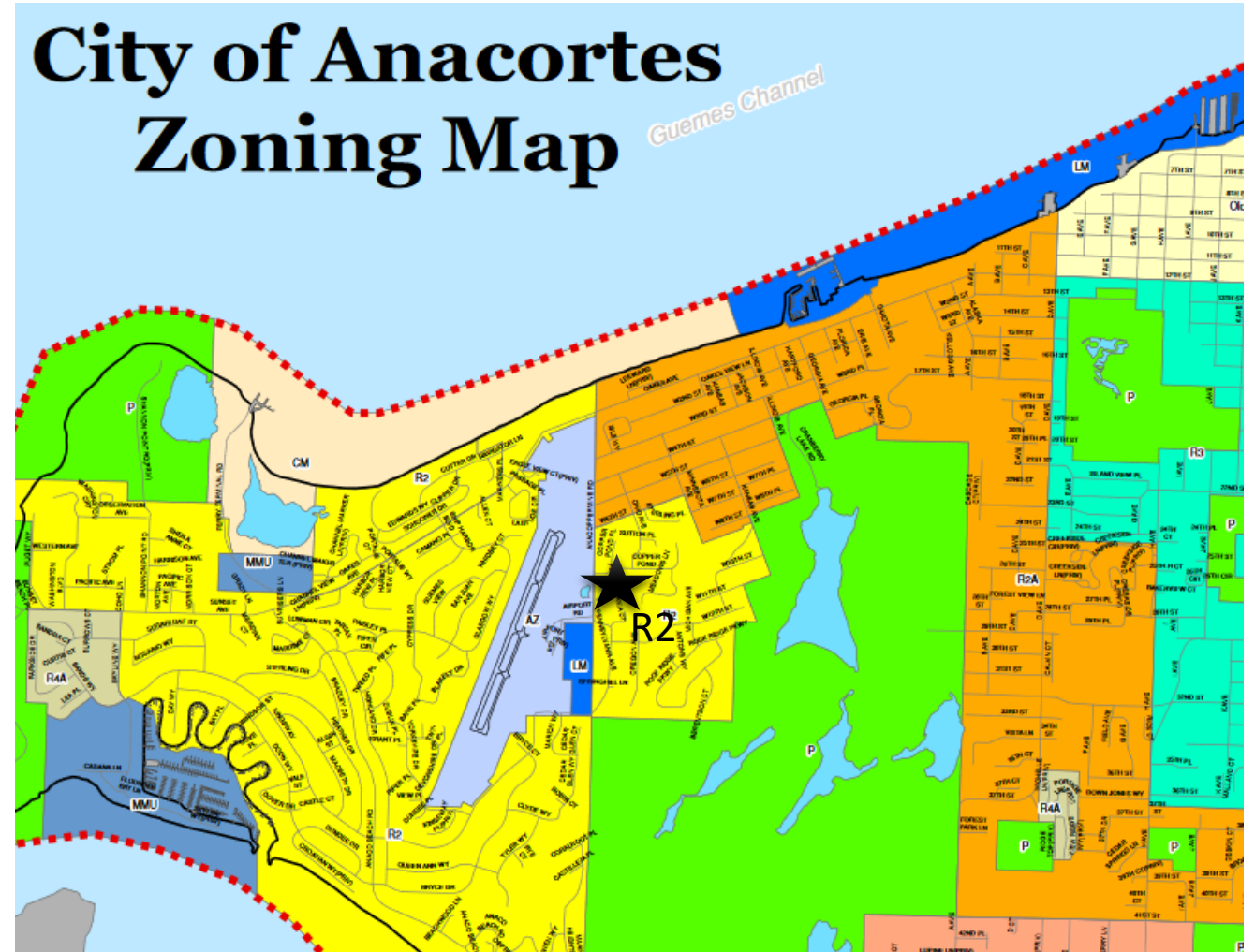


# Comprehensive Plan & Zoning



**Future Land Use Designation:**  
Residential Low Density 2 (RLD-2)

**Zone Designation:**  
R2







1969

# Neighborhood Development



2007

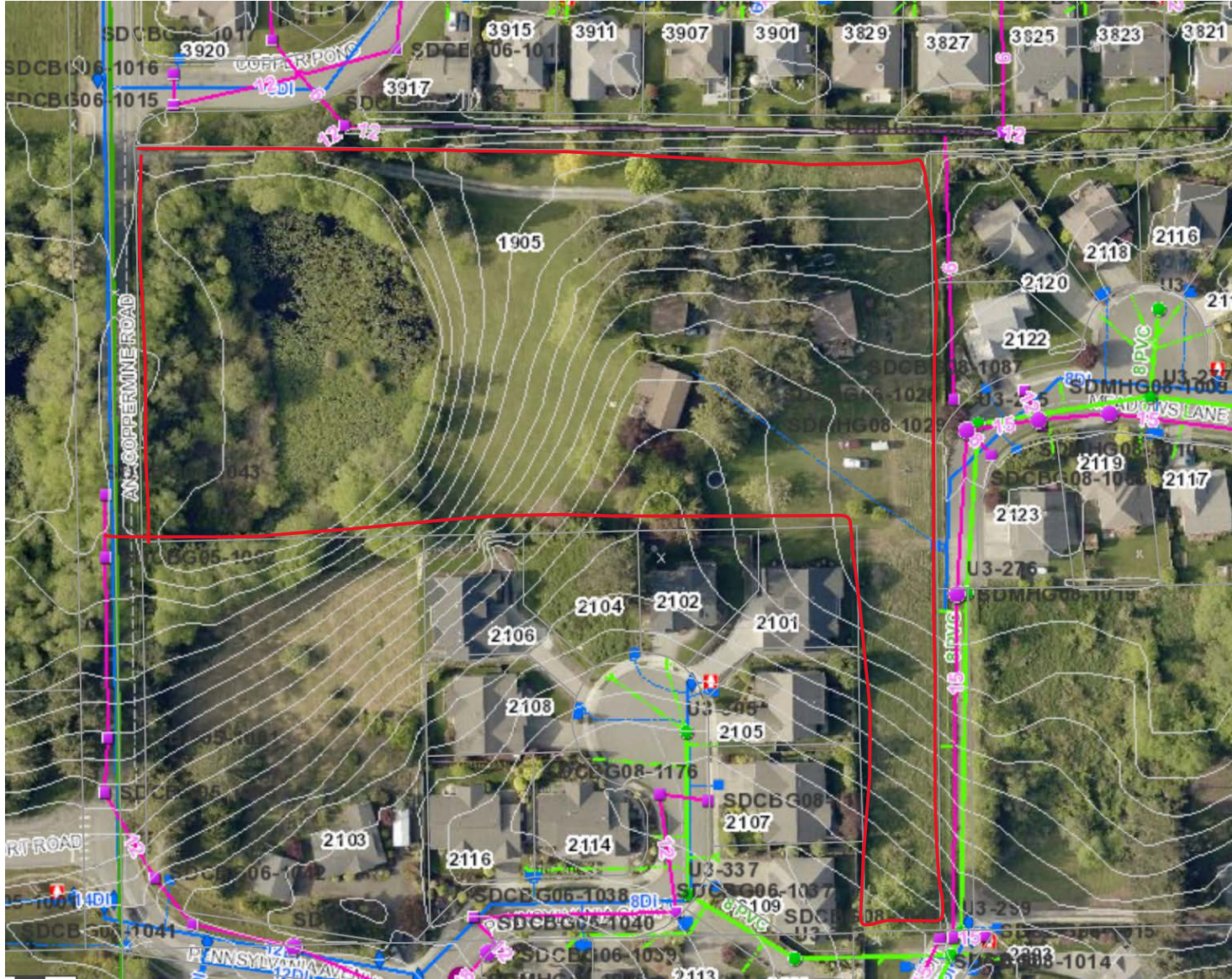


2019

Source: Skagit County iMap aerals



# Project site – existing conditions



- 5.2 acres
- 1 SFR and detached outbuildings
- Doug Fir trees & pasture grass upland
- Slopes down at +/- 15% toward wetland; and gently north and east
- Category III wetland
- Surrounding uses = SFR, R2 zone, Anacortes Airport, AZ, LM zones
- Existing site access from Anacopper Mine Rd., and abuts the ends of both Meadows Lane and Oregon Ave.





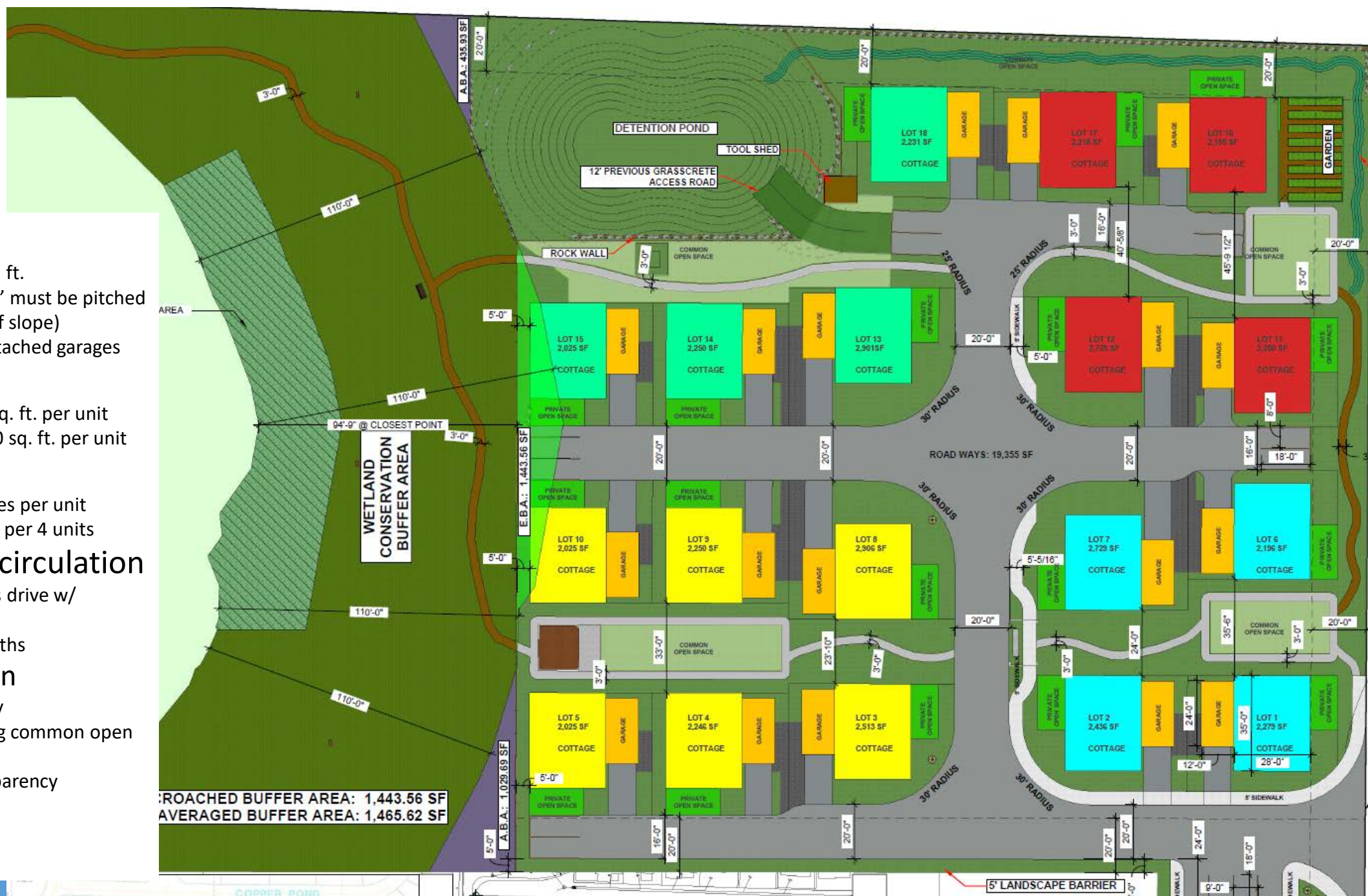
39 BUFFER MITIGATION LANDSCAPING AREA

10/14



# Cottage Site Plan

- 18 cottages
  - Max. 1,200 sf. ft.
  - Max. 25' (>18' must be pitched min. 6:12 roof slope)
  - 300' sq. ft. attached garages
- Open space
  - Private: 200 sq. ft. per unit
  - Common: 400 sq. ft. per unit
- Parking
  - Min. 1.5 spaces per unit
  - Guest: 1 pace per 4 units
- Internal site circulation
  - Shared access drive w/ sidewalk
  - Pedestrian paths
- Building Design
  - Covered entry
  - Porches facing common open space
  - Façade transparency



# Cottage Elevations



1 South-West Exterior Perspective  
A11/175



2 South-East Exterior Perspective  
A11/175



3 North-West Exterior Perspective  
A11/175



4 North-East Exterior Perspective  
A11/175

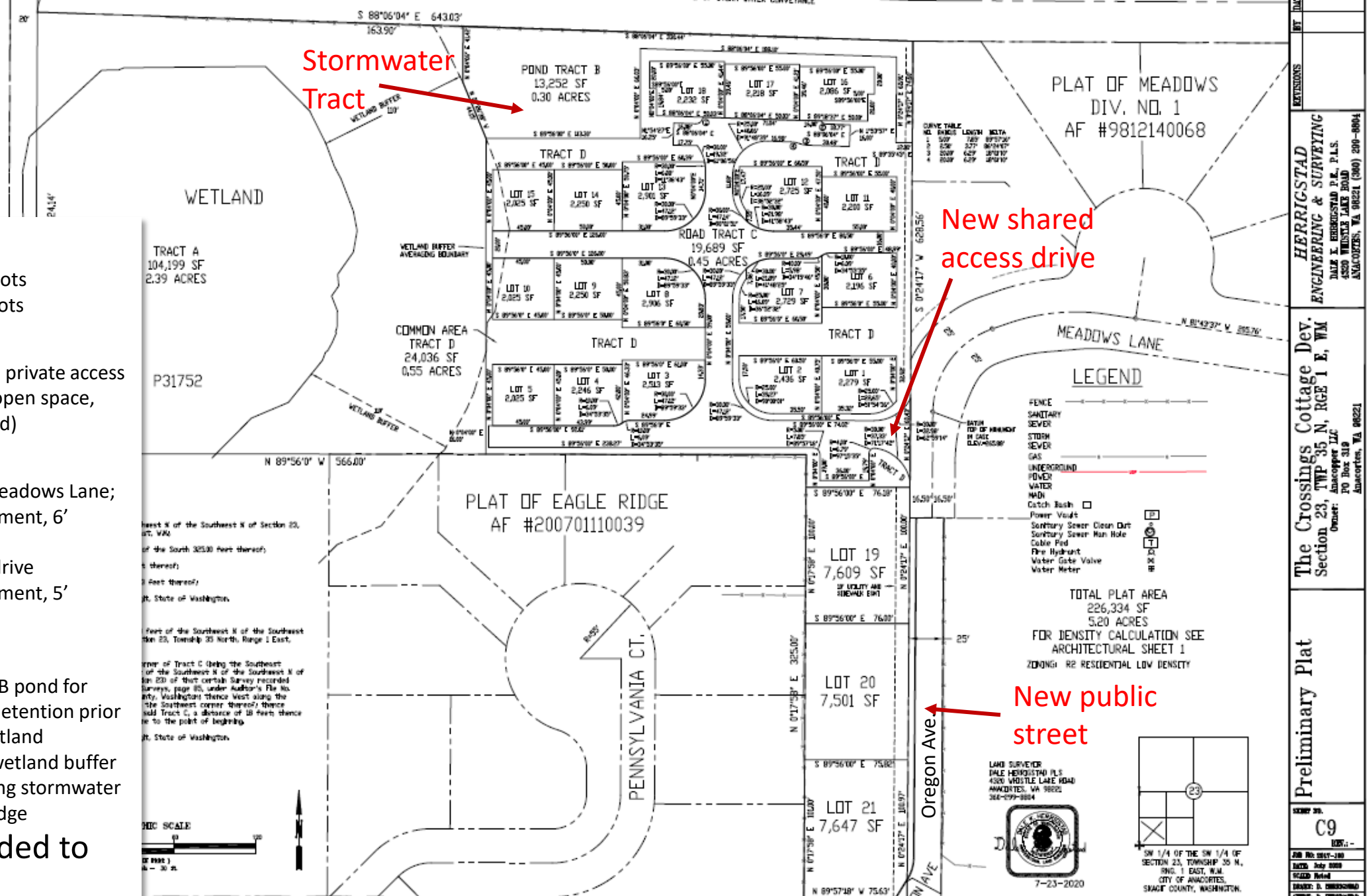
City of Anacortes  
Received by PCED  
Date: February 21, 2020

|                                                                                                |                                                                                 |
|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| DESIGNED BY<br>JASON STERLIN                                                                   |                                                                                 |
| SCALE<br>1/4" = 1' U.N.O.                                                                      |                                                                                 |
| DATE<br>10/18/2019                                                                             |                                                                                 |
|                                                                                                |                                                                                 |
| DRAWING INFO:<br>PROJECT NO.<br>A11/175<br>PROJECT<br>200-283-1421<br>www.strandbergdesign.com | PROJECT CLIENT INFO<br>PROJECT NAME<br>1005 Anacopper Road, Anacortes, WA 98221 |
| EXTERIOR PERSPECTIVES<br>17 of 22                                                              |                                                                                 |



# Unit Lot Subdivision

- 21 lots
  - 18 cottage unit lots
  - 3 standard SFR lots
- 4 tracts
  - (wetland/buffer, private access road, common open space, stormwater pond)
- Access
  - Oregon Ave./ Meadows Lane;
    - 20' pavement, 6' sidewalk
  - Shared access drive
    - 20' pavement, 5' sidewalk
- Stormwater
  - Routed to Tract B pond for treatment and detention prior to release to wetland
  - Dispersed into wetland buffer
  - Routed to existing stormwater pond @ Rock Ridge
- Utilities extended to serve lots



**HERRIGSTAD ENGINEERING & SURVEYING**  
DALE E. HERRIGSTAD P.E., P.L.S.  
4300 WHISTLE LAKE ROAD  
ANACORTES, WA 98021 (360) 299-9804

**The Crossings Cottage Dev.**  
Section 23, TWP 35 N., RGE 1 E, WM  
Owner: Anacortes LLC  
PO Box 319  
Anacortes, WA 98021

**Preliminary Plat**

**STAMP NO. C9**  
DATE: July 2020  
DRAWN: [Signature]  
CHECKED: [Signature]  
DATE: July 2020

## Critical Areas

Cat III Wetland; 110' buffer

Proposed buffer uses:

- Buffer width averaging
- Wood chip trail with split rail fencing
- Stormwater outfall

### Proposed buffer enhancement & restoration:

The Critical Areas report and addendum letter identify proposed actions to avoid and minimize impacts to the wetland. To offset potential impacts of the proposal, the applicant proposes wetland buffer restoration and enhancement by:

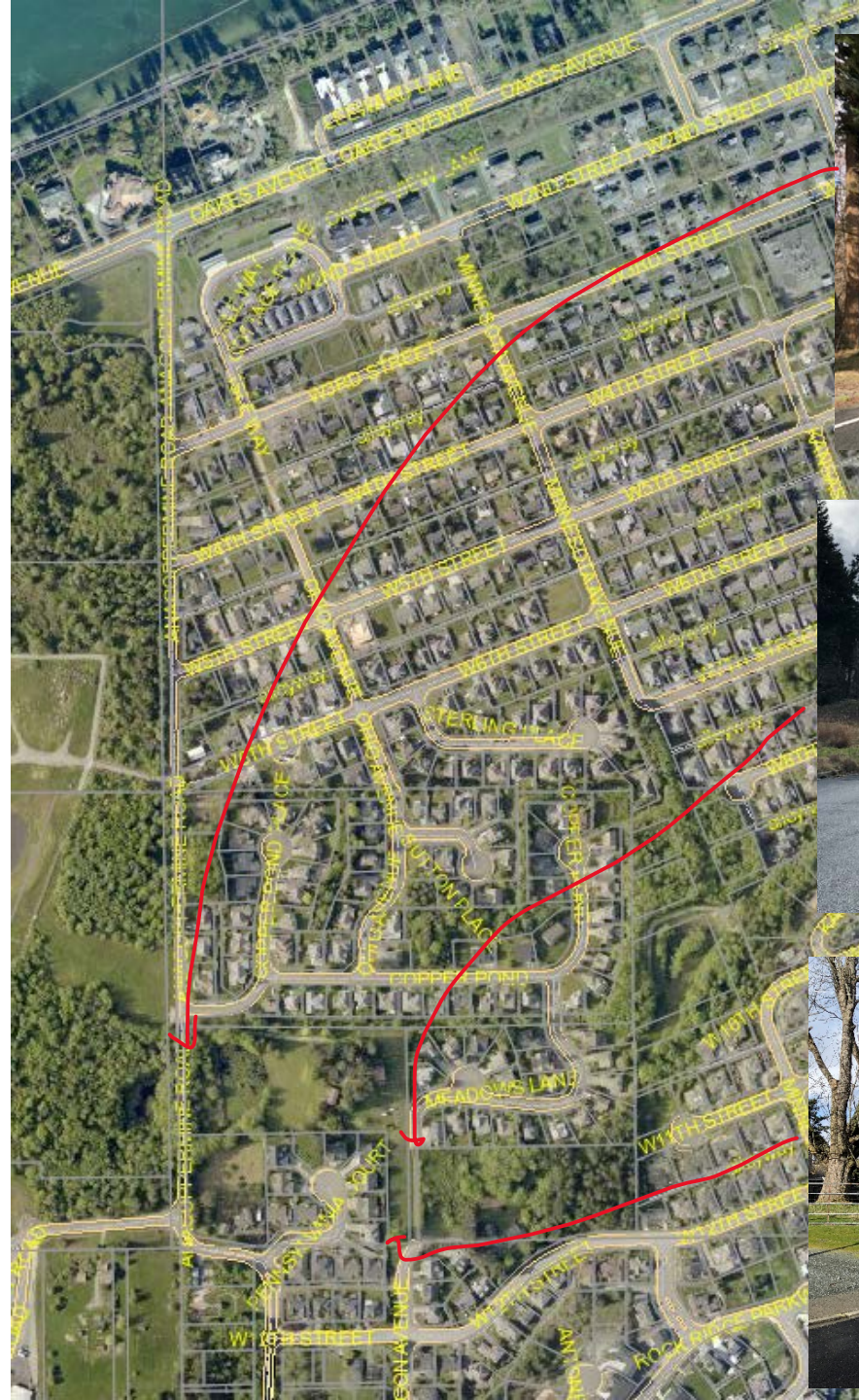
- Removal of the existing gravel driveway, tilling the soil, adding supplemental topsoil, retilling, and then spraying the exposed topsoil with a native hydroseed herbaceous mix.
- Letting the existing mowed lawn grow and planting 19 Douglas fir trees, thus creating an herbaceous meadow with a forested canopy component.
- Planting an area just east of the wetland/pond approximately 30' wide by 170' long with native shrub species to increase native vegetation cover, habitat, and functionality. Monitoring and maintenance for a minimum of 5 years and financial guarantee will also be provided.

ENCROACHED BUFFER AREA: 1,443.56 SF  
AVERAGED BUFFER AREA: 1,465.62 SF

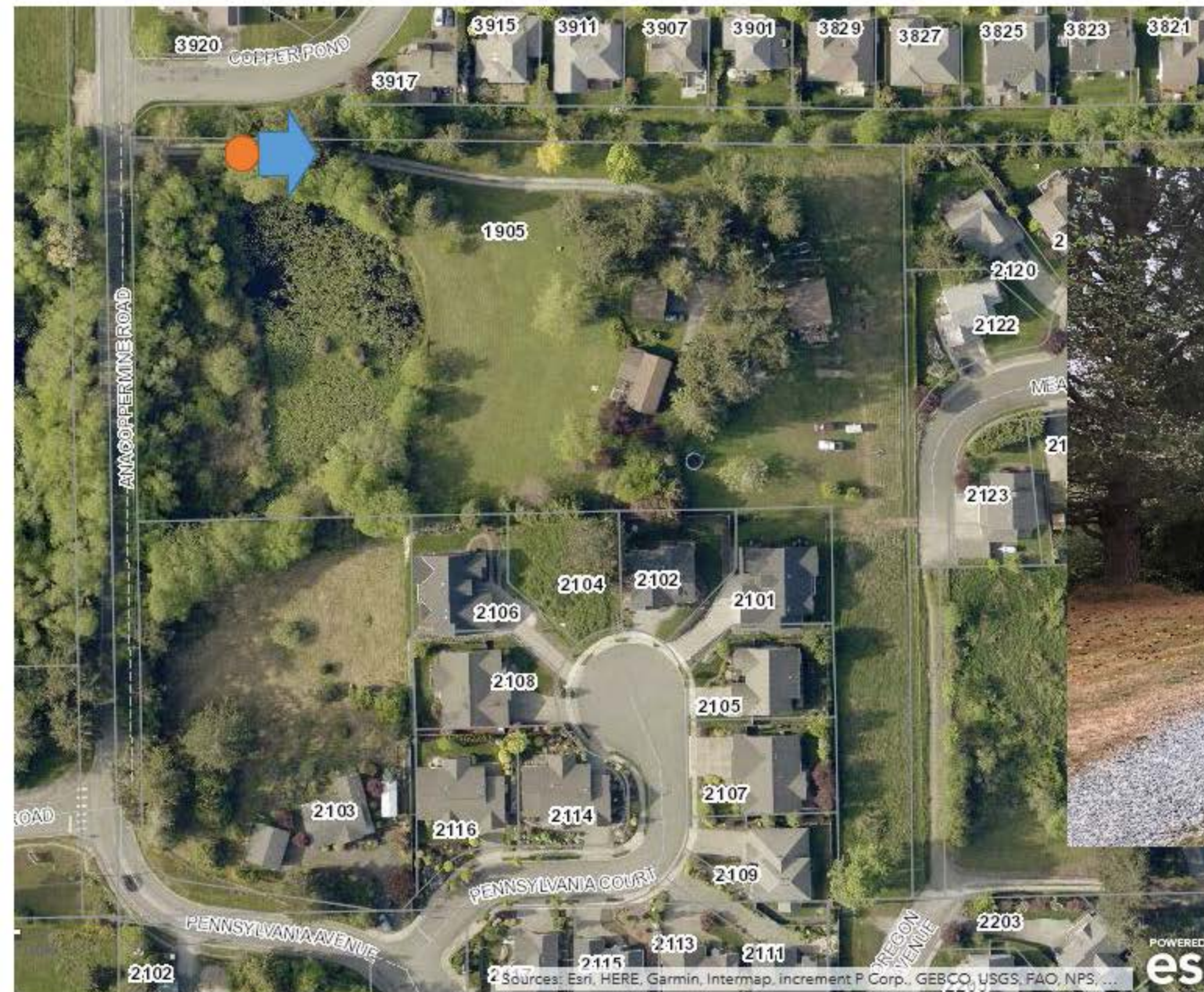


# Transportation facilities

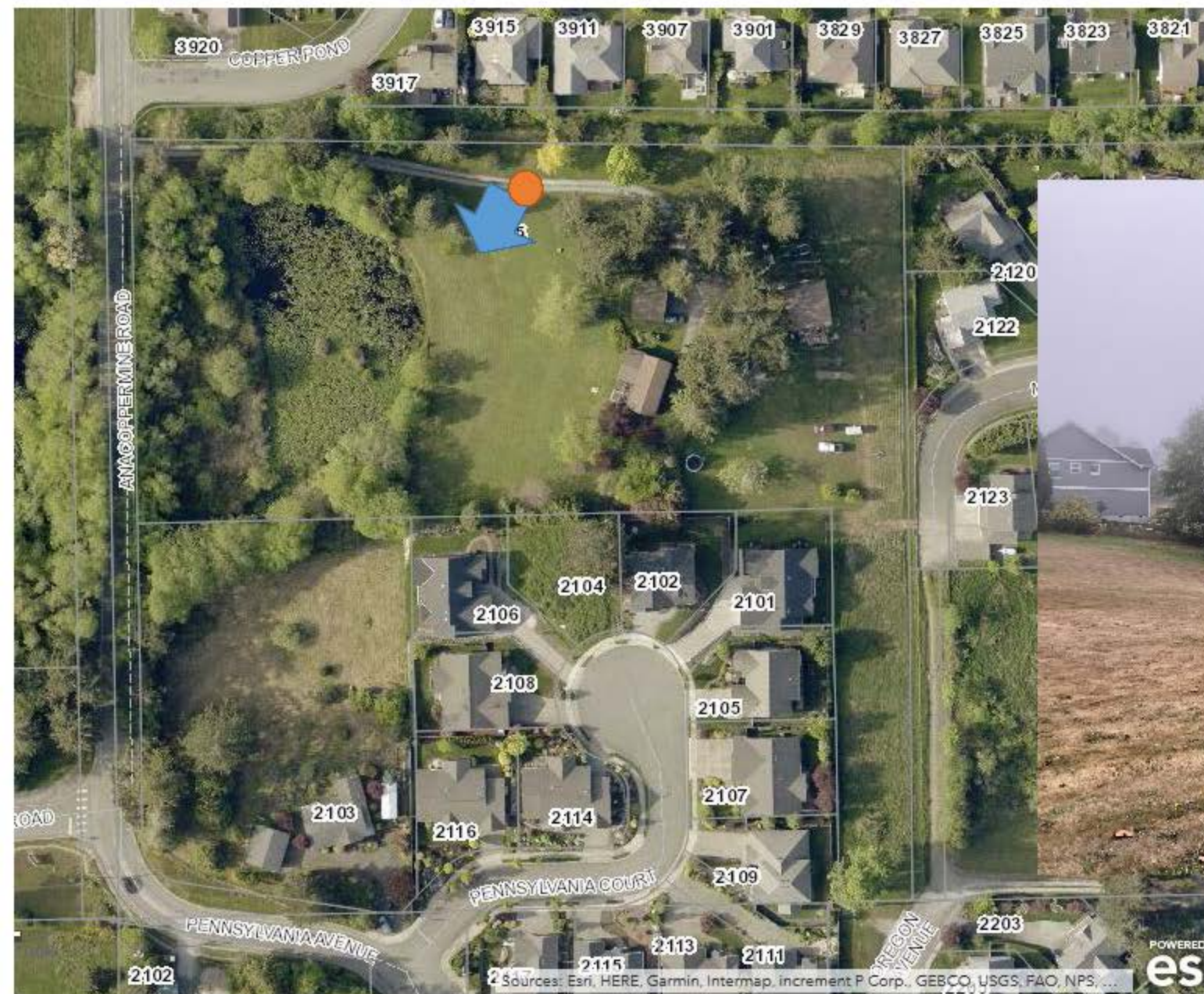
- Connectivity
  - Oregon Ave./Meadows Lane connection
- Anacopper Mine Rd.
  - Minor arterial
  - Remove existing vehicle access
  - Critical area constraints
- Concurrency requirements met per Traffic Impact Analysis



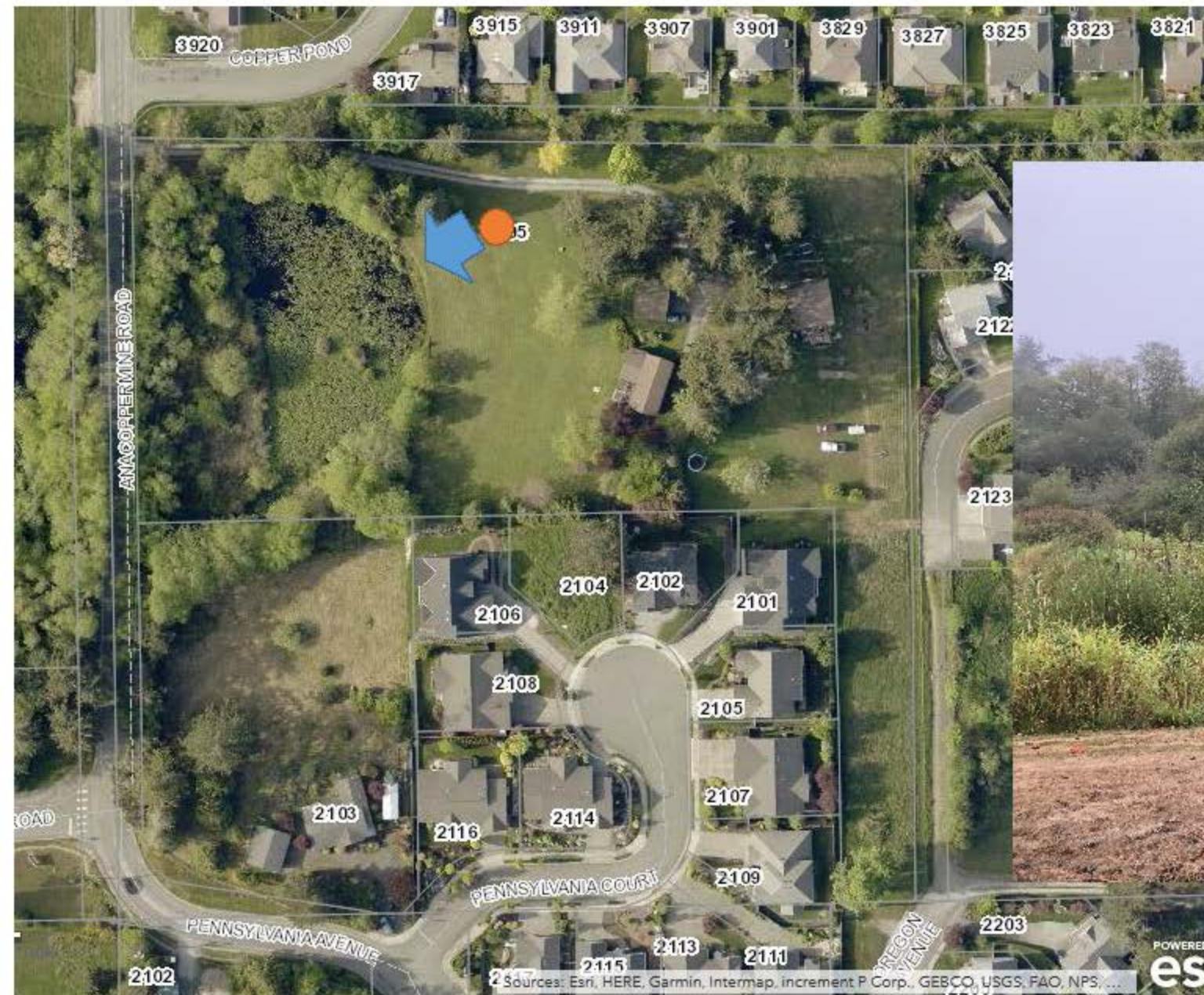




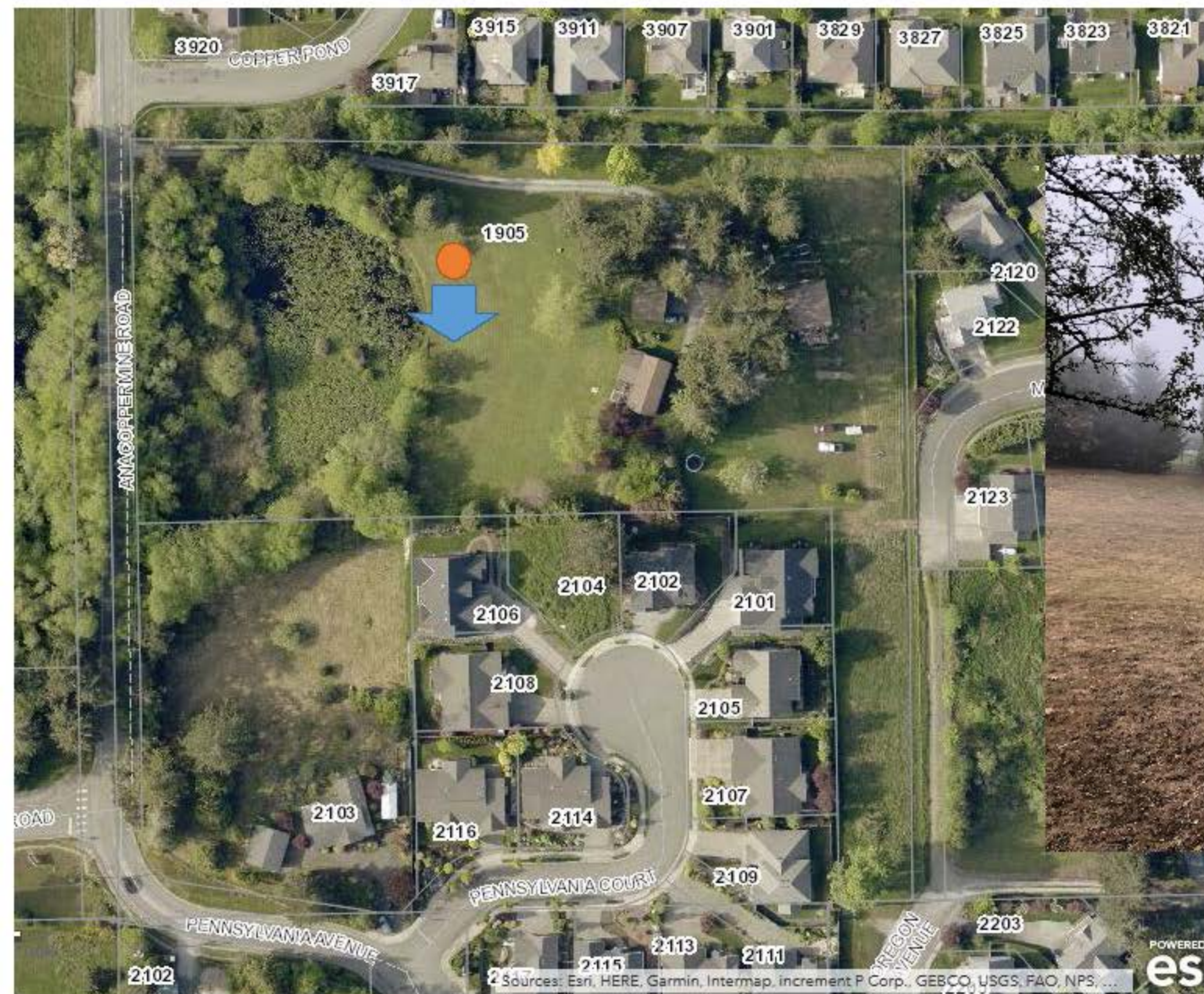




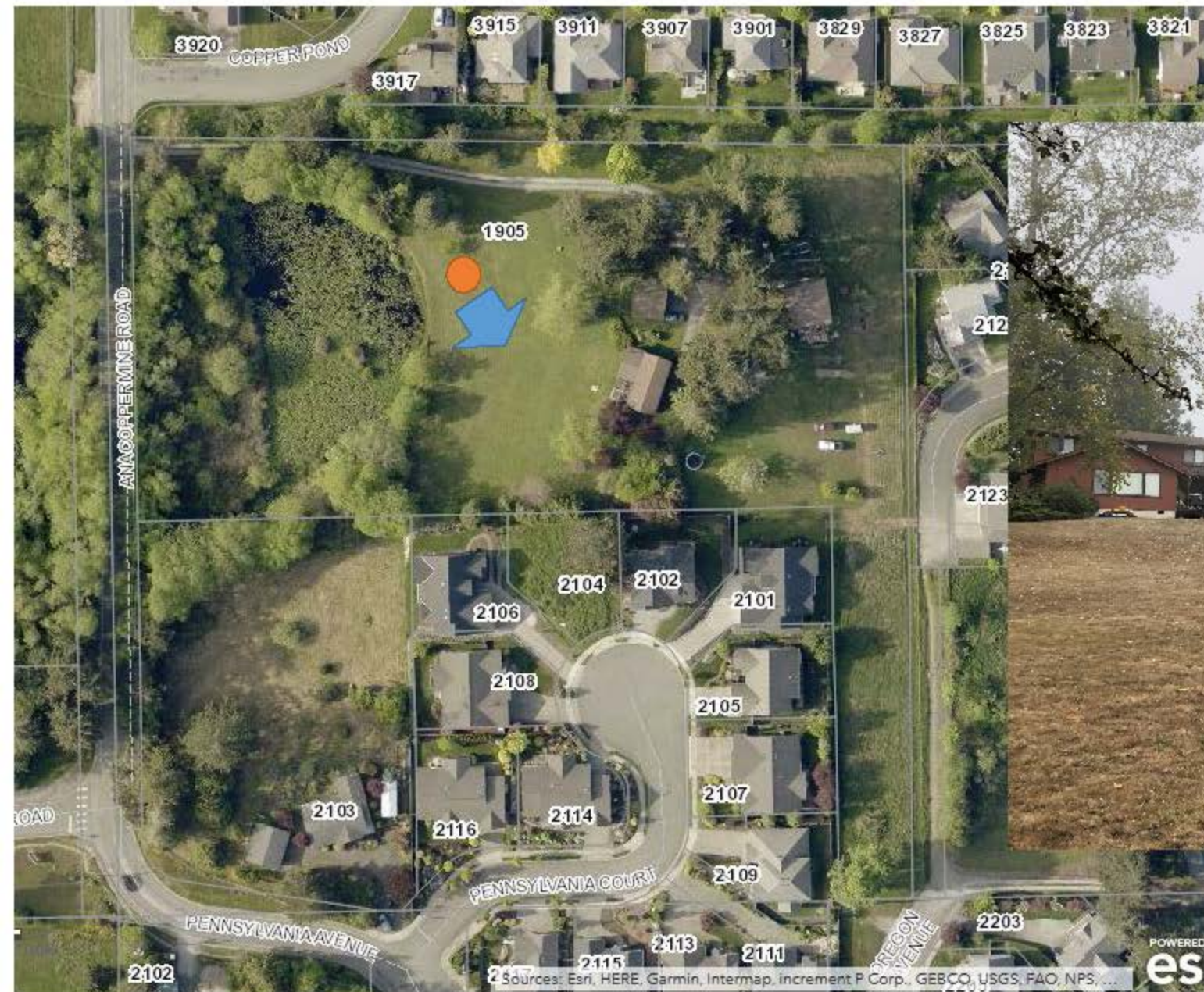




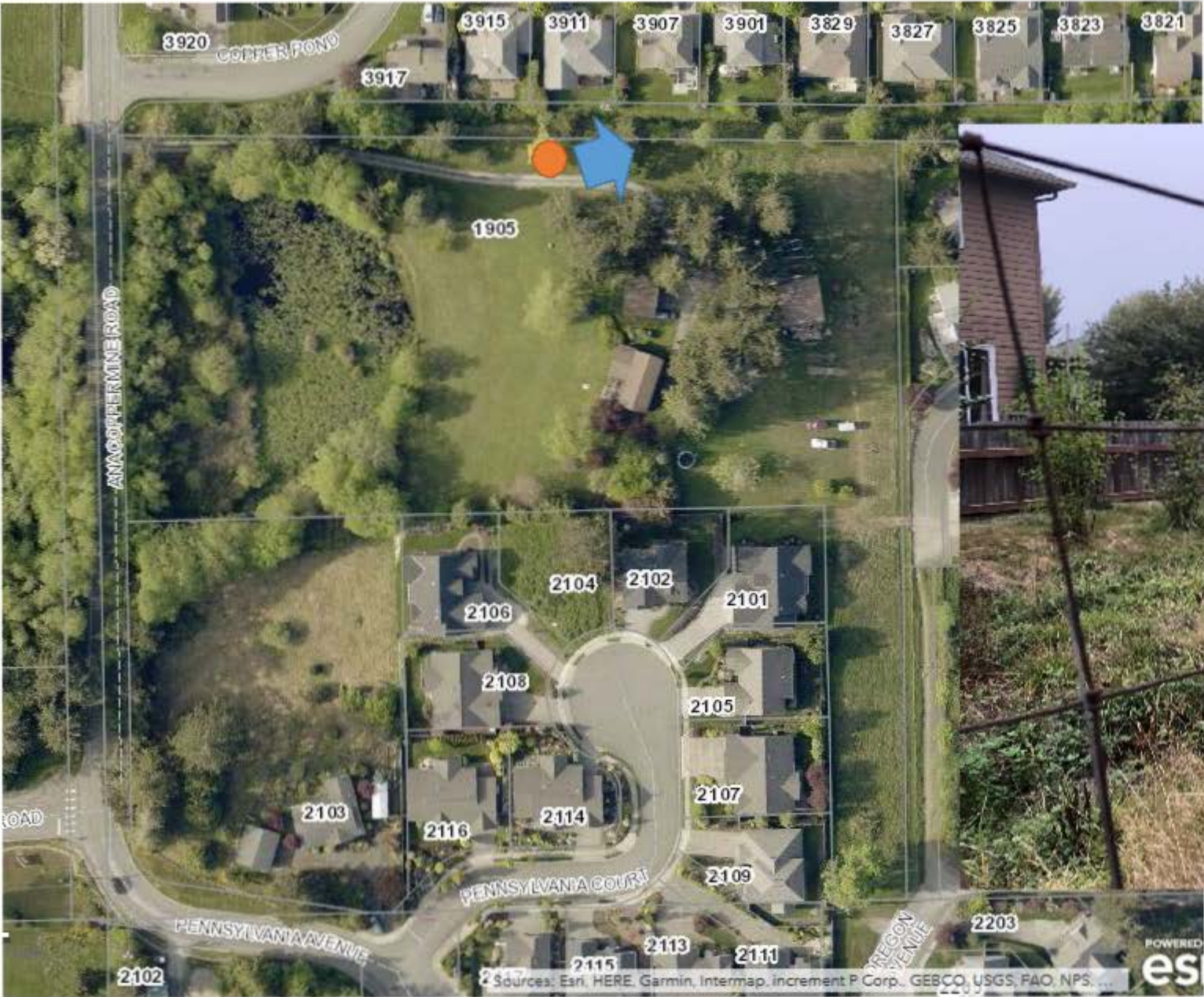




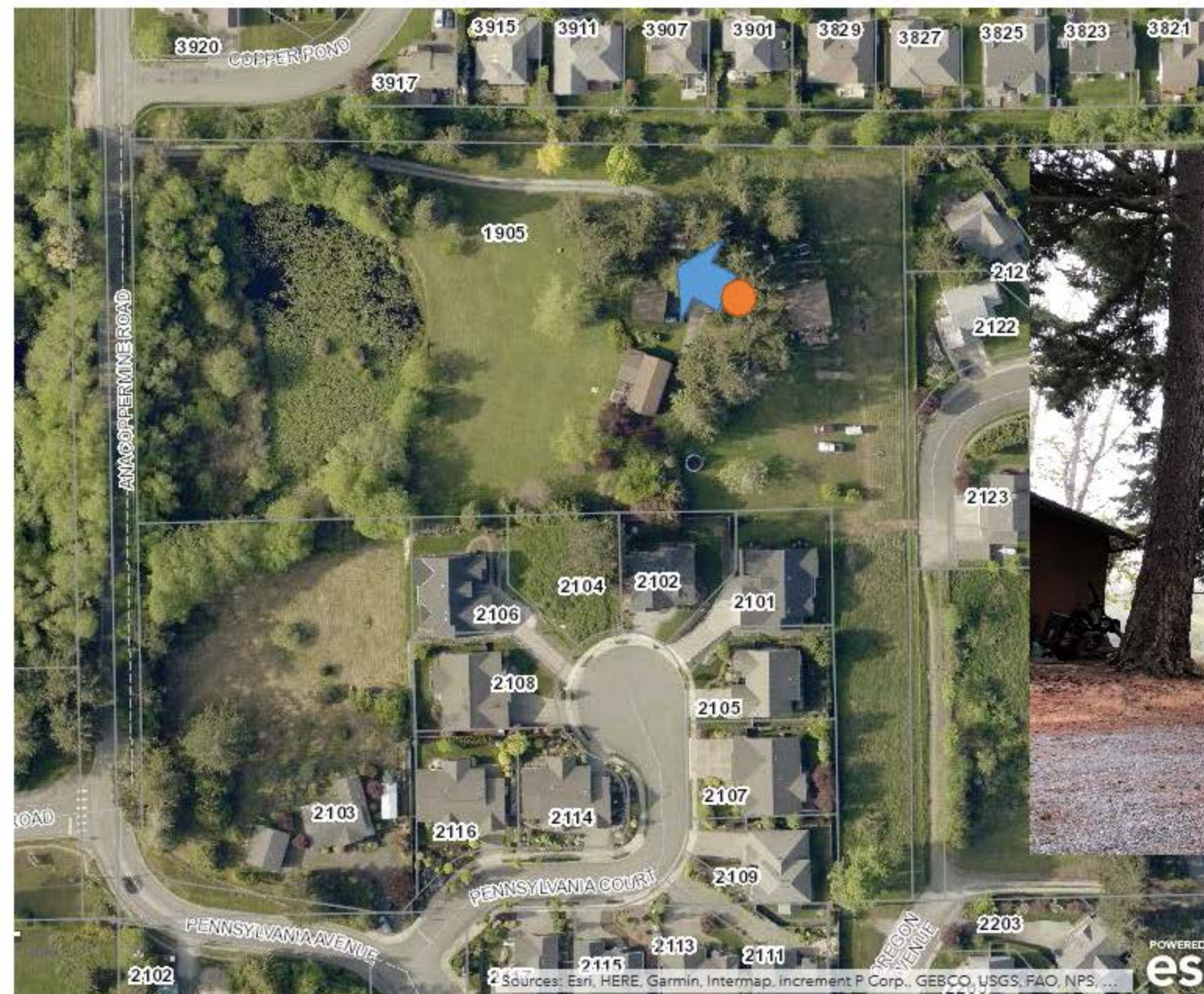




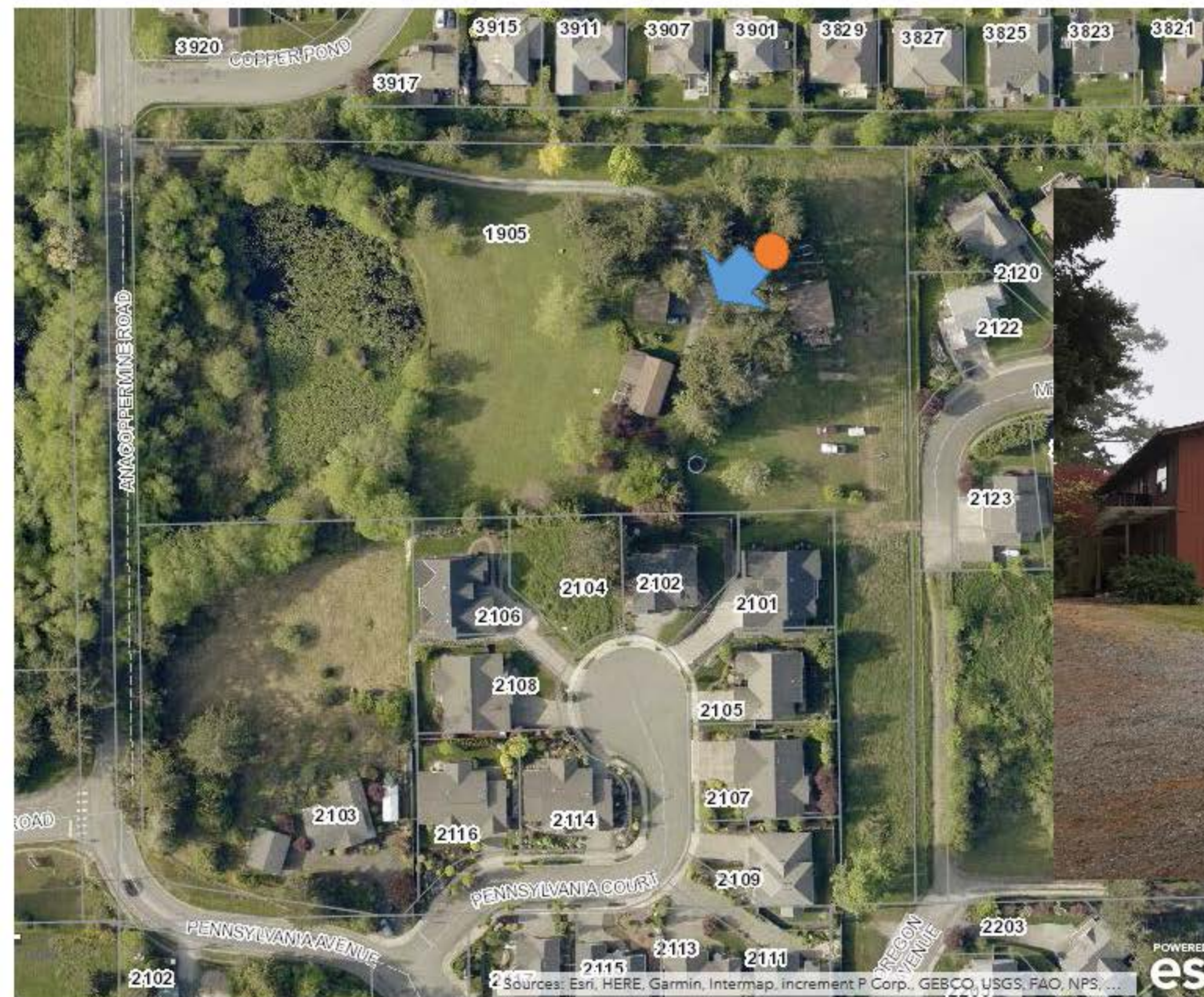




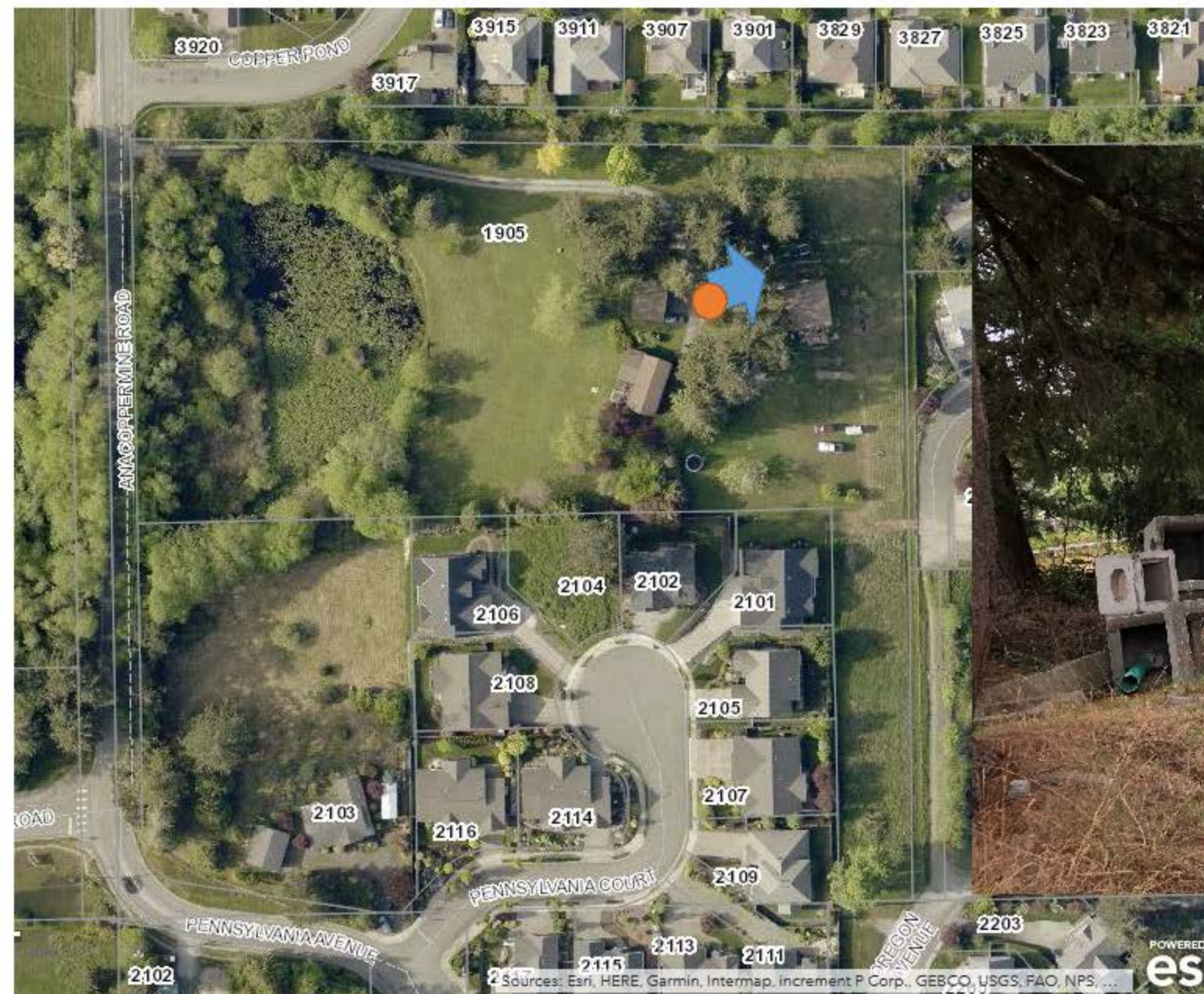




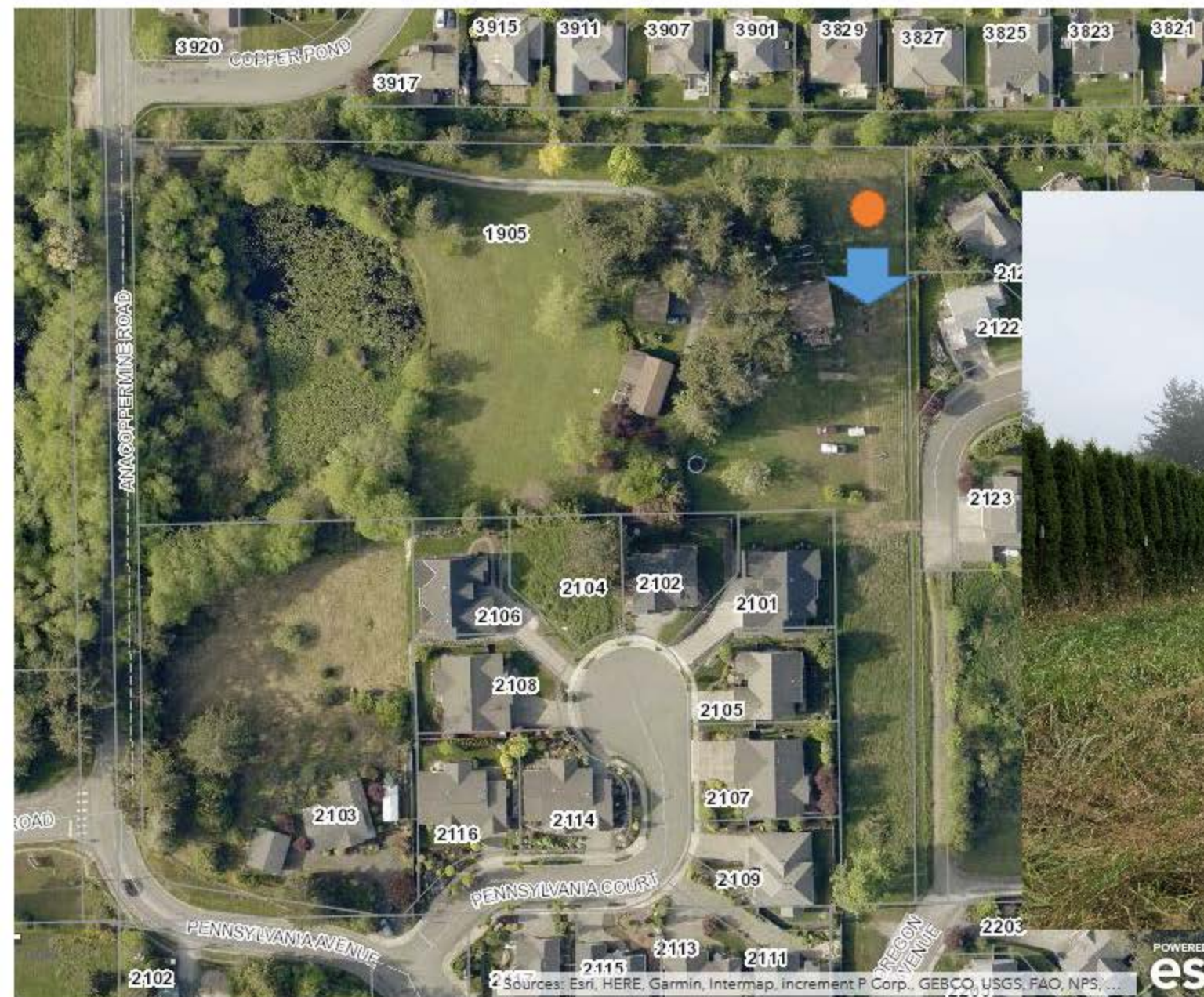




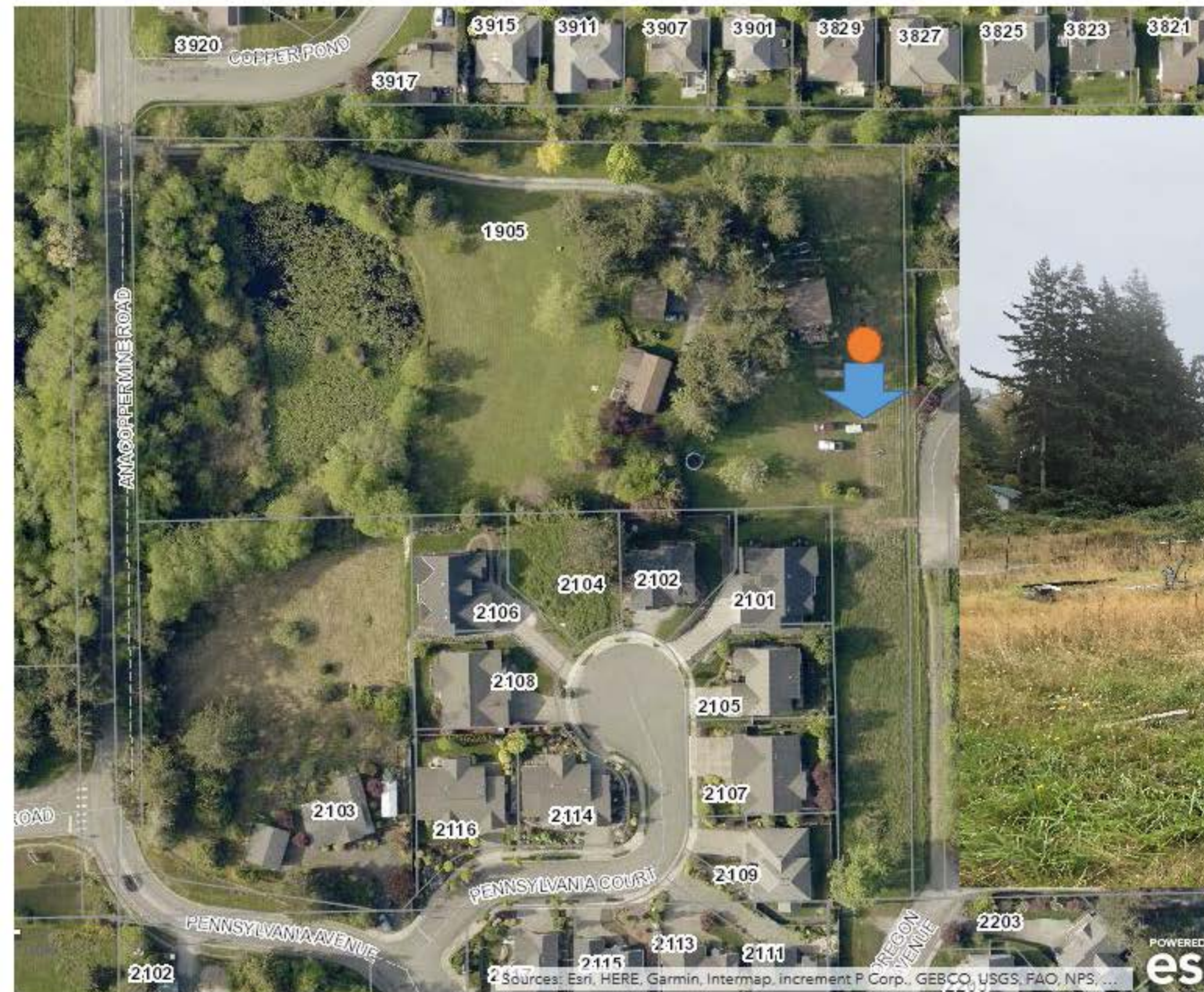




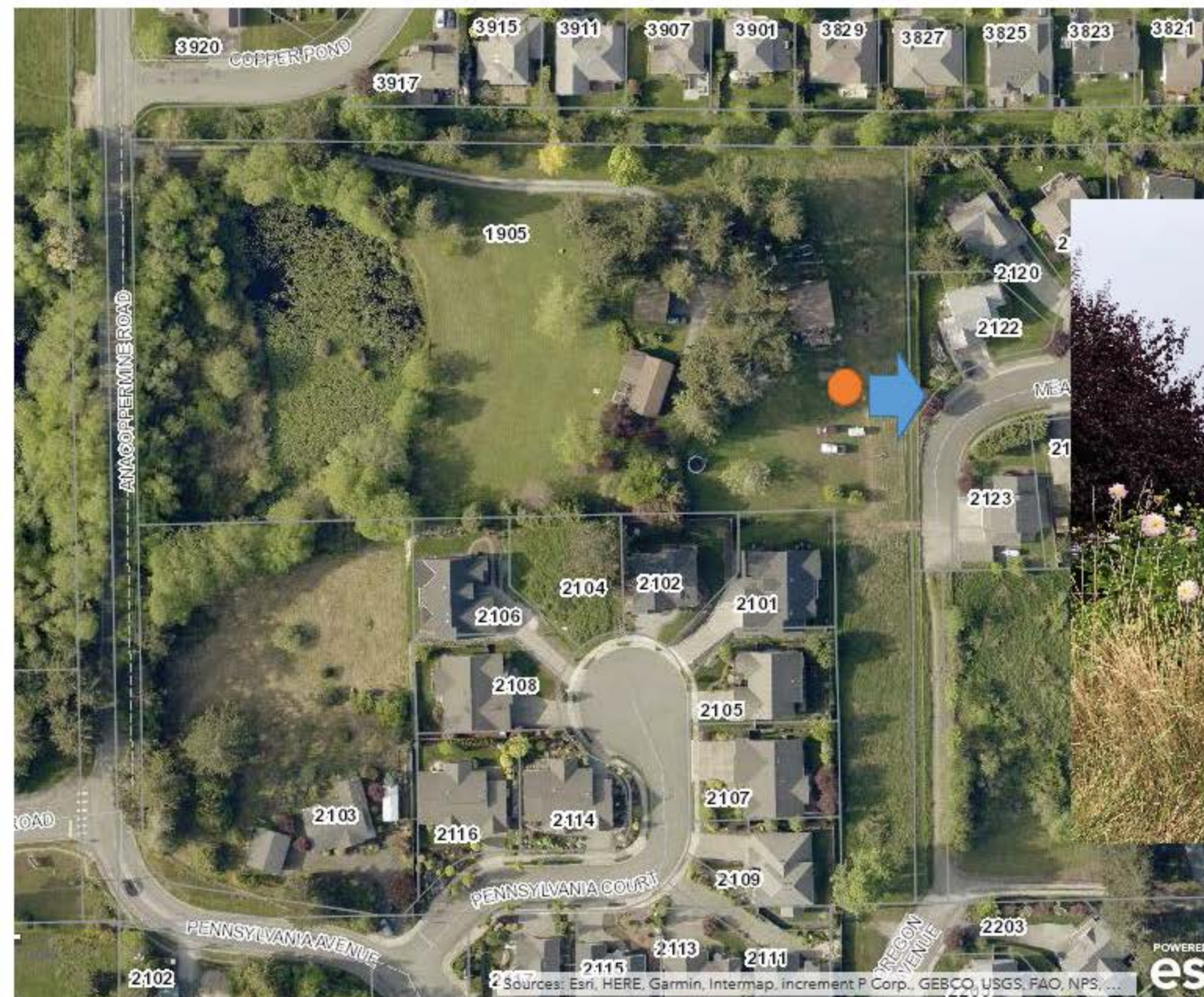






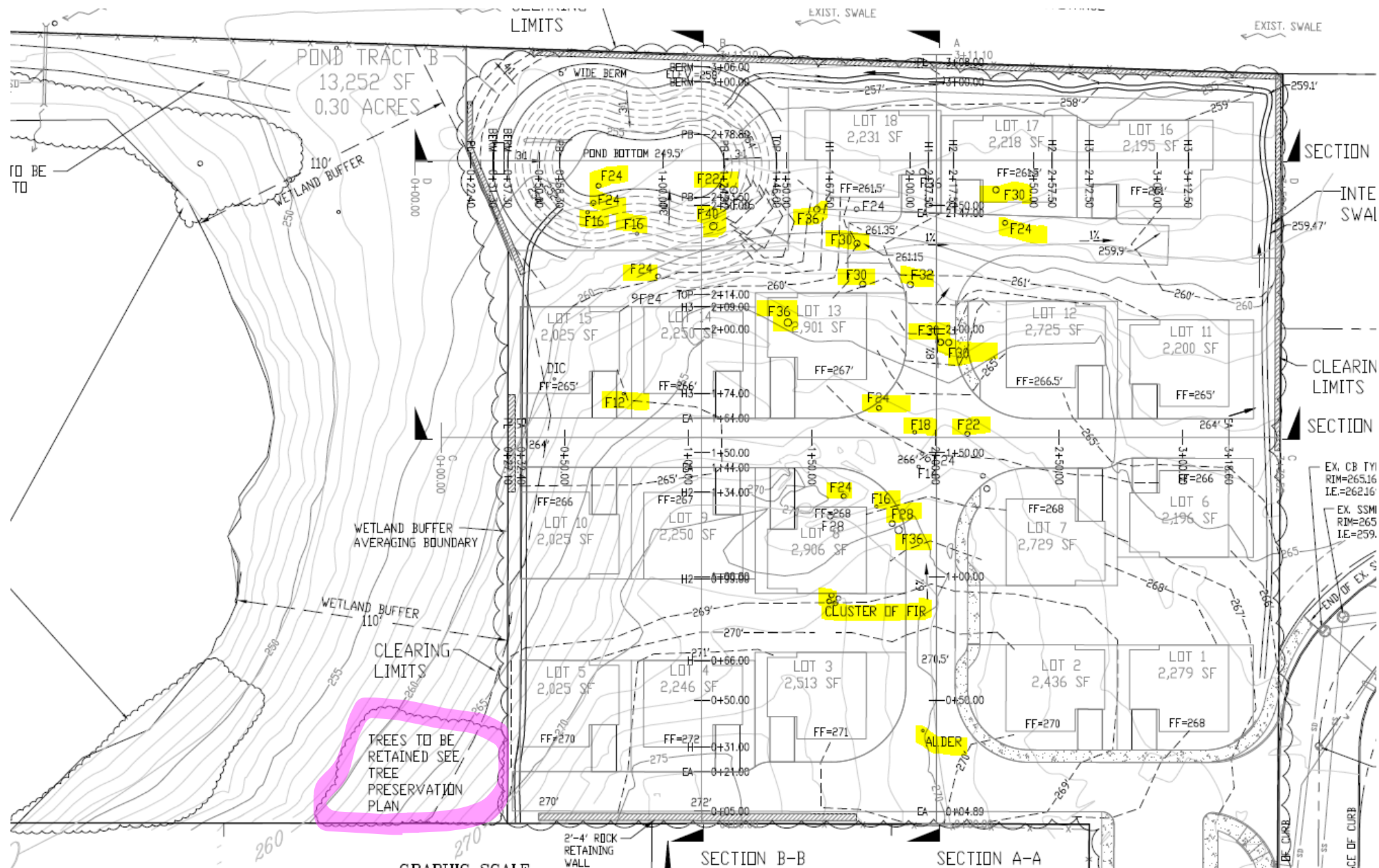








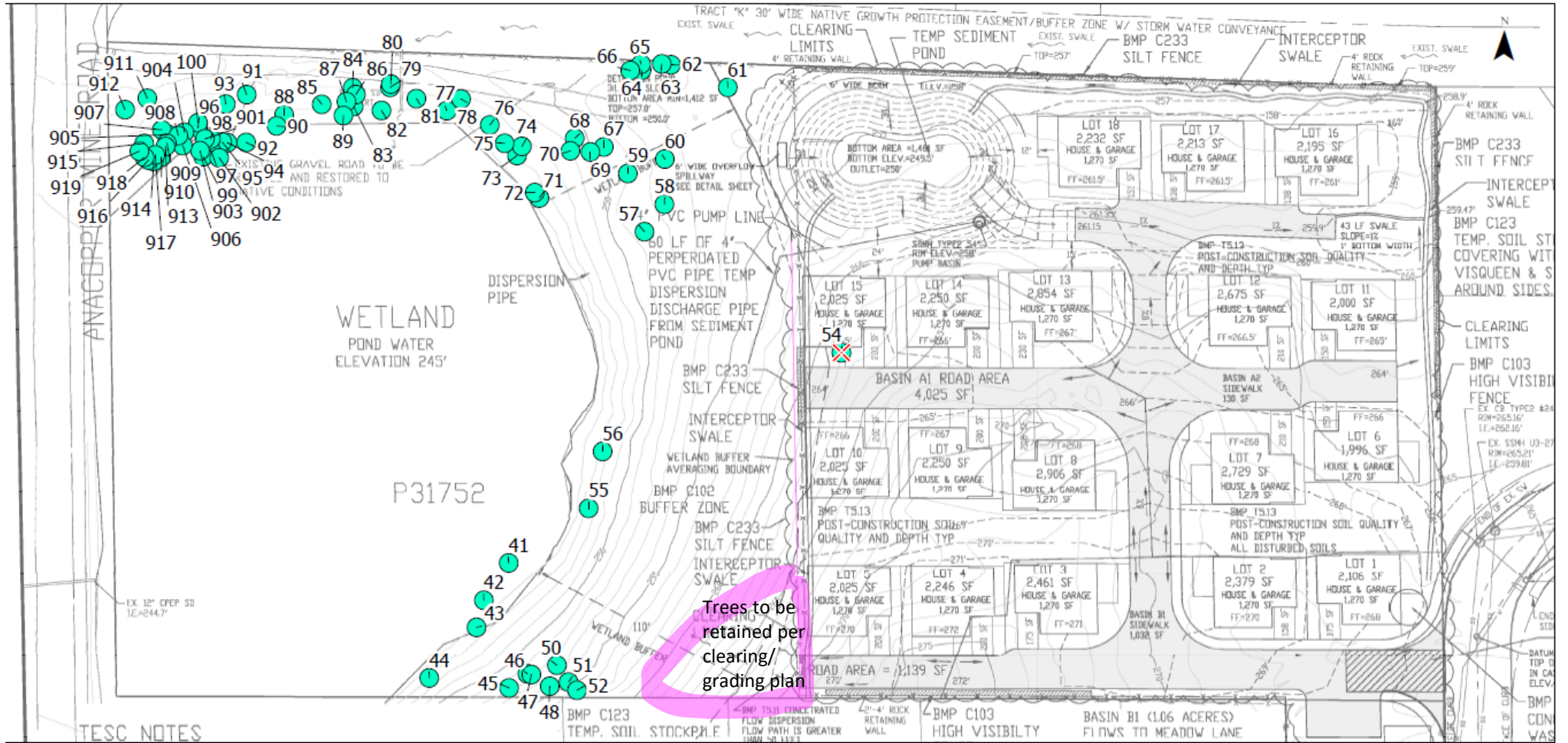
# Tree removal plan



# Tree preservation plan

Min. tree unit credits required: 208

Tree unit credits provided: 226 234



**The Crossings Cottage Development**  
1905 Anacopper Mine Road  
Tree Assessment Site Plan

Anacortes, Washington 98221

Seventy-nine (79) trees were assessed with locations shown on this site plan. One of the seventy-nine (79) trees, #54 cannot be retained with this new plan. See the Tree Assessment Report and Tree Assessment Matrix for detailed information.

- James Barborinas, Principal Consultant  
(360) 770-9921

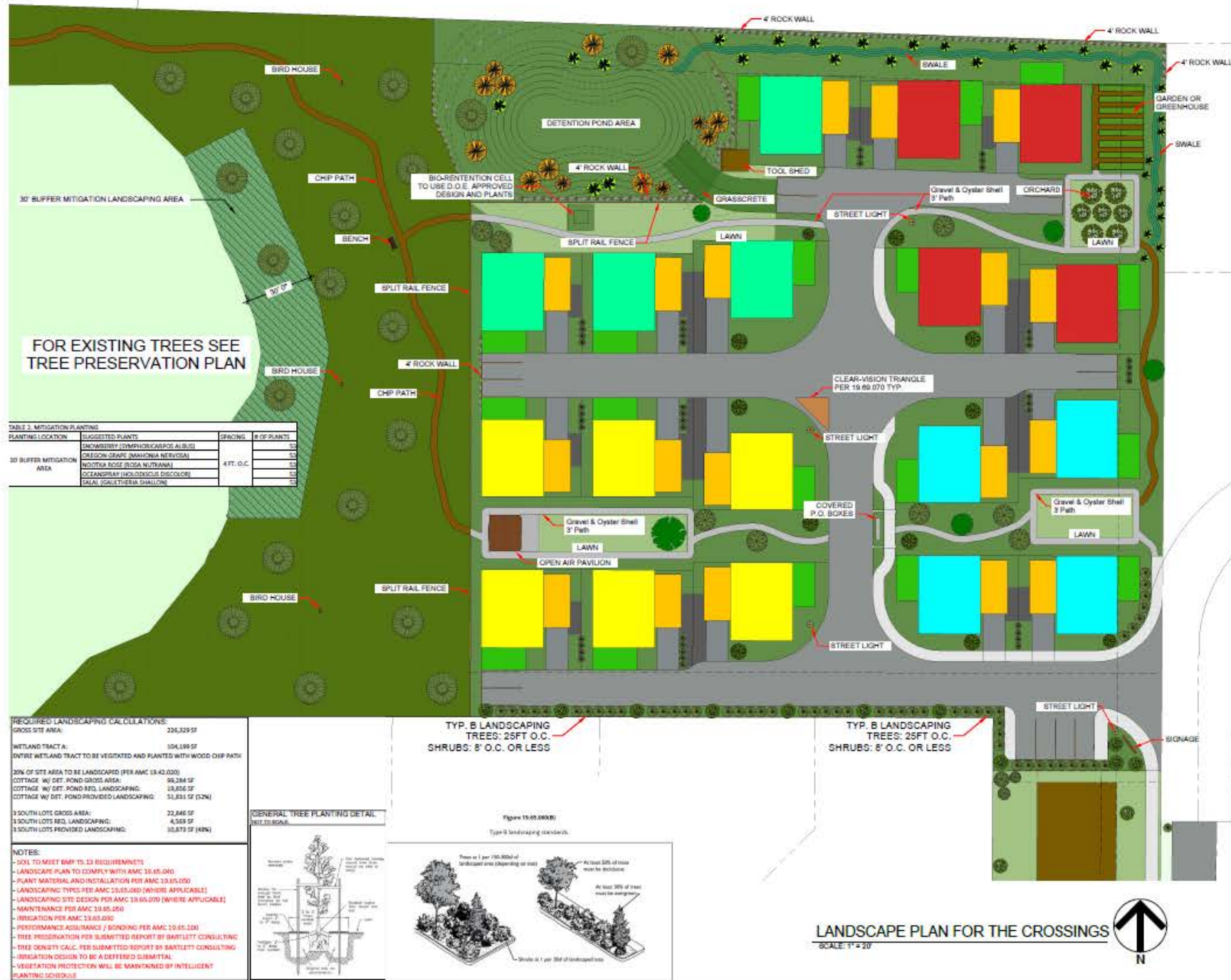
**Symbols: (Approximate location)**

- Assessed tree
- Tree to be removed

January 2020



# Landscape Plan



| LANDSCAPE LEGEND                                                                                       |                                                      |  | JASON STERLING    |
|--------------------------------------------------------------------------------------------------------|------------------------------------------------------|--|-------------------|
| SCALE: 1" = 20' U.N.O.                                                                                 |                                                      |  | DATE: 01/31/2020  |
|                                                                                                        |                                                      |  | DATE: 05/27/2020  |
|                                                                                                        |                                                      |  | DATE: 07/23/2020  |
|                                                                                                        |                                                      |  | Strandberg DESIGN |
| 1                                                                                                      | Cornus Sericea                                       |  |                   |
| 2                                                                                                      | Red Twig Dogwood                                     |  |                   |
| 3                                                                                                      | Myrica Californica                                   |  |                   |
| 4                                                                                                      | Betula papyrifera                                    |  |                   |
| 5                                                                                                      | White Paper Birch                                    |  |                   |
| 6                                                                                                      | Fruit Tree                                           |  |                   |
| 7                                                                                                      | Plum / Apple / Pear                                  |  |                   |
| 8                                                                                                      | Populus Tremuloides                                  |  |                   |
| 9                                                                                                      | Quaking Aspen                                        |  |                   |
| 10                                                                                                     | Platanus Acerifolia                                  |  |                   |
| 11                                                                                                     | London Planetree                                     |  |                   |
| 12                                                                                                     | Populus tremula                                      |  |                   |
| 13                                                                                                     | Swedish Aspen                                        |  |                   |
| 14                                                                                                     | Thuja Plicata "Green Giant"                          |  |                   |
| 15                                                                                                     | Green Giant Arborvitae                               |  |                   |
| 16                                                                                                     | Pseudotsuga Macrocarpa                               |  |                   |
| 17                                                                                                     | Douglas Fir                                          |  |                   |
| 18                                                                                                     | Gravel & Oyster Shell 3" Path                        |  |                   |
| 19                                                                                                     | Mulch Planter Area                                   |  |                   |
| 20                                                                                                     | Chip Path                                            |  |                   |
| 21                                                                                                     | 50" Crushed Gravel                                   |  |                   |
| 22                                                                                                     | General Landscape                                    |  |                   |
| 23                                                                                                     | 50" Crushed Gravel and Oyster Shell Permeous Walkway |  |                   |
| 24                                                                                                     | Existing Wetland Vegetation                          |  |                   |
| List of Acceptable General Landscaping                                                                 |                                                      |  |                   |
| Plants:                                                                                                |                                                      |  |                   |
| 1. Japanese Holly (Ilex: Crenata)                                                                      |                                                      |  |                   |
| 2. Red Seeded Fern                                                                                     |                                                      |  |                   |
| 3. Mexican Feather Grass (Stipa Tenacissima)                                                           |                                                      |  |                   |
| 4. Tall Oregon Grape (Mahonia Aquifolium)                                                              |                                                      |  |                   |
| 5. Salal (Gaultheria Shallon)                                                                          |                                                      |  |                   |
| 6. Kinkadee (Anemone)                                                                                  |                                                      |  |                   |
| 7. Red Flowering Currant (Ribes Sanquianum)                                                            |                                                      |  |                   |
| 8. Blackberry (Rubus)                                                                                  |                                                      |  |                   |
| 9. Western Aconite (Aconitum)                                                                          |                                                      |  |                   |
| 10. Strawberry Tree (Arbutus)                                                                          |                                                      |  |                   |
| Perennials:                                                                                            |                                                      |  |                   |
| 1. Spanish Lavender                                                                                    |                                                      |  |                   |
| 2. Salvia Memorata Canadensis (Sage)                                                                   |                                                      |  |                   |
| 3. Perennial Sage                                                                                      |                                                      |  |                   |
| 4. Yarrow                                                                                              |                                                      |  |                   |
| 5. Black Eyed Susan                                                                                    |                                                      |  |                   |
| Type of irrigation to be drip, soaker hose & standard spray style sprinklers. Will meet AMC 19.45.090. |                                                      |  |                   |
| LANDSCAPE PLAN FOR THE CROSSINGS                                                                       |                                                      |  |                   |
| SCALE: 1" = 20'                                                                                        |                                                      |  |                   |
| L1                                                                                                     |                                                      |  |                   |
| 1 of 2                                                                                                 |                                                      |  |                   |



# Summary of public comments received

| Issue                                                              | Staff Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Concern about project compatibility with the existing neighborhood | The project is consistent with the type of land use and density allowed in the R2 zone. Additional design standards contained in the cottage development provisions help promote compatibility between the project and surrounding area. Recording of an avigation easement promotes compatibility with the nearby airport.                                                                                                                                                                                                                                                                   |
| Tree removal                                                       | The project conforms to the minimum tree preservation requirements in AMC 16.60. The landscape plan shows additional trees will be planted in excess of the minimum requirements.                                                                                                                                                                                                                                                                                                                                                                                                             |
| Density                                                            | The project is consistent with the allowed density in the R2 zone for single family and cottage housing development.                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Wetland impacts                                                    | The critical areas report was prepared in conformance with AMC 17.70 by a qualified professional, reviewed by City staff, and the WA State Department of Ecology wetland staff. Impacts to wetlands will be minimized through implementation of best management practices, buffer enhancement and restoration, wetland fencing and signage, and placement of the wetland and buffer in a separate NGPA tract. The public comments received do not identify specific project impacts that are not adequately mitigated or otherwise addressed in the critical areas report or SEPA conditions. |
| Traffic impacts                                                    | The traffic report for the project was prepared by a qualified professional and reviewed by the City's Public Works Engineering Department. Based on this review, it was determined that the proposal meets concurrency requirements and other traffic impacts are adequately addressed through recommended conditions of approval.                                                                                                                                                                                                                                                           |
| Stormwater and flooding impacts                                    | The stormwater site plan and report for the project was prepared by a qualified professional and reviewed by the City's 3 <sup>rd</sup> party consultant and found to be in conformance with the City's stormwater requirements. The site and surrounding area have a high water table and subsurface flows. The geotech report recommends exterior footing drain systems around new building foundations to reduce potential for groundwater and subsurface water to seep into interior spaces.                                                                                              |
| Project lighting                                                   | SEPA MDNS condition #12 requires streetlights and exterior lighting to be downcast to avoid glare and light trespass onto adjacent properties and the wetland buffer.                                                                                                                                                                                                                                                                                                                                                                                                                         |

# Requirements Met



Preliminary Land Division



Site Plan Review



## 19.32.040 Preliminary land division approval—Criteria for decision.

Each proposed preliminary land division must be reviewed to ensure that:

- A. The proposal conforms to the requirements of this chapter and Chapter [58.17](#) RCW.
- B. The proposal conforms to the form and intensity standards in [AMC Chapter 19.42](#), Form and Intensity Standards, for the zone in which the property is located. Proposals using the [unit lot subdivision](#) process must conform to the applicable use standards for the proposed use type in [AMC 19.43.010](#).
- C. The proposal conforms to the community design standards in Division [5](#) of this title, including:
  - 1. [AMC Chapter 19.51](#), [Public Street](#) Improvements Required.
  - 2. [AMC Chapter 19.52](#), [Public Street](#) Design.
  - 3. [AMC Chapter 19.53](#), Private Driveways and Access.
  - 4. [AMC Chapter 19.54](#), [Subdivision](#) Design and [Block Structure](#).
- D. The proposal conforms to the standards of:
  - 1. [AMC Chapter 16.50](#), [Tree](#) Preservation.
  - 2. [AMC Chapter 17.70](#), Critical Area Regulations.
  - 3. [AMC Chapter 19.22](#), Concurrency.
  - 4. [AMC Chapter 19.76](#), Stormwater, including stormwater infiltration when feasible.
- E. The proposed land division:
  - 1. Makes adequate provision for parks, recreation, and playgrounds.
  - 2. Makes adequate provision for [schools](#) and [school](#) grounds.
  - 3. Makes adequate provisions for sidewalks and other planning features that meet the requirements of this title and that provide safe walking conditions for students who walk to and from [school](#).
  - 4. Serves the public interest and makes appropriate provisions for the public health, safety, and welfare.

## 19.30.040 Review criteria.



This section was recently added by Ordinance 3040, codified in November 2019.

- Conformance with all other applicable laws, ordinances and regulations.
- B. Conformance with [AMC Chapter 15.32](#), Underground Utilities.
- C. Conformance with [AMC Chapter 19.22](#), Concurrency.
- D. Conformance with the applicable zoning provisions of Division [4](#) of this title, including:
  - 1. [AMC Chapter 19.41](#), Allowed Uses.
  - 2. [AMC Chapter 19.42](#), Form and Intensity Standards.
  - 3. The applicable use standards of [AMC Chapters 19.43](#) through [19.48](#).
- E. Conformance with the applicable community design provisions of Division [5](#) of this title, including:
  - 1. [AMC Chapter 19.51](#), [Public Street](#) Improvements Required.
  - 2. [AMC Chapter 19.52](#), [Public Street](#) Design.
  - 3. [AMC Chapter 19.53](#), Private Driveways and Access.
  - 4. [AMC Chapter 19.54](#), [Subdivision](#) Design and [Block Structure](#).
- F. Conformance with the applicable project design provisions of Division [6](#) of this title, including:
  - 1. [AMC Chapter 19.61](#), [Block Frontage](#) Standards.
  - 2. [AMC Chapter 19.62](#), Site Planning.
  - 3. [AMC Chapter 19.63](#), Building Design.
  - 4. [AMC Chapter 19.64](#), Parking.
  - 5. [AMC Chapter 19.65](#), Landscaping.
  - 6. [AMC Chapter 19.66](#), [Fences](#), [Walls](#) and [Hedges](#).
  - 7. [AMC Chapter 19.67](#), Signs.
  - 8. [AMC Chapter 19.69](#), Standards, Generally.
- G. Conformance with other applicable environmental provisions, including:
  - 1. [AMC Chapter 17.70](#), Critical Area Regulations.
  - 2. [AMC Chapter 18.04](#), State Environmental Policy Act.
  - 3. [AMC Chapter 18.16](#), Shoreline Master Plan.
  - 4. [AMC Chapter 19.76](#), Stormwater.
  - 5. [AMC Chapter 19.78](#), Clearing and Grading. (Ord. 3040 § 2 (Att. A), 2019)

## Procedural

- ✓ Pre-Application Meeting & Pre-App Neighborhood Meeting
- ✓ Noticing
- ✓ SEPA DNS – no appeals



# Recommended Conditions

## E. RECOMMENDATION:

Based upon the application, Findings of Fact, and Conclusions of the staff report, staff recommends that the Planning Commission recommend approval of the cottage housing site plan and preliminary subdivision with the following conditions of approval:

1. Prior to Construction Plan approval and any site work, a final cottage development Site Plan shall be submitted by the applicant for review and approval by PCED, which includes the following additional items:
  - Show crosswalk locations and proposed materials per AMC 19.53.050.C.3.
  - Extend internal pathways to provide access to porches that are facing the common open space areas per AMC 19.43.010.D.3.iv and .v.
2. Prior to building permit issuance for each cottage unit, the applicant must demonstrate conformance with the applicable cottage housing site and building design standards outlined in AMC 19.43.010.D. An updated Cottage Site Plan for the entire cottage development may be required by the Director.
3. The preliminary plat map dated July 22, 2020 (Sheet C9) is the approved preliminary plat map.
4. Appropriate public and private easements to ensure adequate provision of utilities and services consistent with the requirements of the Anacortes engineering design standards and the Anacortes

# Recommended Conditions, cont.

Fire Department must be dedicated on the face of the plat and recorded by separate document and referenced on the final cottage site plan. This includes, but is not limited to:

- A waterline easement shall be 20-foot wide minimum and dedicated to the City of Anacortes.
- All Sanitary Sewer Easements shall be 20-foot minimum width and dedicated to the City of Anacortes.

5. The maximum impervious surface allowed for each lot must be added to the face of the plat and cottage site plan along with a statement that there may not a net increase in the impervious surface above the limit on the plat without approval by the director.
6. Notes must be placed on the face of the plat as recorded with the Skagit County Auditor to acknowledge the following:
  - a. Approval of the design of the unit on each of the lots was granted by the review of the development, as a whole, on the parent lot per the standards of AMC Chapter 19.43.010.D, Cottage Housing.
  - b. Development, redevelopment, or rehabilitation of structures on each unit lot is subject to review and approval of plans that are consistent with the design of the surrounding structures on the parent lot as approved by the city through subject file number as stated in subsection (D)(7)(a) of this section.
7. Access easements, joint use and maintenance agreements, and covenants, conditions and restrictions (CC&Rs) identifying the rights and responsibilities of property owners and/or the homeowners' association must be executed for use and maintenance of common garage, parking and vehicle access areas; retaining walls, underground utilities and stormwater facilities; common open space; exterior building facades and roofs; and other similar features must be recorded with the Skagit County Auditor and referenced on the face of the plat.
8. A final plat application must be submitted in conformance with AMC Ch. 19.32 Land Division prior to the expiration of this preliminary approval as provided in AMC Ch. 19.28 Permit Revision and Expiration.
9. To reduce and control erosion impacts the project shall follow the recommendations in the geotechnical report by GeoTest, dated April, 12, 2018, as amended, and approved by PCED. (MDNS 1)
10. Proposed retaining walls must be designed by a structural engineer (if required by the Director), provide appropriate drainage facilities, and conform to the standards in AMC 19.66.080. (MDNS 2)
11. The applicant must comply with City, State and Federal regulations related to emissions to air and provide a dust emissions control plan for review prior to construction activities beginning on site. (MDNS 3)
12. Wetland buffer enhancement and restoration shall be completed per the ATSI report, dated February 2020, and addendum letter, dated July 16, 2020, prior to final subdivision approval, or occupancy of the first residence, whichever occurs first. An as-built report shall be prepared by a qualified biologist and submitted to PCED upon installation completion. Monitoring of the

# Recommended Conditions, cont.

restoration and enhancement areas shall be conducted by a qualified biologist and reports submitted to PCED for a period of five years or until the site is deemed successful. (MDNS 4)

13. The ATSI buffer planting plan referenced above shall be revised as follows:
  - Planting density shall not be less than 3' on center for shrubs and 8' on center for trees;
  - Add or substitute fast growing trees and/or shrubs that will be larger at maturity to shade out existing grass, increase habitat complexity, and aid in success of the buffer enhancement plan.
14. The estimated cost for the installation of the buffer enhancement area and the proposed monitoring and maintenance work for a minimum period of five years shall be submitted to PCED. An acceptable financial guarantee shall be in place prior to final plat approval, or occupancy of the 1<sup>st</sup> residence, whichever occurs first. (MDNS 5)
15. The proposed trail within the buffer shall be located generally parallel to the wetland within the outer 25% of the buffer where possible, be designed to avoid removal of trees and native vegetation, not exceed 6' in width, and be made of native soils or pervious surfaces. (MDNS 6)
16. A split rail fence shall be installed along the eastern edge of the wetland buffer and on either side of the proposed trail, unless an alternative proposal is approved by the Director that would provide better protection of the wetland and buffer. (MDNS 7)
17. Permanent signs made of an enamel-coated metal face and attached to a metal post or other non-treated material of equal durability shall be posted at an interval of one every 50-feet. Sign verbiage shall be as follows, or as approved by the Director:

"Protected Wetland Area  
Do Not Disturb  
Contact City of Anacortes  
Regarding Uses, Restrictions, and Opportunities for Stewardship" (MDNS 8)
18. Design and installation of the proposed stormwater outfall features within the wetland buffer shall follow DOE 2014 SWMMWW guidelines for outfall systems, as approved by the Public Works Department. (MDNS 9)
19. To protect critical areas and trees proposed for retention, prior to any site work, construction limits fencing, silt fencing, and tree protection measures shall be installed and PCED contacted for an inspection. (MDNS 10)
20. Covenants shall be established limiting use of pesticides within 150' of the wetland and requiring application of integrated pest management. (MDNS 11)
21. Streetlights and exterior lighting shall be downcast to avoid glare and light trespass onto adjacent properties and the wetland/buffer. (MDNS 12)



# Recommended Conditions, cont.

22. The applicant shall either work with the property owner to trim the existing hedge located at the southeast corner of Oregon Ave. and Meadows Lane (upon obtaining appropriate approvals), or install appropriate advance advisory signage per the recommendations of the traffic report (TSI, March 5, 2020), as approved by the Public Works Dept. (MDNS 13)
23. A standard Inadvertent Discovery Plan shall be in place and followed during all ground disturbing activities. Should any human remains, archaeological, historic or cultural materials be discovered during construction, work in the affected area shall cease immediately and the area shall be secured, and appropriate agencies contacted. (MDNS 14)
24. An avigation easement shall be recorded for the property and noted on the face of the final plat. (MDNS 15)
25. The development is subject to applicable water, sewer, and stormwater general facility and hookup fees and transportation, fire, and park impact fees. These fees are payable at levels in effect at the time of building permit issuance.
26. A clearing and grading plan consistent with City requirements shall be submitted by the applicant for review and approval by the City of Anacortes Planning\Building and Public Works Departments prior to any construction activities taking place on or off-site.
27. A Storm Drainage Report consistent with City requirements shall be submitted by the applicant for review and approval by the Planning\Building and Public Works Departments prior to any construction activities taking place on or off-site. Stormwater conveyance both on-site and off-site shall comply with City Storm drainage requirements.
28. Prior to any clearing\fill\grade work beginning, construction civil plans consistent with the City of Anacortes Engineering Development Standards, including but not limited to, Clearing and Grading Plan, Erosion Control Plan, Site utility\Infrastructure improvements Plan, Roadway Improvements Plan, Signage Plan, Street Lighting Plan and other plans and\or information required by the City Planning\Building and Public Works Departments shall be submitted for review and approval.
29. Engineering and Inspection fees in the amount of \$500.00, plus 2% of the total estimated construction cost shall be due upon civil plan approval. No construction activity is allowed until the construction plans are approved, all fees have been paid and a preconstruction conference held.
30. Prior to the final plat approval, all infrastructure improvements shall be completed as required by the City of Anacortes Public Works Director and a 2-year Maintenance Bond in place. The 2-year Maintenance Bond is 10% of the actual construction cost.
31. Internal private driveway (Name to be Determined) shall be required to provide for:
  - A minimum of 20-feet of paved asphalt with a thickened edge on one side to control sheet flow runoff.
  - Maximum grade of 12%.
  - The road shall be constructed to meet City requirements and maintained by the property owners of which it serves.
  - No Parking Signs and or paint striping for Fire Lanes as required by the Fire Department.

# Recommended Conditions, cont.

32. Oregon Avenue, along the frontage of this project is required to provide for:
  - A minimum of 20-feet of paved asphalt with traffic curb and gutter along the west side and a thickened edge on the east side to control sheet flow runoff.
  - 6-foot minimum wide sidewalk along the west side. A sidewalk easement in favor the City of Anacortes shall be provided.
33. All internal (Cottage Portion) drainage facilities and facilities within the Wetland Tract are considered private and will be maintained by the HOA. The project is required to record a Drainage BMP Maintenance Covenant prior to recording of the final plat.
34. All drainage facilities along Oregon Avenue that drain to the Rock Ridge Detention Pond will be considered Public and maintained by the City of Anacortes.
35. All Sanitary Sewer structures shall have vehicular access, including but not limited to: 1) A 12-foot minimum width access road with an approved all-weather surface asphalt road, or other approved Low Impact Development Best Management Practice design, 2) Meeting the minimum structural requirements for Access Road approved by the City of Anacortes.
36. The project will make provisions and install a 2-inch minimum sized Schedule 40 or Schedule 80 conduit and Agency provided handholds for future City of Anacortes Access Fiber within the utility easement corridor.
37. Prior to construction plan approval, a "No Parking" plan for the private shared access drive must be submitted by the applicant for review and approval by the City. The plan must include, but is not limited to language in the CC&Rs, HOA's responsibility for enforcement, and signage and/or curb paint. The approved plan must be implemented, as determined by the Public Works and/or Fire Departments, prior to final subdivision approval, or occupancy of the 1<sup>st</sup> residence, whichever occurs first.
38. Prior to any site work beginning, the applicant/landowner shall obtain all required local, state, and federal permits, including but not limited to a clearing and grading permit, Construction Stormwater General permit from the State of Washington Department of Ecology, and a forest practices permit from WA Department of Natural Resources, if applicable.
39. Residential fire sprinklers may be required for some or all units based upon building construction type, fire area, available fire flow, and/or access around structures. Fire hydrant(s) may be required based on structure size, layout, and other considerations. The need for sprinklers and hydrants will be determined at time of building permit submittal. Fire flows shall be addressed in a manner acceptable to the Fire Chief and the City of Anacortes Public Works Department.
40. Emergency services apparatus access and turn-around must meet city standards, including 20' clear width, 30' minimum inside turning radius, and clear marking of required fire lanes.
41. Mailbox locations shall be reviewed and approved by the City of Anacortes Public Works Engineering Department and the U.S. Postal Service.

# Recommended Conditions, cont.

42. Street lighting shall be required at both ingress and egress of the project. Street lighting shall be energy efficient and shall limit glare and/or emission of light downward to the street and front yard areas. Street lighting will be installed per PSE Schedule 52, Option "B". Lighting fixtures and design shall be approved by the Public Works Director. Shields may be necessary to reduce impacts to adjacent properties.

43. Sanitation, recycling and compost collection will be at curbside within the subdivision.

44. Monumentation installation, per the current Engineering Standards.

Staff reserves the right to supplement the record of the case to respond to matters and information raised subsequent to the writing of this report.

## Exhibit List

|    |                                      |
|----|--------------------------------------|
| 1  | Staff Report                         |
| 2  | Application Documents                |
| 3  | Vicinity Map                         |
| 4  | Preliminary unit lot subdivision map |
| 5  | Cottage site plan                    |
| 6  | Notices                              |
| 7  | City Department comments             |
| 8  | Agency Comments                      |
| 9  | Public Comments                      |
| 10 | Issued SEPA MDNS                     |
| 11 | Project Correspondence               |



Questions?



# City Council Agenda Item Summary

**Meeting Date:** 10/12/2020

**Agenda Item Number:** 5a

**Agenda Item Title:** Closed Record Decision Hearing: LPS-2020-0001 - The Crossings Cottages Preliminary Plat & Site Plan

**Staff Contact(s):** Libby Grage; Don Measamer

**Action Type:** Closed Record Public Hearing

**Item Summary:**

Anacopper LLC is requesting approval of a cottage housing site plan and unit lot subdivision/preliminary long subdivision to divide 5.2 acres into 21 lots with 18 cottage units and 3 standard single family homes in the R2 zone.

The site is located at 1905 Anacopper Mine Road.

A public hearing was held by the Planning Commission on September 23, 2020. The Planning Commission voted 6 to 0 in favor of recommending approval of the site plan and preliminary unit lot subdivision subject to conditions.

**Previous Action:** None

**Recommended Motion:** I move to approve the cottage site plan and preliminary unit lot subdivision subject to the conditions recommended by the Planning Commission.

**Alternative Actions:** Change or add conditions of approval, or deny the project permit application(s).

**Attachments** In order presented:

- Planning Commission Recommendation
- 9/23/20 Staff Slide Presentation
- 9/23/20 PC Packet with staff report, project application documents, comments, site photos, etc.
- 9/23/20 PC meeting draft minutes



## Anacortes Planning Commission Findings of Fact, Conclusions of Law and Recommendation

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>File Number:</b>                | LPS-2020-0001                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Project Name:</b>               | The Crossings                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Proposal Description:</b>       | The applicant is requesting preliminary approval of a 21 unit lot subdivision and cottage housing site plan approval (Type 2). The project includes 18 cottage unit lots and 3 standard single family building lots, improvement of Oregon Avenue between W. 12 <sup>th</sup> St. and Meadows Lane, and site infrastructure improvements, including utilities and stormwater facilities. Wetland buffer averaging and buffer enhancement is also proposed. |
| <b>Documents available at:</b>     | City Hall, Planning Community & Economic Development Department                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Public hearing:</b>             | Anacortes Planning Commission                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Public hearing date:</b>        | September 23, 2020                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>PC deliberations:</b>           | September 23, 2020                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Decision Body:</b>              | Anacortes City Council                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Closed Record Hearing Date:</b> | October 12, 2020 6:00 PM                                                                                                                                                                                                                                                                                                                                                                                                                                   |

After considering the written and spoken comments and considering the record before it, the Planning Commission enters the following findings of fact, conclusions of law, and recommendation:

### Findings of Fact & Conclusions of Law

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1. The Staff report dated September 17, 2020 (Exhibit 1) accurately describes the project proposal and its Findings of Fact and Conclusions of Law are hereby incorporated by reference as the Planning Commission's Findings of Fact and Conclusions of Law.
2. The following members of the public provided testimony during the public hearing:
  - Tom Glade
  - Carol Bordin
3. The following additional exhibits were entered into the record at the public hearing:
  - Exhibit 12 Site photos
  - Exhibit 13 Building elevations
  - Exhibit 14 Draft CCRs for Lots 19-21
  - Exhibit 15 Tree credit matrix



- Exhibit 16 Additional public comments
  - Richardson (9/18/20)
  - Brandt (9/21/20)
  - Goyer (9/21/20)
  - Patrick (9/21/20)
  - Evergreen Islands (9/22/20)
  - Evergreen Islands (9/23/20)
  - Goyer, et. al. (9/23/20)
  - Barnes (9/23/20)
  - Evergreen Islands (9/23/20)

4. The following additional Findings of Fact and/or Conclusions of Law are entered:

- None

## Recommendation

Based on the foregoing findings and conclusions of law, and review of the City's regulatory authority to implement the policies, standards, and regulations of the Anacortes Municipal Code, the Planning Commission hereby makes the following recommendation regarding the subject Preliminary Unit Lot Subdivision and Site Plan Review applications:

- ☒ Approve with Conditions
- ☐ Approve
- ☐ Deny

### Conditions of Approval:

1. Prior to Construction Plan approval and any site work, a final cottage development Site Plan shall be submitted by the applicant for review and approval by PCED, which includes the following additional items:
  - Show crosswalk locations and proposed materials per AMC 19.53.050.C.3.
  - Extend internal pathways to provide access to porches that are facing the common open space areas per AMC 19.43.010.D.3.iv and .v.
2. Prior to building permit issuance for each cottage unit, the applicant must demonstrate conformance with the applicable cottage housing site and building design standards outlined in AMC 19.43.010.D. An updated Cottage Site Plan for the entire cottage development may be required by the Director.
3. The preliminary plat map dated July 22, 2020 (Sheet C9) is the approved preliminary plat map.
4. Appropriate public and private easements to ensure adequate provision of utilities and services consistent with the requirements of the Anacortes engineering design standards and the Anacortes Fire Department must be dedicated on the face of the plat and recorded by separate document and referenced on the final cottage site plan. This includes, but is not limited to:

- A waterline easement shall be 20-foot wide minimum and dedicated to the City of Anacortes.
  - All Sanitary Sewer Easements shall be 20-foot minimum width and dedicated to the City of Anacortes.
5. The maximum impervious surface allowed for each lot must be added to the face of the plat and cottage site plan along with a statement that there may not a net increase in the impervious surface above the limit on the plat without approval by the director.
  6. Notes must be placed on the face of the plat as recorded with the Skagit County Auditor to acknowledge the following:
    - a. Approval of the design of the unit on each of the lots was granted by the review of the development, as a whole, on the parent lot per the standards of AMC Chapter 19.43.010.D, Cottage Housing.
    - b. Development, redevelopment, or rehabilitation of structures on each unit lot is subject to review and approval of plans that are consistent with the design of the surrounding structures on the parent lot as approved by the city through subject file number as stated in subsection (D)(7)(a) of this section.
  7. Access easements, joint use and maintenance agreements, and covenants, conditions and restrictions (CC&Rs) identifying the rights and responsibilities of property owners and/or the homeowners' association must be executed for use and maintenance of common garage, parking and vehicle access areas; retaining walls, underground utilities and stormwater facilities; common open space; exterior building facades and roofs; and other similar features must be recorded with the Skagit County Auditor and referenced on the face of the plat.
  8. A final plat application must be submitted in conformance with AMC Ch. 19.32 Land Division prior to the expiration of this preliminary approval as provided in AMC Ch. 19.28 Permit Revision and Expiration.
  9. To reduce and control erosion impacts the project shall follow the recommendations in the geotechnical report by GeoTest, dated April, 12, 2018, as amended, and approved by PCED. (MDNS 1)
  10. Proposed retaining walls must be designed by a structural engineer (if required by the Director), provide appropriate drainage facilities, and conform to the standards in AMC 19.66.080. (MDNS 2)
  11. The applicant must comply with City, State and Federal regulations related to emissions to air and provide a dust emissions control plan for review prior to construction activities beginning on site. (MDNS 3)
  12. Wetland buffer enhancement and restoration shall be completed per the ATSI report, dated February 2020, and addendum letter, dated July 16, 2020, prior to final subdivision approval, or occupancy of the first residence, whichever occurs first. An as-built report shall be prepared by a qualified biologist and submitted to PCED upon installation completion.



Monitoring of the restoration and enhancement areas shall be conducted by a qualified biologist and reports submitted to PCED for a period of five years or until the site is deemed successful. (MDNS 4)

13. The ATSI buffer planting plan referenced above shall be revised as follows:

- Planting density shall not be less than 3' on center for shrubs and 8' on center for trees;
- Add or substitute fast growing trees and/or shrubs that will be larger at maturity to shade out existing grass, increase habitat complexity, and aid in success of the buffer enhancement plan.

14. The estimated cost for the installation of the buffer enhancement area and the proposed monitoring and maintenance work for a minimum period of five years shall be submitted to PCED. An acceptable financial guarantee shall be in place prior to final plat approval, or occupancy of the 1<sup>st</sup> residence, whichever occurs first. (MDNS 5)

15. The proposed trail within the buffer shall be located generally parallel to the wetland within the outer 25% of the buffer where possible, be designed to avoid removal of trees and native vegetation, not exceed 6' in width, and be made of native soils or pervious surfaces. (MDNS 6)

16. A split rail fence shall be installed along the eastern edge of the wetland buffer and on either side of the proposed trail, unless an alternative proposal is approved by the Director that would provide better protection of the wetland and buffer. (MDNS 7)

17. Permanent signs made of an enamel-coated metal face and attached to a metal post or other non-treated material of equal durability shall be posted at an interval of one every 50-feet. Sign verbiage shall be as follows, or as approved by the Director:

"Protected Wetland Area  
Do Not Disturb  
Contact City of Anacortes  
Regarding Uses, Restrictions, and Opportunities for Stewardship" (MDNS 8)

18. Design and installation of the proposed stormwater outfall features within the wetland buffer shall follow DOE 2014 SWMMWW guidelines for outfall systems, as approved by the Public Works Department. (MDNS 9)

19. To protect critical areas and trees proposed for retention, prior to any site work, construction limits fencing, silt fencing, and tree protection measures shall be installed and PCED contacted for an inspection. (MDNS 10)

20. Covenants shall be established limiting use of pesticides within 150' of the wetland and requiring application of integrated pest management. (MDNS 11)



21. Streetlights and exterior lighting shall be downcast to avoid glare and light trespass onto adjacent properties and the wetland/buffer. (MDNS 12)
22. The applicant shall either work with the property owner to trim the existing hedge located at the southeast corner of Oregon Ave. and Meadows Lane (upon obtaining appropriate approvals), or install appropriate advance advisory signage per the recommendations of the traffic report (TSI, March 5, 2020), as approved by the Public Works Dept. (MDNS 13)
23. A standard Inadvertent Discovery Plan shall be in place and followed during all ground disturbing activities. Should any human remains, archaeological, historic or cultural materials be discovered during construction, work in the affected area shall cease immediately and the area shall be secured, and appropriate agencies contacted. (MDNS 14)
24. An avigation easement shall be recorded for the property and noted on the face of the final plat. (MDNS 15)
25. The development is subject to applicable water, sewer, and stormwater general facility and hookup fees and transportation, fire, and park impact fees. These fees are payable at levels in effect at the time of building permit issuance.
26. A clearing and grading plan consistent with City requirements shall be submitted by the applicant for review and approval by the City of Anacortes Planning\Building and Public Works Departments prior to any construction activities taking place on or off-site.
27. A Storm Drainage Report consistent with City requirements shall be submitted by the applicant for review and approval by the Planning\Building and Public Works Departments prior to any construction activities taking place on or off-site. Stormwater conveyance both on-site and off-site shall comply with City Storm drainage requirements.
28. Prior to any clearing\fill\grade work beginning, construction civil plans consistent with the City of Anacortes Engineering Development Standards, including but not limited to, Clearing and Grading Plan, Erosion Control Plan, Site utility\Infrastructure improvements Plan, Roadway Improvements Plan, Signage Plan, Street Lighting Plan and other plans and\or information required by the City Planning\Building and Public Works Departments shall be submitted for review and approval.
29. Engineering and Inspection fees in the amount of \$500.00, plus 2% of the total estimated construction cost shall be due upon civil plan approval. No construction activity is allowed until the construction plans are approved, all fees have been paid and a preconstruction conference held.
30. Prior to the final plat approval, all infrastructure improvements shall be completed as required by the City of Anacortes Public Works Director and a 2-year Maintenance Bond in place. The 2-year Maintenance Bond is 10% of the actual construction cost.

31. Internal private driveway (Name to be Determined) shall be required to provide for:
- A minimum of 20-feet of paved asphalt with a thickened edge on one side to control sheet flow runoff.
  - Maximum grade of 12%.
  - The road shall be constructed to meet City requirements and maintained by the property owners of which it serves.
  - No Parking Signs and or paint striping for Fire Lanes as required by the Fire Department.
32. Oregon Avenue, along the frontage of this project is required to provide for:
- A minimum of 20-feet of paved asphalt with traffic curb and gutter along the west side and a thickened edge on the east side to control sheet flow runoff.
  - 6-foot minimum wide sidewalk along the west side. A sidewalk easement in favor the City of Anacortes shall be provided.
33. All internal (Cottage Portion) drainage facilities and facilities within the Wetland Tract are considered private and will be maintained by the HOA. The project is required to record a Drainage BMP Maintenance Covenant prior to recording of the final plat.
34. All drainage facilities along Oregon Avenue that drain to the Rock Ridge Detention Pond will be considered Public and maintained by the City of Anacortes.
35. All Sanitary Sewer structures shall have vehicular access, including but not limited to: 1) A 12-foot minimum width access road with an approved all-weather surface asphalt road, or other approved Low Impact Development Best Management Practice design, 2) Meeting the minimum structural requirements for Access Road approved by the City of Anacortes.
36. The project will make provisions and install a 2-inch minimum sized Schedule 40 or Schedule 80 conduit and Agency provided handholds for future City of Anacortes Access Fiber within the utility easement corridor.
37. Prior to construction plan approval, a “No Parking” plan for the private shared access drive must be submitted by the applicant for review and approval by the City. The plan must include, but is not limited to language in the CC&Rs, HOA’s responsibility for enforcement, and signage and/or curb paint. The approved plan must be implemented, as determined by the Public Works and/or Fire Departments, prior to final subdivision approval, or occupancy of the 1<sup>st</sup> residence, whichever occurs first.
38. Prior to any site work beginning, the applicant/landowner shall obtain all required local, state, and federal permits, including but not limited to a clearing and grading permit, Construction Stormwater General permit from the State of Washington Department of Ecology, and a forest practices permit from WA Department of Natural Resources, if applicable.
39. Residential fire sprinklers may be required for some or all units based upon building construction type, fire area, available fire flow, and/or access around structures. Fire



hydrant(s) may be required based on structure size, layout, and other considerations. The need for sprinklers and hydrants will be determined at time of building permit submittal. Fire flows shall be addressed in a manner acceptable to the Fire Chief and the City of Anacortes Public Works Department.

40. Emergency services apparatus access and turn-around must meet city standards, including 20' clear width, 30' minimum inside turning radius, and clear marking of required fire lanes.
41. Mailbox locations shall be reviewed and approved by the City of Anacortes Public Works Engineering Department and the U.S. Postal Service.
42. Street lighting shall be required at both ingress and egress of the project. Street lighting shall be energy efficient and shall limit glare and/or emission of light downward to the street and front yard areas. Street lighting will be installed per PSE Schedule 52, Option "B". Lighting fixtures and design shall be approved by the Public Works Director. Shields may be necessary to reduce impacts to adjacent properties.
43. Sanitation, recycling and compost collection will be at curbside within the subdivision.
44. Monumentation installation, per the current Engineering Standards.

| Commission Vote - Recommendation | Approve | Deny | Absent | Abstain |
|----------------------------------|---------|------|--------|---------|
| Frank Jeretzky                   | x       |      |        |         |
| Mike Cortright                   | x       |      |        |         |
| Sarah Reuther                    | x       |      |        |         |
| Jeff Mount                       | x       |      |        |         |
| Vacant                           |         |      |        |         |
| Jeff Graf                        | x       |      |        |         |
| Ward MacKenzie                   | x       |      |        |         |
| Total                            | 6       | 0    |        |         |

ANACORTES PLANNING COMMISSION  
ANACORTES, WASHINGTON

  
Ward MacKenzie, Planning Commission Chair

09/25/2020  
Date





# Planning Commission

Pre-Decision Open-Record Public Hearing

**LPS-2020-0001: The Crossings Cottages**

*September 23, 2020 @ 6:00 PM*

Libby Grage, Planning Manager

# **LPS-2020-0001:**

## **The Crossings Cottages**

|                             |                                                       |
|-----------------------------|-------------------------------------------------------|
| <b>Applicant:</b>           | Anacopper LLC                                         |
| <b>Land Owner:</b>          | Anacopper LLC                                         |
| <b>Project Proposal:</b>    | 21 lots; 18 cottages + 3 standard SFR                 |
| <b>Application Type(s):</b> | Preliminary Unit Lot Subdivision and Site Plan Review |
| <b>Zone:</b>                | R2                                                    |
| <b>Location:</b>            | 1905 Anacopper Mine Road                              |

# LPS-2020-0001:

## The Crossings Cottages

### Types of Review:

- Site Plan Review (Level 2) = Type 2-Admin
- Preliminary unit lot/ long subdivision = Type 4-CC

Consolidated Application  
Processing



Type 4-CC

- Planning Commission: Public Hearing and Recommendation
- City Council: Makes Decision

### Project History & Public Notice:

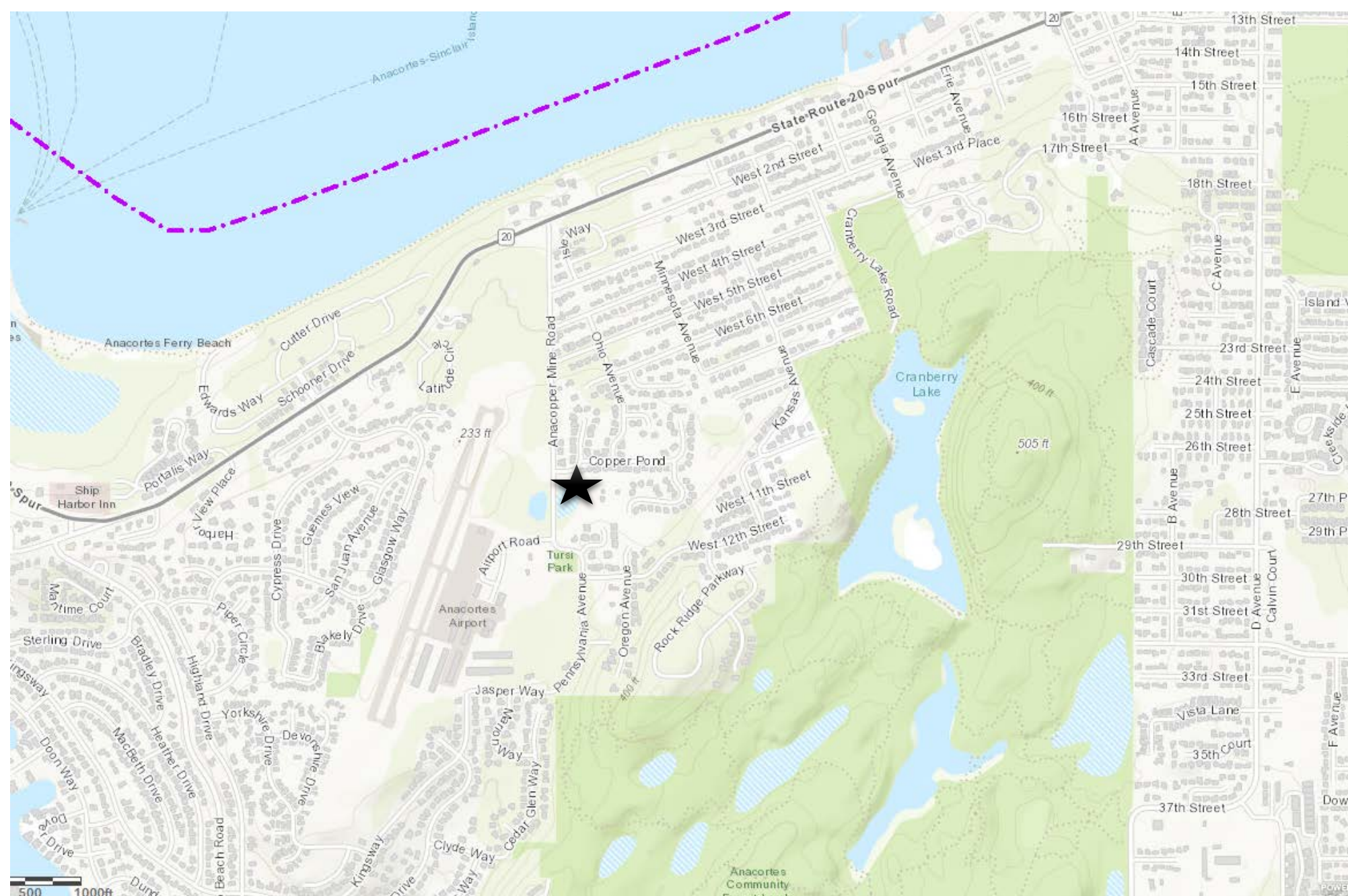
- |                                                        |                              |
|--------------------------------------------------------|------------------------------|
| • Preapplication /Development review group meeting     | Nov. 19, 2019                |
| • Preapplication neighborhood meeting (held virtually) | Jan. 16, 2020 & Feb. 4, 2020 |
| • Complete application submitted                       | Feb. 21, 2020                |
| • Notice Of Application w/ 21 day comment period       | Apr. 1, 2020                 |
| • Route to City departments and agencies for comments  | Mar. 25, 2020                |
| • SEPA DNS, no appeals                                 | Sept. 2, 2020                |
| • Notice Of Hearing                                    | Sept. 2, 2020                |
| • Public Hearing                                       | Sept. 23, 2020               |



# Exhibits

- Exhibit 1 Staff Report
- Exhibit 2 Application Documents
- Exhibit 3 Vicinity Map
- Exhibit 4 Preliminary unit lot subdivision map
- Exhibit 5 Cottage site plan
- Exhibit 6 Notices
- Exhibit 7 City department comments
- Exhibit 8 Agency Comments
- Exhibit 9 Public Comments
- Exhibit 10 Issued SEPA MDNS
- Exhibit 11 Project correspondence
- Exhibit 12 Site photos
- Exhibit 13 Building elevations
- Exhibit 14 Draft CCRs for Lots 19-21
- Exhibit 15 Tree credit matrix
- Exhibit 16 Additional public comments (rec'd as of 3:00 PM 9/23/20)
  - Richardson (9/18/20)
  - Brandt (9/21/20)
  - Goyer (9/21/20)
  - Patrick (9/21/20)
  - Evergreen Islands (9/22/20)
  - Evergreen Islands (9/23/20)
  - Goyer, et. al. (9/23/20)
  - Barnes (9/23/20)
  - Evergreen Islands (9/23/20)

# Project Location



# Comprehensive Plan



Residential Low Density 2 (RLD-2)

## Table LU-1

### Residential Low Density 2

**Purpose:** This designation provides for low density residential development in mostly established neighborhoods throughout the City. These areas are inappropriate for more intensive urban development due to the established character of the area and/or due to the area's separation from transit uses and commercial services.

**Principal uses & density:** Single-family detached dwellings are the predominant dwelling type. Other dwelling types, such as duplexes, accessory dwellings and **cottage housing** may be allowed under certain circumstances. The permitted density is between 4 and 8 dwelling units per gross acre, depending upon the established development pattern and character of the area.

**Special topics to explore:** Accommodate affordable housing and tiny houses (see Housing Element). Explore option for 6,000 sf lots where compatible with existing development (east of Anacopper Mine Rd.).

**Policy LU-6.1.** Provide for a wide variety of housing types within the city to meet the full range of housing needs for Anacortes's evolving population.

- C. **Cottage housing.** Encourage the development of cottage housing (a cluster of small homes around a common open space) in single family zones as an increasingly popular housing type, provided special design provisions are included to ensure a pedestrian-oriented design, inclusion of common open space, and strict cottage size limitations.

**Policy H-1.3.** Integrate smaller housing types, such as cottages, duplexes, townhouses, and accessory dwelling units, into residential neighborhoods.

## ANACORTES Comprehensive Plan 2016

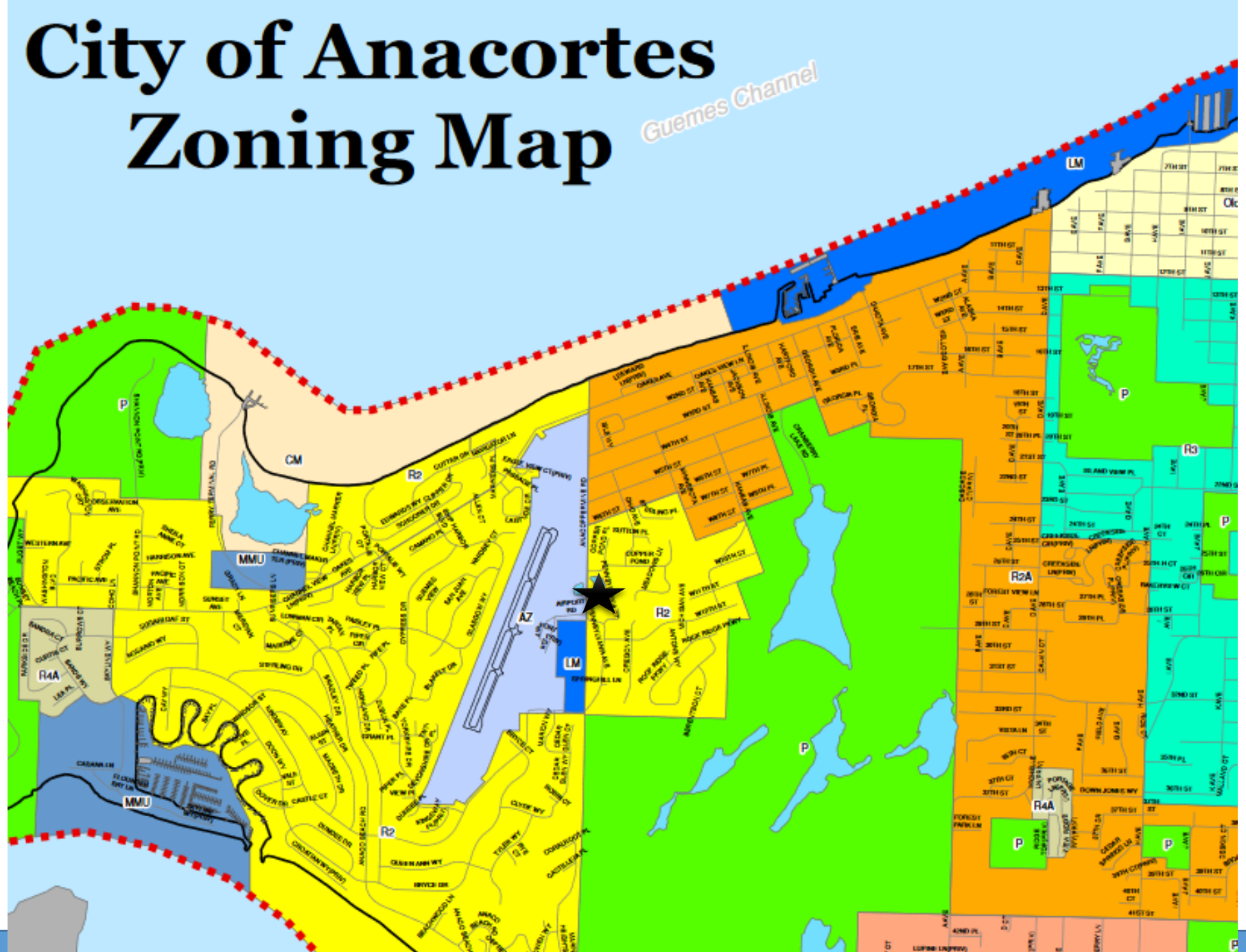


July, 2016



# Zoning

Residential Low Density 2  
(R2)



# Zoning – Permitted Uses

## 19.41.040 Principal uses permitted in residential zones.



Table 19.41.040

Principal uses permitted in residential zones.

| Principal Use                        | R | R2 | R2A | R3 | R3A | R4 | R4A | OT | Reference                   |
|--------------------------------------|---|----|-----|----|-----|----|-----|----|-----------------------------|
| <b>RESIDENTIAL</b>                   |   |    |     |    |     |    |     |    |                             |
| Household Living,<br>as listed below |   |    |     |    |     |    |     |    | AMC 19.43.010(A)            |
| Single-family                        | P | P  | P   | P  | P   | P  | P   | P  | AMC 19.43.010(B)            |
| Single-family, small lot             |   |    |     | P  | P   | P  | P   |    | AMC 19.43.010(C)            |
| Cottage housing                      |   | P  | P   | P  | P   | P  | P   |    | AMC 19.43.010(D)            |
| Duplex                               |   | C  | P   | P  | P   | P  | P   | P  | AMC 19.43.010(E)            |
| Triplex                              |   |    |     | C  | P   | P  | P   |    | AMC 19.43.010(F)            |
| Townhouse                            |   |    |     | C  | P   | P  | P   |    | AMC 19.43.010(G)            |
| Multifamily, 4 units                 |   |    |     | C  | P   | P  | P   |    | AMC 19.43.010(H)<br>and (I) |
| Multifamily, 5 or more               |   |    |     |    |     | P  | P   |    | AMC 19.43.010(H)            |

# Form and Intensity

## 19.42.020 Form and intensity standards for residential zones.

| Measure                                                                                                         | R1     | R2    | R2A   | R3                      | R3A   | R4    | R4A   | OT    | Conditions/Reference                                                                                                               |
|-----------------------------------------------------------------------------------------------------------------|--------|-------|-------|-------------------------|-------|-------|-------|-------|------------------------------------------------------------------------------------------------------------------------------------|
| <b>LOT SIZE AND DEVELOPMENT INTENSITY</b>                                                                       |        |       |       |                         |       |       |       |       |                                                                                                                                    |
| Lot size for single-family dwelling, minimum (square feet)<br>(AMC 19.42.080)                                   | 15,000 | 7,500 | 6,000 | 4,500                   | 3,000 | 3,000 | 3,000 | 6,000 | See AMC 19.43.010(C) for standards for lots <5,000 sq. ft.                                                                         |
| Lot size for duplex, minimum (square feet)<br>(AMC 19.42.080)                                                   |        | 9,000 | 9,000 | 7,500                   | 5,000 | 4,200 | 4,200 | 7,500 | See AMC 19.43.010(E) for duplex standards.                                                                                         |
| Additional lot size needed for additional dwelling unit beyond duplex, minimum (square feet)<br>(AMC 19.42.080) |        |       |       | 2,500                   | 2,000 |       | 1,200 |       | See AMC 19.43.010(F) and (G) for applicable housing type standards.                                                                |
| Minimum lot width circle                                                                                        |        |       |       |                         |       |       |       |       | Applies to each newly created lot in residential zones. See AMC 19.42.090 for minimum lot width circle calculation and exceptions. |
| Lot with alley access (feet)                                                                                    | 100    | 60    | 50    | 35                      | 25    | 25    | 25    | 45    |                                                                                                                                    |
| Lot without alley access (feet)                                                                                 | 100    | 60    | 50    | 40                      | 30    | 30    | 30    | 50    |                                                                                                                                    |
| Density maximum (dwelling units/gross acre)                                                                     | 2      | 4     | 6     | See lot size min. above | None  | 18    | 9     |       | See AMC 19.42.100 for calculating density.                                                                                         |
| Lot coverage, maximum                                                                                           | 35%    | 35%   | 40%   | 50%                     | 50%   | 50%   | 50%   | 35%   | See AMC 19.42.110                                                                                                                  |

## 19.43.010 Household living.

### Cottage housing

#### D. 3. Standards.

- a. **Lot Size.** Cottages are exempt from minimum lot area and lot width circle standards, provided they comply with density and design standards herein.
- b. **Density.** Due to the smaller relative size of cottage units, each cottage may be counted as one-half a dwelling unit for the purpose of calculating density. For example, a cluster of six cottages would be equivalent to three dwelling units.
- c. **Minimum and Maximum Number of Cottages.**
  - i. Cottage housing developments must contain a minimum of three cottages.
  - ii. Three to 12 cottage structures may make up a cluster. There is no limit on the number of clusters, provided all other standards are met.
  - iii. In the R3 R3A R4 and R4A zones, attached duplex cottages are allowed



# Unit Lot Subdivision

- New in 2019 (Ord. 3040)
- For sites to be developed with duplexes, triplexes, cottages, townhouses per 19.43.010 to be divided into unit lots
- Allows for fee simple ownership
- Individual lots not required to conform to typical development standards for individual lots, as long as entire site conforms to site design standards for specific housing type
- Easements & CCRs provide for perpetual maintenance of common areas, shared access, etc.

## AMC 19.32.050.D

### D. Unit Lot Subdivisions.

1. *Approval Process.* Unit lot subdivisions follow the procedures established in AMC 19.20.030 for short subdivision or long subdivision, according to the number of unit lots proposed. Final unit lot subdivisions of 10 or more lots follow the procedures for final long subdivision in subsection C of this section.
2. *Compliance with Prior Approvals.* Sites developed or proposed to be developed with duplexes, triplexes, cottages and townhouses per the standards in AMC 19.43.010 may be subdivided into individual unit lots as provided herein. The development as a whole must conform to the regulations applicable to the site and zone and to applicable plans that were granted approval through provisions of this code.
3. Development on individual unit lots is not required to conform with all development standards that typically apply to individual lots as long as the parent lot conforms to all such development standards.
4. Subsequent platting actions, additions, or modifications to the structure(s) may not create or increase any nonconformity of the parent lot.
5. Access easements, joint use and maintenance agreements, and covenants, conditions and restrictions (CC&Rs) identifying the rights and responsibilities of property owners and/or the homeowners' association must be executed for use and maintenance of common garage, parking and vehicle access areas; underground utilities; common open space; exterior building facades and roofs; and other similar features must be recorded with the Skagit County Auditor.
6. Within the parent lot, required parking for a dwelling unit may be provided on a different unit lot than the lot with the dwelling unit, as long as the right to use the parking is formalized by an easement recorded with the Skagit County Auditor.
7. Notes must be placed on the face of the plat or short plat as recorded with the Skagit County Auditor to acknowledge the following:
  - a. Approval of the design of the unit on each of the lots was granted by the review of the development, as a whole, on the parent lot per the standards of AMC Chapter 19.43, Residential Uses.
  - b. Development, redevelopment, or rehabilitation of structures on each unit lot is subject to review and approval of plans that are consistent with the design of the surrounding structures on the parent lot as approved by the city through subject file number as stated in subsection (D)(7)(a) of this section.

# Cottage Housing

- Cottages = New housing type in 2019 (Ord. 3040)
- Detailed site and building design standards:
  - Max. unit size = 1,200 sq. ft.
  - Max. height = 25'
  - Density and lot size modifications
  - Common and private open space
  - Access and circulation
  - Building orientation and design toward common open space
- Short term rentals not permitted in residential zones, except:
  - B&B allowed with CUP

## 19.43.010.D

### D. Cottage Housing.

1. *Definition.* A small single-family dwelling that is clustered with other similar units sharing a common open space.
2. *Purpose.*
  - a. Provide opportunities for creative, diverse and high-quality infill development that is compatible with existing neighborhoods.
  - b. Promote housing affordability and greater choice by encouraging smaller and more diverse home sizes in accordance with the Anacortes comprehensive plan.
  - c. Support compatibility with existing neighborhoods by promoting high-quality design.
  - d. Support more efficient use of urban residential land.
  - e. Enhance the character of the residential neighborhood.
  - f. Provide usable open space for residents.

Figure 19.43.010(D)(1)

Cottage housing development examples.





## Neighborhood Development



Source: Skagit County iMap aerals



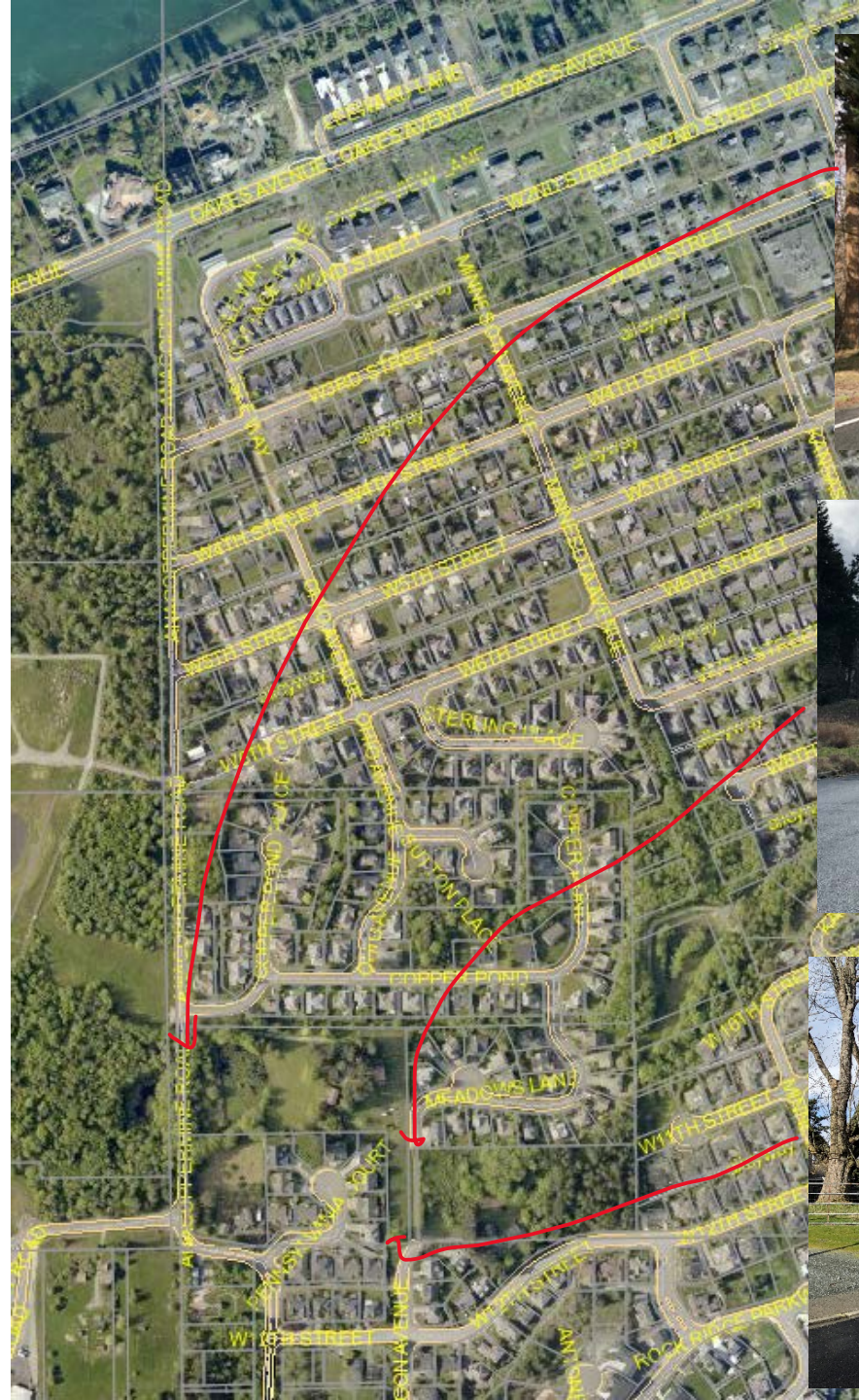
[illegible]

- 5.2 acres
- 1 SFR and detached outbuildings
- Doug Fir trees & pasture grass upland
- Slopes down at +/- 15% toward wetland; and gently north and east
- Category III wetland
- Surrounding uses = SFR, R2 zone, Anacortes Airport, AZ, LM zones
- Existing site access from Anacopper Mine Rd.

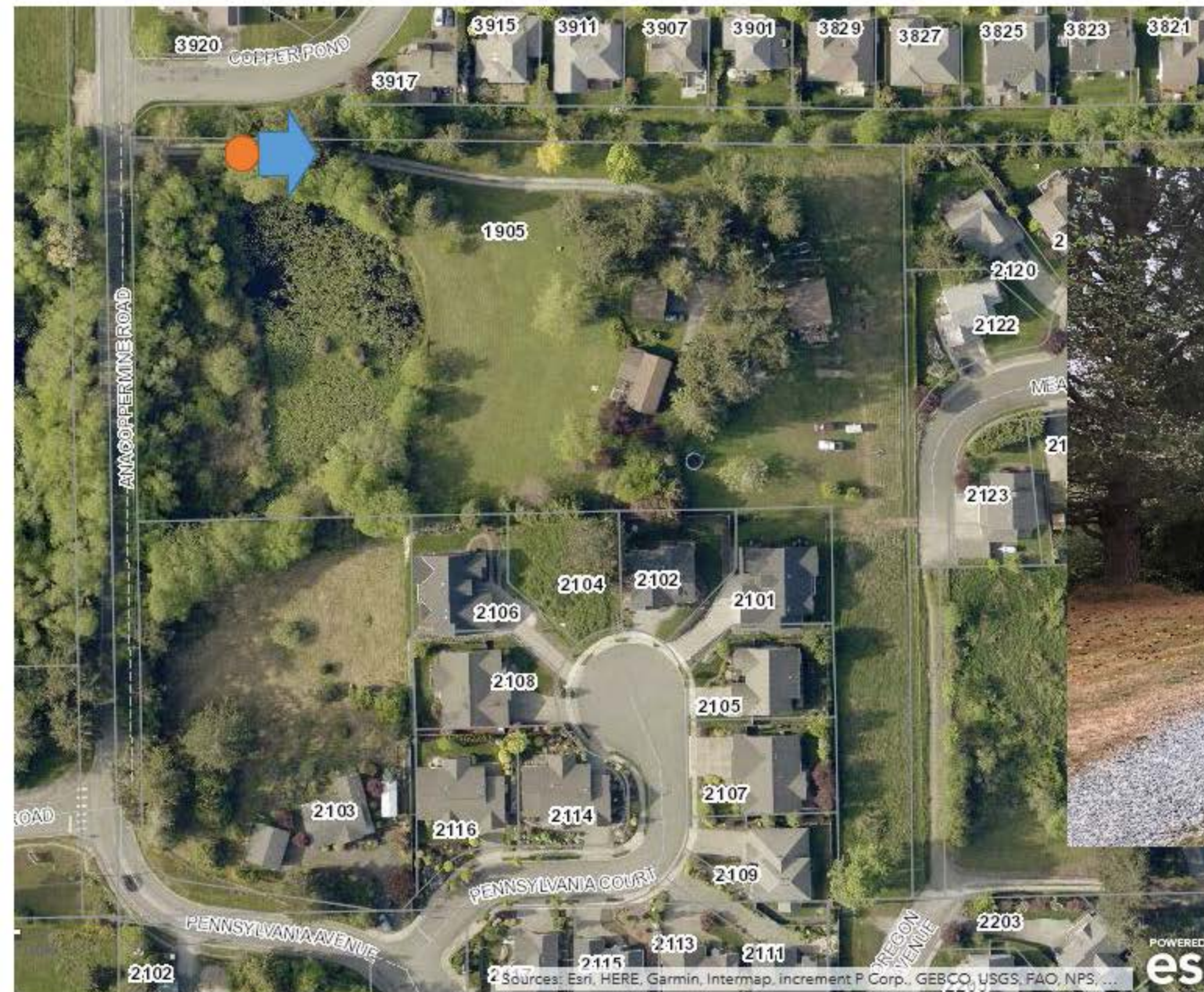


# Transportation facilities

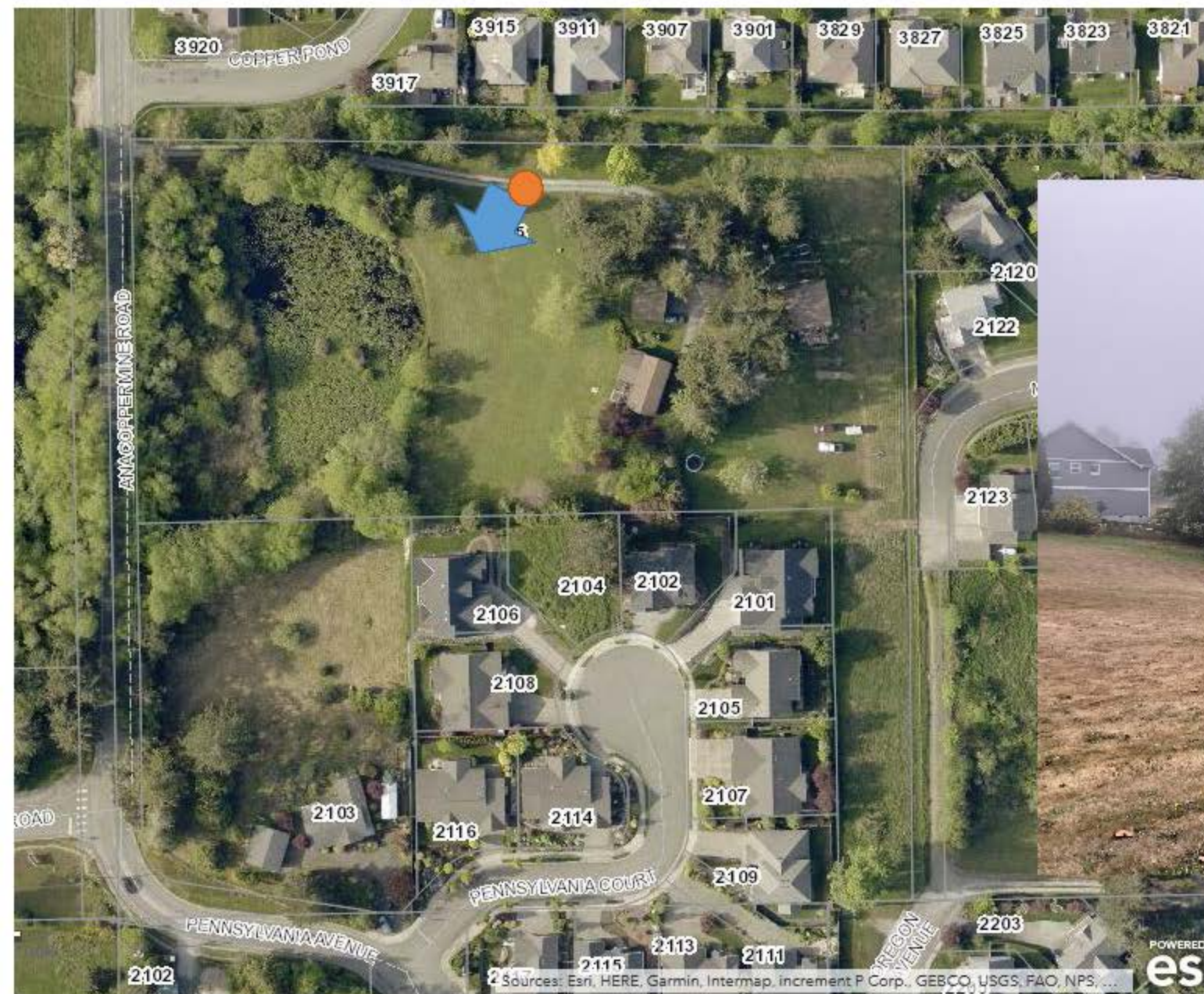
- Concurrency requirements met per Traffic Impact Analysis
- Anacopper Mine Rd.
  - Minor arterial
  - Remove existing vehicle access
  - Critical area constraints
- Connectivity
  - Oregon Ave./Meadows Lane connection



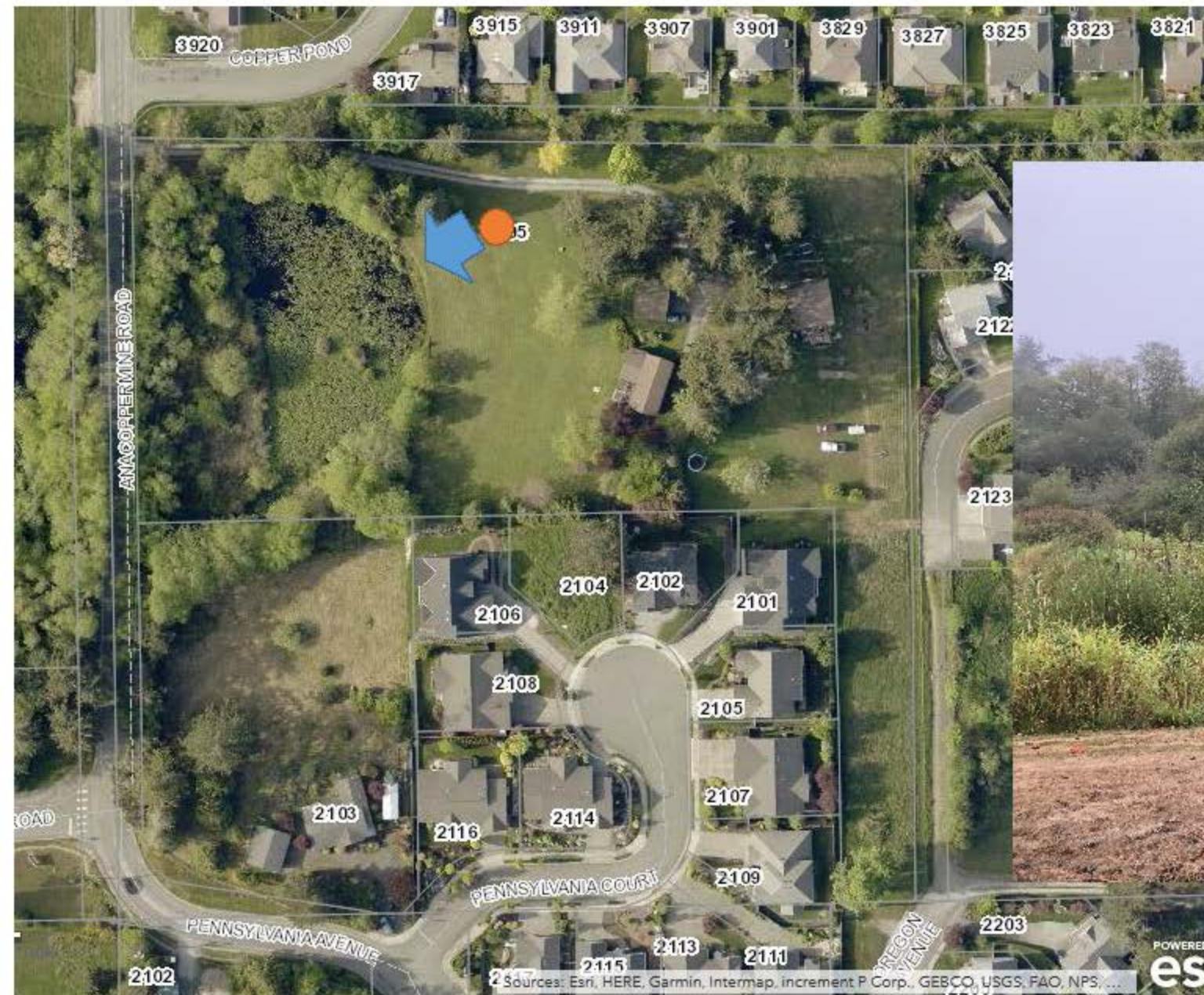




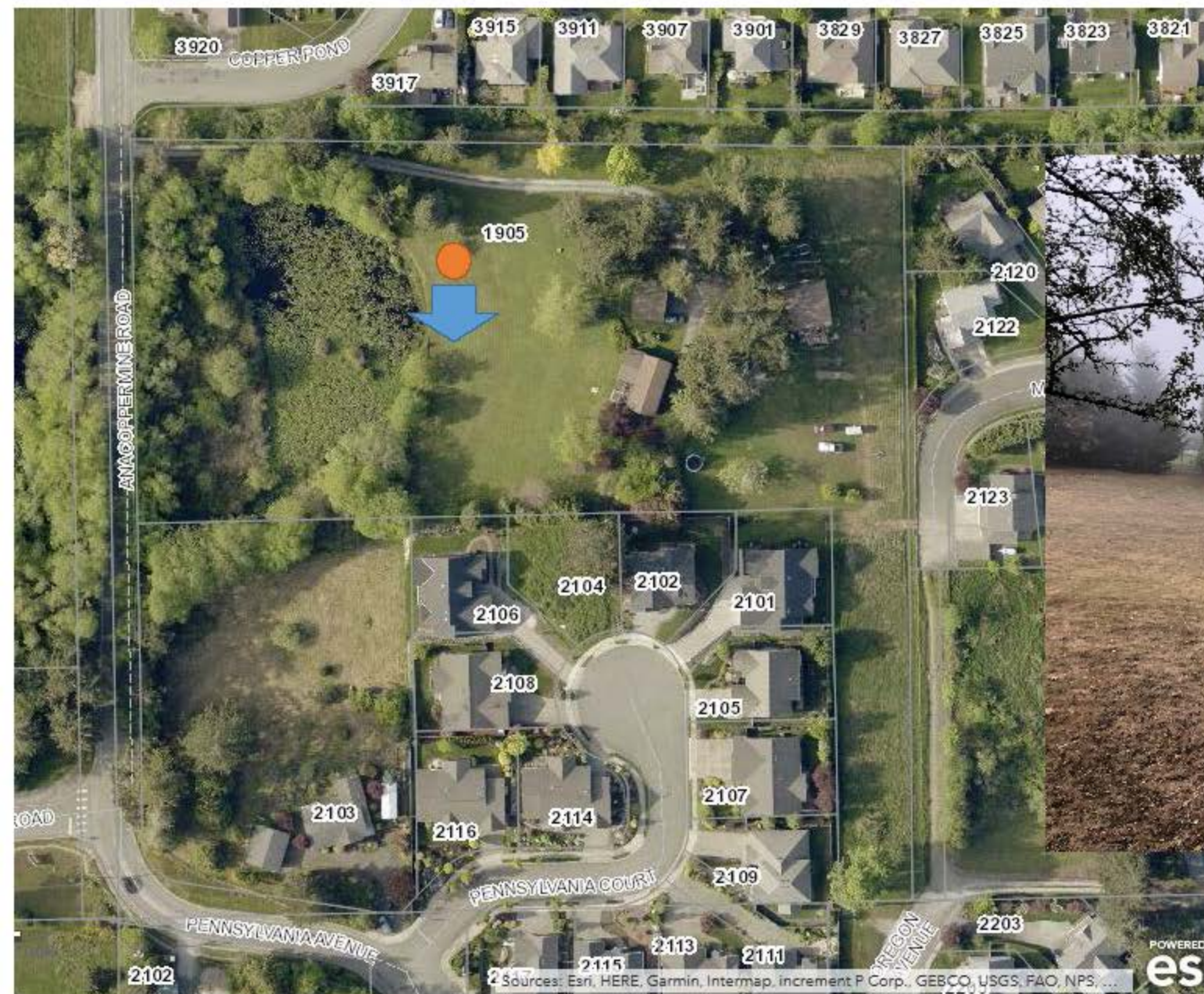




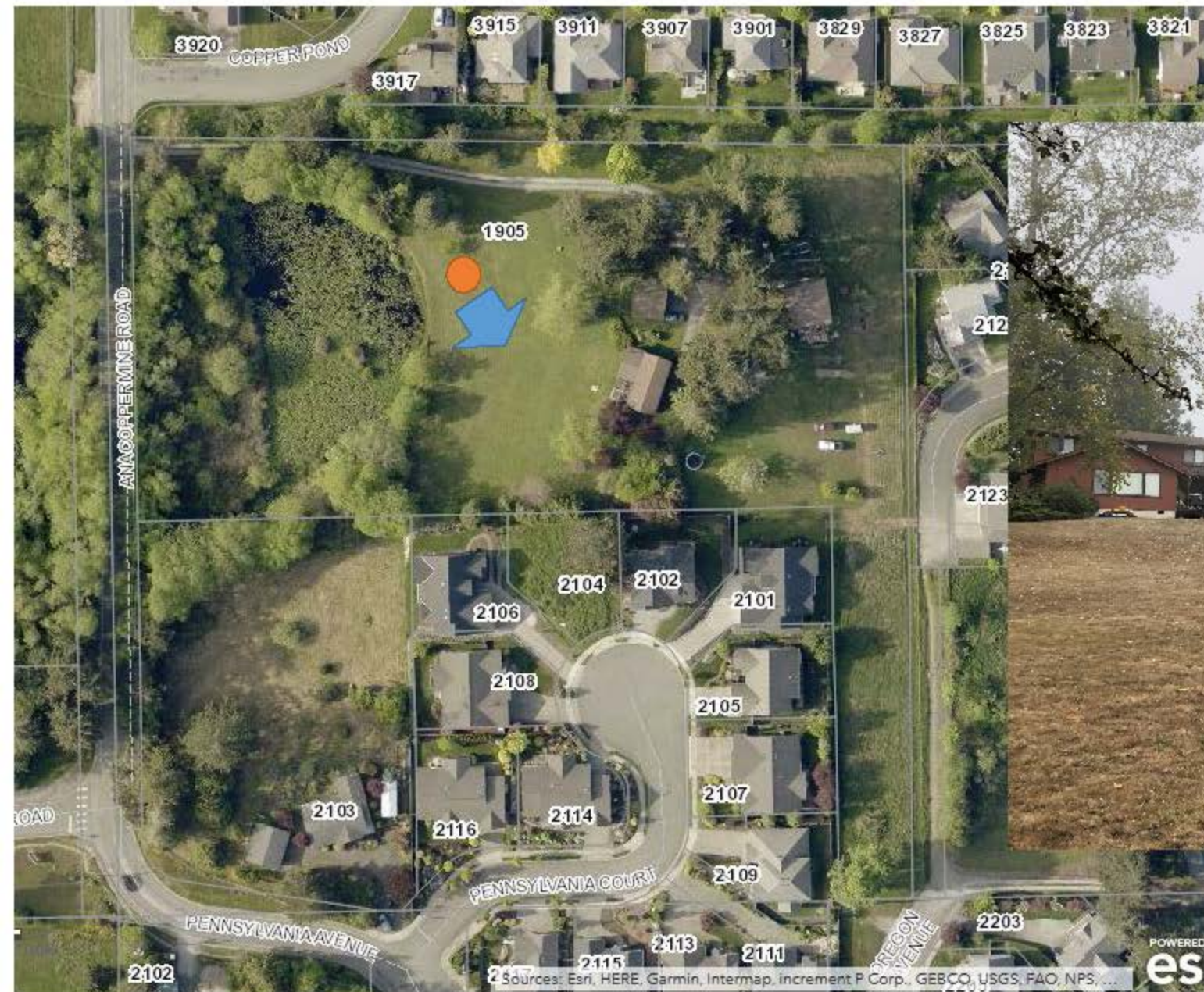




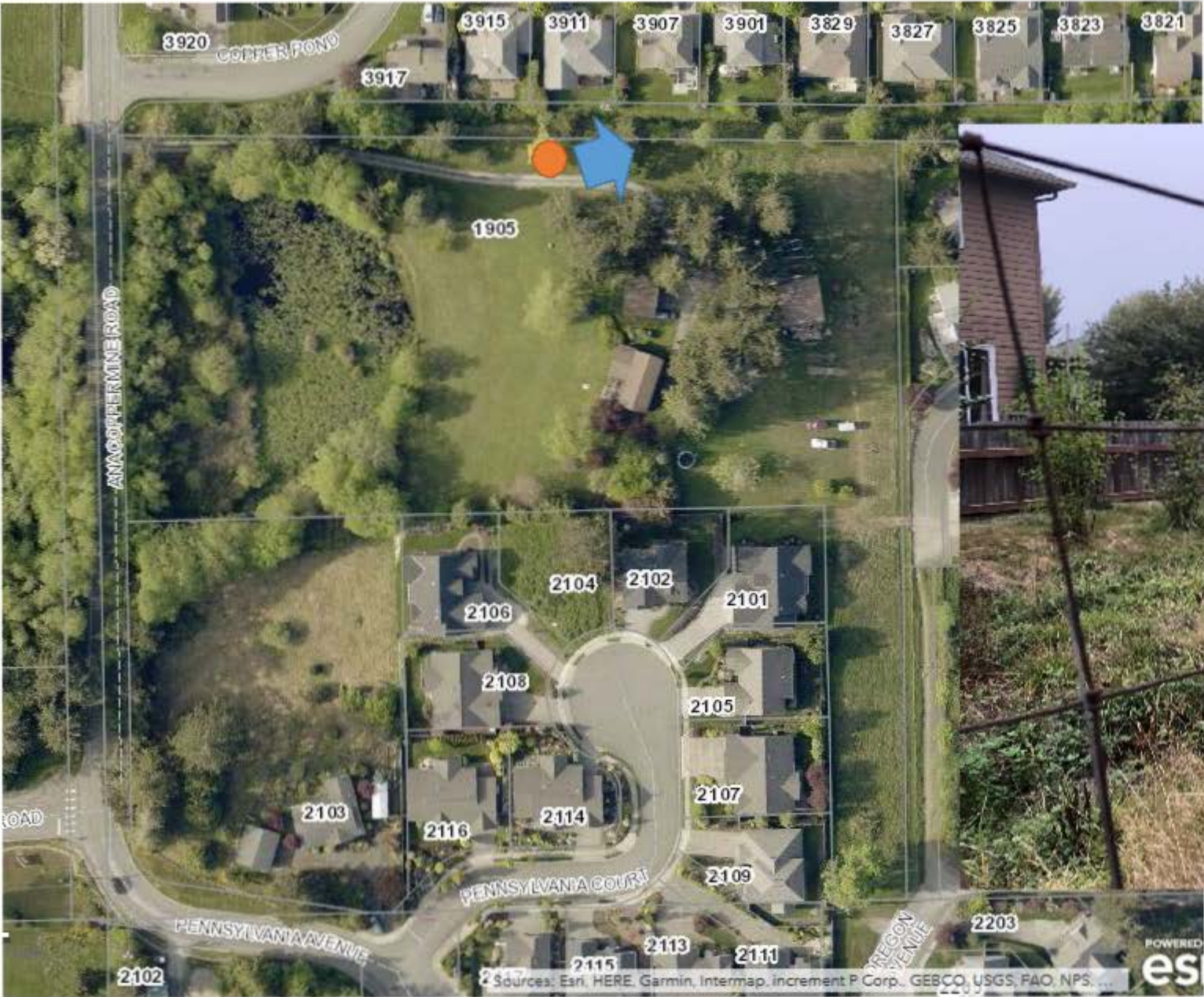




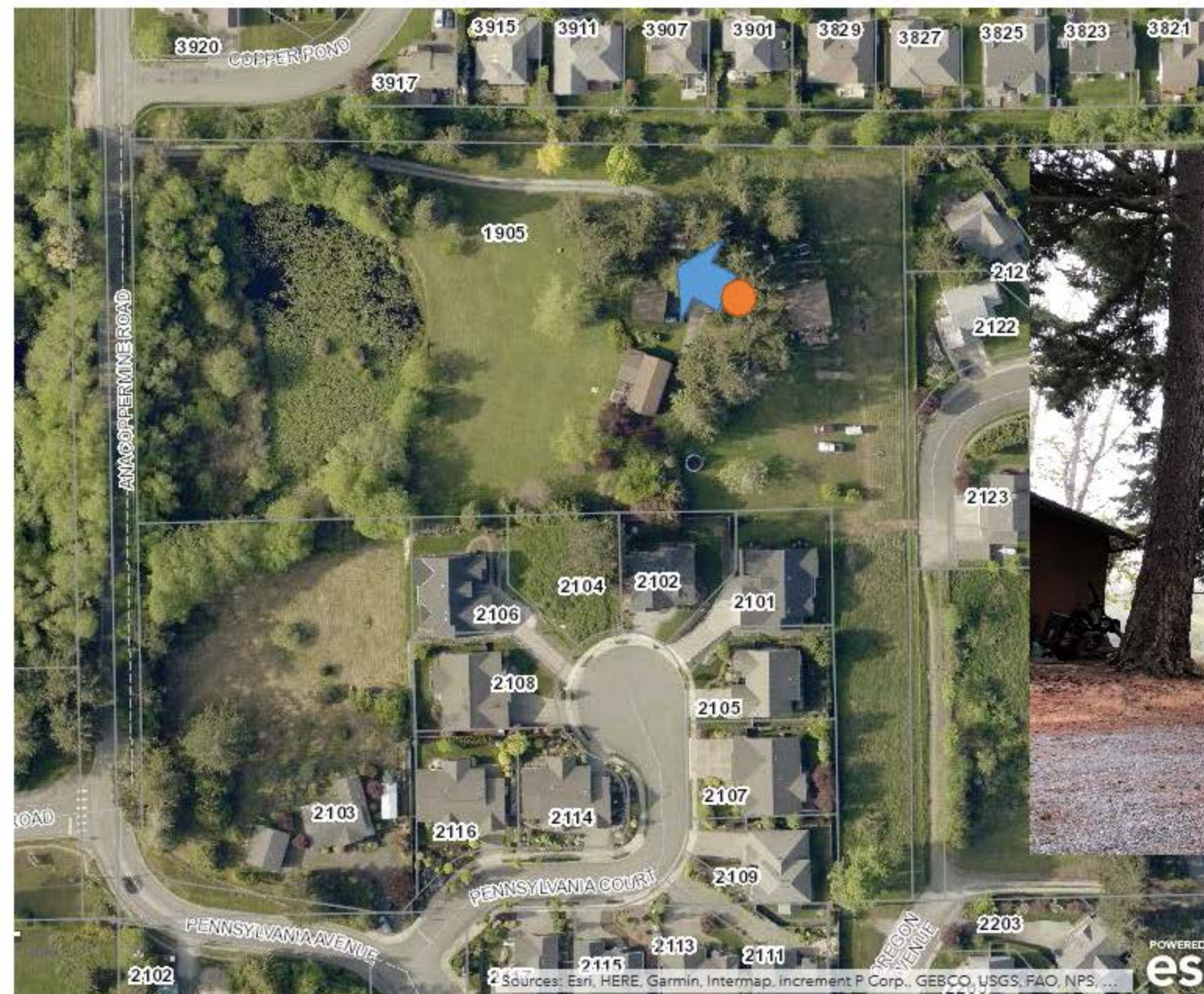




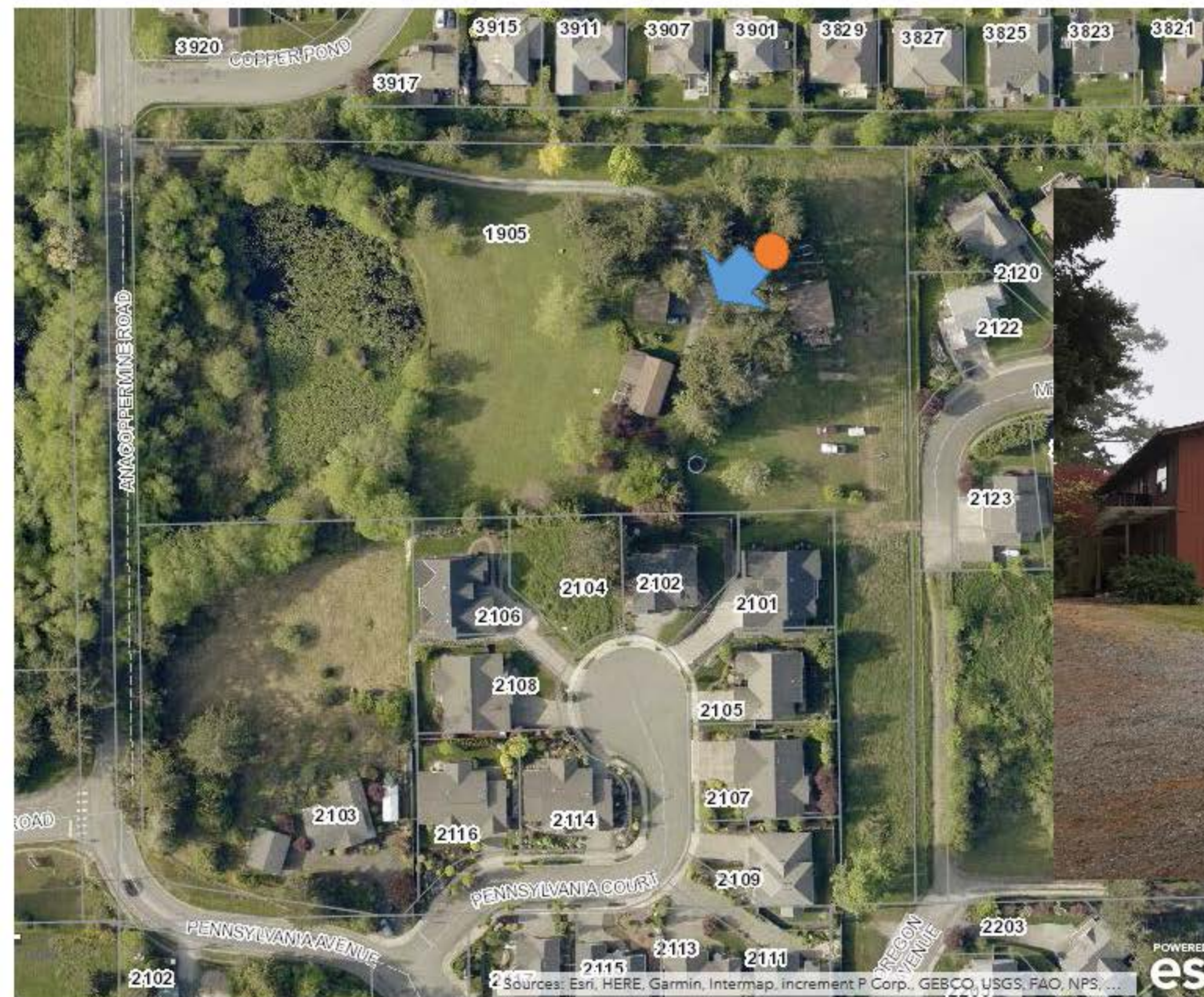




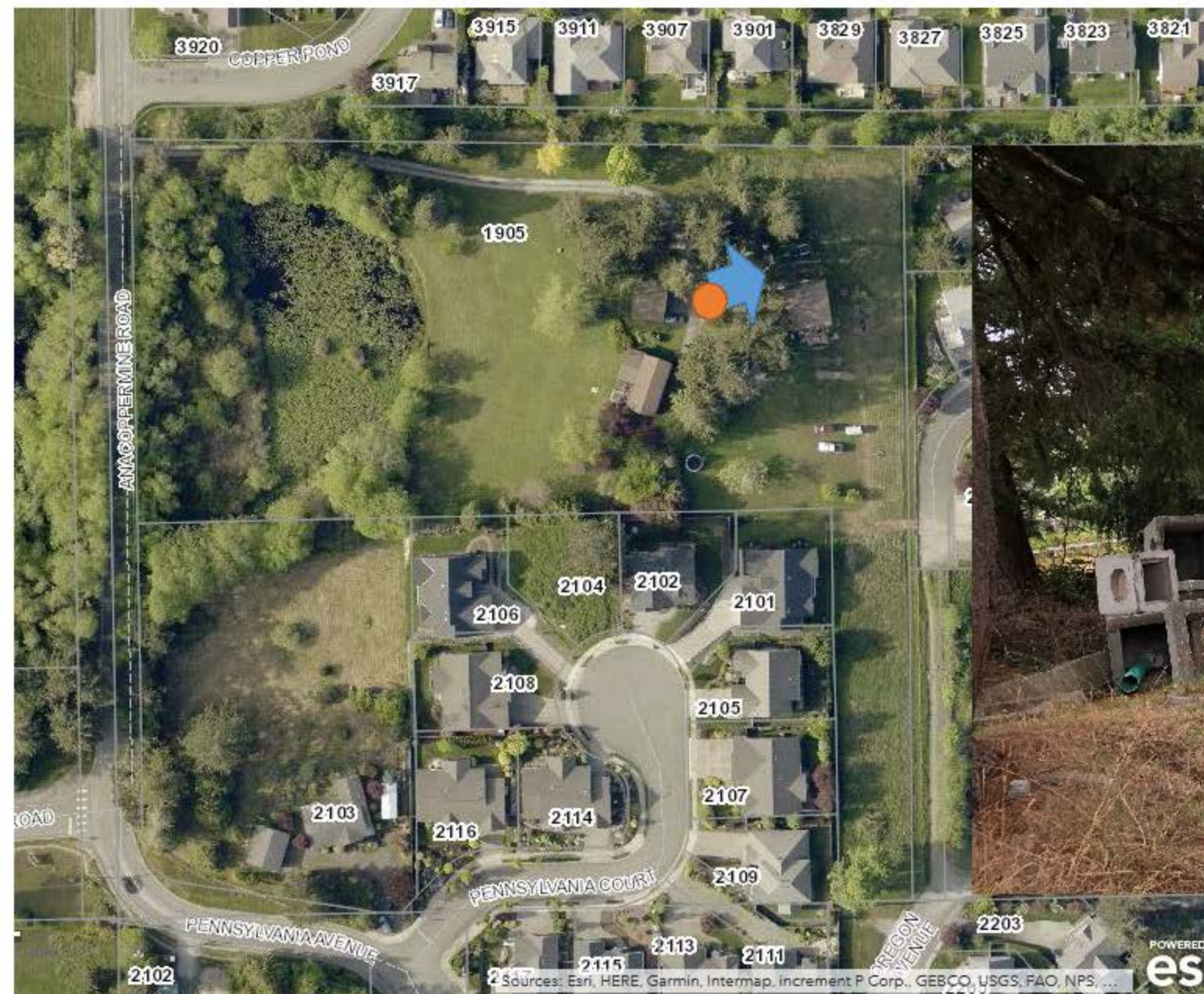




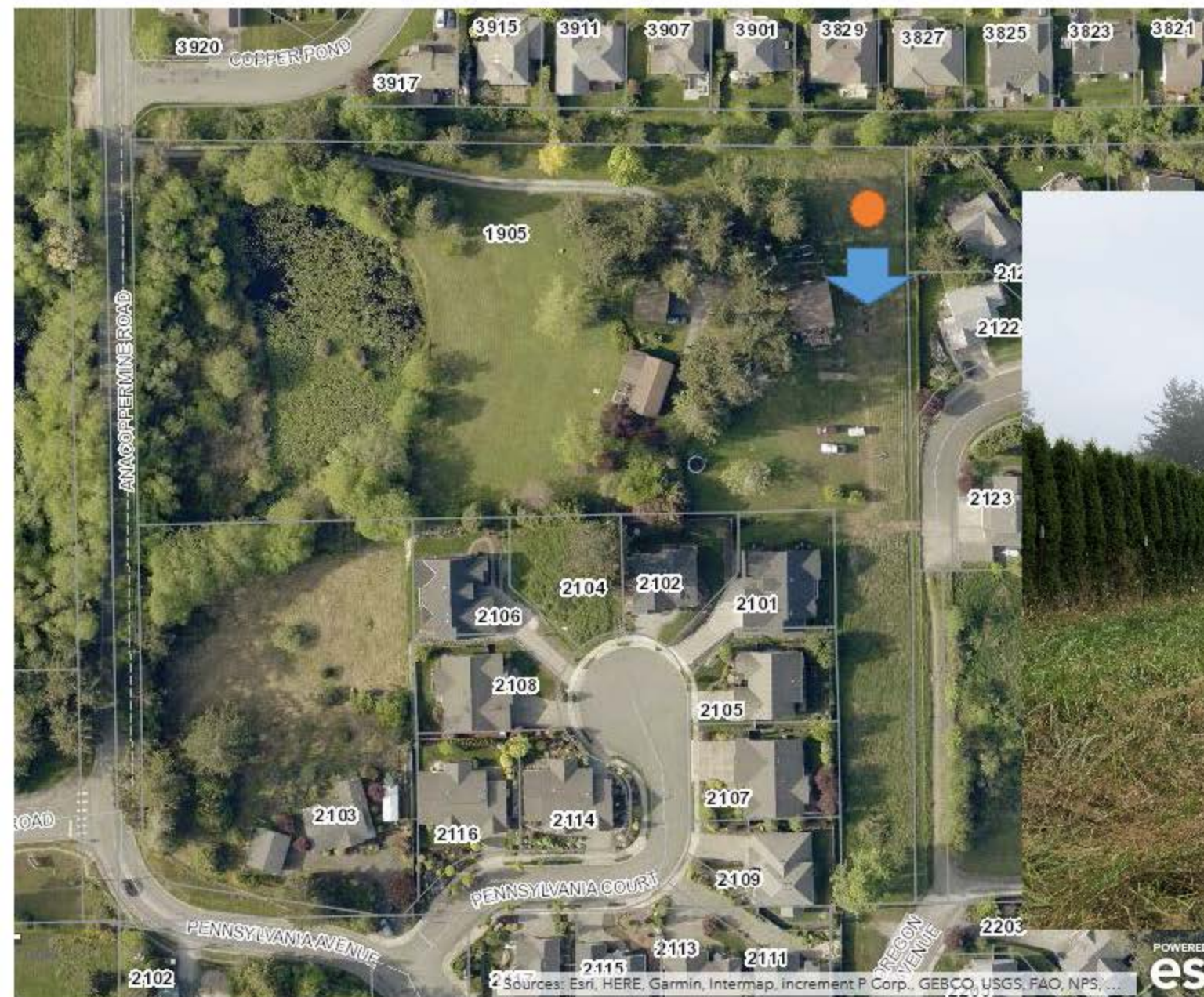




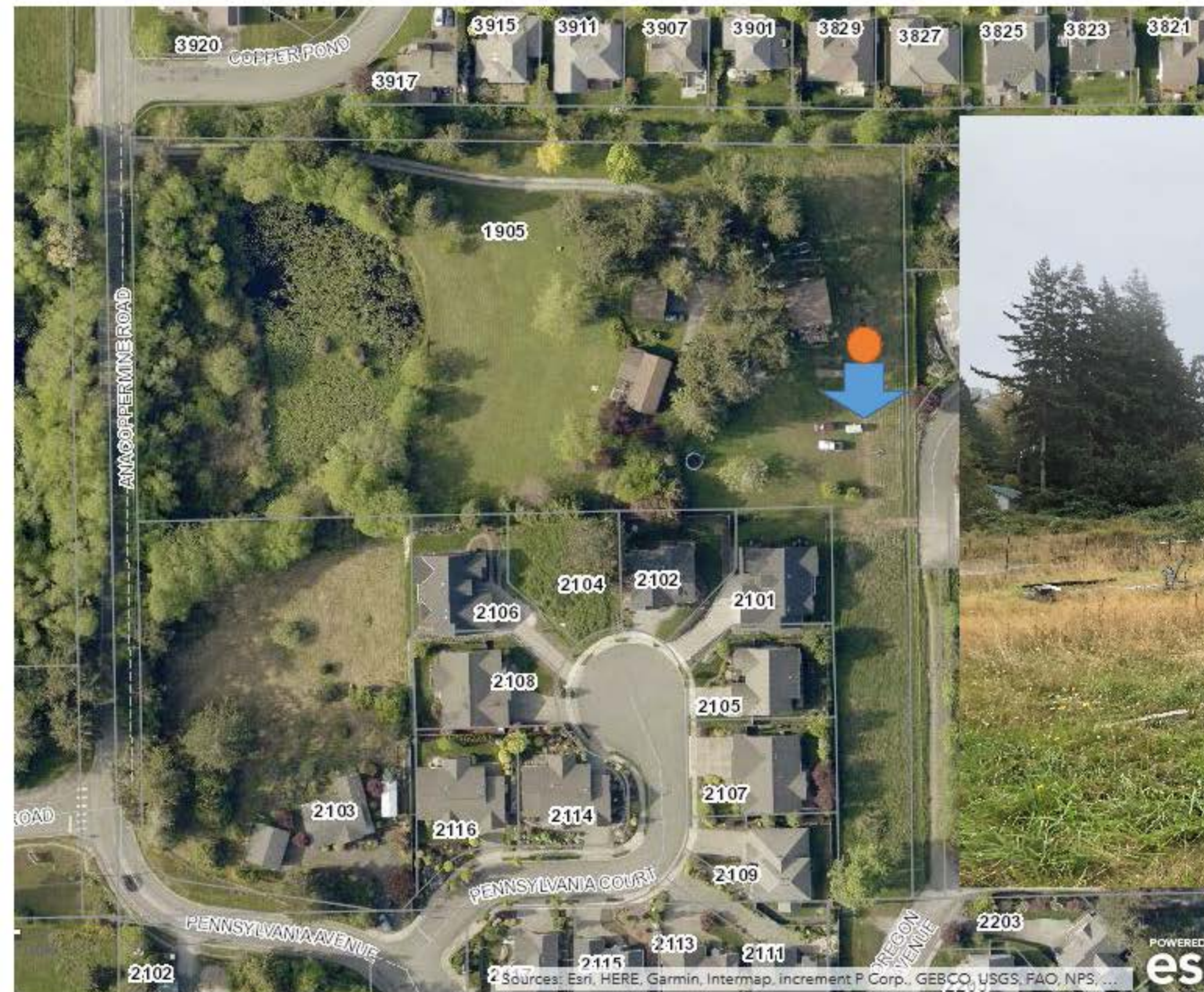




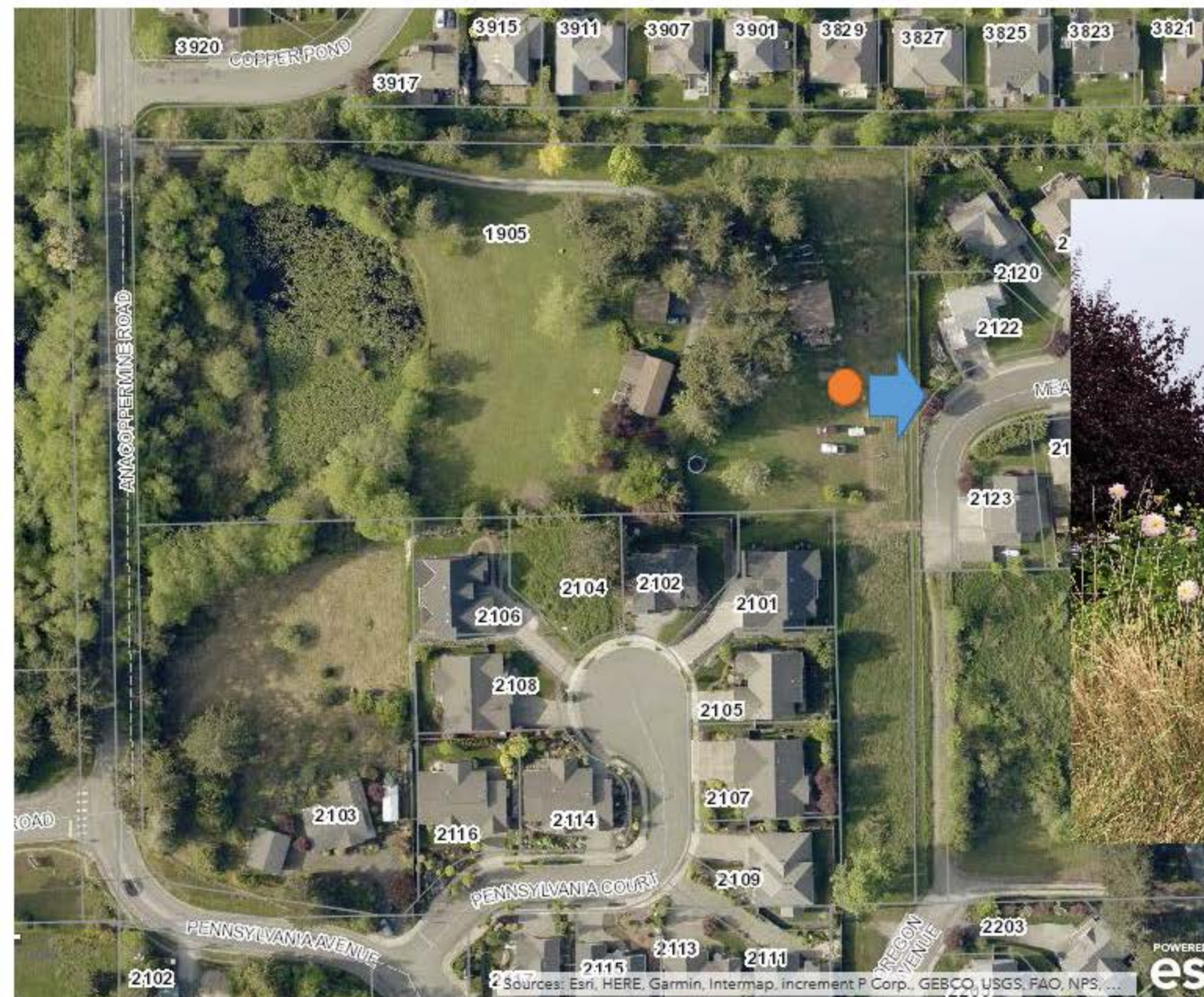








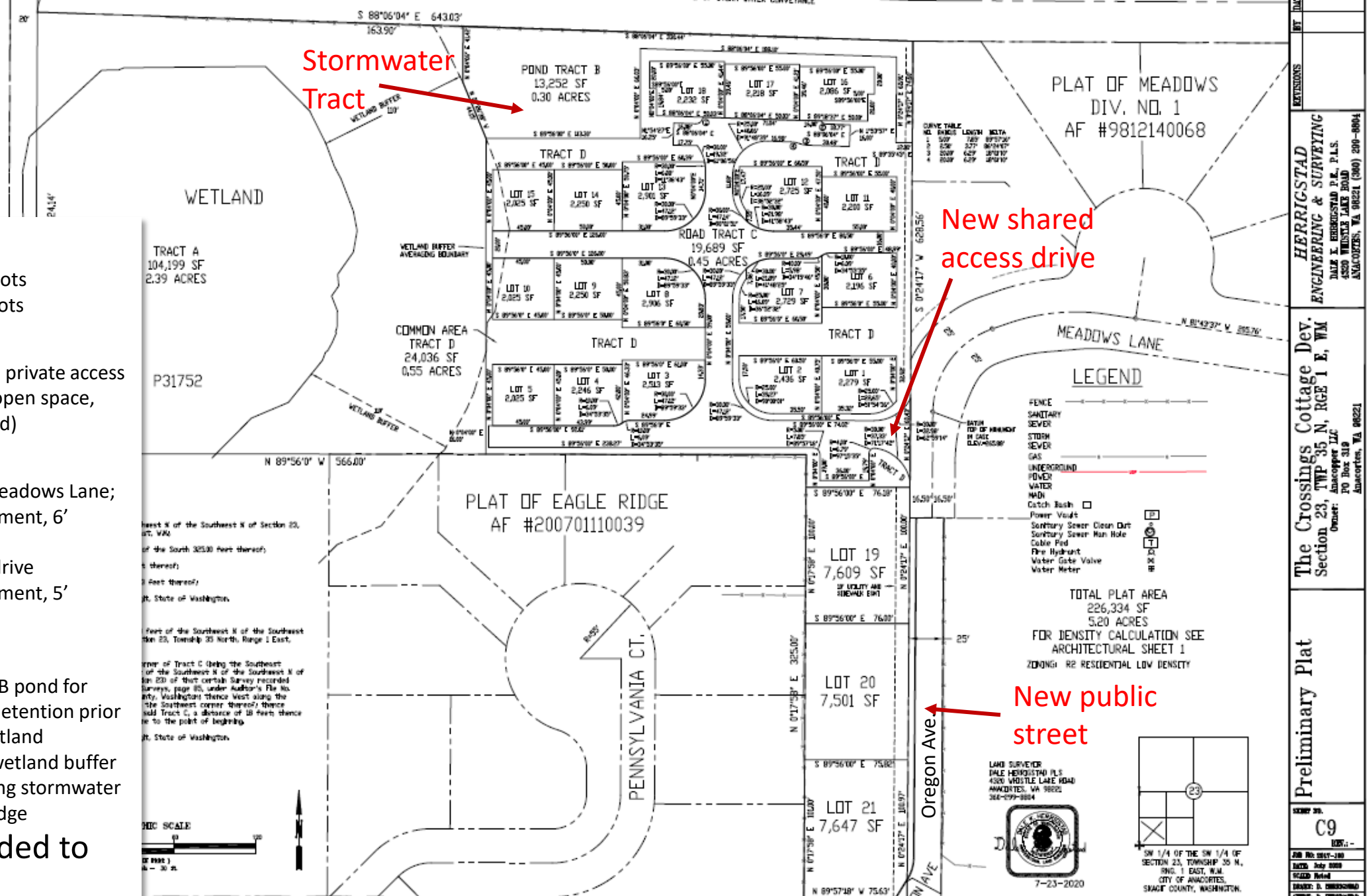






# Unit Lot Subdivision

- 21 lots
  - 18 cottage unit lots
  - 3 standard SFR lots
- 4 tracts
  - (wetland/buffer, private access road, common open space, stormwater pond)
- Access
  - Oregon Ave./ Meadows Lane;
    - 20' pavement, 6' sidewalk
  - Shared access drive
    - 20' pavement, 5' sidewalk
- Stormwater
  - Routed to Tract B pond for treatment and detention prior to release to wetland
  - Dispersed into wetland buffer
  - Routed to existing stormwater pond @ Rock Ridge
- Utilities extended to serve lots



**HERRIGSTAD**  
ENGINEERING & SURVEYING  
DALE E. HERRIGSTAD P.E., P.L.S.  
4300 WHISTLE LAKE ROAD  
ANACORTES, WA 98021 (360) 299-9804

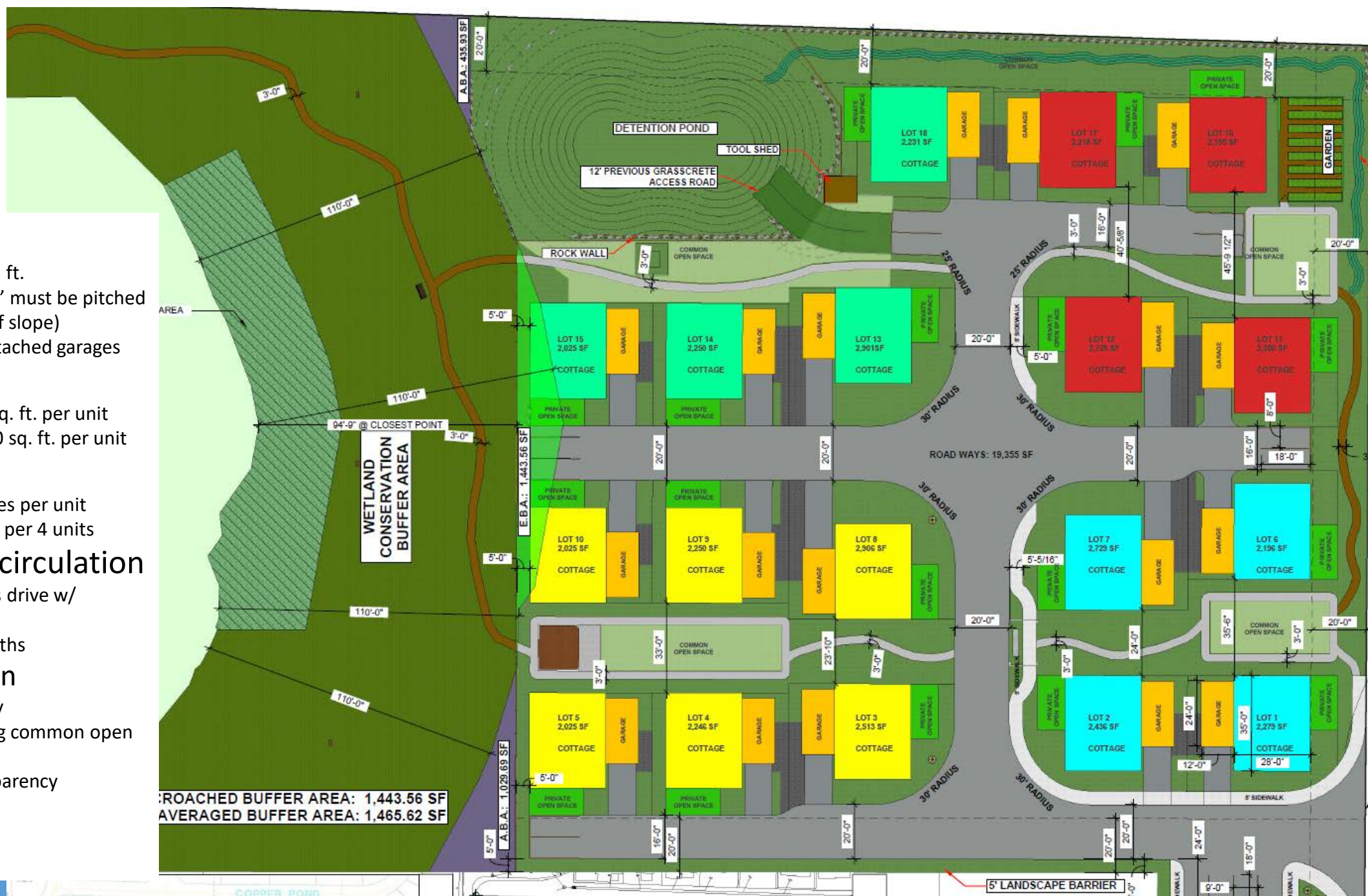
**The Crossings Cottage Dev.**  
Section 23, TWP 35 N., RGE 1 E., WM  
Owner: Anacortes LLC  
PO Box 319  
Anacortes, WA 98021

**Preliminary Plat**

**STAMP NO. C9**  
DATE: July 2020  
DRAWN: [Signature]  
CHECKED: [Signature]  
DATE: July 2020

# Cottage Site Plan

- 18 cottages
  - Max. 1,200 sf. ft.
  - Max. 25' (>18' must be pitched min. 6:12 roof slope)
  - 300' sq. ft. attached garages
- Open space
  - Private: 200 sq. ft. per unit
  - Common: 400 sq. ft. per unit
- Parking
  - Min. 1.5 spaces per unit
  - Guest: 1 pace per 4 units
- Internal site circulation
  - Shared access drive w/ sidewalk
  - Pedestrian paths
- Building Design
  - Covered entry
  - Porches facing common open space
  - Façade transparency





# Cottage Elevations



1 South-West Exterior Perspective  
A11



2 South-East Exterior Perspective  
A11



3 North-West Exterior Perspective  
A11



4 North-East Exterior Perspective  
A11

DESIGNED BY  
JASON STERLIN  
SCALE  
1/4" = 1' U.N.O.  
DATE  
10/18/2019

Strandberg  
DESIGN

OWNER INFO:  
JASON STERLIN  
1005 ANACOSTIA ROAD, ANACOSTIA, VA 22021  
PHONE  
202-333-1421  
WWW.STRANDBERGDESIGN.COM

PROJECT / CLIENT INFO  
PROJECT NAME  
1005 Anacostia Road, Anacostia, VA 22021

EXTERIOR  
PERSPECTIVES

CITY APPROVAL  
City of Anacostia  
Received by PCED  
Date: February 21, 2020  
A11  
17 of 22

## Critical Areas

Cat III Wetland; 110' buffer

Proposed buffer uses:

- Buffer width averaging
- Wood chip trail with split rail fencing
- Stormwater outfall

### Proposed buffer enhancement & restoration:

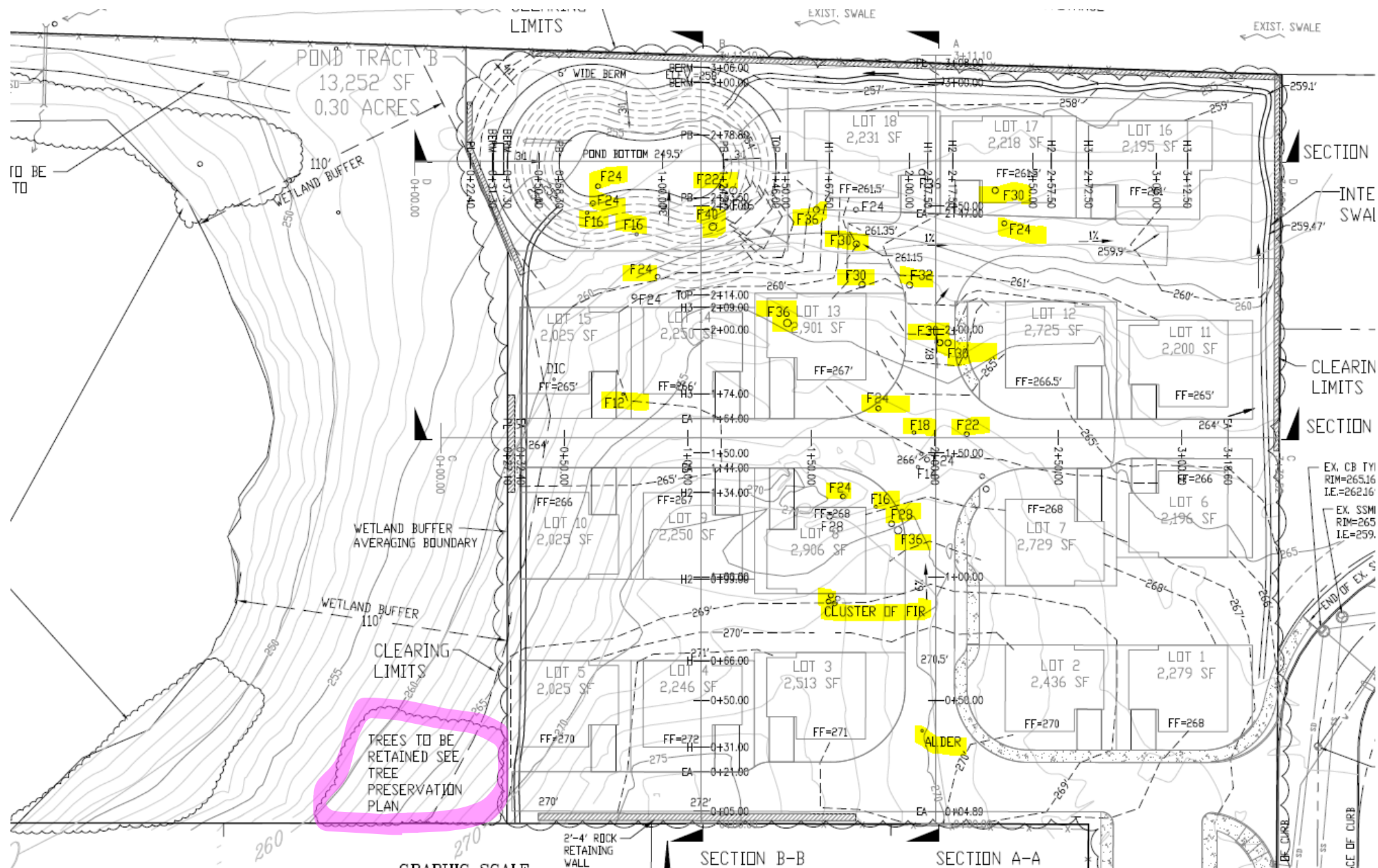
The Critical Areas report and addendum letter identify proposed actions to avoid and minimize impacts to the wetland. To offset potential impacts of the proposal, the applicant proposes wetland buffer restoration and enhancement by:

- Removal of the existing gravel driveway, tilling the soil, adding supplemental topsoil, retilling, and then spraying the exposed topsoil with a native hydroseed herbaceous mix.
- Letting the existing mowed lawn grow and planting 19 Douglas fir trees, thus creating an herbaceous meadow with a forested canopy component.
- Planting an area just east of the wetland/pond approximately 30' wide by 170' long with native shrub species to increase native vegetation cover, habitat, and functionality. Monitoring and maintenance for a minimum of 5 years and financial guarantee will also be provided.

ENCROACHED BUFFER AREA: 1,443.56 SF  
AVERAGED BUFFER AREA: 1,465.62 SF



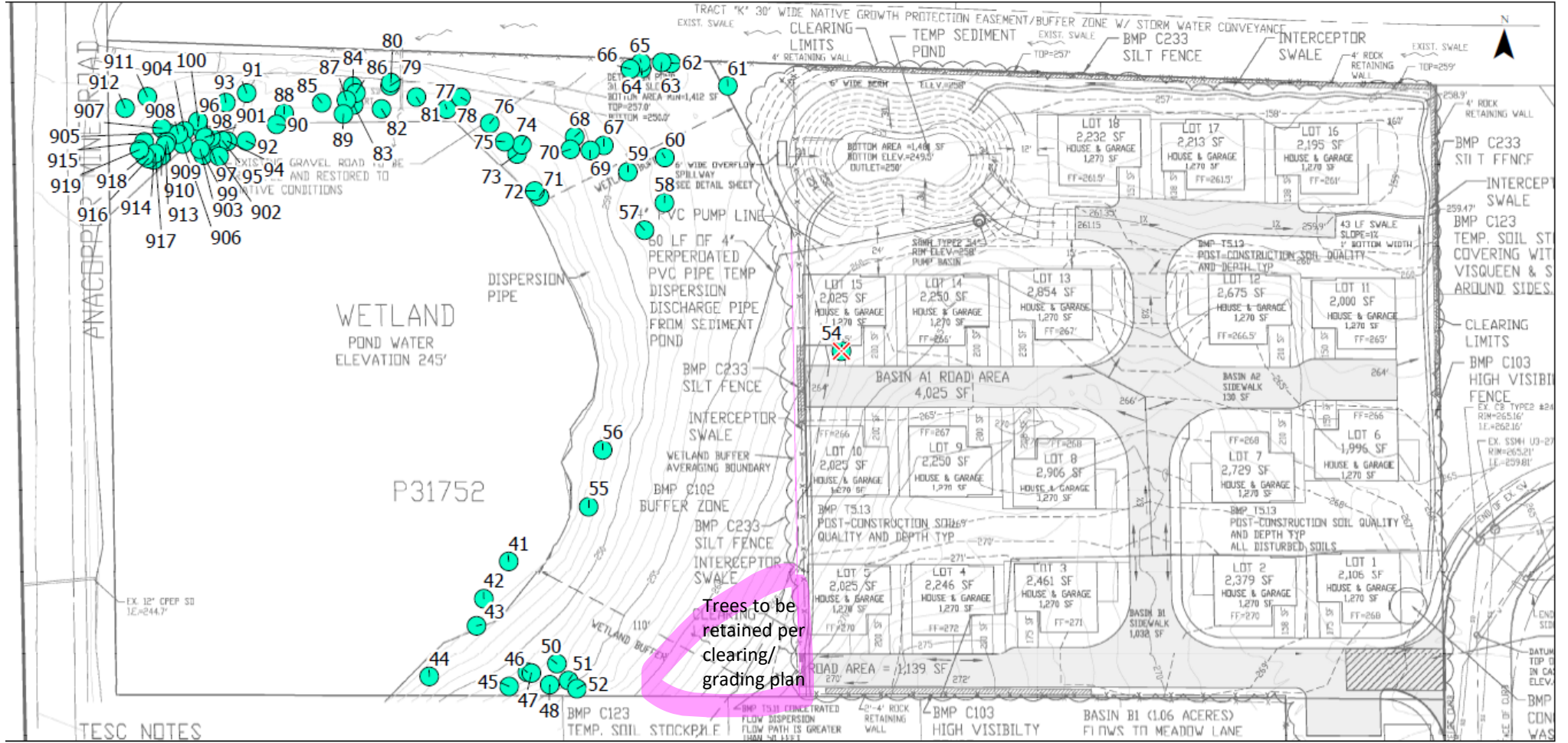
# Tree removal plan



# Tree preservation plan

Min. tree unit credits required: 208

Tree unit credits provided: 226 234



**The Crossings Cottage Development**  
1905 Anacopper Mine Road  
Tree Assessment Site Plan

Anacortes, Washington 98221

Seventy-nine (79) trees were assessed with locations shown on this site plan. One of the seventy-nine (79) trees, #54 cannot be retained with this new plan. See the Tree Assessment Report and Tree Assessment Matrix for detailed information.

- James Barborinas, Principal Consultant  
(360) 770-9921

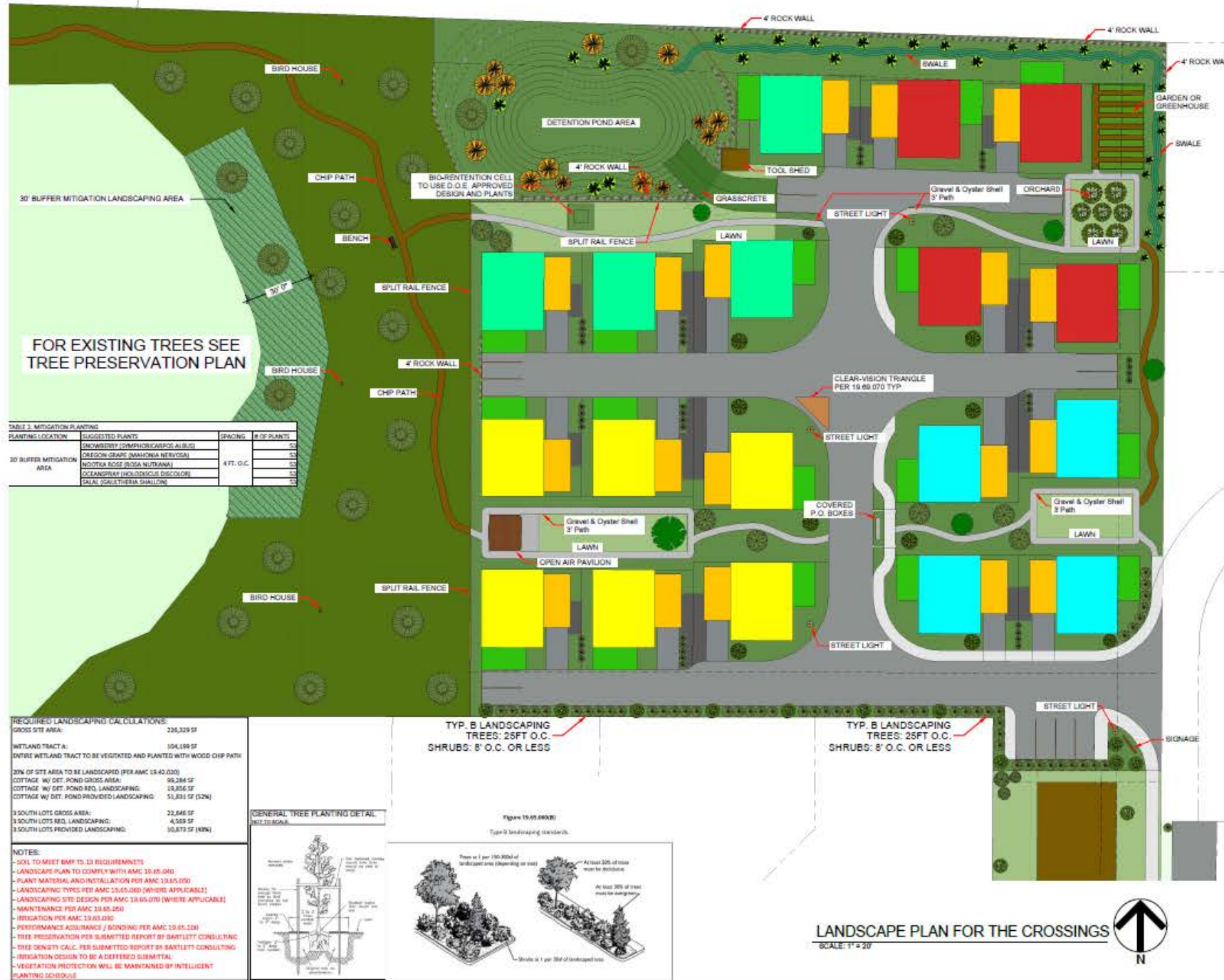
**Symbols: (Approximate location)**

- - Assessed tree
- ⊗ - Tree to be removed

January 2020



# Landscape Plan



| LANDSCAPE LEGEND                                                                                       |                                        |  | JASON STERLING    |
|--------------------------------------------------------------------------------------------------------|----------------------------------------|--|-------------------|
| SCALE: 1" = 20' U.N.O.                                                                                 |                                        |  | DATE: 01/31/2020  |
|                                                                                                        |                                        |  | DATE: 05/27/2020  |
|                                                                                                        |                                        |  | DATE: 07/23/2020  |
|                                                                                                        |                                        |  | Strandberg DESIGN |
| 1                                                                                                      | Cornus Sericea                         |  |                   |
| 2                                                                                                      | Red Twig Dogwood                       |  |                   |
| 3                                                                                                      | Myrica Californica                     |  |                   |
| 4                                                                                                      | Betula papyrifera                      |  |                   |
| 5                                                                                                      | White Paper Birch                      |  |                   |
| 6                                                                                                      | Fruit Tree                             |  |                   |
| 7                                                                                                      | Plum / Apple / Pear                    |  |                   |
| 8                                                                                                      | Populus Tremuloides                    |  |                   |
| 9                                                                                                      | Quaking Aspen                          |  |                   |
| 10                                                                                                     | Platanus Acerifolia                    |  |                   |
| 11                                                                                                     | London Planetree                       |  |                   |
| 12                                                                                                     | Populus tremula                        |  |                   |
| 13                                                                                                     | Swedish Aspen                          |  |                   |
| 14                                                                                                     | Thuja Plicata "Green Giant"            |  |                   |
| 15                                                                                                     | Green Giant Arborvitae                 |  |                   |
| 16                                                                                                     | Pseudotsuga Macrocarpa                 |  |                   |
| 17                                                                                                     | Douglas Fir                            |  |                   |
| 18                                                                                                     | Gravel & Oyster Shell 3' Path          |  |                   |
| 19                                                                                                     | Mulch Planter Area                     |  |                   |
| 20                                                                                                     | Chip Path                              |  |                   |
| 21                                                                                                     | 50" Crushed Gravel                     |  |                   |
| 22                                                                                                     | General Landscape                      |  |                   |
| 23                                                                                                     | Gravel & Oyster Shell Permeous Walkway |  |                   |
| 24                                                                                                     | Existing Wetland Vegetation            |  |                   |
| List of Acceptable General Landscaping                                                                 |                                        |  |                   |
| Plants:                                                                                                |                                        |  |                   |
| 1. Japanese Holly (Ilex: Crenata)                                                                      |                                        |  |                   |
| 2. Red Seeded Fern                                                                                     |                                        |  |                   |
| 3. Mexican Feather Grass (Stipa Tenacissima)                                                           |                                        |  |                   |
| 4. Tall Oregon Grape (Mahonia Aquifolium)                                                              |                                        |  |                   |
| 5. Salal (Gaultheria Shallon)                                                                          |                                        |  |                   |
| 6. Kinkadee (Anemone)                                                                                  |                                        |  |                   |
| 7. Red Flowering Currant (Ribes Sanquianum)                                                            |                                        |  |                   |
| 8. Blackberry (Rubus)                                                                                  |                                        |  |                   |
| 9. Western Aconite (Aconitum)                                                                          |                                        |  |                   |
| 10. Strawberry Tree (Arbutus)                                                                          |                                        |  |                   |
| Perennials:                                                                                            |                                        |  |                   |
| 1. Spanish Lavender                                                                                    |                                        |  |                   |
| 2. Salvia Memorata Canadensis (Sage)                                                                   |                                        |  |                   |
| 3. Perennial Sage                                                                                      |                                        |  |                   |
| 4. Yarrow                                                                                              |                                        |  |                   |
| 5. Black Eyed Susan                                                                                    |                                        |  |                   |
| Type of irrigation to be drip, soaker hose & standard spray style sprinklers. Will meet AMC 19.45.090. |                                        |  |                   |
| LANDSCAPE PLAN FOR THE CROSSINGS                                                                       |                                        |  |                   |
| SCALE: 1" = 20'                                                                                        |                                        |  |                   |
| L1                                                                                                     |                                        |  |                   |
| 1 of 2                                                                                                 |                                        |  |                   |

# Summary of public comments received as of 9/17/20

| Issue                                                              | Staff Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Concern about project compatibility with the existing neighborhood | The project is consistent with the type of land use and density allowed in the R2 zone. Additional design standards contained in the cottage development provisions help promote compatibility between the project and surrounding area. Recording of an avigation easement promotes compatibility with the nearby airport.                                                                                                                                                                                                                                                                   |
| Tree removal                                                       | The project conforms to the minimum tree preservation requirements in AMC 16.60. The landscape plan shows additional trees will be planted in excess of the minimum requirements.                                                                                                                                                                                                                                                                                                                                                                                                             |
| Density                                                            | The project is consistent with the allowed density in the R2 zone for single family and cottage housing development.                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Wetland impacts                                                    | The critical areas report was prepared in conformance with AMC 17.70 by a qualified professional, reviewed by City staff, and the WA State Department of Ecology wetland staff. Impacts to wetlands will be minimized through implementation of best management practices, buffer enhancement and restoration, wetland fencing and signage, and placement of the wetland and buffer in a separate NGPA tract. The public comments received do not identify specific project impacts that are not adequately mitigated or otherwise addressed in the critical areas report or SEPA conditions. |
| Traffic impacts                                                    | The traffic report for the project was prepared by a qualified professional and reviewed by the City's Public Works Engineering Department. Based on this review, it was determined that the proposal meets concurrency requirements and other traffic impacts are adequately addressed through recommended conditions of approval.                                                                                                                                                                                                                                                           |
| Stormwater and flooding impacts                                    | The stormwater site plan and report for the project was prepared by a qualified professional and reviewed by the City's 3 <sup>rd</sup> party consultant and found to be in conformance with the City's stormwater requirements. The site and surrounding area have a high water table and subsurface flows. The geotech report recommends exterior footing drain systems around new building foundations to reduce potential for groundwater and subsurface water to seep into interior spaces.                                                                                              |
| Project lighting                                                   | SEPA MDNS condition #12 requires streetlights and exterior lighting to be downcast to avoid glare and light trespass onto adjacent properties and the wetland buffer.                                                                                                                                                                                                                                                                                                                                                                                                                         |



# Requirements Met



Preliminary Land Division



Site Plan Review



## 19.32.040 Preliminary land division approval—Criteria for decision.

Each proposed preliminary land division must be reviewed to ensure that:

- A. The proposal conforms to the requirements of this chapter and Chapter [58.17](#) RCW.
- B. The proposal conforms to the form and intensity standards in [AMC Chapter 19.42](#), Form and Intensity Standards, for the zone in which the property is located. Proposals using the [unit lot subdivision](#) process must conform to the applicable use standards for the proposed use type in [AMC 19.43.010](#).
- C. The proposal conforms to the community design standards in Division [5](#) of this title, including:
  - 1. [AMC Chapter 19.51](#), [Public Street](#) Improvements Required.
  - 2. [AMC Chapter 19.52](#), [Public Street](#) Design.
  - 3. [AMC Chapter 19.53](#), [Private Driveways](#) and Access.
  - 4. [AMC Chapter 19.54](#), [Subdivision Design](#) and [Block Structure](#).
- D. The proposal conforms to the standards of:
  - 1. [AMC Chapter 16.50](#), [Tree Preservation](#).
  - 2. [AMC Chapter 17.70](#), [Critical Area Regulations](#).
  - 3. [AMC Chapter 19.22](#), [Concurrency](#).
  - 4. [AMC Chapter 19.76](#), [Stormwater](#), including stormwater infiltration when feasible.
- E. The proposed land division:
  - 1. Makes adequate provision for parks, recreation, and playgrounds.
  - 2. Makes adequate provision for [schools](#) and [school grounds](#).
  - 3. Makes adequate provisions for sidewalks and other planning features that meet the requirements of this title and that provide safe walking conditions for students who walk to and from [school](#).
  - 4. Serves the public interest and makes appropriate provisions for the public health, safety, and welfare.

## 19.30.040 Review criteria.



This section was recently added by Ordinance 3040, codified in November 2019.

- Conformance with all other applicable laws, ordinances and regulations.
- B. Conformance with [AMC Chapter 15.32](#), [Underground Utilities](#).
- C. Conformance with [AMC Chapter 19.22](#), [Concurrency](#).
- D. Conformance with the applicable zoning provisions of Division [4](#) of this title, including:
  - 1. [AMC Chapter 19.41](#), [Allowed Uses](#).
  - 2. [AMC Chapter 19.42](#), [Form and Intensity Standards](#).
  - 3. The applicable use standards of [AMC Chapters 19.43 through 19.48](#).
- E. Conformance with the applicable community design provisions of Division [5](#) of this title, including:
  - 1. [AMC Chapter 19.51](#), [Public Street](#) Improvements Required.
  - 2. [AMC Chapter 19.52](#), [Public Street](#) Design.
  - 3. [AMC Chapter 19.53](#), [Private Driveways](#) and Access.
  - 4. [AMC Chapter 19.54](#), [Subdivision Design](#) and [Block Structure](#).
- F. Conformance with the applicable project design provisions of Division [6](#) of this title, including:
  - 1. [AMC Chapter 19.61](#), [Block Frontage Standards](#).
  - 2. [AMC Chapter 19.62](#), [Site Planning](#).
  - 3. [AMC Chapter 19.63](#), [Building Design](#).
  - 4. [AMC Chapter 19.64](#), [Parking](#).
  - 5. [AMC Chapter 19.65](#), [Landscaping](#).
  - 6. [AMC Chapter 19.66](#), [Fences](#), [Walls](#) and [Hedges](#).
  - 7. [AMC Chapter 19.67](#), [Signs](#).
  - 8. [AMC Chapter 19.69](#), [Standards, Generally](#).
- G. Conformance with other applicable environmental provisions, including:
  - 1. [AMC Chapter 17.70](#), [Critical Area Regulations](#).
  - 2. [AMC Chapter 18.04](#), [State Environmental Policy Act](#).
  - 3. [AMC Chapter 18.16](#), [Shoreline Master Plan](#).
  - 4. [AMC Chapter 19.76](#), [Stormwater](#).
  - 5. [AMC Chapter 19.78](#), [Clearing and Grading](#). (Ord. 3040 § 2 (Att. A), 2019)

## Procedural

- ✓ Pre-Application Meeting & Pre-App Neighborhood Meeting
- ✓ Noticing
- ✓ SEPA DNS – no appeals

# Recommended Conditions

## E. RECOMMENDATION:

Based upon the application, Findings of Fact, and Conclusions of the staff report, staff recommends that the Planning Commission recommend approval of the cottage housing site plan and preliminary subdivision with the following conditions of approval:

1. Prior to Construction Plan approval and any site work, a final cottage development Site Plan shall be submitted by the applicant for review and approval by PCED, which includes the following additional items:
  - Show crosswalk locations and proposed materials per AMC 19.53.050.C.3.
  - Extend internal pathways to provide access to porches that are facing the common open space areas per AMC 19.43.010.D.3.iv and .v.
2. Prior to building permit issuance for each cottage unit, the applicant must demonstrate conformance with the applicable cottage housing site and building design standards outlined in AMC 19.43.010.D. An updated Cottage Site Plan for the entire cottage development may be required by the Director.
3. The preliminary plat map dated July 22, 2020 (Sheet C9) is the approved preliminary plat map.
4. Appropriate public and private easements to ensure adequate provision of utilities and services consistent with the requirements of the Anacortes engineering design standards and the Anacortes



# Recommended Conditions, cont.

Fire Department must be dedicated on the face of the plat and recorded by separate document and referenced on the final cottage site plan. This includes, but is not limited to:

- A waterline easement shall be 20-foot wide minimum and dedicated to the City of Anacortes.
- All Sanitary Sewer Easements shall be 20-foot minimum width and dedicated to the City of Anacortes.

5. The maximum impervious surface allowed for each lot must be added to the face of the plat and cottage site plan along with a statement that there may not a net increase in the impervious surface above the limit on the plat without approval by the director.
6. Notes must be placed on the face of the plat as recorded with the Skagit County Auditor to acknowledge the following:
  - a. Approval of the design of the unit on each of the lots was granted by the review of the development, as a whole, on the parent lot per the standards of AMC Chapter 19.43.010.D, Cottage Housing.
  - b. Development, redevelopment, or rehabilitation of structures on each unit lot is subject to review and approval of plans that are consistent with the design of the surrounding structures on the parent lot as approved by the city through subject file number as stated in subsection (D)(7)(a) of this section.
7. Access easements, joint use and maintenance agreements, and covenants, conditions and restrictions (CC&Rs) identifying the rights and responsibilities of property owners and/or the homeowners' association must be executed for use and maintenance of common garage, parking and vehicle access areas; retaining walls, underground utilities and stormwater facilities; common open space; exterior building facades and roofs; and other similar features must be recorded with the Skagit County Auditor and referenced on the face of the plat.
8. A final plat application must be submitted in conformance with AMC Ch. 19.32 Land Division prior to the expiration of this preliminary approval as provided in AMC Ch. 19.28 Permit Revision and Expiration.
9. To reduce and control erosion impacts the project shall follow the recommendations in the geotechnical report by GeoTest, dated April, 12, 2018, as amended, and approved by PCED. (MDNS 1)
10. Proposed retaining walls must be designed by a structural engineer (if required by the Director), provide appropriate drainage facilities, and conform to the standards in AMC 19.66.080. (MDNS 2)
11. The applicant must comply with City, State and Federal regulations related to emissions to air and provide a dust emissions control plan for review prior to construction activities beginning on site. (MDNS 3)
12. Wetland buffer enhancement and restoration shall be completed per the ATSI report, dated February 2020, and addendum letter, dated July 16, 2020, prior to final subdivision approval, or occupancy of the first residence, whichever occurs first. An as-built report shall be prepared by a qualified biologist and submitted to PCED upon installation completion. Monitoring of the

# Recommended Conditions, cont.

restoration and enhancement areas shall be conducted by a qualified biologist and reports submitted to PCED for a period of five years or until the site is deemed successful. (MDNS 4)

13. The ATSI buffer planting plan referenced above shall be revised as follows:
  - Planting density shall not be less than 3' on center for shrubs and 8' on center for trees;
  - Add or substitute fast growing trees and/or shrubs that will be larger at maturity to shade out existing grass, increase habitat complexity, and aid in success of the buffer enhancement plan.
14. The estimated cost for the installation of the buffer enhancement area and the proposed monitoring and maintenance work for a minimum period of five years shall be submitted to PCED. An acceptable financial guarantee shall be in place prior to final plat approval, or occupancy of the 1<sup>st</sup> residence, whichever occurs first. (MDNS 5)
15. The proposed trail within the buffer shall be located generally parallel to the wetland within the outer 25% of the buffer where possible, be designed to avoid removal of trees and native vegetation, not exceed 6' in width, and be made of native soils or pervious surfaces. (MDNS 6)
16. A split rail fence shall be installed along the eastern edge of the wetland buffer and on either side of the proposed trail, unless an alternative proposal is approved by the Director that would provide better protection of the wetland and buffer. (MDNS 7)
17. Permanent signs made of an enamel-coated metal face and attached to a metal post or other non-treated material of equal durability shall be posted at an interval of one every 50-feet. Sign verbiage shall be as follows, or as approved by the Director:

"Protected Wetland Area  
Do Not Disturb  
Contact City of Anacortes  
Regarding Uses, Restrictions, and Opportunities for Stewardship" (MDNS 8)
18. Design and installation of the proposed stormwater outfall features within the wetland buffer shall follow DOE 2014 SWMMWW guidelines for outfall systems, as approved by the Public Works Department. (MDNS 9)
19. To protect critical areas and trees proposed for retention, prior to any site work, construction limits fencing, silt fencing, and tree protection measures shall be installed and PCED contacted for an inspection. (MDNS 10)
20. Covenants shall be established limiting use of pesticides within 150' of the wetland and requiring application of integrated pest management. (MDNS 11)
21. Streetlights and exterior lighting shall be downcast to avoid glare and light trespass onto adjacent properties and the wetland/buffer. (MDNS 12)



# Recommended Conditions, cont.

22. The applicant shall either work with the property owner to trim the existing hedge located at the southeast corner of Oregon Ave. and Meadows Lane (upon obtaining appropriate approvals), or install appropriate advance advisory signage per the recommendations of the traffic report (TSI, March 5, 2020), as approved by the Public Works Dept. (MDNS 13)
23. A standard Inadvertent Discovery Plan shall be in place and followed during all ground disturbing activities. Should any human remains, archaeological, historic or cultural materials be discovered during construction, work in the affected area shall cease immediately and the area shall be secured, and appropriate agencies contacted. (MDNS 14)
24. An avigation easement shall be recorded for the property and noted on the face of the final plat. (MDNS 15)
25. The development is subject to applicable water, sewer, and stormwater general facility and hookup fees and transportation, fire, and park impact fees. These fees are payable at levels in effect at the time of building permit issuance.
26. A clearing and grading plan consistent with City requirements shall be submitted by the applicant for review and approval by the City of Anacortes Planning\Building and Public Works Departments prior to any construction activities taking place on or off-site.
27. A Storm Drainage Report consistent with City requirements shall be submitted by the applicant for review and approval by the Planning\Building and Public Works Departments prior to any construction activities taking place on or off-site. Stormwater conveyance both on-site and off-site shall comply with City Storm drainage requirements.
28. Prior to any clearing\fill\grade work beginning, construction civil plans consistent with the City of Anacortes Engineering Development Standards, including but not limited to, Clearing and Grading Plan, Erosion Control Plan, Site utility\Infrastructure improvements Plan, Roadway Improvements Plan, Signage Plan, Street Lighting Plan and other plans and\or information required by the City Planning\Building and Public Works Departments shall be submitted for review and approval.
29. Engineering and Inspection fees in the amount of \$500.00, plus 2% of the total estimated construction cost shall be due upon civil plan approval. No construction activity is allowed until the construction plans are approved, all fees have been paid and a preconstruction conference held.
30. Prior to the final plat approval, all infrastructure improvements shall be completed as required by the City of Anacortes Public Works Director and a 2-year Maintenance Bond in place. The 2-year Maintenance Bond is 10% of the actual construction cost.
31. Internal private driveway (Name to be Determined) shall be required to provide for:
  - A minimum of 20-feet of paved asphalt with a thickened edge on one side to control sheet flow runoff.
  - Maximum grade of 12%.
  - The road shall be constructed to meet City requirements and maintained by the property owners of which it serves.
  - No Parking Signs and or paint striping for Fire Lanes as required by the Fire Department.

# Recommended Conditions, cont.

32. Oregon Avenue, along the frontage of this project is required to provide for:
  - A minimum of 20-feet of paved asphalt with traffic curb and gutter along the west side and a thickened edge on the east side to control sheet flow runoff.
  - 6-foot minimum wide sidewalk along the west side. A sidewalk easement in favor the City of Anacortes shall be provided.
33. All internal (Cottage Portion) drainage facilities and facilities within the Wetland Tract are considered private and will be maintained by the HOA. The project is required to record a Drainage BMP Maintenance Covenant prior to recording of the final plat.
34. All drainage facilities along Oregon Avenue that drain to the Rock Ridge Detention Pond will be considered Public and maintained by the City of Anacortes.
35. All Sanitary Sewer structures shall have vehicular access, including but not limited to: 1) A 12-foot minimum width access road with an approved all-weather surface asphalt road, or other approved Low Impact Development Best Management Practice design, 2) Meeting the minimum structural requirements for Access Road approved by the City of Anacortes.
36. The project will make provisions and install a 2-inch minimum sized Schedule 40 or Schedule 80 conduit and Agency provided handholds for future City of Anacortes Access Fiber within the utility easement corridor.
37. Prior to construction plan approval, a "No Parking" plan for the private shared access drive must be submitted by the applicant for review and approval by the City. The plan must include, but is not limited to language in the CC&Rs, HOA's responsibility for enforcement, and signage and/or curb paint. The approved plan must be implemented, as determined by the Public Works and/or Fire Departments, prior to final subdivision approval, or occupancy of the 1<sup>st</sup> residence, whichever occurs first.
38. Prior to any site work beginning, the applicant/landowner shall obtain all required local, state, and federal permits, including but not limited to a clearing and grading permit, Construction Stormwater General permit from the State of Washington Department of Ecology, and a forest practices permit from WA Department of Natural Resources, if applicable.
39. Residential fire sprinklers may be required for some or all units based upon building construction type, fire area, available fire flow, and/or access around structures. Fire hydrant(s) may be required based on structure size, layout, and other considerations. The need for sprinklers and hydrants will be determined at time of building permit submittal. Fire flows shall be addressed in a manner acceptable to the Fire Chief and the City of Anacortes Public Works Department.
40. Emergency services apparatus access and turn-around must meet city standards, including 20' clear width, 30' minimum inside turning radius, and clear marking of required fire lanes.
41. Mailbox locations shall be reviewed and approved by the City of Anacortes Public Works Engineering Department and the U.S. Postal Service.



# Recommended Conditions, cont.

42. Street lighting shall be required at both ingress and egress of the project. Street lighting shall be energy efficient and shall limit glare and/or emission of light downward to the street and front yard areas. Street lighting will be installed per PSE Schedule 52, Option "B". Lighting fixtures and design shall be approved by the Public Works Director. Shields may be necessary to reduce impacts to adjacent properties.

43. Sanitation, recycling and compost collection will be at curbside within the subdivision.

44. Monumentation installation, per the current Engineering Standards.

Staff reserves the right to supplement the record of the case to respond to matters and information raised subsequent to the writing of this report.

## Exhibit List

|    |                                      |
|----|--------------------------------------|
| 1  | Staff Report                         |
| 2  | Application Documents                |
| 3  | Vicinity Map                         |
| 4  | Preliminary unit lot subdivision map |
| 5  | Cottage site plan                    |
| 6  | Notices                              |
| 7  | City Department comments             |
| 8  | Agency Comments                      |
| 9  | Public Comments                      |
| 10 | Issued SEPA MDNS                     |
| 11 | Project Correspondence               |

# Staff Recommendation

- Recommend approval of the preliminary unit lot/long subdivision and cottage site plan subject to recommended conditions in the staff report



# Hearing & Deliberation



# Planning Commission Agenda Bill

**Meeting Date:** 9/23/2020    **Agenda Item:** [Click here to enter text.](#)

**Subject:** LPS-2020-0001: The Crossings Cottages Development

**Staff Contact:** Libby Grage, Planning Manager

| Approved for Submittal to PC by |                              |
|---------------------------------|------------------------------|
|                                 | Laurie Gere, Mayor           |
| x                               | Don Measamer, PCED Director  |
|                                 | Darcy Swetnam, City Attorney |

| Action Type |                |
|-------------|----------------|
| X           | Public Hearing |
| X           | Staff Report   |
| X           | Discussion     |
| X           | Action         |

**Summary Statement:** Anacopper LLC requests preliminary unit lot subdivision and site plan approval to subdivide approximately 5.2 acres in the R2 zone into 21 residential lots for future development of 18 cottage units and 3 standard single family residences. The site is located at 1905 Anacopper Mine Rd.

An open record pre-decision public hearing before the Planning Commission is scheduled for September 23, 2020. The Planning Commission will make a recommendation to the City Council upon close of the public hearing and deliberation.

See the Staff Report for additional information.

**Recommended Motion:** The Department of Planning, Community, and Economic Development recommends that the Planning Commission recommend approval to City Council of the conditional use permit subject to the staff's suggested conditions of approval.

**Attachments:**

Planning Commission Draft Findings of Fact  
Staff Report and Exhibits





**DRAFT**

**Anacortes Planning Commission  
Findings of Fact, Conclusions of Law and Recommendation**

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>File Number:</b>                | LPS-2020-0001                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Project Name:</b>               | The Crossings                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Proposal Description:</b>       | The applicant is requesting preliminary approval of a 21 unit lot subdivision and cottage housing site plan approval (Type 2). The project includes 18 cottage unit lots and 3 standard single family building lots, improvement of Oregon Avenue between W. 12 <sup>th</sup> St. and Meadows Lane, and site infrastructure improvements, including utilities and stormwater facilities. Wetland buffer averaging and buffer enhancement is also proposed. |
| <b>Documents available at:</b>     | City Hall, Planning Community & Economic Development Department                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Public hearing:</b>             | Anacortes Planning Commission                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Public hearing date:</b>        | September 23, 2020                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>PC deliberations:</b>           | September 23, 2020                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Decision Body:</b>              | Anacortes City Council                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Closed Record Hearing Date:</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

After considering the written and spoken comments and considering the record before it, the Planning Commission enters the following findings of fact, conclusions of law, and recommendation:

## Findings of Fact & Conclusions of Law

---

1. The Staff report dated September 17, 2020 (Exhibit 1) accurately describes the project proposal and its Findings of Fact and Conclusions of Law are hereby incorporated by reference as the Planning Commission's Findings of Fact and Conclusions of Law.
2. The following members of the public provided testimony during the public hearing:
3. The following additional exhibits were entered into the record at the public hearing:
4. The following additional Findings of Fact and/or Conclusions of Law are entered:

## Recommendation

---

Based on the foregoing findings and conclusions of law, and review of the City's regulatory authority to implement the policies, standards, and regulations of the Anacortes Municipal Code, the Planning Commission hereby makes the following recommendation regarding the subject Preliminary Unit Lot Subdivision and Site Plan Review applications:

- ☒ Approve with Conditions
- ☐ Approve
- ☐ Deny

Conditions of Approval:

*(Add recommended conditions of approval here)*



| <b>Commission Vote -<br/>Recommendation</b> | <b>Approve</b> | <b>Deny</b> | <b>Absent</b> | <b>Abstain</b> |
|---------------------------------------------|----------------|-------------|---------------|----------------|
| Frank Jeretzky                              |                |             |               |                |
| Mike Cortright                              |                |             |               |                |
| Sarah Reuther                               |                |             |               |                |
| Jeff Mount                                  |                |             |               |                |
| Vacant                                      |                |             |               |                |
| Jeff Graf                                   |                |             |               |                |
| Ward MacKenzie                              |                |             |               |                |
| Total                                       |                |             |               |                |

ANACORTES PLANNING COMMISSION  
ANACORTES, WASHINGTON

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Ward MacKenzie, Planning Commission Chair

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Date

# Exhibit 1

## Staff Report





## Anacortes Planning, Community & Economic Development Department

904 6<sup>TH</sup> Street / P.O. Box 547, Anacortes, WA 98221

360.299-1984 - Office Hours: Mon-Fri 8:00 AM – 5:00 PM

### STAFF REPORT

#### A. PROJECT SUMMARY DATA

##### PROJECT INFORMATION:

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                           |                                                        |          |    |          |    |  |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|--------------------------------------------------------|----------|----|----------|----|--|
| File Number                    | LPS-2020-0001                                                                                                                                                                                                                                                                                                                                                                                                                                              | Date of Report            | September 17, 2020                                     |          |    |          |    |  |
| Project Title                  | The Crossings                                                                                                                                                                                                                                                                                                                                                                                                                                              | Attachment                |                                                        |          |    |          |    |  |
| Site Address                   | 1905 Anacopper Mine Road, Anacortes                                                                                                                                                                                                                                                                                                                                                                                                                        |                           |                                                        |          |    |          |    |  |
| APN(s)                         | P31752                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Section                   | 23                                                     | Township | 35 | Range    | 01 |  |
| Request                        | The applicant is requesting preliminary approval of a 21 unit lot subdivision and cottage housing site plan approval (Type 2). The project includes 18 cottage unit lots and 3 standard single family building lots, improvement of Oregon Avenue between W. 12 <sup>th</sup> St. and Meadows Lane, and site infrastructure improvements, including utilities and stormwater facilities. Wetland buffer averaging and buffer enhancement is also proposed. |                           |                                                        |          |    |          |    |  |
| Landowner & Applicant          | Anacopper LLC<br>P.O. Box 319<br>Anacortes, WA 98221                                                                                                                                                                                                                                                                                                                                                                                                       |                           |                                                        |          |    |          |    |  |
|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                           |                                                        |          |    |          |    |  |
| Application Date               | February 21, 2020                                                                                                                                                                                                                                                                                                                                                                                                                                          | Complete Application Date | March 20, 2020                                         |          |    |          |    |  |
| Public Hearing Date            | September 23, 2020<br>(Planning Commission)                                                                                                                                                                                                                                                                                                                                                                                                                |                           |                                                        |          |    |          |    |  |
| Present Use of Property        | 1 single family home (2,000 sq. ft.), detached garage and outbuilding that were constructed in 1984. These structures will be removed.                                                                                                                                                                                                                                                                                                                     |                           |                                                        |          |    |          |    |  |
| Comprehensive Plan Designation | Residential Low Density                                                                                                                                                                                                                                                                                                                                                                                                                                    | Zoning:                   | R2                                                     |          |    |          |    |  |
| Shoreline Environment          | N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Critical Areas            | There is a wetland on the western portion of the site. |          |    |          |    |  |
| Water Supply                   | Current                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Proposed                  | Sewer Supply                                           | Current  |    | Proposed |    |  |
|                                | City                                                                                                                                                                                                                                                                                                                                                                                                                                                       | City                      |                                                        | City     |    | City     |    |  |

**Staff Recommendation** Recommend that Planning Commission recommend approval with conditions to City Council

##### CITY STAFF CONTACTS:

| <b>Name:</b> | <b>Title:</b>            | <b>Phone:</b>  | <b>E-mail:</b>                                                             |
|--------------|--------------------------|----------------|----------------------------------------------------------------------------|
| Libby Grage  | Planning Manager         | (360) 299-1986 | <a href="mailto:libbyb@cityofanacortes.org">libbyb@cityofanacortes.org</a> |
| Steve Lange  | Public Works Engineering | (360) 299-1983 | <a href="mailto:stevel@cityofanacortes.org">stevel@cityofanacortes.org</a> |

## PROJECT LOCATION & SURROUNDING AREA



### SITE & SURROUNDING USES:

|              | Comprehensive Plan      | Zoning | Land Use                |
|--------------|-------------------------|--------|-------------------------|
| <b>Site</b>  | Residential Low Density | R2     | Single-family residence |
| <b>North</b> | Residential Low Density | R2     | Single-family residence |
| <b>East</b>  | Residential Low Density | R2     | Single-family residence |
| <b>South</b> | Residential Low Density | R2     | Single-family residence |
| <b>West</b>  | Aeronautical Zone       | AZ     | Anacortes Airport       |



## B. PROCEDURAL

1. **Type of Review.** The application for cottage housing site plan review (10+ dwelling units) is a Type 2 Administrative Decision. The application for unit lot subdivision approval (with 10+ lots) follows the process for preliminary long subdivision approval, which is a Type 4 City Council Decision. The applications are being processed collectively pursuant to AMC 19.20.040, Consolidated Review, under the highest numbered type procedure required for any part of the application. In this case, a Type 4-CC review process is required.
2. **Project history.** A mandatory preapplication meeting was held on November 19, 2019. Neighborhood meetings were held on January 16, 2020 and February 4, 2020. The formal application was submitted on February 21, 2020 and determined complete on March 20, 2020.
3. **Public notice and reviewing departments/agencies.** A notice of application with a 21-day public comment period ending on April 22, 2020 was published in the Anacortes American on April 1, 2020, posted on the project site and mailed to property owners within 300' on March 26, 2020, and posted on the website on March 24, 2020, and routed to City departments and applicable local, state and federal agencies on March 25, 2020.

The project application was routed for review to applicable agencies and City departments.

| REVIEWING DEPARTMENTS & AGENCIES:                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                  |                                                                                                                                                                                                                         |                                                                                                                        |                                                                                                                                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| City of Anacortes                                                                                                                                                                                                                                                                                                                               | Local Agencies & Districts                                                                                                                                                       | State & Federal                                                                                                                                                                                                         | Skagit County                                                                                                          | Other                                                                                                                                                             |
| <input checked="" type="checkbox"/> Building<br><input checked="" type="checkbox"/> Fire Dept.<br><input checked="" type="checkbox"/> Parks<br><input checked="" type="checkbox"/> Planning<br><input checked="" type="checkbox"/> Police<br><input checked="" type="checkbox"/> Public Works<br><input checked="" type="checkbox"/> Operations | <input checked="" type="checkbox"/> Skagit Transit<br><input checked="" type="checkbox"/> Anacortes School District 103<br><input checked="" type="checkbox"/> Port of Anacortes | <input checked="" type="checkbox"/> DOE<br><input checked="" type="checkbox"/> WDFW<br><input checked="" type="checkbox"/> WSDOT<br><input checked="" type="checkbox"/> DNR<br><input checked="" type="checkbox"/> DAHP | <input type="checkbox"/> Health District<br><input type="checkbox"/> Planning<br><input type="checkbox"/> Public Works | <input checked="" type="checkbox"/> Swinomish Tribe<br><input checked="" type="checkbox"/> Samish Tribe<br><input checked="" type="checkbox"/> Upper Skagit Tribe |
| X = Request for review/comments sent to department or agency.                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                  |                                                                                                                                                                                                                         |                                                                                                                        |                                                                                                                                                                   |

4. **Environmental review.** A SEPA Mitigated Determination of Nonsignificance (MDNS) with a 14-day comment period was issued for the proposal on September 2, 2020. The SEPA MDNS became final on September 16, 2020. There were no appeals of the threshold determination.
5. **Public Hearing.** A pre-decision open record public hearing before the Planning Commission is scheduled for September 23, 2020 at 6:00 PM. A notice of public hearing was published in the Anacortes American on September 2, 2020, posted on the project site, mailed to property owners within 300' and parties of record on September 2, 2020.

## C. DEPARTMENT REVIEW – FINDINGS OF FACT

### **Proposal**

1. The applicant, Anacopper LLC, has requested unit lot subdivision /preliminary long subdivision approval and cottage housing site plan approval. The majority of the site will be developed with a cottage housing development consistent with AMC 19.43.010.E. A unit lot subdivision is proposed to create cottage unit Lots 1-18 (which range between 2,025 and 2,906 sq. ft). Three standard single family residential lots (lots 19-21) will be created in the south portion of the site along Oregon Ave. Four tracts, Tracts A through D, will be comprised of wetlands/buffers, stormwater infrastructure, a private access road, and common open space areas.

### **Location and Existing site conditions**

2. The project site is located at 1905 Anacopper Mine Road (Assessor Parcel Number P31752). The subject property is panhandled in shape and includes 5.2 acres and is zoned R2. The site is surrounded by residential development to the north, east and south; Anacopper Mine Road and the Anacortes Airport are located to the west.
3. A single family residence and associated outbuildings are currently located on the property with access from a gravel driveway via Anacopper Mine Road. The existing structures and driveway are proposed to be removed and vehicular access to the site relocated.
4. The majority of the site slopes downward to the northwest, while the southern portion (the panhandle) slopes down to the north and east. Site elevations vary from 275' in the southeast to 245' at the western side of the property.
5. The majority of the property is upland mowed lawn with scattered trees surrounded by herbaceous understory components. There is a pond/ wetland located on the western portion of the site, adjacent to Anacopper Mine Road.

### **Zoning and Form /Intensity Standards**

6. The site is zoned R2, Residential Low Density 2. The maximum density allowed in R2 is 4 dwelling units per gross acre. The maximum number of standard single family dwelling units allowed for the project site is 21 (5.2 gross acres x 4 dwelling units per gross acre). Per AMC 19.43.010.D.3.b, each cottage unit may be counted as one-half a dwelling unit for the purpose of calculating density (because of their relative smaller size). Therefore, 18 cottages are equivalent to 9 dwelling units. The 3 standard SFR lots are added to this for a total of 12 dwelling units. The proposed density of the subject development is 2.31 dwelling units per gross acre (12 dwelling units / 5.2 acres = 2.31 dwelling units per acre).
7. Proposed lots 1-18 are proposed to be developed with cottages per the standards in AMC 19.43.010.D and will be subdivided into individual unit lots utilizing the unit lot subdivision provisions of AMC 19.32.050.D. Cottage unit lots are not required to conform to all the development standards that typically apply to individual lots as long as the parent lot/ overall development site conforms to the applicable form/intensity standards and cottage housing site and building design standards.



8. The site plan submitted by the applicant shows that the cottage portion of the site will conform to the cottage site standards outlined in AMC 19.43.010.D, including setbacks and separation, common open space, private open space, access and parking, and landscaping. Certain elements of cottage design, including building height, cottage size, entries, and façade transparency, will be reviewed at the time of building permit application.
9. Proposed lots 19-21 conform to the density, minimum lot size and lot width standards for the R2 zone. The lots are designed to meet the following requirements:
  - Minimum lot size of 7,500 sq. ft: The smallest lot is 7,501 sq. ft.
  - Minimum lot width circle of 60 ft.: Each lot is at least 60 ft. wide, meeting this requirement.
  - The future single family residences will be required to meet the minimum setbacks and landscaping requirements, and conform to the maximum allowed lot coverage and building height.

### **Critical Areas**

10. The site contains one wetland, “Wetland A”, according to the critical areas report and addendum letter prepared for the project (ATSI, February 2020 & ATSI, July 16, 2020). The wetland is an approximately 1.42 acre Category III, PEMH/PEM/SSE depressional outflow. Wetland A receives hydrology from an intermittently flowing stormwater detention tract located to the north of the property, which is culverted under the existing onsite gravel driveway and outlets into the wetland.

The wetland located on-site requires a 110’ buffer per the ATSI report. The existing buffer consists primarily of mowed lawn (orchard grass and kentucky blue grass) and there is a gravel driveway along the northwestern portion of the property.

11. Proposed activities in the buffer include installation of a wood chip trail, bench, birdhouses and a stormwater outfall. Buffer width averaging is also proposed.

The Critical Areas report and addendum letter identify proposed actions to avoid and minimize impacts to the wetland. To offset potential impacts of the proposal, the applicant proposes wetland buffer restoration and enhancement by:

- a. Removal of the existing gravel driveway, tilling the soil, adding supplemental topsoil, retilling, and then spraying the exposed topsoil with a native hydroseed herbaceous mix.
- b. Letting the existing mowed lawn grow and planting 19 Douglas fir trees, thus creating an herbaceous meadow with a forested canopy component.
- c. Planting an area just east of the wetland/pond approximately 30’ wide by 170’ long with native shrub species to increase native vegetation cover, habitat, and functionality. Monitoring and maintenance for a minimum of 5 years and financial guarantee will also be provided.

The SEPA MDNS issued on September 2, 2020 for this project incorporates mitigation measures intended to maintain and enhance the functions and values of the wetland.

12. To the west of the project site, across Anacopper Mine Road, there is another wetland (“Wetland B”) located on Port of Anacortes airport property. According to the ATSI report, a culvert under Anacopper Mine Road functions as an outlet from Wetland A, allowing water to flow into Wetland B. ATSI determined that the 2 wetlands are separate and should be rated separately per the Washington Wetland Rating System, 2014.

City staff consulted with the WA State Department of Ecology wetland staff regarding this determination. WA DOE staff provided comments via email dated September 14, 2020, concurring that the flow through the culvert appears to be unidirectional into wetland B, and that the 2 wetlands are separated by the road and should be evaluated as 2 separate wetland units. WA DOE also provided comments suggesting increasing the buffer enhancement planting density near the pond and suggested substitution of faster growing trees and/or shrubs for some of the proposed plantings.

### **Site Access & Traffic**

13. The subject property abuts Anacopper Mine Road, classified as a Minor Arterial, to the west. The roadway includes one travel lane northbound and one southbound. Shoulder sections are paved and narrow along the site's frontage, constrained in width due to presence of wetlands on both sides of the road.

The site currently access via a gravel access driveway from Anacopper Mine Road. The driveway will be converted to a pedestrian path and enhanced wetland buffer; vehicular access to the site will be relocated to Meadows Lane / Oregon Ave.

The Public Works Engineering Department recommend that no improvements be required along the project frontage on Anacopper Mine Road due to the unusual topographic or physical conditions which preclude the construction of a sidewalk. Additionally, as discussed below, the project will construct improvements, including a sidewalk, along Oregon Avenue, which will provide an alternative walking route.

14. The property abuts portions of Oregon and Meadows Avenue, classified as local low volume access streets, to the south and east. There is a strip of undeveloped public right-of-way located between the current terminuses of these streets. The applicant will construct a local low volume street improvement within the existing undeveloped Oregon Ave. right of way, connecting the two existing improved streets, and improving pedestrian connectivity in the area. The cottage portion of the site will access via new shared access road from Oregon Ave. The three standard size SFR lots will each access via a driveway directly from Oregon Ave.
15. The applicant submitted a Traffic Study prepared by TSI, Inc., dated March 5, 2020. The report evaluated the existing street network, the project's trip generation, distribution and assignment, traffic operations, stopping and intersection sight distance, and safety. Transportation system impacts generated by the project will be mitigated through payment of the transportation impact fee in effect at the time of building permit issuance and construction of street and pedestrian improvements on Oregon Avenue fronting the project site.
16. The cottage portion of the site will be served by an internal shared access drive in conformance with AMC 19.53.050. The drive will be a minimum of 20' wide with a 5' wide sidewalk on one side. The drive aisle meets the requirements for fire and emergency services apparatus access. There will be no parking allowed on the 20' wide drive aisle.
17. Site pedestrian circulation will be provided by a system of walkways through open space areas connecting to the shared access drive sidewalk, and eventually the public streets. Groupings of up to 4 cottages will be serviced by individual driveways extending from the shared access drive.



## **Site Construction / Development**

18. Grading of the site is proposed to lower the high point and place fill on the northern portion to make the site more level. Grading activities will consist of approximately 5,000 cubic yards and 5,000 cubic yards of fill. The preliminary grading plans show site grading that will result in fill slopes adjacent to some of the surrounding properties. Retaining walls are proposed to be constructed in certain areas along the north, east, south and west property lines.
19. Trees proposed for removal include approximately 40 trees ranging in size from 12 to 40-inches in diameter. The applicant indicates that retention of the trees is not feasible because they are within the footprint of the future access road and building area. According to the submitted Tree Assessment prepared by Urban Forestry Services, dated January 27, 2020, all trees located within the wetland buffer tract on the west side of the property will be retained. These include red alder, willow, western red cedar and other species ranging from 2 to 24-inches in diameter. Based on the net area of the site, 208 tree unit credits are required; 226 unit credits are provided through retained trees. In addition, the applicant proposes planting 19 Douglas fir trees within the wetland buffer, and multiple new trees will be planted within the developable portion of the site according to the landscape plan for the project.

## **Parks & Open Space**

20. The cottage portion of the site contains approximately 24,000 sq. ft. of common open space area, which exceeds the minimum required for cottage housing developments (400 sq. ft. per unit), and exceeds the minimum parkland dedication requirement for subdivisions with 10 or more lots per AMC 19.54.030.A (one-tenth of the combined area of lots one acre or less in size). The common open space will be owned and maintained in perpetuity by the property owner's association.

## **Utilities, Stormwater, and Services**

21. Utilities will be provided to the site as follows:

Storm Drainage – The site consists of three drainage basins. Stormwater generated by the southernmost access road will utilize concentrated flow dispersion into the 110' wetland buffer. Stormwater from the northern and central portions of the site will be collected in a series of catch basins, pipes and swales and be directed to a private stormwater detention pond in the north central part of the site. The pond will provide water quality and detention, before discharging the treated water via a level spreader outfall into the wetland buffer. Stormwater from lots 19-21 and the new public road connection will be collected via catch basins and pipes and conveyed to an off-site public detention pond.

Water – An 8 inch ductile iron water main currently exists in Oregon Ave. The main will be extended on site within a public utility easement.

Sewer – An 8 inch PVC sanitary sewer main currently exists in Oregon Avenue. The main will be extended on site within a public utility easement.

Utility and street design issues will be addressed during the civil construction plan review process with the city.

22. The application was routed to the City's Public Works, Police, and Fire Departments for review and comment regarding impacts to concurrency facilities and services. Based on this review it was determined that the capacity of concurrency facilities is equal to or greater than the capacity required to maintain the level of service standard for the impact from this development application. Therefore, the concurrency test is passed.

Through payment of impact fees and general facilities charges prior to building permit issuance the development will pay for its proportionate share of new public facilities and infrastructure needed to serve the new development.

23. Pursuant to AMC Chapter 19.76 Stormwater, a temporary erosion and sediment control plan is required to be approved and implemented on the site prior to and during site development. Additionally, a stormwater management plan and subsequent installation of an approved stormwater management system on site is required.

The applicant submitted a stormwater drainage analysis that addresses the project site's soils, impervious surfaces proposed, and stormwater that would be generated onsite along with how the proposed development will comply with Anacortes Municipal Code Chapter 19.76 and the Department of Ecology's 2012 Stormwater Management Manual for Western Washington (as amended in 2014) that was adopted by the City of Anacortes. The city utilized the consultant Gray and Osborne for third party review of this stormwater drainage analysis. As conditioned, stormwater runoff during construction and future use of the site will be handled in conformance with the City's regulations and standards.

24. Park impacts generated by the project are mitigated through payment of the park impact fee in effect at the time of building permit issuance.
25. The site is located in the Anacortes School District. No comments were received from the Anacortes School District.

### Public Comments

26. Consideration of written comments and applicant responses. The notice of application public comment period ended on April 22, 2020. Multiple public comments were received during this time. Additional comments were submitted in response to the MDNS issued for the project. Concerns identified in the public comments received to date are summarized and responses provided below:

| Issue                                                              | Staff Response                                                                                                                                                                                                                                                                                                              |
|--------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Concern about project compatibility with the existing neighborhood | The project is consistent with the type of land use and density allowed in the R2 zone. Additional design standards contained in the cottage development provisions help promote compatibility between the project and surrounding area. Recording of an avigation easement promotes compatibility with the nearby airport. |
| Tree removal                                                       | The project conforms to the minimum tree preservation requirements in AMC 16.60. The landscape plan shows                                                                                                                                                                                                                   |



|                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                 | additional trees will be planted in excess of the minimum requirements.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Density                         | The project is consistent with the allowed density in the R2 zone for single family and cottage housing development.                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Wetland impacts                 | The critical areas report was prepared in conformance with AMC 17.70 by a qualified professional, reviewed by City staff, and the WA State Department of Ecology wetland staff. Impacts to wetlands will be minimized through implementation of best management practices, buffer enhancement and restoration, wetland fencing and signage, and placement of the wetland and buffer in a separate NGPA tract. The public comments received do not identify specific project impacts that are not adequately mitigated or otherwise addressed in the critical areas report or SEPA conditions. |
| Traffic impacts                 | The traffic report for the project was prepared by a qualified professional and reviewed by the City's Public Works Engineering Department. Based on this review, it was determined that the proposal meets concurrency requirements and other traffic impacts are adequately addressed through recommended conditions of approval.                                                                                                                                                                                                                                                           |
| Stormwater and flooding impacts | The stormwater site plan and report for the project was prepared by a qualified professional and reviewed by the City's 3 <sup>rd</sup> party consultant and found to be in conformance with the City's stormwater requirements. The site and surrounding area have a high water table and subsurface flows. The geotech report recommends exterior footing drain systems around new building foundations to reduce potential for groundwater and subsurface water to seep into interior spaces.                                                                                              |
| Project lighting                | SEPA MDNS condition #12 requires streetlights and exterior lighting to be downcast to avoid glare and light trespass onto adjacent properties and the wetland buffer.                                                                                                                                                                                                                                                                                                                                                                                                                         |

## D. CONCLUSIONS

Anacortes Municipal Code Chapter 19.32 provides certain criteria for approval of a unit lot subdivision/ preliminary plat. Below are the criteria, along site staff conclusions:

1. Pursuant to AMC 19.20.030 and 19.20.040, the Planning Commission must conduct an open record public hearing for the proposal prior to making a recommendation to City Council. The City Council is the decision-maker.
2. Proper notice for the public hearing has been provided. Notice was posted on the property, mailed to property owners within 300 feet and published in the Anacortes American newspaper on September 2, 2020, more than 15 days prior to the date of the hearing.
3. **LAND DIVISION Application Review.** The review criteria for land divisions are outlined in AMC 19.32.040.

- a. **The proposal conforms to the requirements of [AMC 19.32] and Chapter 58.17 RCW.**

**Conclusion:**

The proposal ensures that appropriate provisions are made for the public health, safety, and general welfare, and for such open spaces, drainage ways, streets or roads, alleys, other public ways, transit stops, potable water supplies, sanitary wastes, parks and recreation, playgrounds, schools and schoolgrounds, including sidewalks and other planning features that assure safe walking conditions for students who only walk to and from school.

Project review by all city review departments has found the project to be in conformance to City codes and the recommended project approval includes specific recommended conditions to ensure standards are met.

- b. **The proposal conforms to the form and intensity standards in AMC 19.42, Form and Intensity Standards, for the zone in which the property is located.**

**Conclusion:**

Based on review of the site plan and as conditioned, the proposal will conform to the R2 form and intensity standards in AMC 19.42, as modified under the cottage housing provisions in AMC 19.43.010.D and the unit lot subdivision provisions in AMC 19.32.050.D.

- c. **The proposal conforms to the community design standards in Division 5 of [Title 19] including AMC Ch. 19.51, *Public Street Improvements*, AMC 19.52, *Public Street Design*, AMC 19.53, *Private Driveways and Access*, and AMC 19.54, *Subdivision Design*.**

**Conclusion:**

As described in Section C above, the proposal conforms to the applicable community design standards in Division 5. Waiver of the requirement to construct improvements on Anacopper Mine Road is appropriate due to physical space constraints, avoidance of wetland impacts, and the availability of a walking route from the development site to Anacopper Mine Road with the completion of the Oregon/Meadows Ave. connection and the on-site pedestrian trail.

The proposal conforms to AMC 19.54.020, Block design and connectivity standards. AMC 19.54.050 contains standards for lot access, provision for water supplies, sanitary wastewater facilities, storm drainage and surface water facilities, electric, and natural gas facilities (if applicable), consistent with the requirements of the Anacortes engineering design standards. As conditioned below, the subdivision will be in conformance with the applicable standards.

- d. **The proposal conforms to the standards of AMC 16.50 Tree Preservation.**

**Conclusion:**

As described in Section C above, the proposal conforms to the applicable tree preservation requirements in AMC 16.50. Protection measures for trees proposed for retention will be confirmed prior to site construction activities.

- e. **The proposal conforms to the standards of AMC 17.70, Critical Areas Regulations.**

**Conclusion:**



As described in Section C above and as conditioned, the proposal conforms to the standards of AMC 17.70.

**f. The proposal conforms to the standards of AMC 19.22, Concurrency.**

**Conclusion:**

As described in Section C, the proposal conforms to the concurrency standards of AMC 19.22.

**g. The proposal conforms to the standards of AMC 19.76, Stormwater.**

**Conclusion:**

As described in Section C, the proposal conforms to the stormwater requirements in AMC 19.76.

**h. AMC Chapter 19.78, Clearing & Grading:**

**Conclusion:**

Conformance with this Chapter will be reviewed upon submittal of detailed clearing and grading plans prior to building permit issuance.

**4. SITE PLAN Application Review.** The review criteria for site plan review are outlined in AMC 19.30.040. Below are the criteria, along with conclusions:

**a. Conformance with all other applicable laws, ordinances, and regulations.**

**Conclusion:**

Project review by all city review departments has found the project to be in conformance to City codes and the recommended project approval includes specific recommended conditions to ensure standards are met.

**b. Conformance with AMC Ch. 15.32, Underground Utilities.**

**Conclusion:**

As conditioned, the proposal will conform to AMC 15.32.

**c. Conformance with AMC Ch. 19.22, Concurrency.**

**Conclusion:**

As described in Section C, the proposal conforms to the concurrency standards of AMC 19.22.

**d. Conformance with the applicable zoning provisions of Division 4 of Title 19, including AMC Ch. 19.41, Allowed Uses, CH. 19.42, Form and Intensity; the applicable use standards of Ch. 19.43- 19.48.**

**Conclusion:**

As described in Section C, the proposal conforms to the applicable zoning provisions in Division 4 of Title 19. As conditioned, the proposal will conform to the cottage housing development standards outlined in AMC 19.43.010.D.

- e. **Conformance with the applicable community design provisions of Division 5 of Title 19, including AMC Ch. 19.51, *Public Street Improvements*, AMC 19.52, *Public Street Design*, AMC 19.52, *Public Street Design*, AMC 19.53, *Private Driveways and Access*, and AMC 19.54, *Subdivision Design* and Block Structure.**

**Conclusion:**

See number D.3.c above.

- f. **Conformance with Division 6 of Title 19, including AMC Ch. 19.61, *Block Frontage Standards*; Ch. 19.62, *Site Planning*; Ch. 19.63, *Building Design*; Ch. 19.64, *Parking*; Ch. 19.65, *Landscaping*; Ch. 19.66, *Fences, Walls and Hedges*; Ch. 19.67, *Signs*; Ch. 19.69 *Standards, Generally*.**

**Conclusion:**

AMC Chapters 19.61, 19.62, and 19.63 are not applicable to the subject proposal. As described in Section C, and as conditioned, the proposal conforms to the standards of AMC Chapters 19.64, 19.65, 19.66, 19.67 and 19.69.

- g. **Conformance with other applicable environmental provisions, including AMC Ch. 17.70, *Critical Areas*; Ch. 18.04, *State Environmental Policy Act*; Ch. 18.16 *Shoreline Master Program*; Ch. 19.76, *Stormwater*; and CH. 19.78, *Clearing and Grading*.**

**Conclusion:**

Conformance with AMC Chapters 17.70, 18.04, 19.76 and 19.78 is addressed earlier in this report. AMC 18.16 is not applicable.

## **E. RECOMMENDATION:**

Based upon the application, Findings of Fact, and Conclusions of the staff report, staff recommends that the Planning Commission recommend approval of the cottage housing site plan and preliminary subdivision with the following conditions of approval:

1. Prior to Construction Plan approval and any site work, a final cottage development Site Plan shall be submitted by the applicant for review and approval by PCED, which includes the following additional items:
  - Show crosswalk locations and proposed materials per AMC 19.53.050.C.3.
  - Extend internal pathways to provide access to porches that are facing the common open space areas per AMC 19.43.010.D.3.iv and .v.
2. Prior to building permit issuance for each cottage unit, the applicant must demonstrate conformance with the applicable cottage housing site and building design standards outlined in AMC 19.43.010.D. An updated Cottage Site Plan for the entire cottage development may be required by the Director.
3. The preliminary plat map dated July 22, 2020 (Sheet C9) is the approved preliminary plat map.
4. Appropriate public and private easements to ensure adequate provision of utilities and services consistent with the requirements of the Anacortes engineering design standards and the Anacortes



Fire Department must be dedicated on the face of the plat and recorded by separate document and referenced on the final cottage site plan. This includes, but is not limited to:

- A waterline easement shall be 20-foot wide minimum and dedicated to the City of Anacortes.
  - All Sanitary Sewer Easements shall be 20-foot minimum width and dedicated to the City of Anacortes.
5. The maximum impervious surface allowed for each lot must be added to the face of the plat and cottage site plan along with a statement that there may not a net increase in the impervious surface above the limit on the plat without approval by the director.
  6. Notes must be placed on the face of the plat as recorded with the Skagit County Auditor to acknowledge the following:
    - a. Approval of the design of the unit on each of the lots was granted by the review of the development, as a whole, on the parent lot per the standards of AMC Chapter 19.43.010.D, Cottage Housing.
    - b. Development, redevelopment, or rehabilitation of structures on each unit lot is subject to review and approval of plans that are consistent with the design of the surrounding structures on the parent lot as approved by the city through subject file number as stated in subsection (D)(7)(a) of this section.
  7. Access easements, joint use and maintenance agreements, and covenants, conditions and restrictions (CC&Rs) identifying the rights and responsibilities of property owners and/or the homeowners' association must be executed for use and maintenance of common garage, parking and vehicle access areas; retaining walls, underground utilities and stormwater facilities; common open space; exterior building facades and roofs; and other similar features must be recorded with the Skagit County Auditor and referenced on the face of the plat.
  8. A final plat application must be submitted in conformance with AMC Ch. 19.32 Land Division prior to the expiration of this preliminary approval as provided in AMC Ch. 19.28 Permit Revision and Expiration.
  9. To reduce and control erosion impacts the project shall follow the recommendations in the geotechnical report by GeoTest, dated April, 12, 2018, as amended, and approved by PCED. (MDNS 1)
  10. Proposed retaining walls must be designed by a structural engineer (if required by the Director), provide appropriate drainage facilities, and conform to the standards in AMC 19.66.080. (MDNS 2)
  11. The applicant must comply with City, State and Federal regulations related to emissions to air and provide a dust emissions control plan for review prior to construction activities beginning on site. (MDNS 3)
  12. Wetland buffer enhancement and restoration shall be completed per the ATSI report, dated February 2020, and addendum letter, dated July 16, 2020, prior to final subdivision approval, or occupancy of the first residence, whichever occurs first. An as-built report shall be prepared by a qualified biologist and submitted to PCED upon installation completion. Monitoring of the

restoration and enhancement areas shall be conducted by a qualified biologist and reports submitted to PCED for a period of five years or until the site is deemed successful. (MDNS 4)

13. The ATSI buffer planting plan referenced above shall be revised as follows:
  - Planting density shall not be less than 3' on center for shrubs and 8' on center for trees;
  - Add or substitute fast growing trees and/or shrubs that will be larger at maturity to shade out existing grass, increase habitat complexity, and aid in success of the buffer enhancement plan.
14. The estimated cost for the installation of the buffer enhancement area and the proposed monitoring and maintenance work for a minimum period of five years shall be submitted to PCED. An acceptable financial guarantee shall be in place prior to final plat approval, or occupancy of the 1<sup>st</sup> residence, whichever occurs first. (MDNS 5)
15. The proposed trail within the buffer shall be located generally parallel to the wetland within the outer 25% of the buffer where possible, be designed to avoid removal of trees and native vegetation, not exceed 6' in width, and be made of native soils or pervious surfaces. (MDNS 6)
16. A split rail fence shall be installed along the eastern edge of the wetland buffer and on either side of the proposed trail, unless an alternative proposal is approved by the Director that would provide better protection of the wetland and buffer. (MDNS 7)
17. Permanent signs made of an enamel-coated metal face and attached to a metal post or other non-treated material of equal durability shall be posted at an interval of one every 50-feet. Sign verbiage shall be as follows, or as approved by the Director:

"Protected Wetland Area  
Do Not Disturb  
Contact City of Anacortes  
Regarding Uses, Restrictions, and Opportunities for Stewardship" (MDNS 8)
18. Design and installation of the proposed stormwater outfall features within the wetland buffer shall follow DOE 2014 SWMMWW guidelines for outfall systems, as approved by the Public Works Department. (MDNS 9)
19. To protect critical areas and trees proposed for retention, prior to any site work, construction limits fencing, silt fencing, and tree protection measures shall be installed and PCED contacted for an inspection. (MDNS 10)
20. Covenants shall be established limiting use of pesticides within 150' of the wetland and requiring application of integrated pest management. (MDNS 11)
21. Streetlights and exterior lighting shall be downcast to avoid glare and light trespass onto adjacent properties and the wetland/buffer. (MDNS 12)



22. The applicant shall either work with the property owner to trim the existing hedge located at the southeast corner of Oregon Ave. and Meadows Lane (upon obtaining appropriate approvals), or install appropriate advance advisory signage per the recommendations of the traffic report (TSI, March 5, 2020), as approved by the Public Works Dept. (MDNS 13)
23. A standard Inadvertent Discovery Plan shall be in place and followed during all ground disturbing activities. Should any human remains, archaeological, historic or cultural materials be discovered during construction, work in the affected area shall cease immediately and the area shall be secured, and appropriate agencies contacted. (MDNS 14)
24. An avigation easement shall be recorded for the property and noted on the face of the final plat. (MDNS 15)
25. The development is subject to applicable water, sewer, and stormwater general facility and hookup fees and transportation, fire, and park impact fees. These fees are payable at levels in effect at the time of building permit issuance.
26. A clearing and grading plan consistent with City requirements shall be submitted by the applicant for review and approval by the City of Anacortes Planning\Building and Public Works Departments prior to any construction activities taking place on or off-site.
27. A Storm Drainage Report consistent with City requirements shall be submitted by the applicant for review and approval by the Planning\Building and Public Works Departments prior to any construction activities taking place on or off-site. Stormwater conveyance both on-site and off-site shall comply with City Storm drainage requirements.
28. Prior to any clearing\fill\grade work beginning, construction civil plans consistent with the City of Anacortes Engineering Development Standards, including but not limited to, Clearing and Grading Plan, Erosion Control Plan, Site utility\Infrastructure improvements Plan, Roadway Improvements Plan, Signage Plan, Street Lighting Plan and other plans and\or information required by the City Planning\Building and Public Works Departments shall be submitted for review and approval.
29. Engineering and Inspection fees in the amount of \$500.00, plus 2% of the total estimated construction cost shall be due upon civil plan approval. No construction activity is allowed until the construction plans are approved, all fees have been paid and a preconstruction conference held.
30. Prior to the final plat approval, all infrastructure improvements shall be completed as required by the City of Anacortes Public Works Director and a 2-year Maintenance Bond in place. The 2-year Maintenance Bond is 10% of the actual construction cost.
31. Internal private driveway (Name to be Determined) shall be required to provide for:
  - A minimum of 20-feet of paved asphalt with a thickened edge on one side to control sheet flow runoff.
  - Maximum grade of 12%.
  - The road shall be constructed to meet City requirements and maintained by the property owners of which it serves.
  - No Parking Signs and or paint striping for Fire Lanes as required by the Fire Department.

32. Oregon Avenue, along the frontage of this project is required to provide for:
- A minimum of 20-feet of paved asphalt with traffic curb and gutter along the west side and a thickened edge on the east side to control sheet flow runoff.
  - 6-foot minimum wide sidewalk along the west side. A sidewalk easement in favor the City of Anacortes shall be provided.
33. All internal (Cottage Portion) drainage facilities and facilities within the Wetland Tract are considered private and will be maintained by the HOA. The project is required to record a Drainage BMP Maintenance Covenant prior to recording of the final plat.
34. All drainage facilities along Oregon Avenue that drain to the Rock Ridge Detention Pond will be considered Public and maintained by the City of Anacortes.
35. All Sanitary Sewer structures shall have vehicular access, including but not limited to: 1) A 12-foot minimum width access road with an approved all-weather surface asphalt road, or other approved Low Impact Development Best Management Practice design, 2) Meeting the minimum structural requirements for Access Road approved by the City of Anacortes.
36. The project will make provisions and install a 2-inch minimum sized Schedule 40 or Schedule 80 conduit and Agency provided handholds for future City of Anacortes Access Fiber within the utility easement corridor.
37. Prior to construction plan approval, a “No Parking” plan for the private shared access drive must be submitted by the applicant for review and approval by the City. The plan must include, but is not limited to language in the CC&Rs, HOA’s responsibility for enforcement, and signage and/or curb paint. The approved plan must be implemented, as determined by the Public Works and/or Fire Departments, prior to final subdivision approval, or occupancy of the 1<sup>st</sup> residence, whichever occurs first.
38. Prior to any site work beginning, the applicant/landowner shall obtain all required local, state, and federal permits, including but not limited to a clearing and grading permit, Construction Stormwater General permit from the State of Washington Department of Ecology, and a forest practices permit from WA Department of Natural Resources, if applicable.
39. Residential fire sprinklers may be required for some or all units based upon building construction type, fire area, available fire flow, and/or access around structures. Fire hydrant(s) may be required based on structure size, layout, and other considerations. The need for sprinklers and hydrants will be determined at time of building permit submittal. Fire flows shall be addressed in a manner acceptable to the Fire Chief and the City of Anacortes Public Works Department.
40. Emergency services apparatus access and turn-around must meet city standards, including 20’ clear width, 30’ minimum inside turning radius, and clear marking of required fire lanes.
41. Mailbox locations shall be reviewed and approved by the City of Anacortes Public Works Engineering Department and the U.S. Postal Service.



42. Street lighting shall be required at both ingress and egress of the project. Street lighting shall be energy efficient and shall limit glare and/or emission of light downward to the street and front yard areas. Street lighting will be installed per PSE Schedule 52, Option "B". Lighting fixtures and design shall be approved by the Public Works Director. Shields may be necessary to reduce impacts to adjacent properties.

43. Sanitation, recycling and compost collection will be at curbside within the subdivision.

44. Monumentation installation, per the current Engineering Standards.

Staff reserves the right to supplement the record of the case to respond to matters and information raised subsequent to the writing of this report.

#### Exhibit List

|    |                                      |
|----|--------------------------------------|
| 1  | Staff Report                         |
| 2  | Application Documents                |
| 3  | Vicinity Map                         |
| 4  | Preliminary unit lot subdivision map |
| 5  | Cottage site plan                    |
| 6  | Notices                              |
| 7  | City Department comments             |
| 8  | Agency Comments                      |
| 9  | Public Comments                      |
| 10 | Issued SEPA MDNS                     |
| 11 | Project Correspondence               |

Exhibit 2  
Application  
Docs



PLANNING, COMMUNITY, & ECONOMIC DEVELOPMENT DEPARTMENT

Mailing Address: P.O. Box 547, Anacortes, WA 98221

Office Location: 904 6<sup>th</sup> Street, Anacortes WA 98221

Phone: (360) 299-1984

# Master Land Use Permit Application

| TYPE OF APPLICATION (check all that apply):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Administrative Interpretation<br><input type="checkbox"/> Annexation Request<br><input type="checkbox"/> Binding Site Plan (Preliminary)<br><input type="checkbox"/> Boundary Line Adjustment (BLA)<br><input type="checkbox"/> Comprehensive Plan/ Map Amendment Request<br><input type="checkbox"/> Conditional Use Permit (CUP) per AMC 19.36<br><input type="checkbox"/> Conditional/Special Use Permit (CUP) per AMC 17.70<br><input checked="" type="checkbox"/> Cottage Housing Development<br><input type="checkbox"/> Development Agreement<br><input type="checkbox"/> Essential Public Facility | <input type="checkbox"/> Floodplain Development Permit<br><input type="checkbox"/> Home Occupation Permit<br><input checked="" type="checkbox"/> Long Subdivision (Preliminary)<br><input type="checkbox"/> Lot Certification<br><input type="checkbox"/> Minor Permit Revision<br><input type="checkbox"/> Plat Amendment /Modification<br><input checked="" type="checkbox"/> SEPA Environmental Review<br><input type="checkbox"/> Shoreline Conditional Use Permit<br><input type="checkbox"/> Shoreline Exemption<br><input type="checkbox"/> Shoreline Substantial Development Permit<br><input type="checkbox"/> Shoreline Variance | <input type="checkbox"/> Short Subdivision (Preliminary)<br><input type="checkbox"/> Site Plan Review – Type 1<br><input type="checkbox"/> Site Plan Review – Type 2<br><input type="checkbox"/> Stormwater Management Manual Adjustments & Exceptions<br><input type="checkbox"/> Variance (Level 1)<br><input type="checkbox"/> Variance (Level 2)<br><input type="checkbox"/> Wireless Conditional Use Permit (WCUP)<br><input type="checkbox"/> Wireless Service Facility (WSF) Permit<br><input type="checkbox"/> Zoning Code/ Map Amendment Request (Rezone) |
| PROJECT & SITE INFORMATION:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>SITE ADDRESS:</b><br>1905 Anacopper Rd Anacortes, WA 98221                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>PROJECT NAME:</b><br>The Crossings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>PARCEL NUMBER(S):</b><br>P31752                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>SECTION, TOWNSHIP, &amp; RANGE</b><br>23      35      01      SW Qtr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>LOT SQUARE FOOTAGE &amp; ACREAGE:</b><br>5.2 Acres / 226,512 sq ft                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>PROJECT VALUATION:</b><br>\$800,000.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>LEGAL DESCRIPTION:</b><br>SW 1/4 SW 1/4 EXC W 586FT OF S 325FT THOF TGW PTN S 33FT OF N 693FY DESC AFN#888647                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>PRESENT ZONING:</b><br>R2 Residential                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>PRESENT USE OF PROPERTY:</b><br>1 Single Family Residence with 2 out buildings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>CUT &amp; FILL (CY) PROPOSED:</b><br>5000CY/5000CY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>PRE-APPLICATION CONFERENCE HELD?:</b><br><input checked="" type="checkbox"/> Yes, the City file # is <u>Pre-2019-0033</u> <input type="checkbox"/> No                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>WATER SOURCE:</b><br><input checked="" type="checkbox"/> City of Anacortes <input type="checkbox"/> Private Well <input type="checkbox"/> Community Well                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>SEWAGE DISPOSAL:</b><br><input checked="" type="checkbox"/> City of Anacortes <input type="checkbox"/> Septic                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>ROAD ACCESS:</b><br><input checked="" type="checkbox"/> City Road <input type="checkbox"/> State Highway <input checked="" type="checkbox"/> Private Road                                                                                                                                                                                                                                                                                                                                                                                                       |



|                                                                                                                                                                |                                                                                                                           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| <b>CRITICAL AREAS OR BUFFERS ON SITE OR WITHIN 300 FEET:</b><br><input checked="" type="checkbox"/> Yes / Type <u>Catagory III</u> <input type="checkbox"/> No | <b>WATER BODIES WITHIN 200 FEET:</b><br><input type="checkbox"/> Yes / Name: _____ <input checked="" type="checkbox"/> No |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|

|                                                                            |  |  |
|----------------------------------------------------------------------------|--|--|
| <b>FLOODPLAIN:</b><br>Flood Zone: No      FIRM Panel #      Date of Panel: |  |  |
|----------------------------------------------------------------------------|--|--|

|                                                                                                  |  |
|--------------------------------------------------------------------------------------------------|--|
| <b>LOT COVERAGE AREA CALCULATIONS:</b><br>Existing Square Footage:      Proposed Square Footage: |  |
|--------------------------------------------------------------------------------------------------|--|

|                                                                                                                               |  |
|-------------------------------------------------------------------------------------------------------------------------------|--|
| <b>IMPERVIOUS SURFACE AREA CALCULATIONS:</b><br>Existing Impervious Square Footage:      New Impervious Surface: 65,525 sq ft |  |
|-------------------------------------------------------------------------------------------------------------------------------|--|

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>DESCRIPTION OF SUBJECT PROPOSAL:</b> <input checked="" type="checkbox"/> Additional pages attached                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>PROPOSED WORK:</b> Applicant is proposing 18 Cottage homes and 3 single family building lots, the 3 single family lots will be located on the unimproved portion of Oregon Avenue. The portion of unimproved Oregon Ave between W 12th and Meadows Lane will be improved with a 20ft paved street, curb, gutter, sidewalks on one side, landscape installed between curb and sidewalk. The existing home and out buildings will be removed. Infrastructure improvements will be to full city standards. Project will include a detention pond, installation of stormwater, sewer, streets, curb, gutter, sidewalks, fire hydrants, electric, gas, domestic water, telephone, cable. Utilites to be underground per Anacortes building codes. Wetland and buffer will be enhanced per Anacortes critical area codes recommendations found in the Critical Areas Report and Tree Preservation Plan. Vehicle and pedestrian access to the 18 cottage homes will be by way of Meadows Lane, connecting the plat to existing street and sidewalks, landscape improvements may be required at the entrance to improve site distance per the traffic study report done for the project. |

|                                                                                      |                                                            |
|--------------------------------------------------------------------------------------|------------------------------------------------------------|
| <b>PROPERTY OWNER INFORMATION:</b> <input type="checkbox"/> Multiple owners attached |                                                            |
| <b>NAME:</b><br>Anacopper LLC                                                        | <b>MAILING ADDRESS:</b><br>PO Box 319                      |
| <b>CITY, STATE, ZIP:</b> Anacortes, WA 98221                                         | <b>PHONE #:</b> 360-293-7431                               |
| <b>FAX #:</b> 360-299-8660                                                           | <b>EMAIL ADDRESS:</b><br>Debbie@Strandbergconstruction.com |

|                                                                               |                                                          |
|-------------------------------------------------------------------------------|----------------------------------------------------------|
| <b>APPLICANT INFORMATION:</b> <input type="checkbox"/> Same as property owner |                                                          |
| <b>NAME:</b> Anacopper LLC                                                    | <b>MAILING ADDRESS:</b> PO Box 319                       |
| <b>CITY, STATE, ZIP:</b> Anacortes, WA 98221                                  | <b>PHONE #:</b> 360-293-7431                             |
| <b>FAX #:</b> 360-299-8660                                                    | <b>EMAIL ADDRESS:</b><br>Nels@Strandbergconstruction.com |

|                                                                                                                   |                                                            |
|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|
| <b>CONTACT PERSON:</b> <input type="checkbox"/> Same as property owner <input type="checkbox"/> Same as applicant |                                                            |
| <b>NAME:</b> Debbie Headrick                                                                                      | <b>MAILING ADDRESS:</b> PO Box 319                         |
| <b>CITY, STATE, ZIP:</b> Anacortes, WA 98221                                                                      | <b>PHONE #:</b> 360-293-7431                               |
| <b>FAX #:</b> 360-299-8660                                                                                        | <b>EMAIL ADDRESS:</b><br>Debbie@Strandbergconstruction.com |

## ACKNOWLEDGEMENTS & SIGNATURE

Read and initial each of the following statements prior to signing this application:

|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | I understand that land use and/or planning permits do not authorize earth disturbing activities, the removal of vegetation, or the construction of buildings. I understand that additional permits will be required after my land use and/or planning permitting process is completed. I understand that no earth disturbing activities (including the removal of vegetation) may take place until after my land use and/or planning process is complete, and only after I have received additional permits such as Fill & Grade, Building Permit, or Right-of-Way permit(s).                      |
|    | I understand that if critical areas (wetlands, streams, steep slopes, etc.) are found on or near my property I am not authorized to impact these areas in any way and will be required to leave an undisturbed buffer area around the critical area, as determined according the City's critical areas regulations.                                                                                                                                                                                                                                                                                |
|    | I understand that depending on the size and scope of my project, I may be required to provide maintenance and/or performance bonds for items such as landscaping, critical areas, public roads and/or public utilities that I construct or install.                                                                                                                                                                                                                                                                                                                                                |
|    | I understand that I am solely responsible for providing complete and accurate information to the City. I understand that if my application is missing information or if inaccurate materials are submitted, my permits will be delayed. I understand that depending on how inaccurate and how incomplete my application is or becomes, the Department may require an entirely new application be submitted. I understand that when and if conditions change from that which my application originally represented, I am responsible for letting the City staff person assigned to my project know. |
|  | I understand that I am applying for permits from the City of Anacortes only; and that additional permits from other Federal, State, and Local agencies could be required. I understand that the City of Anacortes cannot advise me of permits that are required from other agencies, and that I must contact these agencies to make sure I comply with their requirements. These agencies include (but are not limited to): Corps of Engineers, Department of Natural Resources, Department of Fish & Wildlife, Department of Ecology, and Northwest Clean Air Agency.                             |
|  | I understand that I will be responsible for paying consultants that the City may deem necessary to review certain aspects of my application. I understand that these consultant reviews could include special inspections, traffic concurrency, critical areas, landscaping, stormwater, etc.                                                                                                                                                                                                                                                                                                      |

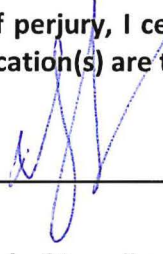
Signature required on next page.

By affixing my signature hereto, I certify that I am the owner, or am acting as the Owner's authorized agent, and that the application and documents contained with this submittal are complete and accurate to the best of my knowledge and abilities. If your title report lists a company, partnership or other owners, you must submit evidence that you are authorized to sign on behalf of the entity or others that are listed.

If you are an authorized representative you must submit an Agent Authorization Form.

Please attach additional signature sheets if there is more than one owner.

**Under penalty of perjury, I certify that the information, statements, answers above regarding the subject application(s) are true and correct to the best of my knowledge and belief.**

Signature: 

Date: 2/13/2020

Printed Name: Nels Strandberg-Anacopper LLC

STATE OF WASHINGTON                    )  
                                                          ) ss.

COUNTY OF SKAGIT

I certify that I know or have satisfactory evidence that Nels Strandberg is the person who appeared before me, and said person acknowledged that he/she signed this instrument, on oath stated that he/she was authorized to execute the instrument, and acknowledged it as the member to be the free and voluntary act and deed of said LLC for the uses and purposes therein mentioned.

Given under my hand and official seal this 13<sup>th</sup> day of February, 2020



  
Notary Public

Residing at Anacortes WA

My appointment expires 4/1/2022



## ANACOPPER LLC

February 21, 2020

Don Measamer  
Director of Planning and Community Development  
City of Anacortes  
PO Box 547  
Anacortes, WA 98221

Subject: Preliminary Plat Application  
"The Crossings"

This letter of submittal for The Crossings includes the following information and reports.

1. Master Application
2. Authorized Agent Form
3. Preliminary Land Division Checklist
4. Cottage Housing Application
5. Project Narrative
6. Subdivision Guarantee 2.14.2020
7. Critical Areas Report 2.2020
8. Geotechnical Evaluation 4.12.2018
9. SEPA Checklist
10. Tree Assessment-Preservation Plan 1.27.2020
11. Landscape Plan
12. Drainage Plan
13. Stormwater Drainage Report 1.13.2020
14. Archaeological Report Proposal-Report Pending 2.21.20
15. Traffic Study – Report pending update 2.14.2020
16. Cottage Plan Set
17. Cottage Design Elevations
18. CCRs Cottage Homes
19. CCRs 3 SFR Lots 19-21

The pending Archaeological Report and updated Traffic Study are expected to be complete by the 28<sup>th</sup> of February I will forwarded upon receipt. If you have questions regarding the submittal please feel free to give me a call or email [Debbie@Strandbergconstruction.com](mailto:Debbie@Strandbergconstruction.com)

Thank you,



Debbie Headrick  
Executive Assistant  
Strandberg Construction, Inc.

# The Crossings

City of Anacortes

Received by PCED

Date: February 21, 2020

January 20, 2020

Don Measamer  
Director of Planning and Community Development  
City of Anacortes  
PO Box 547  
Anacortes, WA 98221

Subject: "The Crossings" 18-unit Cottage Community, and 3 standard R2 residential lots.

This letter forwards our permit application for "The Crossings", an 18-unit Cottage Community along with 3 standard R2 residential lots, in the R2 zoning. This division of land will require the following permit applications:

1. SEPA
2. Long Plat application
3. Clear and Grade permit
4. Large Parcel Stormwater Plan
5. DOE Permit

**Project Description:** The property size is approximately 5.2 acres, of which 1.97 acres are wetland and wetland buffer. Currently, the property has one existing 2000 square foot 2 story home, a detached 2 car garage, and a 1000 square foot shop building. All existing structures will be demolished or removed from the site. The site is currently zoned (R2), we propose 21 total units of housing, consisting of 18 cottages and three standard single-family lots.

**Location:** The Crossings (1905 Anacopper Road, P#31752) located within the City limits of Anacortes the approximate location is East of Anacopper Road, North of the Keystone Development, North of Rockridge Development, South of Copper Pond Development and West of the Meadows Development.

**Infrastructure:** All roads, sidewalks, curb and gutter, and onsite detention pond will be private per the COA cottage code. Covenants, Conditions and Reservation's and the HOA documents will require that a maintenance and replacement fee be charged to each owner, and then placed in a common account and used to maintain and protect these critical components now and into the future. The only public portion of infrastructure will be the road and utilities constructed between Meadows Lane and Oregon Avenue. This city street will have 20ft of drivable surface, curb and gutter, 6ft planting strip, and a 6ft sidewalk on one side.

**Access/ Traffic:** The property can be accessed from two directions, with the completion of a new city street that will connect Meadows Lane and Oregon Avenue, currently there is a single lane gravel road with a closed gate.

From Anacopper Road, East through Copper Pond turn South through the Meadows and enter.

From Pennsylvania Ave, go East on West 12<sup>th</sup> left on Oregon Avenue and enter.

The existing gravel vehicle access that connects the subject property directly with Anacopper Road will be completely abandoned as it is located adjacent to a Category III wetland and completely within said wetlands buffers. A new access directly from Anacopper Rd is completely infeasible due to environmental regulations and rules.

A Traffic Study has been completed by Transportation Solutions, Inc. (TSI) and is part of this application. TSI predicts that there will be 151 total trips, 75.5 out and 75.5 in per day. This includes predicted trips by delivery services such as Fed X or UPS, a concern at the "Neighborhood Meeting". TSI does not attempt to predict which way this traffic will decide travel, through the Meadows and Copper Pond, or through Rockridge and West 12<sup>th</sup>. If the starting or ending point is the intersection of Anacopper and HWY 20, The distance is effectively the same traveled either way. Interior roads are 20ft wide with curb/gutter and sidewalk where required by the new codes for the City of Anacortes, with 16' driveways where applicable. A City of Anacortes standard fire turn around (Hammerhead) is provided. Roads within the cottage plat are proposed as private.

**Pedestrian Traffic:** Many neighbors have brought up their concern with how dangerous Anacopper road is. While it may appear dangerous, as there is no curb and gutter, sidewalks, very little shoulder, and apparently many "speeders" racing to town, historically it has fewer accidents than most streets in Anacortes. Below is a link that shows how many historical accidents have happened in that area and other parts of town, since 1998. Per the map it can be inferred that Anacopper is no more dangerous than just about any other road in town, and much safer than most.

<https://anacortesgis.maps.arcgis.com/apps/View/index.html?appid=edd6f3665a2f49799a41b6732eacbaa4>

The construction of The Crossings is a huge improvement in pedestrian safety: with the connection of Oregon Avenue and Meadows Lane with a full city sidewalk, there is no reason for anyone to walk on Anacopper Road in the area around the Crossings. Pedestrians and cars can simply by-pass Anacopper and stay on the low volume safer streets that have sidewalks.

Per AMC 19.51.060- The Crossing will seek a waiver to street improvements upgrades along Anacopper Road due to several reasons:

1. The necessity of filling, modifying, and significantly changing the wetland/ buffers and other critical areas that are directly adjacent to Anacopper Road. 19.51.060 E. (1) and 19.54.020 B. 2. (b)
2. The Crossing is installing other significant pedestrian paths and sidewalks, increasing pedestrian safety significantly from its current state. 19.54.020 A. 3.
3. The Crossing development is actually adjacent a 2-acre critical area wetland and buffers, the 2-acre wetland is adjacent to Anacopper Road. The Crossings lots do not abut Anacopper nor is any access taken from Anacopper.
4. All required ROW improvements are being made on the east side of The Crossing where our access is taken, and our lots abut the actual city ROW.

**Density:** The Crossing proposed 21 total units of housing, 18 cottages and 3 typical single-family residential lots. Per city of Anacortes Code there is 5.2 acre of land, subtract 1.97 acres of wetland and buffer and then add 0.25 acres of ½ road ROW= **3.48 Gross Acres**. Per Density calculations 19.42.100, R2 would require 1 acre for every four units of typical housing. We are proposing 3 typical R2 lots 7500 square foot minimum. This requires no less 0.75 acres. 3.48 Gross Acres- 0.75 acres= 2.73 acres available for the Cottages. Per 19.43.010 a cottage housing unit counts as ½ a dwelling unit or 8 units per acre in the R2 zoning. 2.73 acres x 8 units per acre= a maximum of 21.84 cottage units. We are proposing 18



units 3.84 units less than the maximum allowed by code and well within the Density requirements. The lots proposed are small as the open space of the development takes up most of the land and is not included in the lots. This "Common Open Space" is intended to be shared by all cottage residents.

**Wetland and Wetland Buffer Protection:** There is a large wetland located on the west half of property. This wetland has been delineated, classified, and categorized by Aqua-Terr Systems, Inc (ATSI) of Sedro Wooley Washington. ATSI's completed report and mapping are part of this application. Wetland and Critical Areas proposed in this application cover 1.97 acres of the site of the 5.2-acre site. The onsite wetland has been determined to be a Category III wetland with a habitat score of 5, per table 17.70.340(1) buffer width are to be 110ft. A minor amount of Wetland Buffer Width Averaging is proposed per 17.70.340 4, as all the criteria have been met. Currently the entire wetland buffer is a mowed lawn, used recreationally by the occupants currently residing in the home and on the property. The wetland and its buffers are critical to protect and considered an asset and amenity to the development. These are the measures we plan to execute to protect and enhance the wetland, its buffers, and the existing habitat within.

1. All stormwater from the site will be captured cleaned and detained prior to entering the wetland. Careful attention has been made not to redirect water that had historically been part of this wetland's watershed. Not only has our civil engineer worked diligently to comply with the DOE stormwater regulations, a third part civil engineer hired by the COA has also been retained to verify all plans are DOE and City of Anacortes compliant.
2. A 3ft tall split rail cedar fence will be installed along the buffer perimeter to help to define that important boundary. Appropriate signage will be installed to further define this border.
3. The existing gravel road will be removed and planted with meadow grasses.
4. The existing mowed yard will be allowed to grow into a knee-high meadow.
5. Although, not a requirement we plan to enhance the buffer with the planting of 20- 6ft tall Douglas Fir Trees.
6. "No use of herbicide, pesticides, or non-organic fertilizers" will be written within the The Crossing CCR's. Additionally, the CCR's will require the hand removal of invasive plants such as Himalayan black berry.
7. There is a proposed non-invasive, rustic wood chip path, one sitting bench, and several bird houses be added to the buffer. This is allowed per 17.70.340 (Passive Recreation).
8. Also proposed in the plat is the buffer and its wetland remain in a separate protected track of land.
9. Although, not required by code we are proposing 5ft building setbacks in addition to the 110 ft wetland setbacks.
10. A professionally designed stormwater plan will recharge the wetland with stormwater to predevelopment conditions.

**Storm Drainage:** A Storm Drainage plan compliant with the Department of Ecology's most recent storm regulations, has been created and submitted to the COA. The plan/report has been preliminarily reviewed by the COA and Gray Osborne Inc, a civil engineer hired by the city for a 3<sup>rd</sup> party peer review. The total site is 5.2 acres, and it is proposed that 1.41 acres are to be impervious, such as roofs, roads, driveways, and sidewalks.

The stormwater generated from 1.06 acres along the south eastern portion of plat will be directed to the already existing pond built by Rockridge. This 1.06 acres of land is part of a different drainage basin than the rest of the plat and has historically has always drained that direction. This water will be transported by existing city storm drainage pipes. The Rockridge detention pond has already been upgraded to handle the new stormwater from "The Crossings".

The remaining property and associated stormwater, including, wetland, and wetland buffer (4.14 acres) flows to the west across Anacopper road, eventually into the Clear ridge drainage system, eventually outflowing in Guemes Channel at the bottom of Edwards Way.

The soils have been investigated by GeoTest Services Inc. (report attached to this application). GeoTest describes the soil as poorly draining Bow-gravelly loam and Clallam gravel loam, hydrologic soil group C/D where the soils are dense glacial till. GeoTest concludes that the glacial till is a restrictive layer and is not suitable for conventional stormwater infiltration. In construction terms, the topsoil layer becomes a very wet sponge during the wet season as the ground does not freely drain. Given this condition we have paid special attention to our stormwater design so as not to create additional stormwater issues for our neighbors.

1. Stormwater from the existing gravel road that will connect Meadows Lane and Oregon Avenue, will be captured in between new curbs and paved surface and then collected in a City of Anacortes storm basin.
2. The water quality rain garden and water quality swale will be designed with underdrains, to collect subterranean water.
3. Rock walls on the east and north of the plat will be built on free draining 2" railroad ballast with under drain and pipe. This has been designed specifically to remove the seasonal standing water on the eastern portion of the plat, this was called out in the Geological report.
4. All roads, driveways and home's stormwater will be captured and directed away from neighboring property, per the attached Stormwater management plan.

Careful attention was given by our civil engineer to insure that preexisting water quality and water quantity would continue to drain into the pond. All stormwater that would have typically drained into the pond will still be draining into the pond, and using best available science, the timing, quantity, and quality of that water should be theoretically the same.

**Landscaping/ Tree Preservation:** A Landscape Plan and Tree Preservation Plan have been completed both are attached as part of this application. It is our intention to exceed all Landscape and Tree Preservation code requirements, per AMC 19.65, 19.65.040, 19.65.050, 19.65.060, 19.65.090, 19.65.100 as well as 19.76.050.

|                                              |                                                           |
|----------------------------------------------|-----------------------------------------------------------|
| -Minimum COA landscape area requirement 20%  | proposed 50%                                              |
| -Minimum COA Tree Credits required 208 units | proposed 234 through retained trees.                      |
| -Additional Tree plantings required "0"      | proposed additional 91- 1.5 Caliper trees will be planted |

Total tree credit above code 117.

The required Type "A" screen planting is also proposed along the south property line.

**Landscape maintenance:** Cottage owners will only be responsible for landscape maintenance in their own "Private Open Space" approximately 200 sq. ft. The rest of the landscape "Common Open Space" will be kept in common and shared amongst all cottage residence. The maintenance of this landscape will be completed by an outside firm hired by the HOA. This will ensure that all aspects of the Landscape plan survive and thrive as planned, and there will be consistency and quality in the way that it is maintained.

**Covenant Conditions and Restriction's and HOA:** (See attached to this application)

1. Internal roads, sidewalks, and utilities are private and will be owned and maintained by the HOA.



2. All landscape, except for 200 sq. ft. of "Private Open Space", will be maintained in common and managed by the HOA.
3. There will be a restrictive covenant that will require parking of the residents first car in the garage before using other spaces. Cottage garages will not be filled for storage or converted for any other use except parking.
4. No road parking, residence must use garages, parking aprons, and other parking spots located throughout the plat.
5. No parking of boats or RV's of any kind anywhere, anytime.
6. Residents of The Crossing may only park two cars on site.
7. No pesticide or herbicide use within (min) of 150 ft of wetland, per COA newest wetlands codes.
8. All light will be directed and shielded down as to not glare into other residence windows, or neighboring developments.
9. Protective measure adds CCR's related to wetland/buffer tract per agreement with COA, TBD.
10. Restrictive Architectural covenants, which will include maintenance and painting.
11. The three separate standard residential lots will not be part of the cottage HOA and cottage CCR's.

**Timing:** Cottage housing is new to Anacortes Code, and it is our understanding this may be the first project to utilize such a code. Traditionally, in a housing plat with public roads, the developer has typically completed all public roads and utilities before beginning home construction. We would like to propose an alternative:

1. Cottage construction to begin simultaneous with infrastructure improvement, especially the foundations.
2. All Detention and water quality systems to be complete prior to home construction beginning, and the required first phase of the construction process.
3. All wetland restoration and protection installed prior to home construction starting.
4. Most roads and utilities within the plat are private, but the roads and utilities that are not will need to be performance bond to 150% of their value, at the time home construction starts.
5. No certificate of occupancy until all infrastructure is complete, erosion control is stable, wetland is protected, stormwater plan is constructed and functional, and the plat is final with the COA.
6. It will be at the developer discretion how many cottages to start and when.

Given the limited space between these smaller cottages this will allow cottages to be constructed much more efficiently, with a shorter construction timeframe, resulting in less impact to the neighborhood. This will also shorten the period in which we are disturbing the soil, running large dump trucks, creating mud, and or dust. Completing the heavy dirt work and foundation simultaneously will lessen the duration of impact on everyone. Assuming approval from the COA in Spring of 2020, we propose a start date of June 1<sup>st</sup>.

**Cottages Compliance: per COA Code 19.43.010 (COA cottage code in italics, our compliance is in RED)**

*D. Cottage Housing.*

*1. Definition. A small single-family dwelling that is clustered with other similar units sharing a common open space.*

*19.43.010(D)(2) Save, Share, Bookmark or Print History of This Subsection*



*2. Purpose.*

- a. Provide opportunities for creative, diverse and high-quality infill development that is compatible with existing neighborhoods.*
- b. Promote housing affordability and greater choice by encouraging smaller and more diverse home sizes in accordance with the Anacortes comprehensive plan.*
- c. Support compatibility with existing neighborhoods by promoting high-quality design.*
- d. Support more efficient use of urban residential land.*
- e. Enhance the character of the residential neighborhood.*
- f. Provide usable open space for residents.*

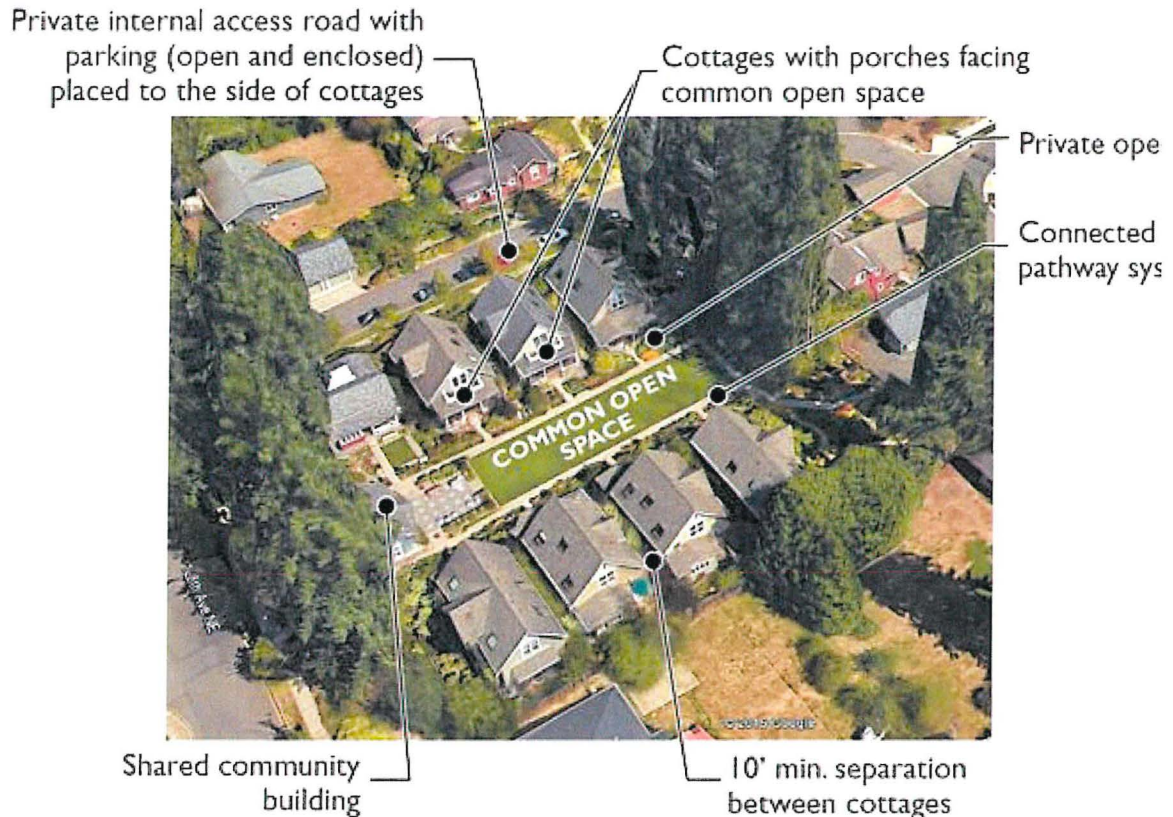
*Figure 19.43.010(D)(1)*

*Cottage housing development examples.*



*Figure 19.43.010(D)(2)*

*Cottage housing site plan example.*



### 3. Standards.

a. *Lot Size.* Cottages are exempt from minimum lot area and lot width circle standards, provided they comply with density and design standards herein. *Lot size (see site plans for details)*

b. *Density.* Due to the smaller relative size of cottage units, each cottage may be counted as one-half a dwelling unit for the purpose of calculating density. For example, a cluster of six cottages would be equivalent to three dwelling units. *Per density calcs above we are far below maximum density.*

c. *Minimum and Maximum Number of Cottages.*

i. *Cottage housing developments must contain a minimum of three cottages.*

*All our cottage clusters contain at least 4 cottages.*

ii. *Three to 12 cottage structures may make up a cluster. There is no limit on the number of clusters, provided all other standards are met.*

*Our largest Cluster contains 6 cottages.*

iii. *In the R3, R3A, R4, and R4A zones, attached duplex cottages are allowed. NA*

d. *Setbacks and Separation.*

i. *The minimum setbacks set forth in Table 19.42.020 apply to the development frontage and external side and rear property lines of the entire cottage development.*



*All the buildings are setback 20ft from external property lines.*

ii. Individual cottages must be separated from other cottages by at least 10 feet. Permitted projections into required interior side setbacks in AMC 19.42.140 apply.

*All cottages are separated by 10ft.*

iii. Cottages must be set back at least five feet from any internal pedestrian path. Permitted projections into required street setbacks in AMC 19.42.140 apply.

*All cottages and paths are setback 5 ft from pedestrian paths.*

iv. Cottages must be set back at least 10 feet from any internal access lanes that provide access to four or more cottages. For access lanes serving less than four cottages, at least five feet of separation is required between access lanes and cottages. Permitted projections into required street setbacks in AMC 19.42.140 apply for setbacks to internal access lanes.

*Per attached site plans compliance is shown on page C2 Site Plan Setbacks.*

e. Building Height.

i. Cottages have a maximum building height of 25 feet. All parts of the roof above 18 feet must be pitched with a minimum roof slope of 6:12.

*Sample plan attached to application with a max height of 25ft, with all parts above 18ft with a minimum roof slope of 6/12.*

ii. Accessory structures in cottage housing developments are subject to the standards in AMC 19.47.020.

*We have one accessory tool shed proposed it will meet this code.*

f. Cottage Size. Cottages must contain no more than 1,200 square feet gross floor area in total, not including attached garages.

*All cottages will be 1200 sq. ft. or less.*

g. Entries.

i. Clear and obvious pedestrian access between the sidewalk (or the street if there is no sidewalk) and the building entry is required for new dwellings.

*See site plan, all cottages have clear and obvious access from common open space.*

ii. All new dwellings must provide a covered pedestrian entry with minimum weather protection of three feet by three feet (a covered porch or recessed entry).

*See sample plan all dwellings will contain a covered pedestrian entry.*

h. Facade Transparency. Transparent windows and/or doors are required on at least eight percent of facades featuring the primary entrance and facing streets and common open spaces. For corner lots, this standard is only applied to the elevation containing the primary entrance.

*See sample plan for compliance.*



*i. Common Open Space.*

*i. Minimum Size. Common open space must be at least 400 square feet per cottage.*

*Common open space proposed per cluster, we exceed these minimums by many times.*

*ii. Minimum Dimensions. Common open space must have no dimension less than 15 feet. Areas used to meet private open space requirements may not be double-counted as common open space.*

*Private open space is not counted as common open space, only open space that is 15ft or wider has been counted.*

*iii. Elements. Common open space may include a lawn, courtyard, plaza, garden, or other shared central open space and may not include parking areas. Common open space must be usable and may not include critical areas or critical area buffers, including steep slopes. LID stormwater BMPs, like rain gardens, may be integrated in up to 25 percent of the minimum required usable open space area.*

*All our common open spaces are different, but they all meet the intent of the above code.*

*iv. Orientation. Common open space must have cottages abutting on at least two sides. At least 50 percent of the cottages in each cottage housing cluster must abut common open space. Cottages abutting the common open space must be oriented around and have the primary entrance face the common open space.*

*All common opens spaces and clusters have cottages on at least two sides.*

*v. Access. Cottages must be within 100 feet walking distance of the common open space and feature a direct pedestrian connection to the common open space.*

*All cottages are within 100ft walking distance of Common open space.*

*j. Shared Community Buildings.*

*i. A shared community building may be integrated into the common open space area required in subsection (D)(3)(i) of this section but must not be included in the minimum common open space area calculations.*

*We propose one open air BBQ pavilion, approximate size is 15x15ft.*

*ii. Nonresidential Use. A shared community building may include uses such as, but not limited to, a multi-purpose entertainment space, recreation center, kitchen, library, storage space, workshop, or similar amenities that promote shared use and a sense of community. Commercial uses other than day care I (see AMC 19.44.010(B)(2)(a)) are prohibited.*

*Community building is for residence only and only for recreation.*

*iii. Residential Use. A shared community building may contain one attached accessory dwelling unit (see AMC 19.47.030).*

*iv. Height. Shared community buildings have a maximum building height of 25 feet. All parts of the roof above 18 feet must be pitched with a minimum roof slope of 6:12.*

*Our outdoor open-air pavilion will be no taller than 15ft.*

v. *Size. Shared community buildings have a maximum ground floor footprint of 1,200 square feet.*

*We are proposing about 250 sq. ft. space.*

vi. *Other Standards. Except for the height and size exceptions identified in subsections (D)(3)(j)(iv) and (v) of this section, shared community buildings are subject to the accessory structure standards in AMC 19.47.020.*

k. *Private Open Space.*

i. *Minimum Size. The minimum private open space adjacent to each cottage must be at least 200 square feet.*

*All units are proposed to have 200 sq. ft. minimum private open space, per attached site maps.*

ii. *Minimum Dimensions. The private open space must have no dimension less than 10 feet.*

*All private open space is 10ft or wider.*

iii. *Access. The private open space must have direct access from the cottage via a door or porch.*

*All private open space will be accessed by a door typically through a porch.*

iv. *The required porch (see subsection (D)(3)(k)(v) of this section) does not count as private open space for the size or dimension requirements of this section. The private open space is encouraged to be located between the cottage and the common open space.*

*The porch has not been counted as private open space .*

v. *Porches. Cottage facades facing the common open space or common pathway must feature a roofed porch at least 70 square feet in size with a minimum dimension of seven feet on any side. Cottages sited between a street and the common open space are also subject to the entry requirements in subsection (D)(3)(g) of this section.*

*All units have a 70 sq. ft. porch facing the common open space with a minimum depth of 7ft.*

vi. *Private open space must be usable and may not include critical areas or critical area buffers, including steep slopes.*

*No common open space or private open space has been counted or planned in the wetland buffers.*

l. *Access and Parking.*

i. *Driveway and access requirements are in AMC Chapter 19.53.*

*Compliant.*

ii. *Off-street parking standards, including guest parking provisions, are set forth in AMC 19.64.030 and 19.64.040.*

*See site plan C4, our parking plan far exceeds code minimums.*

iii. Parking areas must be located to the side or rear of cottage clusters. Parking must not be located between the street and cottages nor between cottages and common open space.

**All parking to the rear of the cottage and away from the common open space.**

iv. Parking and access lanes must be screened from adjacent residential uses by landscaping or architectural screens. For parking areas and access abutting residential uses, at least five feet of Type A, B, or C landscaping (see AMC 19.65.060) must be provided between the parking area and the abutting residential use.

**5ft wide Type A screening proposed per Landscape Plan along south property line.**

v. Parking is encouraged to be consolidated under cover. Uncovered parking must be located in clusters of not more than five adjoining spaces (except where adjacent to an alley). Driveway space in front of private garages is exempt from this provision.

**Parking per site plans.**

vi. Garages with a footprint of up to 300 square feet may be attached to individual cottages, provided all other standards herein are met. Such garages do not count toward the size limit of cottages. Such garages must not be located adjacent to the common open spaces.

**Garages do not exceed 300 sq. ft.**

Departures to the garage/common open space standard will be considered, provided the combination of the common open space design, garage location and design, and landscaping/architectural design features helps to create a common open space that meets the purposes of the standards and the design mitigates the impact of the garages on the common open space.

### **Three Non-Cottage lots:**

The lots proposed on the new proposed city street, will be typical R2 lots, ranging in size between 8186 sq. ft. and 8247 sq. ft. The 3 lots will have separate CCR's and will not be part of "The Crossings" HOA. The intent of the 3 lots is the homes will be constructed in a way as to fit into the existing neighborhood, with a more typical size, style, and density.

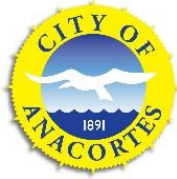
Attachments:

Site Plans  
Storm and Utility Plan  
Drainage Report  
Geo Report  
Tree Preservation  
Landscape Plan

Sincerely,

  
Nels Strandberg  
Anacopper LLC





**PLANNING, COMMUNITY, & ECONOMIC DEVELOPMENT DEPARTMENT**

Mailing Address: P.O. Box 547, Anacortes, WA 98221

Office Location: 904 6<sup>th</sup> Street, Anacortes WA 98221

Phone: (360) 299-1984

City of Anacortes

Received by PCED

Date: February 21, 2020

# PRELIMINARY LAND DIVISION APPLICATION

Long Subdivisions

Short Subdivisions

Binding Site Plans

Unit Lot Subdivisions

## SUBMITTAL REQUIREMENTS

| Applicant Checklist                                                                                                                                                                                                                                                                                                                                                                                    | Land Division<br>Submittal Requirement Checklist                                                                                                                                            | Office Use Only                                                                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                        | See pages 2 and 3 for details about each submittal item. See AMC Ch. 19.32 Land Divisions for review and approval criteria.                                                                 |                                                                                    |
| X                                                                                                                                                                                                                                                                                                                                                                                                      | <a href="#">Master Land Use Permit Application</a>                                                                                                                                          |                                                                                    |
| X                                                                                                                                                                                                                                                                                                                                                                                                      | <a href="#">Agent Authorization Form</a>                                                                                                                                                    |                                                                                    |
| X                                                                                                                                                                                                                                                                                                                                                                                                      | Project Narrative                                                                                                                                                                           |                                                                                    |
| X                                                                                                                                                                                                                                                                                                                                                                                                      | Stormwater Site Plan                                                                                                                                                                        |                                                                                    |
| X                                                                                                                                                                                                                                                                                                                                                                                                      | Preliminary Land Division Map                                                                                                                                                               |                                                                                    |
| X                                                                                                                                                                                                                                                                                                                                                                                                      | Landscape Plans                                                                                                                                                                             |                                                                                    |
| X                                                                                                                                                                                                                                                                                                                                                                                                      | Tree Preservation Plan                                                                                                                                                                      |                                                                                    |
| X                                                                                                                                                                                                                                                                                                                                                                                                      | Clearing & Grading Plans                                                                                                                                                                    |                                                                                    |
| X                                                                                                                                                                                                                                                                                                                                                                                                      | Environmental Checklist (SEPA)                                                                                                                                                              |                                                                                    |
| X                                                                                                                                                                                                                                                                                                                                                                                                      | Subdivision Guarantee                                                                                                                                                                       |                                                                                    |
| X                                                                                                                                                                                                                                                                                                                                                                                                      | Recorded property boundary survey                                                                                                                                                           |                                                                                    |
| X                                                                                                                                                                                                                                                                                                                                                                                                      | Draft covenants, conditions, and restrictions (CC&Rs), condominium declarations, reciprocal use easements, joint use and maintenance agreements, or other similar documents, if applicable. |                                                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                        | Technical Reports                                                                                                                                                                           |                                                                                    |
| X                                                                                                                                                                                                                                                                                                                                                                                                      | Critical Area Report                                                                                                                                                                        |                                                                                    |
| X                                                                                                                                                                                                                                                                                                                                                                                                      | Traffic Impact Analysis                                                                                                                                                                     |                                                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                        | Parking Study                                                                                                                                                                               |                                                                                    |
| <b>Required Number of Copies and Plan Size</b><br><b>3</b> paper copies of each item above<br>Plans must be <b>minimum</b> 18" x 24", to scale, and legible<br><b>1</b> reduced size copy ( <b>maximum</b> size 11" X 17") of plans<br><b>Digital</b> copy of the application and all submitted materials (flash drive or to <a href="mailto:pced@cityofanacortes.org">pced@cityofanacortes.org</a> .) |                                                                                                                                                                                             | <b>Application Fee</b><br><br><a href="#">See the Land Use Permit Fee Schedule</a> |

# SUBMITTAL REQUIREMENT DETAILS

Additional details on certain submittals is provided below to ensure Applicants are fully aware what City staff will be looking for when an application is submitted to the City.

- a. **MASTER PERMIT APPLICATION:** Form attached. Use this form to indicate all requested land use permits and other key information about your proposed project.
- b. **AGENT AUTHORIZATION FORM.** Provide this completed form to authorize someone other than the property owner to apply for permits.
- c. **PROJECT NARRATIVE:** Form attached. This document contains a list of elements to be included in your project narrative to help you provide a clear and concise description of your proposal for those reviewing it.
- d. **STORMWATER SITE PLAN:** The Stormwater Site Plan is the comprehensive report containing all of the technical information and analysis necessary for regulatory agencies to evaluate your project for compliance with stormwater requirements. The level of stormwater review and contents of the Stormwater Site Plan will vary with the type and size of the project, and individual site characteristics. Use Form CG-3 to determine the level of stormwater review and then complete the applicable Stormwater Minimum Requirements Form on the Public Works - [Engineering Department Forms website](#) and provide required submittal items/plans.
- e. **PRELIMINARY LAND DIVISION MAP:** A checklist of required information to be shown on the preliminary land division map is attached.
- f. **LANDSCAPE PLANS:** A landscape plan may be required to show street trees and landscaping required within landscaped areas between the street and sidewalk, in stormwater management facilities, or parks and open space.
- g. **TREE PRESERVATION PLAN:** Tree preservation plans are required for all residential subdivisions. See [AMC 16.50, Tree Preservation](#).
- h. **CLEARING & GRADING PLANS:** The applicable checklist is located in the [Clearing/Grading Permit application packet](#). These plans are needed so that your proposal can be reviewed for conformance with [AMC 19.78 Clearing and Grading](#).
- i. **SEPA CHECKLIST:** Unless a project is categorically exempt, an environmental checklist is required to be completed and submitted.
- j. **SUBDIVISION GUARANTEE:** A document prepared by a title insurance company documenting the ownership and title of all interested parties in the development and that lists all encumbrances. This document is needed to verify property ownership and to identify any encumbrances that are recorded to the property's title. Copies of all the encumbrances listed within the certificate or report must be provided. The certificate or report must be dated within 30 days prior to the submittal of a permit to the City.
- k. **RECORDED PROPERTY BOUNDARY SURVEY:** A recorded survey is required to define the limits of the property subject to the application. All property corners must be staked/marked and visible.

- I. **DIGITAL COPY OF ALL APPLICATION DOCUMENTS:** PDF format files for all submittal items, named as they appear on the submittal checklist, must be provided on a flash drive or emailed to [pced@CityofAnacortes.org](mailto:pced@CityofAnacortes.org).

## TECHNICAL REPORTS

Following is a list of technical reports that may be required to be submitted to the City depending on project and site-specific factors. The general triggers for each of the listed technical reports is provided below:

- A. **CRITICAL AREAS REPORTS:** In general, Critical Area reports are required when wetlands, streams, habitat conservation areas, geologically hazardous areas, shorelines, or aquifer recharge areas are located on or near a site. Critical area mitigation plans may also be required, depending on the project proposal. See Anacortes Municipal Code Ch. 17.70 for additional information.
- B. **TRAFFIC IMPACT ANALYSIS.** In general, a Traffic Impact Analysis is required when a development will add 10 or more PM peak hour trips to the City's transportation system.
- C. **PARKING STUDY:** A parking study may be required to determine the parking requirements for a specific use, adjusting minimum and maximum quantitative parking requirements, determining times of peak demand, and determining impacts to on-street parking in the vicinity of a proposed development. See AMC 19.64.020 for more info.



# PROJECT NARRATIVE REQUIREMENTS

|                                                                                                                                                                                                                                                                                                                                                                                                    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>GENERAL INFORMATION</b>                                                                                                                                                                                                                                                                                                                                                                         |
| This form is intended to assist applicants in creating complete project narrative for site plan and building design review. Please fill in each space with the requested information.                                                                                                                                                                                                              |
| <b>PROJECT DESCRIPTION</b>                                                                                                                                                                                                                                                                                                                                                                         |
| A. If a neighborhood meeting was held, provide the date held, general items of discussion at the meeting, and how the project proposal has been modified since the meeting, if applicable.                                                                                                                                                                                                         |
| A neighborhood meeting was held on Jan.16, 2020 at the Anacortes Senior Center. Powerpoint presentation and handout on the proposed project was shared with approx. 30 neighbors and City Officials, meeting closed with Q&A. A second meeting was held on Feb 4th, 2020 Anacortes Council Chambers same presentation and handout, aprox 10 attendees including city officials.                    |
| B. Proposed use of the Site per AMC Table 19.41.040 or 19.41.050 and any special use provisions that apply. (see AMC 19.43 – 19.48)                                                                                                                                                                                                                                                                |
| Per Table 1941.040 AMC 19.43.010(D) we are proposing cottage housing.                                                                                                                                                                                                                                                                                                                              |
| C. Current use of the Site. Date of construction for any existing structures on site, and whether they are to be removed or retained.                                                                                                                                                                                                                                                              |
| 1 Single Family Home, detached garage and out building, date of construction 1984, current structures will be removed.                                                                                                                                                                                                                                                                             |
| D. Description of the site's physical characteristics, including special site features (such as wetlands, water bodies, steep slopes, or other critical areas).                                                                                                                                                                                                                                    |
| Site slopes gently, gravel access driveway, the property is landscape, mowed lawn, with scattered trees and brush around the property, wetland pond and critical areas.                                                                                                                                                                                                                            |
| E. Current uses and special site features of surrounding properties.                                                                                                                                                                                                                                                                                                                               |
| Current use of properties to the North, South and East are single family homes, West side is Anacopper Rd, adjacent to the Anacortes Airport                                                                                                                                                                                                                                                       |
| F. Description of general design techniques you considered to implement low impact development (see <a href="#">AMC 19.76.050(A) and (B)</a> ) in the design of your project site and proposed stormwater facilities necessary for compliance with AMC 19.76 Stormwater.                                                                                                                           |
| The site has been analyzed and designed to have minimal roads and impervious surfaces. The cluster layout of the homes provides the greatest possible open spaces for LID landscape and pathways. Impervious surfaces have been analyzed for stormwater calcs and proper BMPs designed to handle runoff, clearing, designed to be minimal.                                                         |
| G. Description of the proposed form and intensity of the proposed development (number of lots, density, height, setbacks, lot coverage, etc.). (See AMC 19.42.)                                                                                                                                                                                                                                    |
| The project will adhere to cottage housing standards set forth in 19.43.010(D). Cottage lot sizes are exempt from minimum lot area and lot width circle standards. Setbacks adhere to 19.43.010(D), Bldg height maximum 25ft roof over 18ft will have at a minimum slope of 6:12 per code 19.43.010(D)3(e). Lots 19-21 will be designed per AMC 19.43.010(B) single family homes on standard lots. |
| H. Describe existing and proposed site access from public streets and any proposed street and/or pedestrian improvements.                                                                                                                                                                                                                                                                          |
| The current access to the property is from Anacopper Rd across a wetland buffer, proposed plan will be to restore the area and have the plat access from Meadows Lane, ROW and street improvements connecting Oregon Avenue to Meadows Lane, interior streets, sidewalk. Street, sidewalks and landscape per Anacortes codes.                                                                      |
| I. Describe any proposed phasing.                                                                                                                                                                                                                                                                                                                                                                  |
| No phasing of the project.                                                                                                                                                                                                                                                                                                                                                                         |
| J. Estimated quantities and type of materials involved if any fill or excavation is proposed.                                                                                                                                                                                                                                                                                                      |

|                                                                                                                                                                                                                                                                                                                                                                                                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Aproximately 10,000 cubic yards of soils, gravel, sand.                                                                                                                                                                                                                                                                                                                                                          |
| K. Number, type, and size of trees to be removed.                                                                                                                                                                                                                                                                                                                                                                |
| The number of trees to be removed is not exact at this time, per the arborist report and tree preservation AMC 16.50 (78) trees will be retained within the wetlands and buffer, this exceeds the city requirements. Trees to be removed are in the area of construction, once construction is complete, additional shrubs, grass and trees will be replanted within the buffer area and throughout the project. |
| L. Description of existing site utilities and proposed utilities, including extensions, upgrades, relocations, etc. (see AMC 19.52 Underground Utilities).                                                                                                                                                                                                                                                       |
| The property currently has water, electricity, natural gas, cable, proposed extensions of all underground utilites, to include storm, sewer,water, electric, natural gas,cable, telephone and hydrants.                                                                                                                                                                                                          |
| M. Explanation of any land to be dedicated to the City.                                                                                                                                                                                                                                                                                                                                                          |
| Right of way dedication for the improvements connecting Meadows Lane and Oregon Avenue                                                                                                                                                                                                                                                                                                                           |

# PRELIMINARY LAND DIVISION PLAN REQUIREMENTS

## 1. GENERAL INFORMATION

This form is intended to assist applicants in creating complete, code compliant preliminary land division plans. Please check the plans you wish to submit to make sure they contain each of the listed items. To the right of the Requirements column is space for you to list the sheet number of the plan set where the listed information is shown.

- Preliminary land division maps must be drawn by a State of Washington licensed surveyor.
- Minimum Plan Size: 18" x 24" and drawn in an engineering scale. Plans must be legible.
- You may use multiple sheets if needed.

## 2. INFORMATION REQUIRED ON PRELIMINARY LAND DIVISION MAP

| COMPLETE? | REQUIREMENTS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | PAGE #<br>ON<br>YOUR<br>PLANS |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
|           | <b>Cover sheet must contain all of the following:</b> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Project name, if applicable.</li> <li><input checked="" type="checkbox"/> Section, township, range.</li> <li><input checked="" type="checkbox"/> Full and correct legal description of lands being subdivided.</li> <li><input checked="" type="checkbox"/> Site address and tax parcel number.</li> <li><input checked="" type="checkbox"/> Zoning designation. (see Official Zoning Map)</li> <li><input checked="" type="checkbox"/> Density &amp; dimensional calculations.                             <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Total acreage and square feet of land to be divided.</li> <li><input checked="" type="checkbox"/> Gross acreage (see 19.12.010.G)</li> <li><input checked="" type="checkbox"/> Total number of residential units proposed and density calculations indicating maximum and minimum density requirements, if applicable. (see AMC 19.42.100)</li> </ul> </li> <li><input checked="" type="checkbox"/> Maximum impervious surface area allowed for the lot as determined by the calculations in the stormwater report for the project.</li> <li><input checked="" type="checkbox"/> <b>Sheet Index &amp; Legend</b></li> <li><input checked="" type="checkbox"/> <b>Date plans were prepared and/or revised</b></li> <li><input checked="" type="checkbox"/> <b>Vicinity map</b></li> <li><input checked="" type="checkbox"/> <b>Name, address, phone number of Applicant, Owner, Engineer, &amp; Surveyor</b> (include signature and seal)</li> </ul> | Coversheet                    |
|           | Scale and North Arrow                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Pages 1-15                    |
|           | <b>Property features:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                               |
|           | <b>Zoning.</b> Label existing zoning and zoning boundaries on the site and immediately adjacent properties.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Coversheet                    |
|           | <b>Municipal boundaries, township lines and section lines.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Coversheet                    |
|           | <b>Existing property lines.</b> Accurate lines showing the parcel to be subdivided, the block lines and the lot lines.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 12 of 15                      |
|           | <b>Easements.</b> All easements shown on the title report, Record of Survey, or plat must be dimensioned and shown.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 12,13 of 15                   |



|  |                                                                                                                                                                                                                                                                             |              |
|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
|  | <b>Critical areas.</b> Location and dimensions of existing critical areas (wetlands, streams, steep slopes) and their associated buffers.                                                                                                                                   | All pages    |
|  | <b>Other hydrologic features.</b> Show seeps, springs, closed depression areas, and drainage swales.                                                                                                                                                                        |              |
|  | <b>Shorelines.</b> Location of Ordinary High Water Mark and shoreline jurisdiction limits (if adjacent to a shoreline).                                                                                                                                                     | N/A          |
|  | <b>Topography and grading.</b> Existing and proposed contours and site elevations (i.e. finished grades) at 5-foot minimum increments. The horizontal and vertical control datum must be clearly shown.                                                                     | 7 of 15      |
|  | <b>Proposed lot lines.</b> Dimensions and numbers or description for each new lot and tract. Land area in acreage and square feet for each of the proposed lots.                                                                                                            | 2 of 15      |
|  | <b>Setback lines.</b> Include setback lines for all proposed lots having unusual shape, steep topography, critical areas, wetlands or other environmental or unusual limitations on its building site.                                                                      | 2, 3 of 15   |
|  | <b>Structures:</b>                                                                                                                                                                                                                                                          |              |
|  | <b>Buildings.</b> Location, dimensions and size of all existing buildings and other structures.                                                                                                                                                                             | 12 of 15     |
|  | <b>Other structures.</b> Location of existing and proposed retaining walls, rockeries, and fences.                                                                                                                                                                          | 12 of 15     |
|  | <b>Public &amp; Private Improvements</b>                                                                                                                                                                                                                                    |              |
|  | <b>Utilities.</b> Location, size, and dimensions of existing and proposed stormwater, sanitary sewer, potable water, fiber lines/facilities, franchise utilities, power poles, etc.                                                                                         | 11 of 15     |
|  | <b>Wells &amp; Septic.</b> Location of existing septic tanks, drain fields, wells and other improvements located on the site and within 50-feet of the development; and whether such structures are proposed to remain on the property.                                     |              |
|  | <b>Easements.</b> Show the location, dimensions and purpose of all existing and proposed public and private easements.                                                                                                                                                      | 13 of 15     |
|  | <b>Fire hydrants.</b> Location of all existing and proposed fire hydrants within 300 feet of the boundary of the project site.                                                                                                                                              | 5 of 15      |
|  | <b>Stormwater</b>                                                                                                                                                                                                                                                           |              |
|  | <b>Erosion Control.</b> Proposed Temporary Erosion and Sediment Control Measures, if not shown on other plans.                                                                                                                                                              | 8 of 15      |
|  | <b>Permanent BMPs.</b> Show location of existing and proposed permanent stormwater management BMPs and required setbacks from adjacent structures, utilities, property lines.                                                                                               |              |
|  | <b>Access and Circulation</b>                                                                                                                                                                                                                                               |              |
|  | <b>Existing streets.</b> Location, identification, and dimensions of all existing adjacent streets and alleys, including pavement and right-of-way width, and the location and dimensions of curbs, gutters, sidewalks, landscape strips, median islands, and street trees. | 14, 15 of 15 |
|  | <b>Proposed streets.</b> Location, identification, and dimensions of all proposed public streets including pavement and right-of-way width, location and dimensions of curbs, gutters, sidewalks, landscape strips, and parking pockets. (see AMC 19.52 & 19.53)            | 2 of 15      |

|  |                                                                                                                                                                                                                                                                                                    |          |
|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
|  | <b>Shared driveway access.</b> Location, identification, and dimensions of all proposed shared driveways, including pavement and tract or easement width and landscape buffer screening from adjacent properties. Include notes about easement or tract ownership and maintenance. (see 19.53.040) | N/A      |
|  | <b>Traffic control devices.</b> Show proposed method of and location of “no parking” signage, where applicable.                                                                                                                                                                                    | 14 of 15 |
|  | <b>Emergency apparatus access.</b> Location and dimensions of inside corner turning radii, required emergency apparatus turnaround areas, proposed grade.                                                                                                                                          | 5 of 15  |
|  | <b>Pedestrian access.</b> Show proposed internal pedestrian circulation, including sidewalks, pedestrian paths, crosswalks (including proposed widths and materials).                                                                                                                              | 2 of 15  |
|  | <b>Open Space / Parks</b>                                                                                                                                                                                                                                                                          |          |
|  | <b>Park land dedication.</b> For residential subdivisions with 10+ lots, show location, dimensions, square footage and design of park land proposed for dedication. (see AMC 19.54.030)                                                                                                            | 13 of 15 |
|  | <b>Lot Design</b>                                                                                                                                                                                                                                                                                  |          |
|  | <b>Alternative lot designs.</b> Indicate where zero-lot line, reciprocal use easement lots, shared access lots, or alley access lots are proposed. (see AMC 19.54.040)                                                                                                                             |          |



**PLANNING, COMMUNITY, & ECONOMIC DEVELOPMENT DEPARTMENT**

Mailing Address: P.O. Box 547, Anacortes, WA 98221

Office Location: 904 6<sup>th</sup> Street, Anacortes WA 98221

Phone: (360) 299-1984

City of Anacortes

Received by PCED

Date: February 21, 2020

# COTTAGE HOUSING SITE PLAN REVIEW APPLICATION

## SUBMITTAL REQUIREMENTS

| Applicant Checklist                                                                                                                                                                                                                                                                                                                                                                                                    | <p style="text-align: center;"><b><i>Cottage Housing<br/>Submittal Requirement Checklist</i></b></p> <p>See pages 2-3 of this handout for information about each submittal item listed below.<br/>See AMC 19.43.010.D Cottage Housing for specific use standards and AMC 19.30 Site Plan Review for review and approval criteria.</p> | Office Use Only                                                                           |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| X                                                                                                                                                                                                                                                                                                                                                                                                                      | <a href="#">Master Land Use Permit Application</a>                                                                                                                                                                                                                                                                                    |                                                                                           |
| X                                                                                                                                                                                                                                                                                                                                                                                                                      | <a href="#">Agent Authorization Form</a>                                                                                                                                                                                                                                                                                              |                                                                                           |
| X                                                                                                                                                                                                                                                                                                                                                                                                                      | Project Narrative                                                                                                                                                                                                                                                                                                                     |                                                                                           |
| X                                                                                                                                                                                                                                                                                                                                                                                                                      | Stormwater Site Plan                                                                                                                                                                                                                                                                                                                  |                                                                                           |
| X                                                                                                                                                                                                                                                                                                                                                                                                                      | Site & Landscape Plans                                                                                                                                                                                                                                                                                                                |                                                                                           |
| X                                                                                                                                                                                                                                                                                                                                                                                                                      | Clearing & Grading Plans                                                                                                                                                                                                                                                                                                              |                                                                                           |
| X                                                                                                                                                                                                                                                                                                                                                                                                                      | Building Elevation Drawings                                                                                                                                                                                                                                                                                                           |                                                                                           |
| X                                                                                                                                                                                                                                                                                                                                                                                                                      | Environmental Checklist (SEPA)                                                                                                                                                                                                                                                                                                        |                                                                                           |
| X                                                                                                                                                                                                                                                                                                                                                                                                                      | Subdivision Guarantee                                                                                                                                                                                                                                                                                                                 |                                                                                           |
| X                                                                                                                                                                                                                                                                                                                                                                                                                      | Recorded property boundary survey                                                                                                                                                                                                                                                                                                     |                                                                                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                        | Technical Reports                                                                                                                                                                                                                                                                                                                     |                                                                                           |
| X                                                                                                                                                                                                                                                                                                                                                                                                                      | Critical Area Report                                                                                                                                                                                                                                                                                                                  |                                                                                           |
| X                                                                                                                                                                                                                                                                                                                                                                                                                      | Traffic Impact Analysis                                                                                                                                                                                                                                                                                                               |                                                                                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                        | Parking Study                                                                                                                                                                                                                                                                                                                         |                                                                                           |
| <p><b>Required Number of Copies and Plan Size</b></p> <p><b>3</b> paper copies of each item above<br/>Plans must be <b>minimum</b> 11" x 17", to scale, and legible<br/><b>1</b> reduced size copy (<b>maximum</b> size 11" X 17") of plans<br/><b>Digital</b> copy of the application and all submitted materials<br/>(flash drive or to <a href="mailto:pced@cityofanacortes.org">pced@cityofanacortes.org</a>.)</p> |                                                                                                                                                                                                                                                                                                                                       | <p><b>Application Fee</b></p> <p><a href="#">See the Land Use Permit Fee Schedule</a></p> |



# SUBMITTAL REQUIREMENT DETAILS

Additional details on certain submittals is provided below to ensure Applicants are fully aware what City staff will be looking for when an application is submitted to the City.

- a. **MASTER PERMIT APPLICATION:** Form attached. Use this form to indicate all requested land use permits and other key information about your proposed project.
- b. **AGENT AUTHORIZATION FORM.** Provide this completed form to authorize someone other than the property owner to apply for permits.
- c. **PROJECT NARRATIVE:** Form attached. This document contains a list of elements to be included in your project narrative to help you provide a clear and concise description of your proposal for those reviewing it.
- d. **STORMWATER SITE PLAN:** The Stormwater Site Plan is the comprehensive report containing all of the technical information and analysis necessary for regulatory agencies to evaluate your project for compliance with stormwater requirements. The level of stormwater review and contents of the Stormwater Site Plan will vary with the type and size of the project, and individual site characteristics. Use Form CG-3 to determine the level of stormwater review and then complete the applicable Stormwater Minimum Requirements Form on the Public Works - [Engineering Department Forms website](#) and provide required submittal items/plans.
- e. **SITE & LANDSCAPE PLANS:** Checklist attached. These plans are needed so that your proposal can be reviewed for conformance with the applicable zoning and land use, community design, and project design provisions of the development regulations contained in AMC Title 19 Unified Development Code.
- f. **CLEARING & GRADING PLANS:** Checklist is located in the [Clearing/Grading Permit application packet](#). These plans are needed so that your proposal can be reviewed for conformance with [AMC 19.78 Clearing and Grading](#).
- g. **BUILDING ELEVATION DRAWINGS:** Checklist attached. These plans are needed so that your proposal can be reviewed for conformance with the applicable project and building design provisions in AMC Title 19 Unified Development Code.
- h. **SEPA CHECKLIST:** Unless a project is categorically exempt, an environmental checklist is required to be completed and submitted.
- i. **SUBDIVISION GUARANTEE:** A document prepared by a title insurance company documenting the ownership and title of all interested parties in the development and that lists all encumbrances. This document is needed to verify property ownership and to identify any encumbrances that are recorded to the property's title. Copies of all the encumbrances listed within the certificate or report must be provided. The certificate or report must be dated within 30 days prior to the submittal of a permit to the City.
- j. **RECORDED PROPERTY BOUNDARY SURVEY:** A recorded survey is required to define the limits of the property subject to the application. All property corners must be staked/marked and visible.
- k. **DIGITAL COPY OF ALL APPLICATION DOCUMENTS:** PDF format files for all submittal items,

named as they appear on the submittal checklist, must be provided on a flash drive or emailed to [pced@CityofAnacortes.org](mailto:pced@CityofAnacortes.org).

## TECHNICAL REPORTS

Following is a list of technical reports that may be required to be submitted to the City depending on project and site-specific factors. The general triggers for each of the listed technical reports is provided below:

- A. **CRITICAL AREAS REPORTS:** In general, Critical Area reports are required when wetlands, streams, habitat conservation areas, geologically hazardous areas, shorelines, or aquifer recharge areas are located on or near a site. Critical area mitigation plans may also be required, depending on the project proposal. See Anacortes Municipal Code Ch. 17.70 for additional information.
- B. **TRAFFIC IMPACT ANALYSIS.** In general, a Traffic Impact Analysis is required when a development will add 10 or more PM peak hour trips to the City's transportation system.
- C. **PARKING STUDY:** A parking study may be required to determine the parking requirements for a specific use, adjusting minimum and maximum quantitative parking requirements, determining times of peak demand, and determining impacts to on-street parking in the vicinity of a proposed development. See AMC 19.64.020 for more info.

# PROJECT NARRATIVE REQUIREMENTS

|                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>GENERAL INFORMATION</b>                                                                                                                                                                                                                                                                                                                                                                                                                                |
| This form is intended to assist applicants in creating complete project narrative for site plan and building design review. Please fill in each space with the requested information.                                                                                                                                                                                                                                                                     |
| <b>PROJECT DESCRIPTION – Required for all project types</b>                                                                                                                                                                                                                                                                                                                                                                                               |
| A. If a neighborhood meeting was held, provide the date held, general items of discussion at the meeting, and how the project proposal has been modified since the meeting, if applicable.                                                                                                                                                                                                                                                                |
| Neighborhood meeting was held on Jan 16th at the Anacortes Senior Center. Powerpoint presentation on the proposed development, developer answered questions and noted public concerns. A second meeting was held on Feb 4th 2020 at the City of Anacortes Council Chambers for property owners that missed the Jan 16th meeting.                                                                                                                          |
| B. Proposed use of the Site per AMC Table 19.41.040 or 19.41.050 and any special use provisions that apply. (see AMC 19.43 – 19.48)                                                                                                                                                                                                                                                                                                                       |
| Per Table 1941.040 AMC 19.43.010(D) we are proposing cottage housing on lots 1-18. Lot 19-21 will be single family homes per AMC19.43.010.(B)                                                                                                                                                                                                                                                                                                             |
| C. Current use of the Site. Date of construction for any existing structures on site, and whether they are to be removed or retained.                                                                                                                                                                                                                                                                                                                     |
| Single family home with detached garage and outbuilding, approximate date of construction 1984. Current home and outbuilding are to be removed.                                                                                                                                                                                                                                                                                                           |
| D. Description of the site's physical characteristics, including special site features (such as wetlands, water bodies, steep slopes, or other critical areas).                                                                                                                                                                                                                                                                                           |
| Site slopes gently, gravel access driveway, the majority of the property is mowed lawn, scattered trees and brush around property and wetland area.                                                                                                                                                                                                                                                                                                       |
| E. Current uses and special site features of surrounding properties.                                                                                                                                                                                                                                                                                                                                                                                      |
| Current use of properties to the North, South and East are single family homes, Anacopper Mine Rd adjacent to property on the West. The Anacortes Airport is west of Anacopper Road.                                                                                                                                                                                                                                                                      |
| F. Description of general design techniques you considered to implement low impact development (see <a href="#">AMC 19.76.050(A) and (B)</a> ) in the design of your project site and proposed stormwater facilities necessary for compliance with AMC 19.76 Stormwater.                                                                                                                                                                                  |
| The site has been analyzed and designed to have minimal roads and impervious surfaces. The cluster home layout provides the greatest possible open spaces for applicable LID landscaping and pathways. Impervious surfaces have been analyzed for stormwater calcs and proper BMPs designed to handle runoff, clearing designed to be minimal.                                                                                                            |
| G. Description of the proposed form and intensity of the proposed development (height, setbacks, lot coverage, etc.). (See AMC 19.42.)                                                                                                                                                                                                                                                                                                                    |
| The project will adhere to cottage standards set forth in 19.43.010(D). Cottage lot sizes are exempt from minimum lot area and lot width circle standards. Setbacks adhere to 19.43.010(D), Bldg height maximum 25ft, roof over 18ft will have at a minimum slope of 6:12 per code 19.43.010(D)(e). Lots 19-21 will be designed per AMC 19.43.010(B) single family homes on standard lots.                                                                |
| H. Identification of the site's block frontage designation(s) and description of project conformance. (see AMC 19.61)                                                                                                                                                                                                                                                                                                                                     |
| Site to be developed is not in an Anacortes block frontage designated area.                                                                                                                                                                                                                                                                                                                                                                               |
| I. Description of proposed parking for vehicles and bicycles, including provisions for guests, shared parking. (see AMC 19.65)                                                                                                                                                                                                                                                                                                                            |
| Cottage homes will have an attached garage for parking, driveway apron will serve as additional parking, cottage code for this project requires 5 guest parking spaces, the proposal has 12 guest parking spaces and several of the homes have additional parking adjacent to the driveway, no street parking. Lots 19-21 will have minimum 2 car garage and driveway and additional guest parking. CCRs will address parking restrictions in both areas. |
| J. Describe existing and proposed site access from public streets and any proposed street and/or pedestrian improvements.                                                                                                                                                                                                                                                                                                                                 |



|                                                                                                                                                                                                                                                                                                                                                    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>The current access to the property is from Anacopper Rd across a wetland buffer, proposed plan will be to restore the area and have plat access from Meadows Lane, ROW and street improvements connecting Oregon Ave to Meadows Lane and interior streets and sidewalks. Streets, sidewalks and landscape improvements per Anacortes codes.</p> |
| <p><b>K. Estimated quantities and type of materials involved if any fill or excavation is proposed.</b></p>                                                                                                                                                                                                                                        |
| <p>Approximately 5,000 cubic yards of export removal of existing soil and import of approximately 5,000 cubic yards of local import for utility and road base, and other infrastructure.</p>                                                                                                                                                       |
| <p><b>L. Number, type, and size of trees to be removed.</b></p>                                                                                                                                                                                                                                                                                    |
| <p>The number of trees to be removed is not exact at this time, per the arborist report and tree preservation AMC 16.50 (78) trees will be retained within the wetlands and buffer, this exceeds the city requirements. Trees to be removed in all areas of new construction.</p>                                                                  |
| <p><b>M. Description of existing site utilities and proposed utilities, including extensions, upgrades, relocations, etc. (see AMC 19.52 Underground Utilities).</b></p>                                                                                                                                                                           |
| <p>The property currently has water, electricity, natural gas, cable, proposed extensions of all underground utilities, to include storm, sewer, water, electric natural gas, cable, telephone and hydrants.</p>                                                                                                                                   |
| <p><b>N. Explanation of any land to be dedicated to the City.</b></p>                                                                                                                                                                                                                                                                              |
| <p>Right of way dedication for the improvements connecting Meadows Lane and Oregon Avenue</p>                                                                                                                                                                                                                                                      |

# SITE PLAN REQUIREMENTS

| 1. GENERAL INFORMATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| <p>This form is intended to assist applicants in creating complete, code compliant site plans. Please check the plans you wish to submit to make sure they contain each of the listed items. To the right of the Requirements column is space for you to list the sheet number of the plan set where the listed information is shown.</p> <ul style="list-style-type: none"> <li>Site Plans must be drawn by a State of Washington licensed architect, engineer, surveyor, or other specifically approved by the Director.</li> <li>Minimum Plan Size: 18" x 24" and drawn in an engineering scale. Plans must be legible.</li> </ul> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                              |
| 2. INFORMATION REQUIRED ON ALL SITE PLANS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                              |
| COMPLETE?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | REQUIREMENTS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | PAGE #                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <p><b>Cover sheet must contain all of the following:</b></p> <p><input checked="" type="checkbox"/> <b>Title Block:</b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Project name, if applicable.</li> <li><input checked="" type="checkbox"/> Applicant and contact name, address, phone, email.</li> <li><input checked="" type="checkbox"/> Section, township, range</li> </ul> <p><input checked="" type="checkbox"/> <b>Site Information Block:</b></p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Site address, legal description and tax parcel number.</li> <li><input checked="" type="checkbox"/> Zoning designation. (see Official Zoning Map)</li> <li><input checked="" type="checkbox"/> Use classification. (per AMC Tables 19.42.040 or 19.42.050, and IRC/IBC)</li> <li><input checked="" type="checkbox"/> Density &amp; dimensional calculations.                             <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Total site area (acreage &amp; square footage)</li> <li><input checked="" type="checkbox"/> Gross site area (gross acreage) (see 19.12.010.G)</li> <li><input checked="" type="checkbox"/> Total number of residential units proposed and density calculations. (see AMC 19.42.100 &amp; 19.43.010.D.3.b)</li> <li><input checked="" type="checkbox"/> Range of unit types (# of bedrooms) and floor area of proposed units (from lowest to highest).</li> <li><input checked="" type="checkbox"/> Range of heights and number of stories of purposed structures (from lowest to highest).</li> <li><input checked="" type="checkbox"/> Lot coverage calculations. (see AMC Table 19.42.020 and 19.42.110)</li> </ul> </li> <li><input checked="" type="checkbox"/> Maximum impervious surface area allowed for the lot as determined by the calculations in the stormwater report for the project.</li> </ul> <p><input checked="" type="checkbox"/> <b>Sheet Index &amp; Legend</b></p> <p><input checked="" type="checkbox"/> <b>Date plans were prepared and/or revised</b></p> <p><input checked="" type="checkbox"/> <b>Vicinity map</b></p> <p><input checked="" type="checkbox"/> <b>Name, address, phone number of Applicant, Owner, Engineer, &amp; Surveyor</b> (include signature and seal)</p> | <p>Coversheet<br/>Page 1</p> |
| X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Scale and North Arrow                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | All pages                    |

|  |                                                                                                                                                                                                                                     |                     |
|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
|  | <b>Property features:</b>                                                                                                                                                                                                           |                     |
|  | <b>Property lines.</b> Location, identification, and dimensions of all property lines and easements. All easements shown on the title report, Record of Survey, or plat must be dimensioned and shown.                              |                     |
|  | <b>Critical areas.</b> Location and dimensions of existing critical areas (wetlands, streams, steep slopes) and their associated buffers.                                                                                           | All pages           |
|  | <b>Other hydrologic features.</b> Show seeps, springs, closed depression areas, and drainage swales.                                                                                                                                |                     |
|  | <b>Shorelines.</b> Location of Ordinary High Water Mark and shoreline jurisdiction limits (if adjacent to a shoreline).                                                                                                             | N/A                 |
|  | <b>Topography and grading.</b> Existing and proposed contours and site elevations (i.e. finished grades) at 5-foot minimum increments. The horizontal and vertical control datum must be clearly shown.                             | 8 of 15             |
|  | <b>Structures:</b>                                                                                                                                                                                                                  |                     |
|  | <b>Buildings.</b> Location, dimensions and size of all existing and proposed buildings and other structures. Label garages, minimum weather protection (covered porch or recessed entry), and porches. (see AMC 19.43.010.D)        | 2 of 15<br>12 of 15 |
|  | <b>Other structures.</b> Location of existing and proposed retaining walls, rockeries, and fences.                                                                                                                                  | 12 of 15            |
|  | <b>Setbacks.</b> Location, identification, and dimensions of all structure setbacks from property lines, internal pedestrian paths, and internal access lanes. (see AMC 19.42 and AMC 19.43.010.D)                                  | 2,3&5 of 15         |
|  | <b>Separation.</b> Show required separation distances between cottages.                                                                                                                                                             | 2,3 of 15           |
|  | <b>Projections.</b> Show proposed projections into required setbacks, including dimensions. (see AMC 19.44.140)                                                                                                                     | N/A                 |
|  | <b>Adjacent property.</b> Show buildings and features (within 30' minimum) including basic landscaping/trees, building foot prints, and uses.                                                                                       | 7,12 of 15          |
|  | <b>Lighting and signs.</b> Show existing and proposed freestanding lighting and sign structures.                                                                                                                                    | 14 of 15            |
|  | <b>Utilities &amp; Easements</b>                                                                                                                                                                                                    |                     |
|  | <b>Utilities.</b> Location and dimensions of existing and proposed stormwater, sanitary sewer, potable water, and fiber lines/facilities. All wells and septic systems located on or near the project site must also be identified. | 11 of 15            |
|  | <b>Easements.</b> Show the location of all existing and proposed public and private easements.                                                                                                                                      | 13 of 15            |
|  | <b>Fire hydrants.</b> Location of all existing and proposed fire hydrants within 300 feet of the boundary of the project site.                                                                                                      |                     |
|  | <b>Service Areas &amp; Mechanical Equipment</b>                                                                                                                                                                                     | 5 of 15             |
|  | <b>Service areas.</b> Location of proposed service areas (loading locks, trash dumpsters, compactors, recycling areas, electrical panels and mechanical equipment areas) and proposed screening. (see AMC 19.62.070)                | N/A                 |
|  | <b>Service utilities.</b> Location of proposed utility meters, electrical conduit and other service utility apparatus and proposed screening.                                                                                       | 5,11 of 15          |
|  | Group mailbox location for residential development.                                                                                                                                                                                 | 14 of 15            |



|                                   | <b>Stormwater</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                   |                              |            |                              |                 |               |    |            |                                |                        |         |                              |                 |              |    |             |            |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------------------------|------------|------------------------------|-----------------|---------------|----|------------|--------------------------------|------------------------|---------|------------------------------|-----------------|--------------|----|-------------|------------|
|                                   | <b>Erosion Control.</b> Proposed Temporary Erosion and Sediment Control Measures, if not shown on other plans.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 8 of 15                           |                              |            |                              |                 |               |    |            |                                |                        |         |                              |                 |              |    |             |            |
|                                   | <b>Permanent BMPs.</b> Show location of existing and proposed permanent stormwater management BMPs and required setbacks from adjacent structures, utilities, property lines.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                   |                              |            |                              |                 |               |    |            |                                |                        |         |                              |                 |              |    |             |            |
|                                   | <b>Access and Circulation</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                   |                              |            |                              |                 |               |    |            |                                |                        |         |                              |                 |              |    |             |            |
|                                   | <b>Streets/ROWs.</b> Location, identification, and dimensions of all existing and proposed on-site and adjacent streets and alleys, including the location and dimensions of all existing and proposed curbs, gutters, sidewalks, median islands, and street trees.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 2,5 of 15                         |                              |            |                              |                 |               |    |            |                                |                        |         |                              |                 |              |    |             |            |
|                                   | <b>Site circulation.</b> Location and dimensions of shared-access drives, including inside corner turning radii, and required emergency apparatus turnaround areas. Include proposed materials. (see AMC 19.53.050)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 5 of 15                           |                              |            |                              |                 |               |    |            |                                |                        |         |                              |                 |              |    |             |            |
|                                   | <b>Pedestrian access.</b> Show proposed internal pedestrian circulation, including sidewalks, pedestrian paths, crosswalks (including proposed widths and materials) and pedestrian lighting. (see AMC 19.43.010.D and 19.53.050)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 2 of 15                           |                              |            |                              |                 |               |    |            |                                |                        |         |                              |                 |              |    |             |            |
|                                   | <b>Vehicular access.</b> Show existing and proposed vehicular access to the site, including the size and location of driveways and curb cuts. Include distance between nearby street and alley intersections and adjacent /off-site driveways.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 2 of 15                           |                              |            |                              |                 |               |    |            |                                |                        |         |                              |                 |              |    |             |            |
|                                   | <b>Parking</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                   |                              |            |                              |                 |               |    |            |                                |                        |         |                              |                 |              |    |             |            |
|                                   | <b>Off-street parking.</b> Show existing and proposed vehicle parking spaces and drive aisles, including surface material and dimensions, and location of wheel stops if applicable. Label ADA-compliant and compact spaces.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 5 of 15                           |                              |            |                              |                 |               |    |            |                                |                        |         |                              |                 |              |    |             |            |
|                                   | <b>Parking Calculations.</b> The following tables, with project specific information filled in, must be placed on the site plan, as applicable:<br><br><b>Guest Parking Calculations (Example):</b> <table><tr><th>Type of Use from AMC 19.64.030(B)</th><th>Parking Ratio Required</th><th># of Units</th><th># of Parking spaces Required</th></tr><tr><td>Cottage housing</td><td>1 per 4 units</td><td>10</td><td>3 required</td></tr></table><br><b>Off-Street Vehicle Parking Calculations (Example):</b> <table><tr><th>Type of Use from AMC 19.64.040</th><th>Parking Ratio Required</th><th># units</th><th># of Parking Stalls Required</th></tr><tr><td>Cottage housing</td><td>1.5 per unit</td><td>10</td><td>15 required</td></tr></table> | Type of Use from AMC 19.64.030(B) | Parking Ratio Required       | # of Units | # of Parking spaces Required | Cottage housing | 1 per 4 units | 10 | 3 required | Type of Use from AMC 19.64.040 | Parking Ratio Required | # units | # of Parking Stalls Required | Cottage housing | 1.5 per unit | 10 | 15 required | 2, 5 of 15 |
| Type of Use from AMC 19.64.030(B) | Parking Ratio Required                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | # of Units                        | # of Parking spaces Required |            |                              |                 |               |    |            |                                |                        |         |                              |                 |              |    |             |            |
| Cottage housing                   | 1 per 4 units                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 10                                | 3 required                   |            |                              |                 |               |    |            |                                |                        |         |                              |                 |              |    |             |            |
| Type of Use from AMC 19.64.040    | Parking Ratio Required                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | # units                           | # of Parking Stalls Required |            |                              |                 |               |    |            |                                |                        |         |                              |                 |              |    |             |            |
| Cottage housing                   | 1.5 per unit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 10                                | 15 required                  |            |                              |                 |               |    |            |                                |                        |         |                              |                 |              |    |             |            |
|                                   | <b>Open Space</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                   |                              |            |                              |                 |               |    |            |                                |                        |         |                              |                 |              |    |             |            |
|                                   | <b>Common open space.</b> Show location, dimensions, square footage and design of each common open space area proposed to meet minimum common open space standards. (see AMC 19.43.010.D.3.i)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 4 of 15                           |                              |            |                              |                 |               |    |            |                                |                        |         |                              |                 |              |    |             |            |
|                                   | <b>Private open space.</b> Show location, dimensions, square footage, and design of each private open space area proposed to meet minimum private open space standards. (see AMC 19.43.010.D.3.k)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 4 of 5                            |                              |            |                              |                 |               |    |            |                                |                        |         |                              |                 |              |    |             |            |

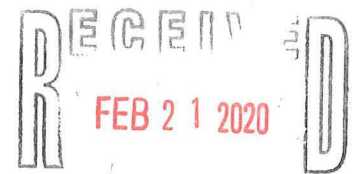
|         | <b>Design.</b> Provide design details regarding materials and surfacing, seating types, landscaping elements, and other amenities and features intended to enhance the character of the space and encourage its use.                                                                                                                                                                                                                                                                                                                | 14 of 15                                                           |       |                                     |    |                      |                                                                    |         |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|-------|-------------------------------------|----|----------------------|--------------------------------------------------------------------|---------|
|         | <p><b>Common Open Space Calculations.</b> The following table, with project specific information filled in, must be placed on the site plan, as applicable. (see AMC 19.43.010.D.3.i)</p> <p><b>Common Open Space Calculations (Example):</b></p> <table border="1"> <thead> <tr> <th># units</th><th>ratio</th><th>Common open space required/provided</th></tr> </thead> <tbody> <tr> <td>10</td><td>400 sq. ft. per unit</td><td>4,000 sq. ft. common open space required<br/>5,000 sq. ft. provided</td></tr> </tbody> </table> | # units                                                            | ratio | Common open space required/provided | 10 | 400 sq. ft. per unit | 4,000 sq. ft. common open space required<br>5,000 sq. ft. provided | 4 of 15 |
| # units | ratio                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Common open space required/provided                                |       |                                     |    |                      |                                                                    |         |
| 10      | 400 sq. ft. per unit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 4,000 sq. ft. common open space required<br>5,000 sq. ft. provided |       |                                     |    |                      |                                                                    |         |
|         | <b>Landscaping</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                    |       |                                     |    |                      |                                                                    |         |
|         | <b>Site Boundaries.</b> Show boundaries and dimensions of site.                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 14 of 15                                                           |       |                                     |    |                      |                                                                    |         |
|         | <b>Streets &amp; Utilities.</b> Location of existing and proposed streets, curbs, utility lines, sidewalks.                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                    |       |                                     |    |                      |                                                                    |         |
|         | <b>Buildings and parking areas.</b> Location of buildings and structures, parking lots, driveways, loading areas, outdoor mechanical equipment, signs, refuse enclosures, overhead utilities, water meter location, grassy swales, parking lot lighting, and any plants or trees that are to remain on the site.                                                                                                                                                                                                                    | 8-12 of 15                                                         |       |                                     |    |                      |                                                                    |         |
|         | <b>New and retained vegetation.</b> Show the location and design of landscape areas to be preserved and planted, and a plant list to include the location, number, size and type of plant material by botanical and common name.                                                                                                                                                                                                                                                                                                    | 14, 15 of 15                                                       |       |                                     |    |                      |                                                                    |         |
|         | <b>Landscape buffers and screening.</b> Show location, type, dimensions and total area of each required landscape buffer area per Table 19.65.070(A) and parking /access lane screening (see AMC 19.43.010.D.3.I).                                                                                                                                                                                                                                                                                                                  |                                                                    |       |                                     |    |                      |                                                                    |         |
|         | <b>Irrigation.</b> Location of irrigation system if a permanent or temporary system is proposed.                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                    |       |                                     |    |                      |                                                                    |         |
|         | <b>Tree preservation.</b> Show the location of existing trees to be retained, tree unit credit calculations, new trees to be planted, and tree protection measures to be implemented in conformance with AMC 16.50, when applicable.                                                                                                                                                                                                                                                                                                | See Tree Preservation Report included with application             |       |                                     |    |                      |                                                                    |         |
|         | <b>Planting details and standards.</b> Include planting material and installation standards. (see AMC 19.65.050)                                                                                                                                                                                                                                                                                                                                                                                                                    | 14, 15 of 15                                                       |       |                                     |    |                      |                                                                    |         |
|         | <b>LID BMP maintenance.</b> Provide a maintenance plan for any infiltration-based stormwater best management practices (BMPs) built as part of the landscaping design, including the specifications and maintenance procedures of any soil amendments.                                                                                                                                                                                                                                                                              |                                                                    |       |                                     |    |                      |                                                                    |         |
|         | The name, address, and phone number of the person preparing the plans.                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1 of 15                                                            |       |                                     |    |                      |                                                                    |         |
|         | <b>Vegetation protection measures.</b> Indicate tree and plant protection measures to be implemented during construction.                                                                                                                                                                                                                                                                                                                                                                                                           | See Tree Preservation Report included with application             |       |                                     |    |                      |                                                                    |         |
|         | <b>Clear-vision triangle.</b> Show the required clear-vision triangle per AMC 19.69.070 along intersections of streets, alleys, and driveways.                                                                                                                                                                                                                                                                                                                                                                                      | 14 of 15                                                           |       |                                     |    |                      |                                                                    |         |

|                                                             | <p><b>Landscaping Calculations.</b> The following table, with project specific information filled in, must be placed on the site plan:</p> <table><tr><th>Required Landscaping Calculations</th><th>For Example</th></tr><tr><td>Gross Site Area</td><td>50,000 sq. ft.</td></tr><tr><td>% of site area to be landscaped (per AMC Tables 19.42.020).</td><td>20% - Residential zones<br/>10,000 sq. ft. required<br/>15,000 sq. ft. provided</td></tr></table> | Required Landscaping Calculations | For Example | Gross Site Area | 50,000 sq. ft. | % of site area to be landscaped (per AMC Tables 19.42.020). | 20% - Residential zones<br>10,000 sq. ft. required<br>15,000 sq. ft. provided | 14,15 of 15 |
|-------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|-------------|-----------------|----------------|-------------------------------------------------------------|-------------------------------------------------------------------------------|-------------|
| Required Landscaping Calculations                           | For Example                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                   |             |                 |                |                                                             |                                                                               |             |
| Gross Site Area                                             | 50,000 sq. ft.                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                   |             |                 |                |                                                             |                                                                               |             |
| % of site area to be landscaped (per AMC Tables 19.42.020). | 20% - Residential zones<br>10,000 sq. ft. required<br>15,000 sq. ft. provided                                                                                                                                                                                                                                                                                                                                                                                  |                                   |             |                 |                |                                                             |                                                                               |             |



# BUILDING ELEVATION DRAWING REQUIREMENTS

| 1. GENERAL INFORMATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                      |                      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| <p>This form is intended to assist applicants in creating complete applications for site plan and building design review. Please check the plans you wish to submit to make sure they contain each of the listed items. To the right of the Requirements column is space for you to list the sheet number of the plan set where the listed information is shown.</p> <ul style="list-style-type: none"> <li>Minimum Plan Size: 11" x 17" and drawn in an architectural scale.</li> </ul> |                                                                                                                                                      |                      |
| 2. REQUIREMENTS FOR ALL BUILDING ELEVATION DRAWINGS                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                      |                      |
| COMPLETE?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | REQUIREMENTS                                                                                                                                         | PAGE # ON YOUR PLANS |
| Preliminary                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>Elevations.</b> Show elevation views from all sides of the building(s) (north, south, east, west).                                                | A-10<br>A-11         |
| Preliminary                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>Height.</b> Show proposed building height dimensions per AMC 19.42.120. (see AMC 19.43.D.3.e)<br>Include existing and finished ground elevations. | A-10                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Façade transparency.</b> Show façade transparency details and calculations. (see AMC 19.43.010.D.3.h)                                             |                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Fences and retaining wall details.</b> Fence or retaining wall materials, colors and architectural design.                                        |                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Exterior lighting plan.</b> Show approximate location and design of exterior light fixtures, and light spillage at night. (see AMC 19.69.040)     |                      |
| Preliminary                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>Pedestrian entries and porches.</b> Include required pedestrian entries, weather protection, and porches. (see AMC 19.42.010.D.3.g and .k)        | A-10<br>A-11         |



## **SEPA ENVIRONMENTAL CHECKLIST**

### ***Purpose of checklist:***

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

### ***Instructions for applicants:*** [\[help\]](#)

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

### ***Use of checklist for nonproject proposals:*** [\[help\]](#)

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the [SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS \(part D\)](#). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements –that do not contribute meaningfully to the analysis of the proposal.

**A. BACKGROUND** [\[help\]](#)

1. Name of proposed project, if applicable:
- [\[help\]](#)

The Crossings

2. Name of applicant:
- [\[help\]](#)

Anacopper LLC

3. Address and phone number of applicant and contact person:
- [\[help\]](#)

PO Box 319 Anacortes, WA 98221 Debbie Headrick 360-293-7431

4. Date checklist prepared:
- [\[help\]](#)

01/30/2020

5. Agency requesting checklist:
- [\[help\]](#)

City of Anacortes

6. Proposed timing or schedule (including phasing, if applicable):
- [\[help\]](#)

Summer 2020

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.
- [\[help\]](#)

No

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.
- [\[help\]](#)

Critical Areas Study completed by ATSI Dated February 2020, Tree Preservation Plan by Urban Forestry Dated January 1, 2020, Geotech Report by Geotest Dated April 12, 2018, Traffic Study by TSI Inc. Dated December 9, 2019.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.
- [\[help\]](#)

Department of Ecology Stormwater Permit

Cultural Resources  
Report, Drayton  
Archaeology, Feb. 25,  
2020  
Stormwater Site Plan,  
Dale Herrigstad,  
1/13/20  
(LBG, 3/20/20)

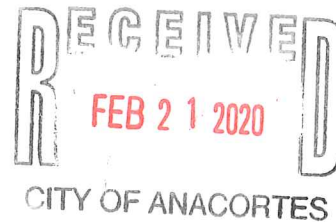
10. List any government approvals or permits that will be needed for your proposal, if known.
- [\[help\]](#)

City of Anacortes applications and permits to include Master Permit, Cottage Housing Checklist, Long Subdivision, Preliminary Application, Demo, Clear and Grade, SEPA, ROW, Final Plat Application, New Home Construction Permits.

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)
- [\[help\]](#)

The current site is 5.2 acres this proposal is for 18 Cottage Homes and 3 single family building lots, removal of existing home and 2 outbuildings install infrastructure to service all homes, detention pond, underground utilities, storm, sewer, electric, cable, telephone, roads, curb, gutter, sidewalks. Install improvements to connect Oregon Avenue and Meadows Lane, street, curb, gutter sidewalks landscape utilities to 3 single family building lots. The existing wetland buffer will be enhanced, current driveway removed from buffer area, planting of trees and shrubs to make the area more natural.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and





range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. [\[help\]](#)

1905 Anacopper Rd Anacortes, WA 98221

Section 25 Township 35 Range 01

5.2 ac SW1/4 SW1/4 SW 1/4 EXC W 586ft OF S 325ft THOF & EXC W 20ft & EXC N 33ft THOF

TGW PTN S 33FT of N 693ft DESC AF#887647

## B. ENVIRONMENTAL ELEMENTS [\[help\]](#)

### 1. Earth

#### a. General description of the site [\[help\]](#)

(circle one): Flat, rolling, hilly, steep slopes, mountainous,  
other gently slopes south to north .

#### b. What is the steepest slope on the site (approximate percent slope)? [\[help\]](#)

Approximately 16%

#### c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils. [\[help\]](#)

Medium dense silty sand, abundant organic topsoil, gravelly sand, glacial til.

Per geotech report,  
Bow gravelly loam  
3-8% slopes and  
Clallam gravelly  
loam  
(LBG 3/20/20)

#### d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe. [\[help\]](#)

No signs of instability.

#### e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill. [\[help\]](#)

A significant amount of excavation will occur on the 5.2 acre site for underground utilities, road improvements, the wetland and buffer area approximately 1.97 acres will remain natural.

#### f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe. [\[help\]](#)

Yes, it is possible to have erosion, the areas disturbed by construction will be covered with straw and tarp or hydroseed, mulch onsite from grindings, silt fence, straw bales, to help prevent erosion and run off, when feasible vegetation will remain in place.

#### g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? [\[help\]](#)

Approximately 61,800 sq ft of the 5.2 acres

#### h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any: [\[help\]](#)

Disturbed areas will be covered with straw and tarp or hydroseed, mulch onsite from grinding, straw bales, silt fence to help prevent runoff, when feasible a conscious effort to keep native vegetation intact.

Conform to AMC  
19.76, approved  
stormwater site  
plan, DOE 2014  
SWMMWW and  
geotech report  
recommendations  
(LBG 3/20/20)

**2. Air**

- a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known. [\[help\]](#)  
Emissions discharged to the air will be typical of heavy equipment and trucks used for land clearing, dust from earth moving. Emissions upon completion will be that of typical single family neighborhood uses.
- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe. [\[help\]](#)

No

- c. Proposed measures to reduce or control emissions or other impacts to air, if any: [\[help\]](#)  
During dry season construction watering will be used for dust control.

**3. Water**

- a. Surface Water: [\[help\]](#)
- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. [\[help\]](#)  
Wetland and pond are located on the property.
- 2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans. [\[help\]](#)  
Work within the 200 ft area will be removal of a gravel driveway, enhancement planting, installation of a split rail fence, detention pond and swale, a small portion of the private road.
- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material. [\[help\]](#)  
None
- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. [\[help\]](#)  
Stormwater management per the Drainage Report Dated January 13, 2020, by Dale Herrigstad Herrigstad Engineering PS.
- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan. [\[help\]](#)  
No
- 6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge. [\[help\]](#)  
No

## b. Ground Water:

- 1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known. [\[help\]](#)

No, the development will be connected to City of Anacortes utilities.

- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve. [\[help\]](#)

None

## c. Water runoff (including stormwater):

- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe. [\[help\]](#)

Runoff will be from roof, roads, sidewalks, driveways and landscaped areas and collected with water treatment swales, bioretention cells and storm pipes with a total 100 year volume of 0.59 acre-feet. The water will flow to a detention pond and released back to the wetlands.

- 2) Could waste materials enter ground or surface waters? If so, generally describe. [\[help\]](#)

Best Management Practices (BMPs) will be in place to stop waste materials from entering ground or surface waters.

- 3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

Existing drainage patterns will be maintained.

## d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

Treatment provided with water quality swales and bioretention treatment cells and the increase in volume will be managed with a detention pond to reduce potential impacts to not exceed the pre-developed storm water impacts.

Conform to  
AMC 19.76 and  
approved  
stormwater site  
plan & DOE  
2014  
SWMMWW  
(LBG 3/20/20)

4. Plants [\[help\]](#)

- a. Check the types of vegetation found on the site: [\[help\]](#)

☒ deciduous tree: alder, maple, aspen, other

☒ evergreen tree: fir, cedar, pine, other

☒ shrubs

☒ grass

☐ pasture

☐ crop or grain

☐ Orchards, vineyards or other permanent crops.

☒ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other



water plants: water lily, eelgrass, milfoil, other  
  X   other types of vegetation

- b. What kind and amount of vegetation will be removed or altered? [\[help\]](#)

Approximately 3 acres of the 5.2 site will be disturbed during construction to install underground utilities and roads. (Wetland area and pond will not be disturbed)

- c. List threatened and endangered species known to be on or near the site. [\[help\]](#)

None

- d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any: [\[help\]](#)

Plants, grasses and trees native to the area as recommended in the Critical Areas Report dated February 2020 will be used to enhance the wetland buffer area and landscape through out the plat, trail/paths will be chips and gravel. Other native plants and trees are included in the landscape plan and a hedge is planned along the south property line.

- e. List all noxious weeds and invasive species known to be on or near the site.

None known

## 5. Animals

- a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site. Examples include: [\[help\]](#)

birds: [\[hawk\]](#), heron, [\[eagle\]](#), [\[songbirds\]](#), other:

mammals: deer, bear, elk, beaver, other:

fish: bass, salmon, trout, herring, shellfish, other \_\_\_\_\_

- b. List any threatened and endangered species known to be on or near the site. [\[help\]](#)

None known

- c. Is the site part of a migration route? If so, explain. [\[help\]](#)

Not site specific, however Fidalgo Island is part of the North American Bird Migration route.

- d. Proposed measures to preserve or enhance wildlife, if any: [\[help\]](#)

The improvements to the wetland buffer and landscape will create an inviting environment for birds and other wildlife.

- e. List any invasive animal species known to be on or near the site.

None known

## 6. Energy and natural resources

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc. [\[help\]](#)

Homes will use electricity and natural gas for appliances, heating and lighting.

- b. Would your project affect the potential use of solar energy by adjacent properties?

If so, generally describe. [\[help\]](#)

No

- c. What kinds of energy conservation features are included in the plans of this proposal?

List other proposed measures to reduce or control energy impacts, if any: [\[help\]](#)

The project plans are designed with the required State and City energy conservation codes. Use of double pane windows, LED fixtures, energy star appliances, insulation.

## 7. Environmental health

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe. [\[help\]](#)

- 1) Describe any known or possible contamination at the site from present or past uses.

No known contamination on the property.

- 2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

None known

- 3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

No toxic or hazardous chemicals will be stored onsite, fuel and oil will be used in construction equipment.

- 4) Describe special emergency services that might be required.

None

- 5) Proposed measures to reduce or control environmental health hazards, if any:

Not applicable to the project

## b. Noise

- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)? [\[help\]](#)

No known noises that will directly impact the project.

- 2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site. [\[help\]](#)

Short term; noise from equipment during installation of improvements, typical home construction noise and traffic M-F 7am-6pm.  
Long term noise will be that of a typical residential neighborhood.

- 3) Proposed measures to reduce or control noise impacts, if any: [\[help\]](#)

Construction activities will be during the daylight hours 7am - 6pm short term impact

## 8. Land and shoreline use

- a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe. [\[help\]](#)

Currently on the property is a single family home with 2 outbuildings, adjacent properties to the North, South and East are residential neighborhoods, the Anacortes Airport is to the west of the property, there is no direct affect to adjacent properties.

- b. Has the project site been used as working farmlands or working forest lands? If so, describe.

How much agricultural or forest land of long-term commercial significance will be converted

to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use? [\[help\]](#)

Not applicable to the property

- 1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

No

- c. Describe any structures on the site. [\[help\]](#)

One single family residence, detached garage and outbuildings, approximate date of construction 1984.

- d. Will any structures be demolished? If so, what? [\[help\]](#)

Yes all structures on the property will be removed or demolished.

- e. What is the current zoning classification of the site? [\[help\]](#)

R2 - Residential

- f. What is the current comprehensive plan designation of the site? [\[help\]](#)

R2 Low Density 2

- g. If applicable, what is the current shoreline master program designation of the site? [\[help\]](#)

Not applicable to the property.

- h. Has any part of the site been classified as a critical area by the city or county? If so, specify. [\[help\]](#)

Yes the wetland and pond on the property are classified critical areas.

- i. Approximately how many people would reside or work in the completed project? [\[help\]](#)

The project could potentially house between 30-48 people.

- j. Approximately how many people would the completed project displace? [\[help\]](#)

Three (3) tenants currently reside in the residence.

- k. Proposed measures to avoid or reduce displacement impacts, if any: [\[help\]](#)

The current tenant was aware of our plans to develop the property when leasing the home and has been given advance notice of the project, currently rents month to month.

- l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any: [\[help\]](#)

The project proposal is compatible with the current lands use and designed around the R2 Cottage Housing code AMC19.43.010 (D) and AMC19.43.010(B) Single Family Residence.

- m. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any:

Not applicable to the property.

Conformance  
with AMC  
17.70 Critical  
Areas.  
(LBG 3/20/20)

## 9. Housing



- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing. [\[help\]](#)

21 Single Family Middle Income Homes.

- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing. [\[help\]](#)

One (1) Single Family Middle Income home will be eliminated.

- c. Proposed measures to reduce or control housing impacts, if any: [\[help\]](#)

We are building 21 homes that will be affordable to middle income individuals and familys.

## 10. Aesthetics

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed? [\[help\]](#)

Per the building codes of Anacortes, the cottage homes will have a height restriction of 25', the 3 SFR on Oregon Ave will have a restriction of 35'. Building materials wood, concrete, metal and composition roof.

- b. What views in the immediate vicinity would be altered or obstructed? [\[help\]](#)

None

- c. Proposed measures to reduce or control aesthetic impacts, if any: [\[help\]](#)

The project will be professionally landscaped and maintained, homes will be painted with a predetermined color palette. CC&Rs will have architectrual guidelines controlled by an HOA Board.

## 11. Light and glare

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur? [\[help\]](#)

Typical glare from residential lighting and landscape lighting, to eliminate glare the use of dark sky and down lighting is proposed.

- b. Could light or glare from the finished project be a safety hazard or interfere with views? [\[help\]](#)

No safety hazards or interference of view.

- c. What existing off-site sources of light or glare may affect your proposal? [\[help\]](#)

None

- d. Proposed measures to reduce or control light and glare impacts, if any: [\[help\]](#)

Use of dark sky lighting, down lights and low voltage landscape lighting.

## 12. Recreation

- a. What designated and informal recreational opportunities are in the immediate vicinity? [\[help\]](#)

Tursi Park and community trails are within walking distance of the proposed project.

- b. Would the proposed project displace any existing recreational uses? If so, describe. [\[help\]](#)

No displacement of recreational uses.

- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any: [\[help\]](#)

The neighborhood will have common open space with walking trails and open air pavillion.

**13. Historic and cultural preservation**

- a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers located on or near the site? If so, specifically describe. [\[help\]](#)

No

- b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources. [\[help\]](#)

None found per  
Cultural Resources  
Report, Drayton  
Archaeology, Feb. 25,  
2020  
(LBG 3/20/20)

- c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc. [\[help\]](#)

Follow  
recommendations  
in Cultural  
Resources report  
(LBG 3/20/20)

- d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

**14. Transportation**

- a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any. [\[help\]](#)  
Access via Anacopper to Copper Pond to Meadows Lane, there are several surface streets that access Copper Pond as alternate routes to Meadows Lane, another possible access is West 12th via Oregon Avenue connecting to Meadows Lane.

- b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop? [\[help\]](#)

Skagit Transit has pick up locations near Oakes Avenue and Anacopper Rd.

- c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate? [\[help\]](#)

The proposed development will add 34 parking spaces.

- d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private). [\[help\]](#)

Yes, the project requires improvements to the existing unfinished portion of Oregon Avenue between Meadows Lane and Oregon Avenue. (road, curb, gutter, sidewalks and landscape)

- e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe. [\[help\]](#) Anacortes Airport is west of the property.



- f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates? [\[help\]](#)

Per traffic report dated December 9, 2019 daily vehicle trips estimated at 151.

- g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

No

- h. Proposed measures to reduce or control transportation impacts, if any: [\[help\]](#)

None

Potential recording  
of an aviation  
easement.  
Payment of  
transportation  
impact fees.  
(LBG 3/20/20)

### 15. Public services

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe. [\[help\]](#)

Public services are in place for the proposed project, additional population to the area could increase the use of some of the public services .

- b. Proposed measures to reduce or control direct impacts on public services, if any. [\[help\]](#)

None

Conformance  
with IFC and  
payment of  
fire/EMS  
impact fees  
(LBG 3/20/20)

### 16. Utilities

- a. Circle utilities currently available at the site: [\[help\]](#)

electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system,  
other \_\_\_\_\_

- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed. [\[help\]](#)

Electricity-Puget Sound Energy  
Natural Gas- Cascade Natural Gas  
Water/Sewer/Garbage- City of Anacortes  
Cable-Comcast  
Telephone - Comcast or Other

### C. SIGNATURE [\[HELP\]](#)

I certify (or declare) under penalty of perjury under laws of the State of Washington that the above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make a decision.

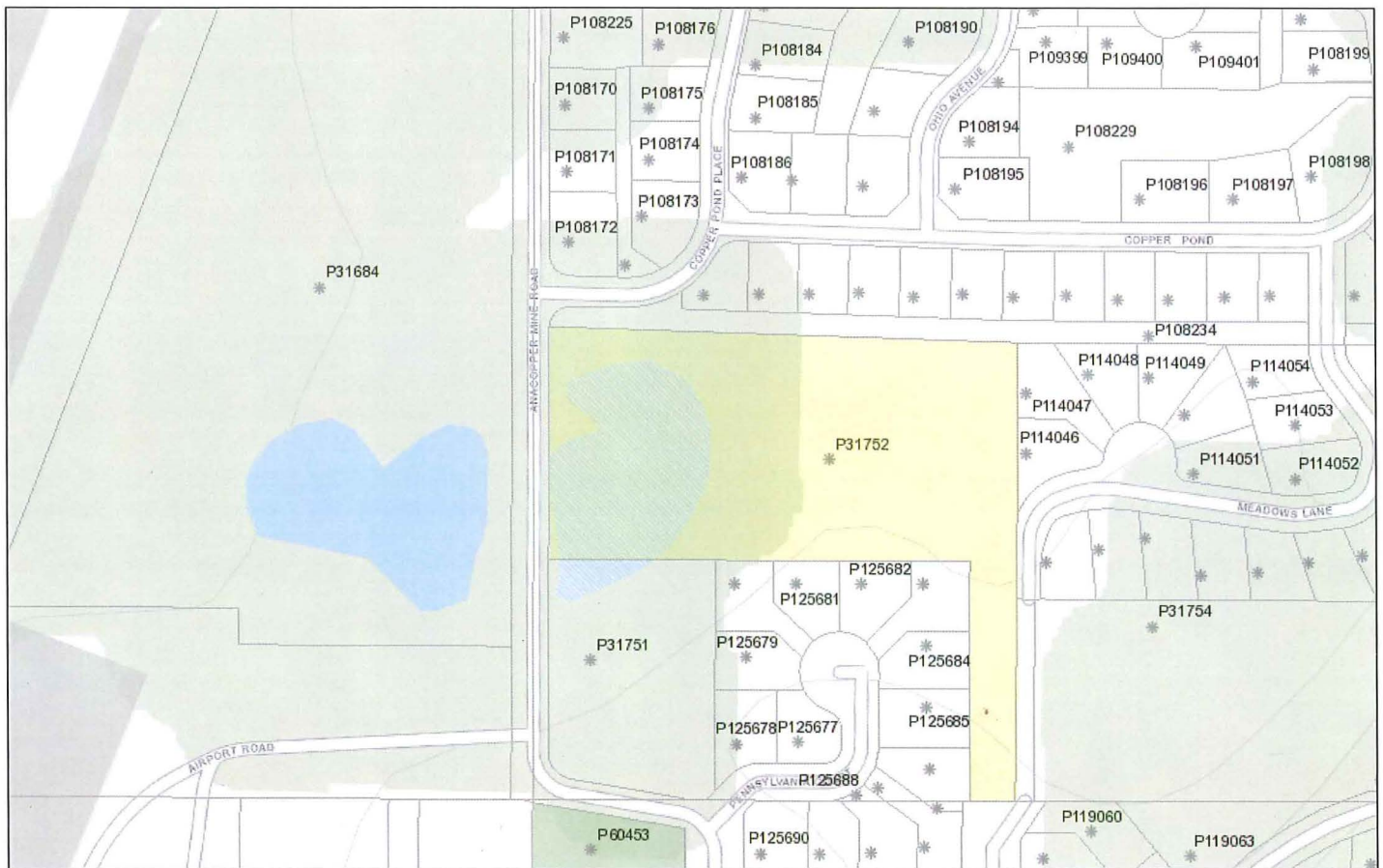
Signature: \_\_\_\_\_

Name of signee Nels Strandberg

Position and Agency/Organization Member

Date Submitted: 2/13/2020



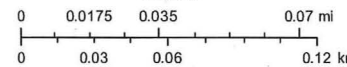


February 13, 2018

**Legend**

- |                           |                           |                          |
|---------------------------|---------------------------|--------------------------|
| County Boundary           | Senior Citizen Accounts   | Tax Parcels              |
| <b>Tax Parcel Numbers</b> | Mobile Home Only Accounts | Pre Tax Account Property |
| Land Accounts             | Building Only Accounts    |                          |

1:2,257



Date Accuracy Warning: All GIS data was created from available public records and existing map sources. Map features have been adjusted to achieve a best-fit registration. While great care was taken in this process, maps from different sources rarely agree as to the precise location of geographic features. Map discrepancies can be as great as 300 feet.

Copyright 2016

Legal Description at time of Assessment:

This is the legal description as of the most recent certification of the assessment roll. The Current Legal Description reflects any changes resulting from boundary modifications after certification.

(5.2000 ac) SW1/4 SW1/4 SW1/4 EXC W 586FT OF S 325F TTHOF & EXC W 20FT & EXC N 33FT THOF TGW PTN S 33FT OF N 693FT DESC AF#887647

Critical Areas Assessment Report:  
Strandberg – The Crossing  
Anacortes, Washington

February 2020

Prepared for:

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**ATSI**  
Aqua-Terr Systems, Inc.

Environmental • Biological • Land Use  
Consulting & Management Firm

**City of Anacortes**

Received by PCED

Date: February 21, 2020



Critical Areas Assessment Report:  
Strandberg – The Crossing  
Anacortes, Washington

February 2020

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## LIST OF ABBREVIATIONS & ACRONYMS

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- Aqua-Terr Systems, Inc. (ATSI)
- Best Management Practices (BMPs)
- Bachelor of Science (BS)
- Biological Assessment (BA)
- Certified Ecological Restoration Professional (CERP)
- City of Anacortes (COA)
- Critical Areas Ordinance (CAO)
- Master of Science (MS)
- National Wetland Plant List (NWPL)
- National Wetlands Inventory (NWI)
- Natural Heritage Program (NHP)
- Natural Resources Conservation Service (NRCS)
- Palustrine Emergent Permanently Flooded//Palustrine Emergent/Scrub-Shrub Seasonally Flooded/Saturated (PEMH//PEM/SSE)
- Palustrine Scrub-Shrub Seasonally Flooded (PSSC)
- Palustrine Unconsolidated Bottom Permanently Flooded (PUBH)
- Priority Habitats and Species (PHS)
- Professional Certification Program (PCP)
- Professional Wetland Scientist (PWS)
- Society of Wetland Scientists (SWS)

United States Army Corps of Engineers (Corps)  
United States Fish and Wildlife Service (USFWS)  
Washington State Department of Ecology (Ecology)  
Washington State Department of Fish and Wildlife (WDFW)  
Washington State Department of Natural Resources (WDNR)  
Water Quality Certification (WQC)  
Watershed Resource Inventory Area (WRIA)  
Web Soil Survey (WSS)  
Western Washington University (WWU)  
Wetland Professional in Training (WPIT)  
Wetlands of High Conservation Value (WHCV)  
Willamette Meridian (WM)

## 1.0 EXECUTIVE SUMMARY

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ATSI has been retained by Mr. Nels Strandberg to review an approximate 5.20 acre property for biological critical areas, specifically wetlands. The property is located at 1905 Anacopper Road (parcel number P31752), Anacortes, Washington within a portion of Section 23, Township 35 north, Range 01 east, WM. The proposed project is to remove the existing 1,650 square foot single family home, garage, shop, and gravel driveway and divide the property into an 18 lot cottage home subdivision with associated paved access roads, utilities, and stormwater infrastructure. This project will include wetland buffer averaging and voluntary wetland buffer enhancement and restoration. The results of our review as they pertain to critical areas and the proposed project are provided within this report.

Overall, the property has a slight to moderate slope to the north on the eastern portion and a moderate slope to the west on the western portion. The property is comprised of an existing single family home, gravel driveway, garage, and storage building. The property is bounded by residential homes to the north, south, and east and Anacopper Road to the west.

One wetland (Wetland A) was delineated on the property and one (Wetland B) was delineated by Grette Associates LLC adjacent, west of Anacopper Road. Wetland A is an approximate 61,933 square foot (1.42 acre) Category III, PEMH//PEM/SSE depressional outflow. Wetland A receives hydrology from an intermittently flowing stormwater detention tract. The stormwater drainage flows east to west north of the northern property boundary, is culverted to the south under the existing gravel driveway on the western portion of the property, and outlets into the northern portion of Wetland A. Wetland B is an approximate 153,529 square foot (3.52 acre) Category II, PSSC depressional outflow. Both wetlands have 110 foot COA regulated buffers. The wetlands and buffers located on and adjacent to the property are regulated by the COA, Ecology, and/or the Corps. No other regulated biological critical areas were observed on or adjacent to the property. Permitting is required for development impacts to critical areas and buffers, including mitigation sequencing avoidance and minimization and mitigation for unavoidable impacts.

The proposed project is to remove the existing 1,650 square foot single family home, garage, shop, and gravel driveway and divide the property into an 18 lot cottage home subdivision with associated paved access roads, utilities, and stormwater infrastructure. This project will include wetland buffer averaging that will result in 1,372 square feet of wetland buffer reduction and 1,416 square feet of wetland buffer addition in compliance with COA CAO Chapter 17.70.340.4. Wetland buffer enhancement includes planting 19 Douglas fir (*Pseudotsuga menziesii*) trees and allowing the mowed lawn to grow, thus creating an herbaceous meadow with a forested canopy component. Approximately 2,488 square feet of voluntary wetland buffer restoration includes removal of an existing gravel road, tilling the soil, adding supplemental topsoil, retilling, and then spraying the exposed topsoil with a native hydroseed herbaceous mix. Lastly, the project includes installation of wood chip trail, bench, three bird houses, and a split rail fence along the eastern boundary of the wetland buffer to offer green space adjacent the residential development.



Avoidance and minimization measures were utilized in the design phase of the proposed project. These measures in combination with the proposed voluntary wetland buffer enhancement and restoration will result in no net loss of wetland and buffer, functions and values. This report has been prepared to satisfy COA critical area regulations set forth in the current, 2008 CAO, 2 May 2019 draft CAO, and the 23 December 2019 draft CAO.

## 2.0 INTRODUCTION

ATSI prepared this Critical Areas Assessment Report for reconnaissance, data collection, and delineation of a wetland and intermittent drainage located on the property and within the surrounding review area as they pertain to the proposed project.

## 3.0 METHODS

### 3.1 GENERAL

The biological critical areas in this document were identified utilizing the methods set forth in the current CAO (COA 2008). Review, reconnaissance, data collection, and critical area identification were conducted for the property and within 300 feet, i.e. the review area. This report has been prepared to document the results of the before mentioned.

#### 3.1.0 Preliminary Review

Preliminary data review of public resource documents was performed to provide initial information on the potential vegetation, soils, hydrology, and critical areas located on and adjacent to the property. These resources included, but were not limited to:

- Google Earth aerial photographs (Google Earth 2017)
- NRCS WSS soils maps (NRCS WSS)
- USFWS NWI wetlands maps (USFWS 2016)
- WDFW PHS and SalmonScape Maps (WDFW 2015 and 2015)

#### 3.1.1 Reconnaissance

To perform this qualitative review, former ATSI staff member Sigrid Williams, BS, WPIT walked the property on 9 October 2017. Reconnaissance aided in determining the locations, assessing the functions, and delineating the boundaries of biological critical wetlands and drainages located on the property and within the review area. Aerial photographs were used for orientation and to assist in locating wetlands and drainages. Data on topography, vegetation, soil, hydrology, wildlife, and habitat were observed and recorded and have been synthesized into this report.

#### 3.1.2 Data Collection

Data was collected utilizing the methods set forth in the Corps, Wetland Delineation Manual (Environmental Laboratory 1987) and Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0) as accepted by Ecology (Corps May 2010). Data on vegetation, soil, and hydrology were recorded on data forms (Appendix A).

### 3.1.2.0 Vegetation

In general, hydrophytic vegetation is present when the plant community is dominated by species that can tolerate prolonged inundation or soil saturation during the growing season. In most cases, hydrophytic vegetation decisions are based on the wetland indicator status which include Facultative (FAC), Facultative Wetland (FACW), Obligate (OBL), Facultative Upland (FACU), Upland (UPL), No Indicator (NI), No Occurrence (NO), and Not Listed (NL) as defined in the NWPL (Corps 2014).

The percent cover of the dominant plant species is estimated and the indicator status of each species is determined for each stratum (e.g. tree, woody vine, sapling/shrub, and herb strata) within a 30 foot radius plot for the tree and woody vine strata and a 5 foot radius plot for the sapling/shrub and herb strata. Plot size and shape are modified to reflect site conditions. Vegetation characteristics are recorded on data forms (Appendix A).

The hydrophytic vegetation indicators include the Rapid Test, Dominance Test, Prevalence Test, Morphological Adaptations, Wetland Non Vascular Plants, and Problematic Hydrophytic Vegetation.

### 3.1.2.1 Soil

Hydric soils are soils formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper portion (upper 12 inches). Onsite soils are described from a 20 inch (+/-), hand dug soil pit. Soil characteristics, including hydric soil characteristics and indicators such as redoxymorphic features if present and color determined using Munsell Soil Color Charts (Munsell 2009), are examined within the soil profile. Soil characteristics are recorded on data forms (Appendix A).

The hydric soil indicators pertinent to this area include Histosol (A1), Histic Epipedon (A2), Black Histic (A3), Hydrogen Sulfide (A4), Depleted Below Dark Surface (A11), Thick Dark Surface (A12), Sandy Mucky Mineral (S1), Sandy Gleyed Matrix (S4), Sandy Redox (S5), Stripped Matrix (S6), Loamy Mucky Mineral (F1), Loamy Gleyed Matrix (F2), Depleted Matrix (F3), Redox Dark Surface (F6), Depleted Dark Surface (F7), Redox Depressions (F8), Muck (A10), Red Parent Material (TF2), and Very Shallow Dark Surface (TF12).

Several additional test holes/pits were dug for quick reference of soil conditions of which data were not recorded.

### 3.1.2.2 Hydrology

Wetland hydrology is present when direct or indirect indicators of seasonal or permanent soil saturation or inundation are observed. Hydrology characteristics are recorded on data forms (Appendix A).

Primary indicators of wetland hydrology include Surface Water (A1), High Water Table (A2), Saturation (A3), Water Marks (B1), Sediment Deposits (B2), Drift Deposits (B3), Algal Mat or Crust (B4), Iron Deposits (B5), Surface Soil Cracks (B6), Inundation Visible

on Aerial Imagery (B7), Sparsely Vegetated Concave Surface (B8), Water Stained Leaves (B9), Salt Crust (B11), Aquatic Invertebrates (B13), Hydrogen Sulfide Odor (C1), Oxidized Rhizospheres along Living Roots (C3), Presence of Reduced Iron (C4), Recent Iron Reduction in Tilled Soils (C6), Stunted or Stressed Plants (D1). Secondary Indicators of wetland hydrology include Water Stained Leaves (B9), Drainage Patterns (B10), Dry Season Water Table (C2), Saturation Visible on Aerial Imagery (C9), Geomorphic Position (D2), Shallow Aquitard (D3), FAC Neutral Test (D5), Raised Ant Mounds (D6), and Frost Heave Hummocks.

Several additional test holes/pits were dug for quick reference of hydrological conditions of which data were not recorded.

#### 3.1.2.3 Classification

Wetlands are classified using the methodology provided in Cowardin's, Classification of Wetlands and Deepwater Habitats of the United States and Brinson's, A Hydrogeomorphic Classification for Wetlands (Cowardin 1979 and Brinson 1993).

#### 3.1.2.4 Categorization

Wetlands in this report were categorized using the 2014 update for the Washington State Wetland Rating System for Western Washington (Hruby 2014). This system takes into account the hydrogeomorphic class of the wetland (Brinson 1993), sensitivity to disturbance, significance of the wetland, its degree of rarity, replacement potential, and functions the wetland provides. When wetlands extend off of or are located adjacent to the property, NWI maps and best professional judgment are used. Categorizing information is recorded on wetland rating forms (Appendix B).

#### 3.1.2.5 Functions

Wetland functions were evaluated using the 2014 update for the Washington State Wetland Rating System for Western Washington (Hruby 2014).

#### 3.1.3 Wetland Delineation

Wetlands are delineated utilizing the guidance provided in the delineation manual and supplement (Environmental Laboratory 1987 and Corps May 2010). Pink wetland delineation pin flags and/or tape are tied/placed on the wetland boundary. The majority Wetland A was delineated by ATSI and then surveyed by Herrigstad Engineering & Surveying. The portion of Wetland A to the south of the property line was approximated by ATSI. It should be noted, although not a wetland, an inlet of an intermittently flowing stormwater detention tract was flagged with blue flags (Figure 2).

#### 3.1.4 Qualifications

ATSI staff includes Jim Wiggins, Karla Gallina, Nathan Goldschmidt, Kelly Werdick, Frances Jose, and Olin Anderson whose qualifications are as follows (resumes available upon request). Both Mr. Wiggins and Mrs. Gallina are PWSs certified by the SWS PCP and have completed training from the Ecology on the 2004 Wetland Rating System for Western Washington (Hruby 2004). Mrs. Gallina is a CERP certified through Society of Ecological Restorations CERP Program. Mr. Goldschmidt is a WPIT certified by the SWS



PCP. Mrs. Gallina, Mr. Goldschmidt, and Ms. Werdick are qualified to rate wetlands per the Washington State Wetland Rating System for Western Washington: 2014 Update (Hruby 2014). Mrs. Gallina is qualified to write BAs per Washington State Department of Transportation requirements as a Senior Author. Mr. Wiggins, Ms. Gallina, Mr. Goldschmidt, and Ms. Werdick have completed Ecology training for Determining the OHWM (Ecology October 2016). Olin Anderson has over ten years of working experience in designing and implementing a variety of ecological restoration projects. We complete relevant workshops and courses to maintain their PWS/WPIT statuses and to have a current understanding of the best available science.

Jim Wiggins, MS, PWS Emeritus is a senior biologist for ATSI. Mr. Wiggins has a MS degree in ecology from WWU and has been a biologist with ATSI since 1988. Karla Gallina, BS, PWS, CERP president of and senior biologist for ATSI is an ACAD specialist, technical writer and editor, and project manager. Mrs. Gallina has a BS degree in natural resources/environmental science from Paul Smith's College in New York State and has been a biologist with ATSI since 2008. Nathan Goldschmidt, BS, WPIT, biologist with ATSI is a field and ACAD technician and technical writer. Mr. Goldschmidt has a BS in biology from WWU and has been a biologist with ATSI since November 2016. Ms. Werdick has a BS in environmental science from WWU and has been an associate biologist with ATSI since May 2018. Ms. Jose has a Bachelor of Arts in business administration with a marketing communication studies minor from WWU and has been an executive assistant with ATSI since April 2019. Mr. Anderson has a Masters in landscape architecture from the University of Illinois, a BS in geography from Northern Illinois University, and a Certificate in wetland delineation from Skagit Valley College. Mr. Anderson has been with ATSI as a biologist since December of 2019.

ATSI staff includes Jim Wiggins, Karla Gallina, Sigrid Williams and Nathan Goldschmidt whose qualifications are as follows (resumes available upon request). Both Mr. Wiggins and Mrs. Gallina are PWSs certified by the SWS PCP and have completed training from the Ecology on the 2004 Wetland Rating System for Western Washington. Mrs. Gallina is a CERP certified through Society of Ecological Restorations CERP Program. Ms. Williams and Mr. Goldschmidt are WPIT certified by the SWS PCP. Mrs. Gallina and Ms. Williams are qualified to rate wetlands per the Washington State Wetland Rating System for Western Washington: 2014 Update and are Washington State Department of Transportation BA Authors (Senior and Junior respectively). All four have completed Ecology training for Determining the Ordinary High Water Mark. We complete relevant workshops and courses to maintain their PWS/WPIT statuses and to have a current understanding of the best available science.

## 4.0 RESULTS

### 4.1 GENERAL

The property is located at 1905 Anacopper Road (parcel number P31752), Anacortes, Washington within a portion of Section 23, Township 35 north, Range 01 east, WM (Figures 1 and 2).

Overall, the property has a slight to moderate slope to the north on the eastern portion and a moderate slope to the west on the western portion. The property is comprised of an existing single family home, gravel driveway, garage, and storage building. The property is bounded by residential homes to the north, south, and east and Anacopper Road to the west.

One wetland (Wetland A) was delineated on the property and one (Wetland B) was delineated by Grette Associates LLC adjacent, west of Anacopper Road. Wetland A is an approximate 61,933 square foot (1.42 acre) Category III, PEMH//PEM/SSE depressional outflow. Wetland A receives hydrology from an intermittently flowing stormwater detention tract. The stormwater drainage flows east to west north of the northern property boundary, is culverted to the south under the existing gravel driveway on the western portion of the property, and outlets into the northern portion of Wetland A. Wetland B is an approximate 153,529 square foot (3.52 acre) Category II, PSSC depressional outflow. Both wetlands have 110 foot COA regulated buffers (Figure 2; COA 2 May 2019, 2008, 23 December 2019).

#### 4.1.0 Vegetation

##### 4.1.0.0 Observations

The majority of the property is upland mowed lawn with scattered trees surrounded by localized scrub/shrub and herbaceous understory components (Figure 2). The wetland located on the property is scrub/shrub and emergent surrounded by forested components (Figure 2). Representative vegetation was sampled and noted in a field book and on data forms (Appendix A).

##### *Upland*

Representative upland forest vegetation was sampled with tree, scrub/shrub, and herbaceous components. Upland forest data plots include numbers 1, 3, and 4 which were not hydrophytic (Appendix A).

The dominant species present in the tree stratum include red alder (*Alnus rubra*; FAC). The subdominant species present in the tree stratum include western red cedar (*Thuja plicata*; FAC) and Douglas fir (FACU).

The dominant species present in the sapling/shrub stratum include salmonberry (*Rubus spectabilis*; FAC). There were no subdominant species present in the sapling/shrub stratum.

The dominant species present in the herb stratum include orchard grass (*Dactylis glomerata*; FACU) and Kentucky bluegrass (*Poa pratensis*; FAC). There were no subdominant species in the herb stratum.

The dominant species present in the woody vine stratum include Himalayan blackberry (*Rubus armeniacus*; FAC). There were no subdominant species present in the woody vine stratum.

### *PEMH//PEM/SSE Wetland*

Representative PEMH//PEM/SSE wetland vegetation was sampled with tree, scrub/shrub, and emergent components. PEMH//PEM/SSE wetland data plot included number 2 which was hydrophytic (Appendix A).

The dominant species present in the tree stratum include red alder and Pacific willow (*Salix lasiandra*; FACW). There were no subdominant species present in the tree stratum.

The dominant species present in the sapling/shrub stratum include Pacific willow, salmonberry, and hardhack (*Spirea douglasii*; FACW). There were no subdominant species present in the sapling/shrub stratum.

The dominant species present in the herb stratum include white pond lily (*Nymphaea odorata*; OBL). There were no subdominant species present in the herb stratum.

There were no dominant or subdominant species present in the woody vine stratum.

### *Additional Observed Vegetation*

Additional vegetation observed on the property includes English holly (*Ilex aquifolium*; FACU), rhododendron (*Rhododendron macrophyllum*; FACU), Himalayan blackberry, red elderberry (*Sambucus racemosa*; FACU), sword fern (*Polystichum munitum*; FACU), and reed canarygrass (*Phalaris arundinacea*; FACW).

## 4.1.1 Soil

### 4.1.1.0 NRCS WSS Soils Map

The NRCS maps three soil units on and adjacent to the property: 18 – Bow gravelly loam, dry, 0 to 3 percent slopes (listed as hydric), 30 – Clallam gravelly loam, 8 to 15 percent slopes (listed as not hydric), and 156 – Whistle-Fidalgo-Rock outcrop complex, 30 to 65 percent slopes (not listed as hydric) (NRCS WSS; Figure 3). The NRCS descriptions for the soil units are listed below (NRCS WSS):

18—Bow gravelly loam, dry, 0 to 3 percent slopes

Component: Bow, dry (95%)

The Bow, dry component makes up 95 percent of the map unit. Slopes are 0 to 3 percent. This component is on hillslopes, terraces, hills on drift plains. The parent material consists of volcanic ash, glaciolacustrine deposits, and glacial drift. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria.

Minor Component: Bellingham, undrained (5%)

Generated brief soil descriptions are created for major soil components. The Bellingham, undrained soil is a minor component.



### 30—Clallam gravelly loam, 8 to 15 percent slopes

#### Component: Clallam (90%)

The Clallam component makes up 90 percent of the map unit. Slopes are 8 to 15 percent. This component is on hills, hillslopes. The parent material consists of glacial drift. Depth to a root restrictive layer, densic material, is 20 to 40 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 27 inches during January, February, March, April. Organic matter content in the surface horizon is about 4 percent. Nonirrigated land capability classification is 4s. Irrigated land capability classification is 4e. This soil does not meet hydric criteria.

#### Minor Components: Bow (5%) and Coveland (5%)

Generated brief soil descriptions are created for major soil components. These soils are minor components.

### 156—Whistle-Fidalgo-Rock outcrop complex, 30 to 65 percent slopes

#### Component: Whistle (50%)

The Whistle component makes up 50 percent of the map unit. Slopes are 30 to 65 percent. This component is on mountain slopes, mountains. The parent material consists of volcanic ash, loess and colluvium from glacial drift, argillite, and phyllite. Depth to a root restrictive layer, bedrock, lithic, is 40 to 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 8 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria.

#### Component: Fidalgo (20%)

The Fidalgo component makes up 20 percent of the map unit. Slopes are 30 to 65 percent. This component is on mountains, mountain slopes. The parent material consists of volcanic ash, and colluvium from glacial drift, argillite, and argillitic residuum. Depth to a root restrictive layer, bedrock, lithic, is 20 to 40 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 27 inches during January, February, March, December. Organic matter content in the surface horizon is about 8 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria.

#### Component: Rock outcrop (15%)

Generated brief soil descriptions are created for major soil components. The Rock outcrop is a miscellaneous area.

#### Minor Components: Bow (3%) and Coveland (2%).

Generated brief soil descriptions are created for major soil components. These soils are minor components.

#### 4.1.1.1 Field Observations

The soils observed were similar to the mapped NRCS soil units.

Soils were sampled in four test plots on the property (Appendix A Data Plot Numbers 1 through 4; Figure 2). The soils present within data plot number 2 satisfied hydric soil indicators A4 (Hydrogen Sulfide) and therefore hydric, while the soils present in data plot numbers 1, 3, and 4 did not satisfy hydric soil indicators and therefore are not hydric.

#### *Upland*

The upland soils sampled had two to three layers. From 0 to between 5 and 8 inches, the matrix color of the first layer was 10YR 3/3 and 10YR 2/2. From 5 and 8 to between 12 and 20 inches, the matrix color of the second and third layers was 10YR 3/4. Soil texture included silt loam and cobbly silt loam.

#### *Wetland*

The wetland soil sampled had one layer. From 0 to 24 inches, the matrix color of the first layer was 10YR 2/1. Soil texture was greasy mucky loam.

### 4.1.2 Hydrology

#### 4.1.2.0 Water Regime

The property is located within WRIA 3 (Ecology 2008). Wetland A receives hydrology from an intermittently flowing stormwater detention tract. The stormwater drainage flows east to west north of the northern property boundary, is culverted to the south under the existing gravel driveway on the western portion of the property, and outlets into the northern portion of Wetland A. Additionally, surface hydrology on the property is supplied by direct precipitation and from adjacent properties via up gradient runoff.

#### 4.1.2.1 Observations

Indicators of wetland hydrology were observed located within the property in the delineated wetland (Appendix A). Indicators included High Water Table (A2), Saturation (A3), Inundation Visible on Aerial Imagery (B7), and Hydrogen Sulfide Odor (C1).

### 4.1.3 Wildlife & Habitat

#### 4.1.3.0 Field Observations

The habitat located on the property and within the review area is primarily comprised of upland mowed lawn, an emergent/scrub-shrub wetland, and an additional scrub-shrub wetland (Figure 2). The wildlife that may utilize the habitats located on and adjacent to the property include aquatic/terrestrial insects, amphibians, birds, reptiles, and/or small and large mammals, i.e. fauna that are typical for open mowed upland habitat, wetland habitat, and developed, disturbed residential areas such as deer and coyote.

#### 4.1.3.1 USFWS

##### *IPAC*

IPAC lists North American wolverine (*Gulo gulo luscus*), marbled murrelet (*Brachyramphus marmoratus*), streaked horned lark (*Eremophila alpestris strigata*), yellow billed cuckoo (*Coccyzus americanus*), bull trout (*Salvelinus confluentus*), dolly

warden (*Salvelinus malma*), and golden paintbrush (*Castilleja levisecta*) (IPAC 2018). Though these species are listed, there is no listed critical habitat located on or adjacent to the property and species are only listed as potentially effected (IPAC 2018).

ATSI did not observe species of local importance, priority species, or Endangered Species Act listed, proposed, candidate, delisted, or species of concern that have a primary association with habitat on the property or within the review area.

#### 4.1.3.2 WDNR

##### WHCV

Per the WDNR WHCV map, no WHCV are located on the property or within the review area (WDNR December 2015).

#### 4.1.3.3 WDFW

##### SalmonScape

Per the WDFW SalmonScape map, there are no fish-bearing streams or waterways on the property or within the review area (WDFW 2015).

##### PHS

The WDFW PHS program mapped pinto abalone (*Haliotis kamtschatkana*) and Yuma myotis (*Myotis yumanensis*) on the property and within the review area (WDFW 2015). Both species are mapped as present in the Township. Wetlands were also mapped in the same place as the NWI maps them (Figure 4).

ATSI does not concur with the mapping of the Pinto abalone because sufficient habitat (marine substrate) to support said species is not located on the property or within the review area. ATSI does concur with the mapping of the wetlands and Yuma myotis. The property provides potential roosting and feeding sites for Yuma myotis, however, the species tends to roost and feed near water (Braun 10 June 2015), so the wetland buffer will protect the habitat.

## 4.2 BIOLOGICAL CRITICAL AREAS

One wetland (Wetland A) was identified and delineated on the property and is described in detail in this report (Figure 2). One additional wetland (Wetland B) was delineated and described by Grette Associates LLC west of the property, west of Anacopper Road (Figure 2; Grette 4 September 2015). No other biological critical areas were observed on the property or within the review area.

### 4.2.0 Wetlands

One approximate 1.4 acre wetland was delineated on the property and one approximate 3.5 acre wetland was delineated by Grette Associates LLC west of the property (Figure 2; Grette 4 September 2015).



#### 4.2.0.0 Classification

The onsite wetland (Wetland A) was classified as a PEMH//PEM/SSE depressional outflow and the offsite wetland (Wetland B) was classified as a PSSC depressional outflow (Figure 2; Grette 4 September 2015).

#### 4.2.0.1 Categorization & Functional Assessment

Wetland A was rated as Category III with moderate function as follows (Appendix B; Table 1):

| <b>Table 1. Wetland A Functional Assessment</b> |                                |                   |                |              |
|-------------------------------------------------|--------------------------------|-------------------|----------------|--------------|
| <b>Function</b>                                 | <b>Improving Water Quality</b> | <b>Hydrologic</b> | <b>Habitat</b> | <b>Total</b> |
| <b>Site Potential</b>                           | Moderate                       | High              | Moderate       |              |
| <b>Landscape Potential</b>                      | Moderate                       | High              | Low            |              |
| <b>Value</b>                                    | Moderate                       | Low               | Moderate       |              |
| <b>Score Based on Rating</b>                    | <b>6</b>                       | <b>7</b>          | <b>5</b>       | <b>18</b>    |

##### *Water Quality: Moderate*

Although Wetland A is depressional outflow with persistent vegetation and a moderate opportunity for holding and filtering polluted runoff from upgradient, the wetland is located towards the top of the watershed. Therefore, the wetland scored moderate for improving water quality.

##### *Hydrologic: Moderate*

As Wetland A is depressional outflow, there is low to moderate opportunity for water storage. Therefore, Wetland A scored moderate for hydrologic.

##### *Habitat: Moderate*

Wetland A has direct connections to moderately disturbed habitat and undisturbed habitat corridors. Therefore, Wetland A scored moderate for habitat.

#### 4.2.0.2 USFWS NWI Wetlands Map

The USFWS NWI maps a PUBH/PSSC wetland on and continuing west of the property within the review area. ATSI does, in general, concur with said mapping as a PEMH//PEM/SSE wetland was identified and delineated on the property as well as a PSSC wetland delineated by Grette Associates LLC west of Anacopper Road (Figure 2; Grette 4 September 2015).

### 4.3 REGULATIONS

As this report pertains to regulated biological critical areas, one wetland was identified on the property (Wetland A) and one to the west (Wetland B) (Figure 2). The wetlands located on and adjacent to the property are regulated by the COA, Ecology, and/or the Corps. No other regulated biological critical areas were observed on or adjacent to the property. Permitting is required for development impacts to critical areas and buffers,

including mitigation sequencing avoidance and minimization and mitigation for unavoidable impacts.

#### 4.3.0 COA

One Category III wetland (Wetland A) and one Category II wetland (Wetland B) were identified on and adjacent to the property (Figure 2). Both wetlands have COA regulated 110 foot buffers per the current CAO regulations, (COA 2008 and Grette 4 September 2015). This report has been prepared to satisfy COA critical area regulations set forth in the current, 2008 CAO, 2 May 2019 draft CAO, and the 23 December 2019 draft CAO.

The wetland buffers as defined in the CAO set forth in the current 2008 CAO, the 2 May 2019 draft CAO, and the 23 December 2019 draft CAO are as follows:

| <b>Table 2. Category III Wetland Buffer Widths for Proposed High Intensity Land Use</b> |                     |                          |                             |
|-----------------------------------------------------------------------------------------|---------------------|--------------------------|-----------------------------|
| <b>COA Code Edition</b>                                                                 | <b>Code Chapter</b> | <b>Code Edition Date</b> | <b>Wetland Buffer Width</b> |
| Current COA Code                                                                        | Chapter 17.70       | 2008                     | 110 feet                    |
| COA Code Draft                                                                          | Chapter 19.70       | 2 May 2019               | 80 feet                     |
| COA Code Draft                                                                          | Chapter 19.70       | 23 December 2019         | 80 feet                     |

#### 4.3.1 Ecology

Ecology reviews all waters of the state permits received by the Corps for WQC. Ecology has authority over discharge into all waters, including streams and wetlands, and can impose buffers and compensatory mitigation for impacts. If there are no impacts to waters of the state, a WQC permit for the construction of the house will not be required.

#### 4.3.2 Corps

Corps requires notification for all disturbances to wetlands, streams, and potentially other drainages. Corps regulates Waters of the United States, which includes wetlands, streams, and other surface waters.

### 5.0 PROPOSED PROJECT

The proposed project is to remove the existing 1,650 square foot single family home, garage, shop, and gravel driveway and divide the property into an 18 lot cottage home subdivision with associated paved access roads, utilities, and stormwater infrastructure. This project will include wetland buffer averaging that will result in 1,372 square feet of wetland buffer reduction and 1,416 square feet of wetland buffer addition in compliance with COA CAO Chapter 17.70.340.4 (Figure 5; COA 2008). Wetland buffer enhancement includes planting 19 Douglas fir trees and allowing the mowed lawn to grow, thus creating an herbaceous meadow with a forested canopy component. Approximately 2,488 square feet of voluntary wetland buffer restoration includes removal of an existing gravel road, tilling the soil, adding supplemental topsoil, retilling, and then spraying the exposed topsoil with a native hydroseed herbaceous mix (Figure 5). Lastly, the project includes installation of wood chip trail, bench, three bird houses, and a split rail fence along the eastern boundary of the wetland buffer to offer green space adjacent the residential development (Figure 5; Appendix C).

Avoidance and minimization measures were utilized in the design phase of the proposed project. These measures in combination with the proposed voluntary wetland buffer enhancement and restoration will result in no net loss of wetland and buffer, functions and values. This report has been prepared to satisfy COA critical area regulations set forth in the current, 2008 CAO, 2 May 2019 draft CAO, and the 23 December 2019 draft CAO.

## 5.1 CONSERVATION MEASURES

### 5.1.0 BMPs & Preliminary Stormwater Management Plan

To protect habitat areas, the BMPs outlined in the current version of the Ecology's Stormwater Management Manual will be used during the construction project. The BMPs that should be used include, but are not limited to:

1. Stockpiling materials for the project as well as equipment in upland, non buffer locations, away from the wetland and drainage.
2. No materials or debris will be discarded into the wetland or drainage.

The use of BMPs, temporary erosion, and control measures will be used. BMPs related to staging and stockpiling areas for construction equipment will be clearly marked in the field. Temporary erosion control measures will be utilized and are expected to include designated clearing limits and silt fencing, where needed, to minimize erosion potential during construction.

## 5.2 AVOIDANCE & MINIMIZATION

### 5.2.0 Wetland Impact Avoidance

The current site plan avoids wetland impacts entirely. Wetland buffer averaging reduction will be offset with additional wetland area resulting in no net loss of wetland function (Figure 5).

### 5.2.1 Wetland Impact Minimization

Although our client is not proposing buffer reduction as part of their project proposal, the following measures to minimize impacts will be adhered to:

| <b>Table 3. Wetland Impact Minimization Measures</b> |                                                                                                                                                                                                                                                         |
|------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Disturbance</b>                                   | <b>Measures to Minimize Impacts</b>                                                                                                                                                                                                                     |
| <b>Lights</b>                                        | <ul style="list-style-type: none"> <li>• Direct lights away from wetland</li> </ul>                                                                                                                                                                     |
| <b>Noise</b>                                         | <ul style="list-style-type: none"> <li>• Locate activity that generates noise away from wetland to the maximum extent practicable</li> <li>• If warranted, enhance existing buffer with native vegetation plantings adjacent to noise source</li> </ul> |
| <b>Toxic Runoff</b>                                  | <ul style="list-style-type: none"> <li>• Establish covenants limiting use of pesticides within 150 ft. of wetland</li> <li>• Apply integrated pest management</li> </ul>                                                                                |



| <b>Table 3. Wetland Impact Minimization Measures</b> |                                                                                                                                                                                                                                                                                                           |
|------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Disturbance</b>                                   | <b>Measures to Minimize Impacts</b>                                                                                                                                                                                                                                                                       |
| <b>Lights</b>                                        | <ul style="list-style-type: none"> <li>• Direct lights away from wetland</li> </ul>                                                                                                                                                                                                                       |
| <b>Stormwater Runoff</b>                             | <ul style="list-style-type: none"> <li>• Retrofit stormwater detention and treatment for roads and existing adjacent development</li> <li>• Prevent channelized flow from lawns that directly enters the buffer</li> </ul>                                                                                |
| <b>Change in Water Regime</b>                        | <ul style="list-style-type: none"> <li>• Infiltrate or treat, detain, and disperse into buffer new runoff from impervious surfaces and new lawns</li> </ul>                                                                                                                                               |
| <b>Pets &amp; Human Disturbance</b>                  | <ul style="list-style-type: none"> <li>• Use privacy fencing; plant dense vegetation to delineate buffer edge and to discourage disturbance using vegetation appropriate for the ecoregion</li> <li>• Place wetland and its buffer in a separate tract or protect with a conservation easement</li> </ul> |
| <b>Dust</b>                                          | <ul style="list-style-type: none"> <li>• Use best management practices to control dust</li> </ul>                                                                                                                                                                                                         |

**Note:** Table 3 is adapted from Table 17.70.340(2) Measures to Minimize impacts to Wetlands from Proposed Change in Land Use that have the Potential for High Impacts (COA 2008).

## 5.2 IMPACTS ANALYSIS

### 5.2.0 Direct Impacts

The proposed project is to remove the existing 1,650 square foot single family home, garage, shop, and gravel driveway and divide the property into an 18 lot cottage home subdivision with associated paved access roads, utilities, and stormwater infrastructure. This project will include wetland buffer averaging that will result in 1,372 square feet of wetland buffer reduction and 1,416 square feet of wetland buffer addition in compliance with COA CAO Chapter 17.70.340.4 (Figure 5; COA 2008). The proposed 1,372 square foot impacted buffer area is currently comprised of mowed lawn. The proposed reduction will still maintain at least a 95 foot wetland buffer (Figure 5). This buffer reduction area will be offset by 1,416 square feet of wetland buffer addition that will be converted from mowed lawn to an herbaceous meadow with a forested canopy component (Figure 5; Appendix C).

### 5.2.1 Indirect Impacts

Indirect impacts are those that may occur after project construction, at a later period in time, and are caused by ensuing development or circumstances created by the proposed project. To examine the potential for indirect impacts that may occur as a result of the project, ATSI used the following analysis with answers in italics following the questions (USFWS 14 April 2015):

#### 1. Does the project create a new facility?

Yes, a single family housing development, with all features outside the proposed wetland buffer.

2. Does the project provide or increase access to the area, increasing human activity levels, and resulting in potential land use changes and impacts that would not have occurred otherwise?

Use will increase as the site is converting one single family property on acreage to an 18 lot cottage home subdivision. The wetland and proposed buffer will be adequately protected.

3. Does the project have the potential to increase the rate of development?

No, as the project is being built to maximum development for the area and the surrounding areas are already developed.

Therefore, there will be no indirect impacts.

### 5.3 WETLAND BUFFER WIDTH AVERAGING

The proposed project is to remove the existing 1,650 square foot single family home, garage, shop, and gravel driveway and divide the property into an 18 lot cottage home subdivision with associated paved access roads, utilities, and stormwater infrastructure. This project will include wetland buffer averaging that will result in 1,372 square feet of wetland buffer reduction and 1,416 square feet of wetland buffer addition in compliance with COA CAO Chapter 17.70.340.4 as detailed below (Figure 5; COA 2008):

- a. It will not reduce wetland functions or functional performance;

The proposed 1,372 square foot impacted buffer area is currently comprised of mowed lawn. The proposed reduction will still maintain at least a 95 foot wetland buffer (Figure 5). This buffer reduction area will be offset by 1,416 square feet of wetland buffer addition that will be converted from mowed lawn to an herbaceous meadow with a forested canopy component resulting in a net increase in ecological function of both the wetland buffer and the wetland (Figure 5).

- b. The wetland contains variations in sensitivity due to existing physical characteristics or the character of the buffer varies in slope, soils, or vegetation, and the wetland would benefit from a wider buffer in places and would not be adversely impacted by a narrower buffer in other places;

The proposed buffer reduction will decrease the wetland buffer by 15 feet at the most. The entire buffer reduction area is currently vegetated with mowed lawn and therefore offers minimal ecological value. The proposed buffer reduction is necessary in order for the property boundaries to be straight, and for the project to achieve the goal of creating 18 lots within the property. This buffer reduction will not come at the expense of ecological function for the following reasons:

- The buffer reduction area will be offset with additional buffer area.

- The entire wetland buffer, including the additional buffer area, will be converted from mowed lawn to an herbaceous meadow with a forested canopy component.

c. The total area contained in the buffer area after averaging is no less than that which would be contained within the standard buffer;

The proposed averaging will result in 1,372 square feet of wetland buffer reduction and 1,416 square feet of wetland buffer addition (Figure 5).

d. For Category I and II wetlands the buffer width is not reduced to less than seventy-five percent of the standard width.

While not applicable as Wetland A is a Category III wetland, the buffer will only be reduced by a maximum of 86 percent (Figure 5).

## 5.4 WETLAND BUFFER ENHANCEMENT & RESTORATION

### 5.4.0 Summary

The buffer enhancement area is approximately 42,857 square feet and the buffer restoration area is approximately 2,488 square feet (Figure 5).

Wetland buffer enhancement includes planting 19 Douglas fir trees and allowing the mowed lawn to grow, thus creating an herbaceous meadow with a forested canopy component. The approximate 2,488 square feet of voluntary wetland buffer restoration includes removal of an existing gravel road, tilling the soil, adding supplemental topsoil, retilling, and then spraying the exposed topsoil with a native hydroseed herbaceous mix (Figure 5). Lastly, the project includes installation of wood chip trail, bench, three bird houses, and a split rail fence along the eastern boundary of the wetland buffer to offer green space adjacent the residential development (Figure 5; Appendix C).

### 5.4.1 Landscape Bond

The proposed plantings within the buffer enhancement area and buffer restoration will be submitted to the COA as part of the landscape bond per Anacortes Municipal Code Chapter 19.65.100 added by Ordinance 3040, codified in November 2019 (COA November 2019).

## 6.0 SUMMARY

As this report pertains to COA regulated biological critical areas, one wetland (Wetland A) was delineated on the property and one (Wetland B) was delineated by Grette Associates LLC adjacent, west of Anacopper Road. Wetland A is an approximate 61,933 square foot (1.42 acre) Category III, PEMH//PEM/SSE depressional outflow. Wetland A receives hydrology from an intermittently flowing stormwater detention tract. The stormwater drainage flows east to west north of the northern property boundary, is culverted to the south under the existing gravel driveway on the western portion of the property, and outlets into the northern portion of Wetland A. Wetland B is an approximate 153,529 square foot (3.52 acre) Category II, PSSC depressional outflow. Both wetlands have 110 foot COA regulated buffers (Figure 2). The wetlands and buffers located on and



adjacent to the property are regulated by the COA, Ecology, and/or the Corps. No other regulated biological critical areas were observed on or adjacent to the property. Permitting is required for development impacts to critical areas and buffers, including mitigation sequencing avoidance and minimization and mitigation for unavoidable impacts.

The proposed project is to remove the existing 1,650 square foot single family home, garage, shop, and gravel driveway and divide the property into an 18 lot cottage home subdivision with associated paved access roads, utilities, and stormwater infrastructure. This project will include wetland buffer averaging that will result in 1,372 square feet of wetland buffer reduction and 1,416 square feet of wetland buffer addition in compliance with COA CAO Chapter 17.70.340.4 (Figure 5). Wetland buffer enhancement includes planting 19 Douglas fir trees and allowing the mowed lawn to grow, thus creating an herbaceous meadow with a forested canopy component. Approximately 2,488 square feet of voluntary wetland buffer restoration includes removal of an existing gravel road, tilling the soil, adding supplemental topsoil, retilling, and then spraying the exposed topsoil with a native hydroseed herbaceous mix. Lastly, the project includes installation of wood chip trail, bench, three bird houses, and a split rail fence along the eastern boundary of the wetland buffer to offer green space adjacent the residential development (Figure 5; Appendix C).

Avoidance and minimization measures were utilized in the design phase of the proposed project. These measures in combination with the proposed voluntary wetland buffer enhancement and restoration will result in no net loss of wetland and buffer, functions and values. This report has been prepared to satisfy COA critical area regulations set forth in the current, 2008 CAO, 2 May 2019 draft CAO, and the 23 December 2019 draft CAO.

## 7.0 LIMITATIONS

We have used the most current, established methods to make determinations as to the location, size, and types of critical areas located on the property and within the review area. All of the above statements are based on our best professional judgment. Although we follow the local, state, and federal criteria, we cannot guarantee their determination will correspond with ours. Please note that regulations pertaining to critical areas are subject to change over time.

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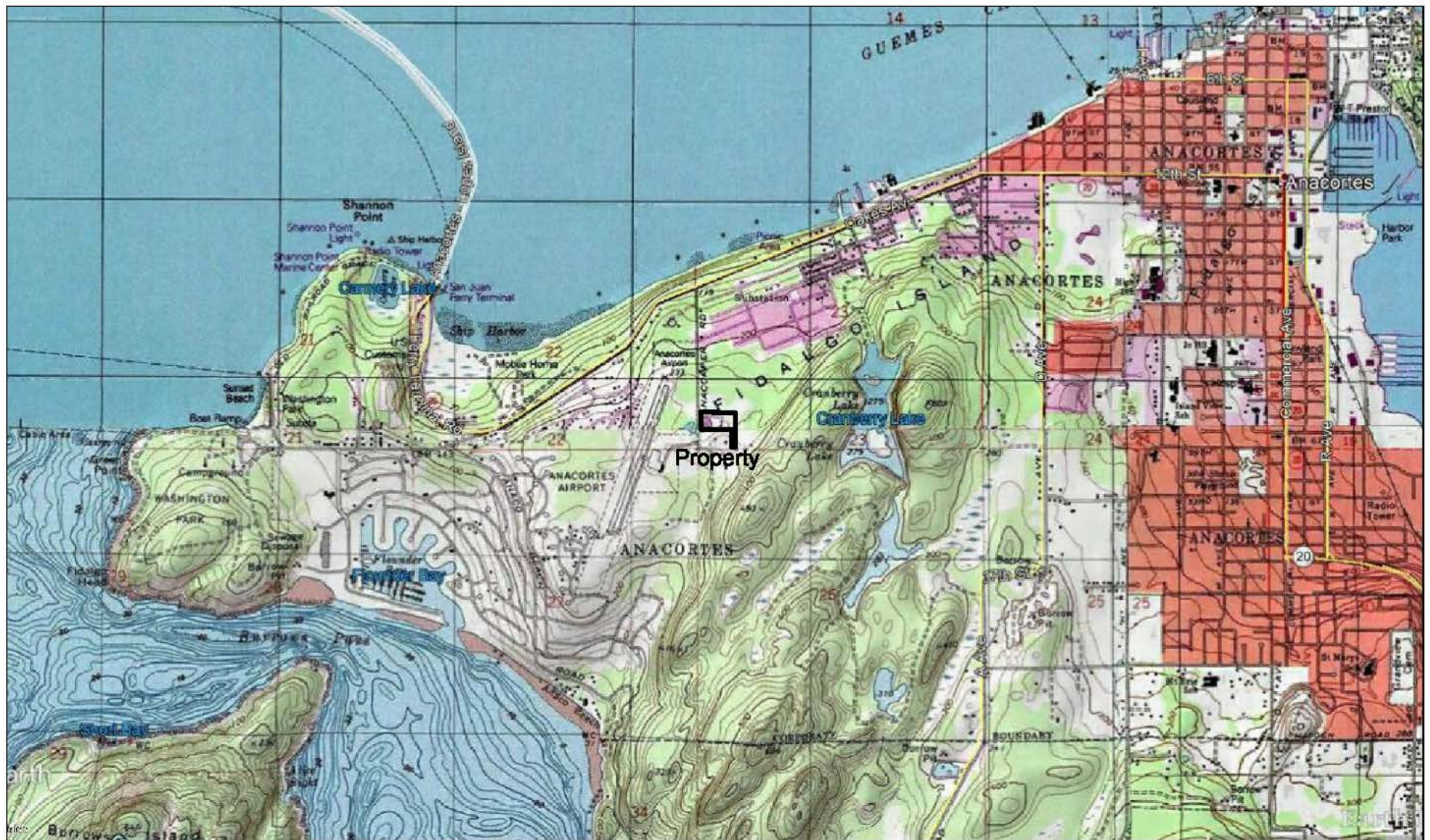
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[Accessed December 2017]

## 9.0 FIGURES

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**Figure 1. Vicinity Map**

**Strandberg - The Crossing**

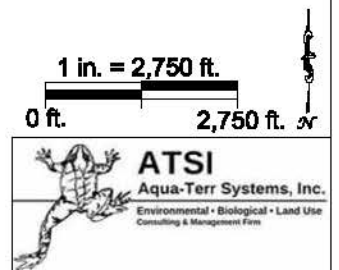
**Parcel Number: P31752**

**1905 Anacopper Road, Anacortes, Washington**

**Section 3, Township 36 N, Range 01 E, WM**

**February 2020**

**Directions:** From I-5 take Exit 230 toward Burlington/Anacortes/WA-20. Turn onto WA-20 going west towards Anacortes. Continue straight onto WA-20 spur W. At the traffic circle take the first exit onto Commercial Ave. Turn left onto 32nd St. Turn right onto D Ave. Turn left onto 12th St. Continue onto Oakes Ave. Turn left onto Anacopper Mine Rd. Property will be on the left.



**Note:** Basemap obtained from Google Earth Topo. The property boundaries and locations were provided by Strandberg Design with edits by ATSI.





**Figure 2. Aerial Photograph, Existing Conditions, & Data Plots 1-4**

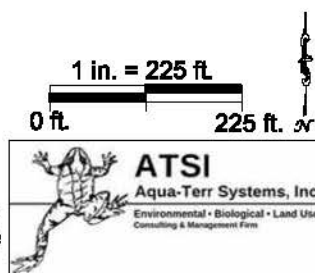
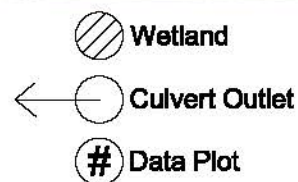
Strandberg-The Crossing

Parcel Number: P31752

1905 Anacopper Road, Anacortes, Washington

Section 3, Township 35 N, Range 01 E, WM

February 2020



**Note:** Basemap obtained from Google Earth (Imagery Date: 2 May 2015). Wetland B location and information obtained from Grette Associates LLC (4 September 2015) with alterations by ATSI. Wetland B is not described as part of this rating. The wetland boundaries and locations are approximate and do not constitute a legal land survey. Wetland buffers do not cross roads per AMC 17.70.340.G.4 (16 December 2019).





**Figure 3. NRCS WSS Soils Map**

Strandberg-The Crossing

Parcel Number: P31752

1905 Anacopper Road, Anacortes, Washington

Section 3, Township 35 N, Range 01 E, WM

February 2020

**Mapped Soil Units:**

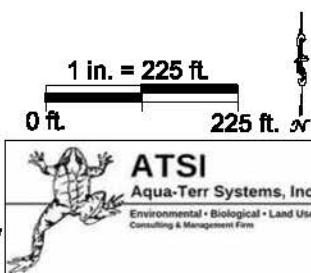
**18** - Bow gravelly loam, dry, 0-3% slopes (hydric)

**30** - Clallam gravelly loam, 8-15% slopes (not hydric)

**55** - Fidalgo-Lithic Xerochrepts-Rock outcrop complex, 3-30% slopes (not hydric)

**156** - Whistle-Fidalgo-Rock outcrop complex, 30-65% slopes (not hydric)

**165** - Xerorthents, 0-5% slopes (not hydric)



**Note:** Basemap obtained from WSS NRSC. The property boundaries and locations are were provided by Strandberg Design with edits by ATSI.





**Figure 4. USFWS NWI Wetlands Map**

Strandberg - The Crossing

Parcel Number: P31752

1905 Anacopper Road, Anacortes, Washington

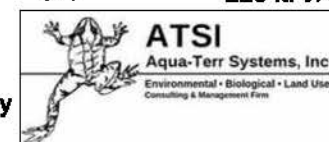
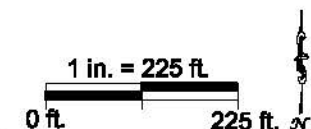
Section 3, Township 35 N, Range 01 E, WM

February 2020

**Mapped NWI Units:**

**PSSC** - Palustrine Scrub/Shrub Seasonally Flooded

**PUBH** - Palustrine Unconsolidated Bottom Permanently Flooded



**Note:** Basemap obtained from USFWS NWI. The property boundaries and locations are were provided by Strandberg Design with edits by ATSI.



## 10.0 APPENDICIES

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### 10.1 APPENDIX A. DATA FORMS



# WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

|                                                                                                                                                   |  |                                              |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------|--|
| Project Site: Strandberg – Anacopper                                                                                                              |  | Sampling Date: 9 October 2017                |  |
| Applicant/Owner: Nels Strandberg                                                                                                                  |  | Sampling Point: 1                            |  |
| Investigator: Sigrid Williams                                                                                                                     |  | City/County: City of Anacortes               |  |
| Section, Township, Range: Section 23, Township 35 N, Range 01 E, WM                                                                               |  | State: WA                                    |  |
| Landform (hillslope, terrace, etc): Depression                                                                                                    |  | Slope (%): ~4%                               |  |
| Subregion (LRR): A                                                                                                                                |  | Lat: 48.300084° north                        |  |
| Long: 122.392555° west                                                                                                                            |  | Datum: WGS84                                 |  |
| Soil Map Unit Name: 18 – Bow gravelly loam, dry, 0-3% slopes (hydic)                                                                              |  | NW1 classification: None                     |  |
| Are climatic/hydrologic conditions on the site typical for this time of year? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |  | (If no, explain in remarks.)                 |  |
| Are "Normal Circumstances" present on the site? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No                               |  |                                              |  |
| Are Vegetation <input type="checkbox"/> , Soil, <input type="checkbox"/> , or Hydrology <input type="checkbox"/> significantly disturbed?: No     |  |                                              |  |
| Are Vegetation <input type="checkbox"/> , Soil, <input type="checkbox"/> , or Hydrology <input type="checkbox"/> naturally problematic?: No       |  | (If needed, explain any answers in Remarks.) |  |

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

|                                                                                                                                                                                                                                                                                                                           |                                                                                                              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| Hydrophytic Vegetation Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                                                                                                                                                                                                       | Is this Sampling Point within a Wetland? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Hydic Soils Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                                                                                                                                                                                                                  |                                                                                                              |
| Wetland Hydrology Present? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                                                                                                                                                                                                            |                                                                                                              |
| Remarks: Indicators of hydrophytic vegetation, hydic soil, and wetland hydrology were absent; therefore, since all three parameters were not met, data plot number 1 was not located within a wetland. Data plot number 1 was taken in an upland mowed field depression located on the southeast portion of the property. |                                                                                                              |

## VEGETATION – Use scientific names of plants.

| Tree Stratum (Plot size 30 foot radius)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Absolute % Cover | Dominant Species? | Indicator Status | Dominance Test Worksheet                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                  |             |             |           |              |           |             |             |              |              |             |           |               |                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------|-------------|-----------|--------------|-----------|-------------|-------------|--------------|--------------|-------------|-----------|---------------|----------------|
| 1.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                  |                   |                  | Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)<br>Total Number of Dominant Species Across All Strata: 1 (B)<br>Percent of Dominant Species that are OBL, FACW, or FAC: 50 % (A/B)                                                                                                                                                                                                                                                                                                                           |                  |             |             |           |              |           |             |             |              |              |             |           |               |                |
| 2.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                  |                   |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |             |             |           |              |           |             |             |              |              |             |           |               |                |
| 3.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                  |                   |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |             |             |           |              |           |             |             |              |              |             |           |               |                |
| 4.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                  |                   |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |             |             |           |              |           |             |             |              |              |             |           |               |                |
| 50 percent threshold equals: 0 = Total Cover                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                  |                   |                  | <b>Prevalence Index Worksheet</b><br><table border="1"> <thead> <tr> <th>Total % Cover of</th> <th>Multiply by</th> </tr> </thead> <tbody> <tr> <td>OBL species</td> <td>0 x 1 = 0</td> </tr> <tr> <td>FACW species</td> <td>0 x 2 = 0</td> </tr> <tr> <td>FAC species</td> <td>30 x 3 = 90</td> </tr> <tr> <td>FACU species</td> <td>50 x 4 = 200</td> </tr> <tr> <td>UPL species</td> <td>0 x 5 = 0</td> </tr> <tr> <td>Column totals</td> <td>80 (A) 290 (B)</td> </tr> </tbody> </table> Prevalence Index = B/A = 3.6 | Total % Cover of | Multiply by | OBL species | 0 x 1 = 0 | FACW species | 0 x 2 = 0 | FAC species | 30 x 3 = 90 | FACU species | 50 x 4 = 200 | UPL species | 0 x 5 = 0 | Column totals | 80 (A) 290 (B) |
| Total % Cover of                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Multiply by      |                   |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |             |             |           |              |           |             |             |              |              |             |           |               |                |
| OBL species                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 0 x 1 = 0        |                   |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |             |             |           |              |           |             |             |              |              |             |           |               |                |
| FACW species                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 0 x 2 = 0        |                   |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |             |             |           |              |           |             |             |              |              |             |           |               |                |
| FAC species                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 30 x 3 = 90      |                   |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |             |             |           |              |           |             |             |              |              |             |           |               |                |
| FACU species                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 50 x 4 = 200     |                   |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |             |             |           |              |           |             |             |              |              |             |           |               |                |
| UPL species                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 0 x 5 = 0        |                   |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |             |             |           |              |           |             |             |              |              |             |           |               |                |
| Column totals                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 80 (A) 290 (B)   |                   |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |             |             |           |              |           |             |             |              |              |             |           |               |                |
| Sapling/Shrub Stratum (Plot size 5 foot radius)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                  |                   |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |             |             |           |              |           |             |             |              |              |             |           |               |                |
| 1.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                  |                   |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |             |             |           |              |           |             |             |              |              |             |           |               |                |
| 2.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                  |                   |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |             |             |           |              |           |             |             |              |              |             |           |               |                |
| 3.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                  |                   |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |             |             |           |              |           |             |             |              |              |             |           |               |                |
| 4.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                  |                   |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |             |             |           |              |           |             |             |              |              |             |           |               |                |
| 5.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                  |                   |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |             |             |           |              |           |             |             |              |              |             |           |               |                |
| 50 percent threshold equals: 0 = Total Cover                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                  |                   |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |             |             |           |              |           |             |             |              |              |             |           |               |                |
| Herb Stratum (Plot size 5 foot radius)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                  |                   |                  | <b>Hydrophytic Vegetation Indicators</b><br>No 1. Rapid Test- Hydrophytic Vegetation OBL/FACW<br>No 2. Dominance test is > 50%<br>No 3. Prevalence test is ≤ 3.0 <sup>1</sup><br>N/A 4. Morphological Adaptations <sup>1</sup> (provide supp. info.)<br>N/A 5. Wetland Non-Vascular Plants <sup>1</sup><br>N/A 6. Problematic Hydrophytic Vegetation <sup>1</sup> (explain)                                                                                                                                               |                  |             |             |           |              |           |             |             |              |              |             |           |               |                |
| 1. <i>Dactylis glomerata</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 50               | Yes               | FACU             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |             |             |           |              |           |             |             |              |              |             |           |               |                |
| 2. <i>Poa pratensis</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 30               | Yes               | FAC              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |             |             |           |              |           |             |             |              |              |             |           |               |                |
| 3. **Grass sp.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 20               | -                 | -                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |             |             |           |              |           |             |             |              |              |             |           |               |                |
| 4.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                  |                   |                  | <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic                                                                                                                                                                                                                                                                                                                                                                                                             |                  |             |             |           |              |           |             |             |              |              |             |           |               |                |
| 5.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                  |                   |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |             |             |           |              |           |             |             |              |              |             |           |               |                |
| 6.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                  |                   |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |             |             |           |              |           |             |             |              |              |             |           |               |                |
| 7.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                  |                   |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |             |             |           |              |           |             |             |              |              |             |           |               |                |
| 8.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                  |                   |                  | <b>Hydrophytic Vegetation Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                |                  |             |             |           |              |           |             |             |              |              |             |           |               |                |
| 9.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                  |                   |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |             |             |           |              |           |             |             |              |              |             |           |               |                |
| 10.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                  |                   |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |             |             |           |              |           |             |             |              |              |             |           |               |                |
| 11.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                  |                   |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |             |             |           |              |           |             |             |              |              |             |           |               |                |
| 50 percent threshold equals: 40% 80 = Total Cover                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                  |                   |                  | 50 percent threshold equals: 16%<br>Woody Vine Stratum (Plot size 30 foot radius)<br>1.<br>2.<br>50 percent threshold equals: 0 = Total Cover<br>20 percent threshold equals:<br>% Bare Ground in Herb Stratum 20                                                                                                                                                                                                                                                                                                         |                  |             |             |           |              |           |             |             |              |              |             |           |               |                |
| 20 percent threshold equals: 16%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                  |                   |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |             |             |           |              |           |             |             |              |              |             |           |               |                |
| Woody Vine Stratum (Plot size 30 foot radius)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |                   |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |             |             |           |              |           |             |             |              |              |             |           |               |                |
| 1.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                  |                   |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |             |             |           |              |           |             |             |              |              |             |           |               |                |
| 2.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                  |                   |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |             |             |           |              |           |             |             |              |              |             |           |               |                |
| 50 percent threshold equals: 0 = Total Cover                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                  |                   |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |             |             |           |              |           |             |             |              |              |             |           |               |                |
| 20 percent threshold equals:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                  |                   |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |             |             |           |              |           |             |             |              |              |             |           |               |                |
| % Bare Ground in Herb Stratum 20                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                  |                   |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |             |             |           |              |           |             |             |              |              |             |           |               |                |
| Remarks: The Corps 2016 NWPL was used to determine indicator statuses. Indicators of hydrophytic vegetation were absent. The vegetation present did not satisfy the Rapid Test for Hydrophytic Vegetation because not all the dominant species across all strata were rated OBL or FACW or a combination of these two categories. The vegetation present did not satisfy the Dominance Test because greater than 50 percent of the dominant species present (50 percent) were not FAC, FACW, or OBL. The vegetation present did not satisfy the Prevalence Test because the result was greater than 3.0 (3.6).<br><br>**Plant not identified to species level, not included in the total percent cover. |                  |                   |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |             |             |           |              |           |             |             |              |              |             |           |               |                |

## SOIL

Sampling Point: 1

| Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) |               |     |                |   |                   |                  |                  |         |
|---------------------------------------------------------------------------------------------------------------------|---------------|-----|----------------|---|-------------------|------------------|------------------|---------|
| Depth (inches)                                                                                                      | Matrix        |     | Redox Features |   |                   |                  | Texture          | Remarks |
|                                                                                                                     | Color (moist) | %   | Color (moist)  | % | Type <sup>1</sup> | Loc <sup>2</sup> |                  |         |
| 0-5                                                                                                                 | 10YR 2/2      | 100 |                |   |                   |                  | Cobbly silt loam |         |
| 5-12                                                                                                                | 10YR 3/4      | 100 |                |   |                   |                  | Cobbly silt loam |         |
| 12-20                                                                                                               | 10YR 3/4      | 98  | 10YR 4/6       | 2 | C                 | M                | Cobbly silt loam |         |
|                                                                                                                     |               |     |                |   |                   |                  |                  |         |
|                                                                                                                     |               |     |                |   |                   |                  |                  |         |

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains      <sup>2</sup>Loc: PL=Pore Lining, M=Matrix

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

|                                                            |                                                                   |
|------------------------------------------------------------|-------------------------------------------------------------------|
| <input type="checkbox"/> Histosol (A1)                     | <input type="checkbox"/> Sandy Redox (S5)                         |
| <input type="checkbox"/> Histic Epipedon (A2)              | <input type="checkbox"/> Stripped Matrix (S6)                     |
| <input type="checkbox"/> Black Histic (A3)                 | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input type="checkbox"/> Hydrogen Sulfide (A4)             | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                 |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3)                     |
| <input type="checkbox"/> Thick Dark Surface (A12)          | <input type="checkbox"/> Redox Dark Surface (F6)                  |
| <input type="checkbox"/> Sandy Mucky Mineral (S1)          | <input type="checkbox"/> Depleted Dark Surface (F7)               |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)          | <input type="checkbox"/> Redox Depressions (F8)                   |

**Indicators for Problematic Hydric Soils<sup>3</sup>**

|                                                           |
|-----------------------------------------------------------|
| <input type="checkbox"/> 2cm Muck (A10)                   |
| <input type="checkbox"/> Red Parent Material (TF2)        |
| <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Other (explain in remarks)       |

<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if present):  
Type: N/A

Depth (inches): N/A

Hydric soil present? Yes ☐ No ☒

Remarks: Indicators of hydric soil were absent. The soil present did not satisfy the hydric soil indicators.

## HYDROLOGY

**Wetland Hydrology Indicators:**

*Primary Indicators (minimum of one required: check all that apply):*

|                                                                    |                                                                                |
|--------------------------------------------------------------------|--------------------------------------------------------------------------------|
| <input type="checkbox"/> Surface water (A1)                        | <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)               |
| <input type="checkbox"/> High Water Table (A2)                     | <input type="checkbox"/> Water-Stained Leaves (except MLRA 1, 2, 4A & 4B) (B9) |
| <input type="checkbox"/> Saturation (A3)                           | <input type="checkbox"/> Salt Crust (B11)                                      |
| <input type="checkbox"/> Water Marks (B1)                          | <input type="checkbox"/> Aquatic Invertebrates (B13)                           |
| <input type="checkbox"/> Sediment Deposits (B2)                    | <input type="checkbox"/> Hydrogen Sulfide Odor (C1)                            |
| <input type="checkbox"/> Drift Deposits (B3)                       | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)         |
| <input type="checkbox"/> Algal Mat or Crust (B4)                   | <input type="checkbox"/> Presence of Reduced Iron (C4)                         |
| <input type="checkbox"/> Iron Deposits (B5)                        | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)            |
| <input type="checkbox"/> Surface Soil Cracks (B6)                  | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)               |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (explain in remarks)                            |

*Secondary Indicators (2 or more required):*

|                                                                         |
|-------------------------------------------------------------------------|
| <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 4B) |
| <input type="checkbox"/> Drainage Patterns (B10)                        |
| <input type="checkbox"/> Dry-Season Water Table (C2)                    |
| <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)      |
| <input type="checkbox"/> Geomorphic Position (D2)                       |
| <input type="checkbox"/> Shallow Aquitard (D3)                          |
| <input type="checkbox"/> FAC-Neutral Test (D5)                          |
| <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)                 |
| <input type="checkbox"/> Frost-Heave Hummocks                           |

**Field Observations**

|                                                 |                              |                                        |             |     |
|-------------------------------------------------|------------------------------|----------------------------------------|-------------|-----|
| Surface Water Present?                          | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | Depth (in): | N/A |
| Water Table Present?                            | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | Depth (in): | N/A |
| Saturation Present? (includes capillary fringe) | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | Depth (in): | N/A |

Wetland Hydrology Present? Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A

Remarks: Indicators of wetland hydrology were absent. Direct or indirect indicators of seasonal or permanent soil saturation or inundation were not observed.

# WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

|                                                                                                                                            |                                                  |                             |                                              |                   |                  |
|--------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|-----------------------------|----------------------------------------------|-------------------|------------------|
| Project Site:                                                                                                                              | Strandberg – Anacopper                           |                             | Sampling Date:                               | 9 October 2017    |                  |
| Applicant/Owner:                                                                                                                           | Nels Strandberg                                  |                             | Sampling Point:                              | 2                 |                  |
| Investigator:                                                                                                                              | Sigrid Williams                                  |                             | City/County:                                 | City of Anacortes |                  |
| Section, Township, Range:                                                                                                                  | Section 23, Township 35 N, Range 01 E, WM        |                             | State:                                       | WA                |                  |
| Landform (hillslope, terrace, etc):                                                                                                        | Depression                                       | Slope (%):                  | ~4%                                          |                   |                  |
| Subregion (LRR):                                                                                                                           | A                                                | Lat:                        | 48.300084° north                             | Long:             | 122.392555° west |
|                                                                                                                                            |                                                  |                             |                                              | Datum:            | WGS84            |
| Soil Map Unit Name:                                                                                                                        | 18 – Bow gravelly loam, dry, 0-3% slopes (hydic) |                             | NWI classification:                          | PUBH/PEMC         |                  |
| Are climatic/hydrologic conditions on the site typical for this time of year?                                                              | <input checked="" type="checkbox"/> Yes          | <input type="checkbox"/> No | (If no, explain in remarks.)                 |                   |                  |
| Are "Normal Circumstances" present on the site?                                                                                            | <input checked="" type="checkbox"/> Yes          | <input type="checkbox"/> No |                                              |                   |                  |
| Are Vegetation <input type="checkbox"/> , Soil, <input type="checkbox"/> , or Hydrology <input type="checkbox"/> significantly disturbed?: | No                                               |                             |                                              |                   |                  |
| Are Vegetation <input type="checkbox"/> , Soil, <input type="checkbox"/> , or Hydrology <input type="checkbox"/> naturally problematic?:   | No                                               |                             | (If needed, explain any answers in Remarks.) |                   |                  |

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

|                                 |                                                                                                                                                                                                                                                                                                                    |                             |                                          |                                         |                             |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------------------------------------|-----------------------------------------|-----------------------------|
| Hydrophytic Vegetation Present? | <input checked="" type="checkbox"/> Yes                                                                                                                                                                                                                                                                            | <input type="checkbox"/> No | Is this Sampling Point within a Wetland? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| Hydic Soils Present?            | <input checked="" type="checkbox"/> Yes                                                                                                                                                                                                                                                                            | <input type="checkbox"/> No |                                          |                                         |                             |
| Wetland Hydrology Present?      | <input checked="" type="checkbox"/> Yes                                                                                                                                                                                                                                                                            | <input type="checkbox"/> No |                                          |                                         |                             |
| Remarks:                        | Indicators of hydrophytic vegetation, hydic soil, and wetland hydrology were present; therefore, since all three parameters were met, data plot number 2 was located within a wetland. Data plot number 2 was taken in a wetland located on the southwest portion of the property. Paired plot with plot number 1. |                             |                                          |                                         |                             |

## VEGETATION – Use scientific names of plants.

| Tree Stratum (Plot size 30 foot radius)         | Absolute % Cover                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Dominant Species? | Indicator Status | Dominance Test Worksheet                                                                                      |                                                                 |
|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------|---------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| 1. <i>Alnus rubra</i>                           | 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Yes               | FAC              | Number of Dominant Species that are OBL, FACW, or FAC: 5 (A)                                                  |                                                                 |
| 2. <i>Salix lasiandra</i>                       | 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Yes               | FACW             | Total Number of Dominant Species Across All Strata: 5 (B)                                                     |                                                                 |
| 3.                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                   |                  | Percent of Dominant Species that are OBL, FACW, or FAC: 100% (A/B)                                            |                                                                 |
| 4.                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                   |                  |                                                                                                               |                                                                 |
| 50 percent threshold equals: 10%                | 20                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | = Total Cover     |                  |                                                                                                               |                                                                 |
| 20 percent threshold equals: 4%                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                   |                  |                                                                                                               |                                                                 |
| Sapling/Shrub Stratum (Plot size 5 foot radius) |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                   |                  | Prevalence Index Worksheet                                                                                    |                                                                 |
| 1. <i>Spirea douglasii</i>                      | 30                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Yes               | FACW             | Total % Cover of                                                                                              |                                                                 |
| 2. <i>Salix lasiandra</i>                       | 20                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Yes               | FACW             | Multiply by                                                                                                   |                                                                 |
| 3. <i>Rubus spectabilis</i>                     | 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | No                | FAC              | OBL species                                                                                                   | x 1 =                                                           |
| 4.                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                   |                  | FACW species                                                                                                  | x 2 =                                                           |
| 5.                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                   |                  | FAC species                                                                                                   | x 3 =                                                           |
| 50 percent threshold equals: 30%                | 60                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | = Total Cover     |                  | FACU species                                                                                                  | x 4 =                                                           |
| 20 percent threshold equals: 12%                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                   |                  | UPL species                                                                                                   | x 5 =                                                           |
| Herb Stratum (Plot size 5 foot radius)          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                   |                  | Column totals                                                                                                 | (A) (B)                                                         |
| 1. <i>Nymphaea odorata</i>                      | 50                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Yes               | OBL              | Prevalence Index = B/A =                                                                                      |                                                                 |
| 2.                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                   |                  |                                                                                                               |                                                                 |
| 3.                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                   |                  |                                                                                                               |                                                                 |
| 4.                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                   |                  | Hydrophytic Vegetation Indicators                                                                             |                                                                 |
| 5.                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                   |                  | No                                                                                                            | 1. Rapid Test- Hydrophytic Vegetation OBL/FACW                  |
| 6.                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                   |                  | Yes                                                                                                           | 2. Dominance test is > 50%                                      |
| 7.                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                   |                  | N/A                                                                                                           | 3. Prevalence test is ≤ 3.0 <sup>1</sup>                        |
| 8.                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                   |                  | N/A                                                                                                           | 4. Morphological Adaptations <sup>1</sup> (provide supp. info.) |
| 9.                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                   |                  | N/A                                                                                                           | 5. Wetland Non-Vascular Plants <sup>1</sup>                     |
| 10.                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                   |                  | N/A                                                                                                           | 6. Problematic Hydrophytic Vegetation <sup>1</sup> (explain)    |
| 11.                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                   |                  | <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic |                                                                 |
| 50 percent threshold equals: 25%                | 50                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | = Total Cover     |                  |                                                                                                               |                                                                 |
| 20 percent threshold equals: 10%                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                   |                  |                                                                                                               |                                                                 |
| Woody Vine Stratum (Plot size 30 foot radius)   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                   |                  | Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>           |                                                                 |
| 1.                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                   |                  |                                                                                                               |                                                                 |
| 2.                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                   |                  |                                                                                                               |                                                                 |
| 50 percent threshold equals:                    | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | = Total Cover     |                  |                                                                                                               |                                                                 |
| 20 percent threshold equals:                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                   |                  |                                                                                                               |                                                                 |
| % Bare Ground in Herb Stratum                   | 50                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                   |                  |                                                                                                               |                                                                 |
| Remarks:                                        | The Corps 2016 NWPL was used to determine indicator statuses. Indicators of hydrophytic vegetation were present. The vegetation present did not satisfy the Rapid Test for Hydrophytic Vegetation because not all the dominant species across all strata were rated OBL or FACW or a combination of these two categories. The vegetation present satisfied the Dominance Test because greater than 50 percent of the dominant species present (100 percent) were FAC, FACW, or OBL. |                   |                  |                                                                                                               |                                                                 |



## SOIL

Sampling Point: 2

| Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) |               |     |                |   |                   |                  |                   |         |
|---------------------------------------------------------------------------------------------------------------------|---------------|-----|----------------|---|-------------------|------------------|-------------------|---------|
| Depth (inches)                                                                                                      | Matrix        |     | Redox Features |   |                   |                  | Texture           | Remarks |
|                                                                                                                     | Color (moist) | %   | Color (moist)  | % | Type <sup>1</sup> | Loc <sup>2</sup> |                   |         |
| 0-24                                                                                                                | 10YR 2/1      | 100 |                |   |                   |                  | Greasy mucky loam |         |
|                                                                                                                     |               |     |                |   |                   |                  |                   |         |
|                                                                                                                     |               |     |                |   |                   |                  |                   |         |
|                                                                                                                     |               |     |                |   |                   |                  |                   |         |

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Loc: PL=Pore Lining, M=Matrix

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

|                                                            |                                                                   |
|------------------------------------------------------------|-------------------------------------------------------------------|
| <input type="checkbox"/> Histosol (A1)                     | <input type="checkbox"/> Sandy Redox (S5)                         |
| <input type="checkbox"/> Histic Epipedon (A2)              | <input type="checkbox"/> Stripped Matrix (S6)                     |
| <input type="checkbox"/> Black Histic (A3)                 | <input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1) |
| <input checked="" type="checkbox"/> Hydrogen Sulfide (A4)  | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                 |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3)                     |
| <input type="checkbox"/> Thick Dark Surface (A12)          | <input type="checkbox"/> Redox Dark Surface (F6)                  |
| <input type="checkbox"/> Sandy Mucky Mineral (S1)          | <input type="checkbox"/> Depleted Dark Surface (F7)               |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)          | <input type="checkbox"/> Redox Depressions (F8)                   |

**Indicators for Problematic Hydric Soils<sup>3</sup>**

|                                                           |
|-----------------------------------------------------------|
| <input type="checkbox"/> 2cm Muck (A10)                   |
| <input type="checkbox"/> Red Parent Material (TF2)        |
| <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Other (explain in remarks)       |

<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if present):  
Type: N/A

Depth (inches): N/A

**Hydric soil present?** Yes ☒ No ☐

Remarks: Indicators of hydric soil were present. The soil present satisfied the hydric soil indicator Hydrogen Sulfide (A4).

## HYDROLOGY

**Wetland Hydrology Indicators:**

*Primary Indicators (minimum of one required: check all that apply):*

|                                                                               |                                                                                |
|-------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| <input type="checkbox"/> Surface water (A1)                                   | <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)               |
| <input checked="" type="checkbox"/> High Water Table (A2)                     | <input type="checkbox"/> Water-Stained Leaves (except MLRA 1, 2, 4A & 4B) (B9) |
| <input checked="" type="checkbox"/> Saturation (A3)                           | <input type="checkbox"/> Salt Crust (B11)                                      |
| <input type="checkbox"/> Water Marks (B1)                                     | <input type="checkbox"/> Aquatic Invertebrates (B13)                           |
| <input type="checkbox"/> Sediment Deposits (B2)                               | <input checked="" type="checkbox"/> Hydrogen Sulfide Odor (C1)                 |
| <input type="checkbox"/> Drift Deposits (B3)                                  | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)         |
| <input type="checkbox"/> Algal Mat or Crust (B4)                              | <input type="checkbox"/> Presence of Reduced Iron (C4)                         |
| <input type="checkbox"/> Iron Deposits (B5)                                   | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)            |
| <input type="checkbox"/> Surface Soil Cracks (B6)                             | <input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)               |
| <input checked="" type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (explain in remarks)                            |

*Secondary Indicators (2 or more required):*

|                                                                         |
|-------------------------------------------------------------------------|
| <input type="checkbox"/> Water-Stained Leaves (B9) (MLRA 1, 2, 4A & 4B) |
| <input type="checkbox"/> Drainage Patterns (B10)                        |
| <input type="checkbox"/> Dry-Season Water Table (C2)                    |
| <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)      |
| <input type="checkbox"/> Geomorphic Position (D2)                       |
| <input type="checkbox"/> Shallow Aquitard (D3)                          |
| <input type="checkbox"/> FAC-Neutral Test (D5)                          |
| <input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)                 |
| <input type="checkbox"/> Frost-Heave Hummocks                           |

**Field Observations**

|                        |                                         |                                        |             |            |
|------------------------|-----------------------------------------|----------------------------------------|-------------|------------|
| Surface Water Present? | <input type="checkbox"/> Yes            | <input checked="" type="checkbox"/> No | Depth (in): | N/A        |
| Water Table Present?   | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            | Depth (in): | 4 inches   |
| Saturation Present?    | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No            | Depth (in): | 0-4 inches |

(includes capillary fringe)

**Wetland Hydrology Present?** Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A

Remarks: Indicators of wetland hydrology were present. Direct or indirect indicators of seasonal or permanent soil saturation or inundation were observed. The hydrology present satisfied the wetland hydrology indicators High Water Table (A2), Saturation (A3), Inundation Visible on Aerial Imagery (B7), and Hydrogen Sulfide Odor (C1).

# WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

|                                                                                                                                               |                                           |            |                  |                                                                     |                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|------------|------------------|---------------------------------------------------------------------|------------------|
| Project Site:                                                                                                                                 | Strandberg – Anacopper                    |            | Sampling Date:   | 9 October 2017                                                      |                  |
| Applicant/Owner:                                                                                                                              | Nels Strandberg                           |            | Sampling Point:  | 3                                                                   |                  |
| Investigator:                                                                                                                                 | Sigrid Williams                           |            | City/County:     | City of Anacortes                                                   |                  |
| Section, Township, Range:                                                                                                                     | Section 23, Township 35 N, Range 01 E, WM |            | State:           | WA                                                                  |                  |
| Landform (hillslope, terrace, etc):                                                                                                           | Flat                                      | Slope (%): | ~4%              |                                                                     |                  |
| Subregion (LRR):                                                                                                                              | A                                         | Lat:       | 48.300084° north | Long:                                                               | 122.392555° west |
|                                                                                                                                               |                                           |            |                  | Datum:                                                              | WGS84            |
| Soil Map Unit Name: 18 – Bow gravelly loam, dry, 0-3% slopes (hydric)                                                                         |                                           |            |                  | NW1 classification: None                                            |                  |
| Are climatic/hydrologic conditions on the site typical for this time of year?                                                                 |                                           |            |                  | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |                  |
| Are "Normal Circumstances" present on the site?                                                                                               |                                           |            |                  | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |                  |
| Are Vegetation <input type="checkbox"/> , Soil, <input type="checkbox"/> , or Hydrology <input type="checkbox"/> significantly disturbed?: No |                                           |            |                  |                                                                     |                  |
| Are Vegetation <input type="checkbox"/> , Soil, <input type="checkbox"/> , or Hydrology <input type="checkbox"/> naturally problematic?: No   |                                           |            |                  | (If no, explain in remarks.)                                        |                  |
| (If needed, explain any answers in Remarks.)                                                                                                  |                                           |            |                  |                                                                     |                  |

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

|                                                                                                                                                                                                                                                                                                                                                                 |                                                                     |                                          |                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|------------------------------------------|---------------------------------------------------------------------|
| Hydrophytic Vegetation Present?                                                                                                                                                                                                                                                                                                                                 | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Is this Sampling Point within a Wetland? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Hydric Soils Present?                                                                                                                                                                                                                                                                                                                                           | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |                                          |                                                                     |
| Wetland Hydrology Present?                                                                                                                                                                                                                                                                                                                                      | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |                                          |                                                                     |
| Remarks: Indicators of hydrophytic vegetation were present, but hydric soil and wetland hydrology were absent; therefore, since all three parameters were not met, data plot number 3 was not located within a wetland. Data plot number 3 was taken in a forested upland paired to wetland data plot number 2, located on the western portion of the property. |                                                                     |                                          |                                                                     |

## VEGETATION – Use scientific names of plants.

| Tree Stratum (Plot size 30 foot radius)                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Absolute % Cover | Dominant Species? | Indicator Status | Dominance Test Worksheet                                                                                      |                                                                 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------|------------------|---------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| 1. <i>Alnus rubra</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 70               | Yes               | FAC              | Number of Dominant Species that are OBL, FACW, or FAC:                                                        | 2 (A)                                                           |
| 2.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |                   |                  | Total Number of Dominant Species Across All Strata:                                                           | 2 (B)                                                           |
| 3.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |                   |                  | Percent of Dominant Species that are OBL, FACW, or FAC:                                                       | 100% (A/B)                                                      |
| 4.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |                   |                  |                                                                                                               |                                                                 |
| 50 percent threshold equals: 35%                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 70               | = Total Cover     |                  |                                                                                                               |                                                                 |
| 20 percent threshold equals: 14%                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                  |                   |                  |                                                                                                               |                                                                 |
| Sapling/Shrub Stratum (Plot size 5 foot radius)                                                                                                                                                                                                                                                                                                                                                                                                                                              |                  |                   |                  | Prevalence Index Worksheet                                                                                    |                                                                 |
| 1. <i>Rubus spectabilis</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 50               | Yes               | FAC              | Total % Cover of                                                                                              |                                                                 |
| 2.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |                   |                  | Multiply by                                                                                                   |                                                                 |
| 3.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |                   |                  | OBL species                                                                                                   | x 1 =                                                           |
| 4.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |                   |                  | FACW species                                                                                                  | x 2 =                                                           |
| 5.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |                   |                  | FAC species                                                                                                   | x 3 =                                                           |
| 50 percent threshold equals: 25%                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 50               | = Total Cover     |                  | FACU species                                                                                                  | x 4 =                                                           |
| 20 percent threshold equals: 10%                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                  |                   |                  | UPL species                                                                                                   | x 5 =                                                           |
| Herb Stratum (Plot size 5 foot radius)                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                  |                   |                  | Column totals                                                                                                 | (A) (B)                                                         |
| 1.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |                   |                  | Prevalence Index = B/A =                                                                                      |                                                                 |
| 2.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |                   |                  |                                                                                                               |                                                                 |
| 3.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |                   |                  |                                                                                                               |                                                                 |
| 4.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |                   |                  | Hydrophytic Vegetation Indicators                                                                             |                                                                 |
| 5.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |                   |                  | No                                                                                                            | 1. Rapid Test- Hydrophytic Vegetation OBL/FACW                  |
| 6.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |                   |                  | Yes                                                                                                           | 2. Dominance test is > 50%                                      |
| 7.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |                   |                  | N/A                                                                                                           | 3. Prevalence test is ≤ 3.0 <sup>1</sup>                        |
| 8.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |                   |                  | N/A                                                                                                           | 4. Morphological Adaptations <sup>1</sup> (provide supp. info.) |
| 9.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |                   |                  | N/A                                                                                                           | 5. Wetland Non-Vascular Plants <sup>1</sup>                     |
| 10.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                  |                   |                  | N/A                                                                                                           | 6. Problematic Hydrophytic Vegetation <sup>1</sup> (explain)    |
| 11.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                  |                   |                  | <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic |                                                                 |
| 50 percent threshold equals:                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 0                | = Total Cover     |                  |                                                                                                               |                                                                 |
| 20 percent threshold equals:                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                  |                   |                  |                                                                                                               |                                                                 |
| Woody Vine Stratum (Plot size 30 foot radius)                                                                                                                                                                                                                                                                                                                                                                                                                                                |                  |                   |                  | Hydrophytic Vegetation Present?                                                                               |                                                                 |
| 1. <i>Rubus armeniacus</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 20               | Yes               | FAC              | Yes                                                                                                           | <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| 2.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                  |                   |                  |                                                                                                               |                                                                 |
| 50 percent threshold equals: 10%                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 20               | = Total Cover     |                  |                                                                                                               |                                                                 |
| 20 percent threshold equals: 4%                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                  |                   |                  |                                                                                                               |                                                                 |
| % Bare Ground in Herb Stratum                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 100              |                   |                  |                                                                                                               |                                                                 |
| Remarks: The Corps 2016 NWPL was used to determine indicator statuses. Indicators of hydrophytic vegetation were present. The vegetation present did not satisfy the Rapid Test for Hydrophytic Vegetation because not all the dominant species across all strata were rated OBL or FACW or a combination of these two categories. The vegetation present satisfied the Dominance Test because greater than 50 percent of the dominant species present (100 percent) were FAC, FACW, or OBL. |                  |                   |                  |                                                                                                               |                                                                 |

## SOIL

Sampling Point: 3

| Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) |               |     |                |   |                   |                  |                  |         |
|---------------------------------------------------------------------------------------------------------------------|---------------|-----|----------------|---|-------------------|------------------|------------------|---------|
| Depth (inches)                                                                                                      | Matrix        |     | Redox Features |   |                   |                  | Texture          | Remarks |
|                                                                                                                     | Color (moist) | %   | Color (moist)  | % | Type <sup>1</sup> | Loc <sup>2</sup> |                  |         |
| 0-7                                                                                                                 | 10YR 2/2      | 100 |                |   |                   |                  | Cobbly silt loam |         |
| 7-20                                                                                                                | 10YR 3/4      | 100 |                |   |                   |                  | Cobbly silt loam |         |
|                                                                                                                     |               |     |                |   |                   |                  |                  |         |
|                                                                                                                     |               |     |                |   |                   |                  |                  |         |
|                                                                                                                     |               |     |                |   |                   |                  |                  |         |

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains    <sup>2</sup>Loc: PL=Pore Lining, M=Matrix

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

|                                                            |                                                                          |
|------------------------------------------------------------|--------------------------------------------------------------------------|
| <input type="checkbox"/> Histosol (A1)                     | <input type="checkbox"/> Sandy Redox (S5)                                |
| <input type="checkbox"/> Histic Epipedon (A2)              | <input type="checkbox"/> Stripped Matrix (S6)                            |
| <input type="checkbox"/> Black Histic (A3)                 | <input type="checkbox"/> Loamy Mucky Mineral (F1) <b>(except MLRA 1)</b> |
| <input type="checkbox"/> Hydrogen Sulfide (A4)             | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                        |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3)                            |
| <input type="checkbox"/> Thick Dark Surface (A12)          | <input type="checkbox"/> Redox Dark Surface (F6)                         |
| <input type="checkbox"/> Sandy Mucky Mineral (S1)          | <input type="checkbox"/> Depleted Dark Surface (F7)                      |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)          | <input type="checkbox"/> Redox Depressions (F8)                          |

**Indicators for Problematic Hydric Soils<sup>3</sup>**

|                                                           |
|-----------------------------------------------------------|
| <input type="checkbox"/> 2cm Muck (A10)                   |
| <input type="checkbox"/> Red Parent Material (TF2)        |
| <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Other (explain in remarks)       |

<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if present):  
Type: N/A

Depth (inches): N/A

**Hydric soil present?**    Yes ☐    No ☒

*Remarks:*    Indicators of hydric soil were absent. There were no redoxymorphic features present. The soil present did not satisfy the hydric soil indicators.

## HYDROLOGY

**Wetland Hydrology Indicators:**

*Primary Indicators (minimum of one required: check all that apply):*

|                                                                    |                                                                                           |
|--------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Surface water (A1)                        | <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)                          |
| <input type="checkbox"/> High Water Table (A2)                     | <input type="checkbox"/> Water-Stained Leaves <b>(except MLRA 1, 2, 4A &amp; 4B)</b> (B9) |
| <input type="checkbox"/> Saturation (A3)                           | <input type="checkbox"/> Salt Crust (B11)                                                 |
| <input type="checkbox"/> Water Marks (B1)                          | <input type="checkbox"/> Aquatic Invertebrates (B13)                                      |
| <input type="checkbox"/> Sediment Deposits (B2)                    | <input type="checkbox"/> Hydrogen Sulfide Odor (C1)                                       |
| <input type="checkbox"/> Drift Deposits (B3)                       | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)                    |
| <input type="checkbox"/> Algal Mat or Crust (B4)                   | <input type="checkbox"/> Presence of Reduced Iron (C4)                                    |
| <input type="checkbox"/> Iron Deposits (B5)                        | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)                       |
| <input type="checkbox"/> Surface Soil Cracks (B6)                  | <input type="checkbox"/> Stunted or Stressed Plants (D1) <b>(LRR A)</b>                   |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (explain in remarks)                                       |

*Secondary Indicators (2 or more required):*

|                                                                                    |
|------------------------------------------------------------------------------------|
| <input type="checkbox"/> Water-Stained Leaves (B9) <b>(MLRA 1, 2, 4A &amp; 4B)</b> |
| <input type="checkbox"/> Drainage Patterns (B10)                                   |
| <input type="checkbox"/> Dry-Season Water Table (C2)                               |
| <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)                 |
| <input type="checkbox"/> Geomorphic Position (D2)                                  |
| <input type="checkbox"/> Shallow Aquitard (D3)                                     |
| <input type="checkbox"/> FAC-Neutral Test (D5)                                     |
| <input type="checkbox"/> Raised Ant Mounds (D6) <b>(LRR A)</b>                     |
| <input type="checkbox"/> Frost-Heave Hummocks                                      |

**Field Observations**

|                                                    |                                                                     |             |     |
|----------------------------------------------------|---------------------------------------------------------------------|-------------|-----|
| Surface Water Present?                             | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Depth (in): | N/A |
| Water Table Present?                               | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Depth (in): | N/A |
| Saturation Present?<br>(includes capillary fringe) | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Depth (in): | N/A |

**Wetland Hydrology Present?**    Yes ☐    No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A

*Remarks:*    Indicators of wetland hydrology were absent. Direct or indirect indicators of seasonal or permanent soil saturation or inundation were not observed.



# WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

|                                                                                                                                            |                                                   |                             |                                              |                   |                  |
|--------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|-----------------------------|----------------------------------------------|-------------------|------------------|
| Project Site:                                                                                                                              | Strandberg – Anacopper                            |                             | Sampling Date:                               | 9 October 2017    |                  |
| Applicant/Owner:                                                                                                                           | Nels Strandberg                                   |                             | Sampling Point:                              | 4                 |                  |
| Investigator:                                                                                                                              | Sigrid Williams                                   |                             | City/County:                                 | City of Anacortes |                  |
| Section, Township, Range:                                                                                                                  | Section 23, Township 35 N, Range 01 E, WM         |                             | State:                                       | WA                |                  |
| Landform (hillslope, terrace, etc):                                                                                                        | Depression                                        | Slope (%):                  | ~4%                                          |                   |                  |
| Subregion (LRR):                                                                                                                           | A                                                 | Lat:                        | 48.300084° north                             | Long:             | 122.392555° west |
|                                                                                                                                            |                                                   |                             |                                              | Datum:            | WGS84            |
| Soil Map Unit Name:                                                                                                                        | 18 – Bow gravelly loam, dry, 0-3% slopes (hydric) |                             | NWI classification:                          | None              |                  |
| Are climatic/hydrologic conditions on the site typical for this time of year?                                                              | <input checked="" type="checkbox"/> Yes           | <input type="checkbox"/> No | (If no, explain in remarks.)                 |                   |                  |
| Are "Normal Circumstances" present on the site?                                                                                            | <input checked="" type="checkbox"/> Yes           | <input type="checkbox"/> No |                                              |                   |                  |
| Are Vegetation <input type="checkbox"/> , Soil, <input type="checkbox"/> , or Hydrology <input type="checkbox"/> significantly disturbed?: | No                                                |                             |                                              |                   |                  |
| Are Vegetation <input type="checkbox"/> , Soil, <input type="checkbox"/> , or Hydrology <input type="checkbox"/> naturally problematic?:   | No                                                |                             | (If needed, explain any answers in Remarks.) |                   |                  |

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

|                                 |                                                                                                                                                                                                                                                                                                       |                                        |                                          |                              |                                        |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|------------------------------------------|------------------------------|----------------------------------------|
| Hydrophytic Vegetation Present? | <input type="checkbox"/> Yes                                                                                                                                                                                                                                                                          | <input checked="" type="checkbox"/> No | Is this Sampling Point within a Wetland? | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No |
| Hydric Soils Present?           | <input type="checkbox"/> Yes                                                                                                                                                                                                                                                                          | <input checked="" type="checkbox"/> No |                                          |                              |                                        |
| Wetland Hydrology Present?      | <input type="checkbox"/> Yes                                                                                                                                                                                                                                                                          | <input checked="" type="checkbox"/> No |                                          |                              |                                        |
| Remarks:                        | Indicators of hydrophytic vegetation, hydric soil, and wetland hydrology were absent; therefore, since all three parameters were not met, data plot number 4 was not located within a wetland. Data plot number 4 was taken in an upland mowed lawn located on the northeast portion of the property. |                                        |                                          |                              |                                        |

## VEGETATION – Use scientific names of plants.

| Tree Stratum (Plot size 30 foot radius)                                           | Absolute % Cover                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Dominant Species? | Indicator Status | Dominance Test Worksheet                                                                                      |                                                                 |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------|---------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| 1. <i>Pseudotsuga menziesii</i>                                                   | 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Yes               | FACU             | Number of Dominant Species that are OBL, FACW, or FAC:                                                        | 1 (A)                                                           |
| 2. <i>Thuja plicata</i>                                                           | 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Yes               | FAC              | Total Number of Dominant Species Across All Strata:                                                           | 1 (B)                                                           |
| 3.                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                   |                  | Percent of Dominant Species that are OBL, FACW, or FAC:                                                       | 50% (A/B)                                                       |
| 4.                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                   |                  |                                                                                                               |                                                                 |
| 50 percent threshold equals: 5%                                                   | 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | = Total Cover     |                  |                                                                                                               |                                                                 |
| 20 percent threshold equals: 2%                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                   |                  |                                                                                                               |                                                                 |
| Sapling/Shrub Stratum (Plot size 5 foot radius)                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                   |                  | Prevalence Index Worksheet                                                                                    |                                                                 |
| 1.                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                   |                  | Total % Cover of                                                                                              |                                                                 |
| 2.                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                   |                  | Multiply by                                                                                                   |                                                                 |
| 3.                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                   |                  | OBL species                                                                                                   | 0 x 1 = 0                                                       |
| 4.                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                   |                  | FACW species                                                                                                  | 0 x 2 = 0                                                       |
| 5.                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                   |                  | FAC species                                                                                                   | 5 x 3 = 15                                                      |
| 50 percent threshold equals:                                                      | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | = Total Cover     |                  | FACU species                                                                                                  | 5 x 4 = 20                                                      |
| 20 percent threshold equals:                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                   |                  | UPL species                                                                                                   | 0 x 5 = 0                                                       |
| Herb Stratum (Plot size 5 foot radius)                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                   |                  | Column totals                                                                                                 | 10 (A) 35 (B)                                                   |
| 1. **Grass sp.                                                                    | 100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                   |                  | Prevalence Index = B/A = 3.5                                                                                  |                                                                 |
| 2.                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                   |                  |                                                                                                               |                                                                 |
| 3.                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                   |                  |                                                                                                               |                                                                 |
| 4.                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                   |                  | Hydrophytic Vegetation Indicators                                                                             |                                                                 |
| 5.                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                   |                  | No                                                                                                            | 1. Rapid Test- Hydrophytic Vegetation OBL/FACW                  |
| 6.                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                   |                  | No                                                                                                            | 2. Dominance test is > 50%                                      |
| 7.                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                   |                  | No                                                                                                            | 3. Prevalence test is ≤ 3.0 <sup>1</sup>                        |
| 8.                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                   |                  | N/A                                                                                                           | 4. Morphological Adaptations <sup>1</sup> (provide supp. info.) |
| 9.                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                   |                  | N/A                                                                                                           | 5. Wetland Non-Vascular Plants <sup>1</sup>                     |
| 10.                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                   |                  | N/A                                                                                                           | 6. Problematic Hydrophytic Vegetation <sup>1</sup> (explain)    |
| 11.                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                   |                  | <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic |                                                                 |
| 50 percent threshold equals:                                                      | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | = Total Cover     |                  |                                                                                                               |                                                                 |
| 20 percent threshold equals:                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                   |                  |                                                                                                               |                                                                 |
| Woody Vine Stratum (Plot size 30 foot radius)                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                   |                  | Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>           |                                                                 |
| 1.                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                   |                  |                                                                                                               |                                                                 |
| 2.                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                   |                  |                                                                                                               |                                                                 |
| 50 percent threshold equals:                                                      | 0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | = Total Cover     |                  |                                                                                                               |                                                                 |
| 20 percent threshold equals:                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                   |                  |                                                                                                               |                                                                 |
| % Bare Ground in Herb Stratum                                                     | 100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                   |                  |                                                                                                               |                                                                 |
| Remarks:                                                                          | The Corps 2016 NWPL was used to determine indicator statuses. Indicators of hydrophytic vegetation were absent. The vegetation present did not satisfy the Rapid Test for Hydrophytic Vegetation because not all the dominant species across all strata were rated OBL or FACW or a combination of these two categories. The vegetation present did not satisfy the Dominance Test because greater than 50 percent of the dominant species present (50 percent) were not FAC, FACW, or OBL. The vegetation present did not satisfy the Prevalence Test because the result was greater than 3.0 (3.5). |                   |                  |                                                                                                               |                                                                 |
| **Plant not identified to species level, not included in the total percent cover. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                   |                  |                                                                                                               |                                                                 |

## SOIL

Sampling Point: 4

| Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) |               |     |                |   |                   |                  |           |         |
|---------------------------------------------------------------------------------------------------------------------|---------------|-----|----------------|---|-------------------|------------------|-----------|---------|
| Depth (inches)                                                                                                      | Matrix        |     | Redox Features |   |                   |                  | Texture   | Remarks |
|                                                                                                                     | Color (moist) | %   | Color (moist)  | % | Type <sup>1</sup> | Loc <sup>2</sup> |           |         |
| 0-8                                                                                                                 | 10YR 3/3      | 100 |                |   |                   |                  | Silt loam |         |
| 8-20                                                                                                                | 10YR 3/4      | 100 |                |   |                   |                  | Silt loam |         |
|                                                                                                                     |               |     |                |   |                   |                  |           |         |
|                                                                                                                     |               |     |                |   |                   |                  |           |         |
|                                                                                                                     |               |     |                |   |                   |                  |           |         |

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains      <sup>2</sup>Loc: PL=Pore Lining, M=Matrix

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

|                                                            |                                                                          |
|------------------------------------------------------------|--------------------------------------------------------------------------|
| <input type="checkbox"/> Histosol (A1)                     | <input type="checkbox"/> Sandy Redox (S5)                                |
| <input type="checkbox"/> Histic Epipedon (A2)              | <input type="checkbox"/> Stripped Matrix (S6)                            |
| <input type="checkbox"/> Black Histic (A3)                 | <input type="checkbox"/> Loamy Mucky Mineral (F1) <b>(except MLRA 1)</b> |
| <input type="checkbox"/> Hydrogen Sulfide (A4)             | <input type="checkbox"/> Loamy Gleyed Matrix (F2)                        |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Depleted Matrix (F3)                            |
| <input type="checkbox"/> Thick Dark Surface (A12)          | <input type="checkbox"/> Redox Dark Surface (F6)                         |
| <input type="checkbox"/> Sandy Mucky Mineral (S1)          | <input type="checkbox"/> Depleted Dark Surface (F7)                      |
| <input type="checkbox"/> Sandy Gleyed Matrix (S4)          | <input type="checkbox"/> Redox Depressions (F8)                          |

**Indicators for Problematic Hydric Soils<sup>3</sup>**

|                                                           |
|-----------------------------------------------------------|
| <input type="checkbox"/> 2cm Muck (A10)                   |
| <input type="checkbox"/> Red Parent Material (TF2)        |
| <input type="checkbox"/> Very Shallow Dark Surface (TF12) |
| <input type="checkbox"/> Other (explain in remarks)       |

<sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if present):  
Type: N/A

Depth (inches): N/A

**Hydric soil present?**      Yes ☐      No ☒

Remarks:      Indicators of hydric soil were absent. There were no redoxymorphic features present. The soil present did not satisfy the hydric soil indicators.

## HYDROLOGY

**Wetland Hydrology Indicators:**

*Primary Indicators (minimum of one required: check all that apply):*

|                                                                    |                                                                                           |
|--------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Surface water (A1)                        | <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)                          |
| <input type="checkbox"/> High Water Table (A2)                     | <input type="checkbox"/> Water-Stained Leaves <b>(except MLRA 1, 2, 4A &amp; 4B)</b> (B9) |
| <input type="checkbox"/> Saturation (A3)                           | <input type="checkbox"/> Salt Crust (B11)                                                 |
| <input type="checkbox"/> Water Marks (B1)                          | <input type="checkbox"/> Aquatic Invertebrates (B13)                                      |
| <input type="checkbox"/> Sediment Deposits (B2)                    | <input type="checkbox"/> Hydrogen Sulfide Odor (C1)                                       |
| <input type="checkbox"/> Drift Deposits (B3)                       | <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)                    |
| <input type="checkbox"/> Algal Mat or Crust (B4)                   | <input type="checkbox"/> Presence of Reduced Iron (C4)                                    |
| <input type="checkbox"/> Iron Deposits (B5)                        | <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)                       |
| <input type="checkbox"/> Surface Soil Cracks (B6)                  | <input type="checkbox"/> Stunted or Stressed Plants (D1) <b>(LRR A)</b>                   |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) | <input type="checkbox"/> Other (explain in remarks)                                       |

*Secondary Indicators (2 or more required):*

|                                                                                    |
|------------------------------------------------------------------------------------|
| <input type="checkbox"/> Water-Stained Leaves (B9) <b>(MLRA 1, 2, 4A &amp; 4B)</b> |
| <input type="checkbox"/> Drainage Patterns (B10)                                   |
| <input type="checkbox"/> Dry-Season Water Table (C2)                               |
| <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)                 |
| <input type="checkbox"/> Geomorphic Position (D2)                                  |
| <input type="checkbox"/> Shallow Aquitard (D3)                                     |
| <input type="checkbox"/> FAC-Neutral Test (D5)                                     |
| <input type="checkbox"/> Raised Ant Mounds (D6) <b>(LRR A)</b>                     |
| <input type="checkbox"/> Frost-Heave Hummocks                                      |

**Field Observations**

|                                                    |                                                                     |             |     |
|----------------------------------------------------|---------------------------------------------------------------------|-------------|-----|
| Surface Water Present?                             | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Depth (in): | N/A |
| Water Table Present?                               | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Depth (in): | N/A |
| Saturation Present?<br>(includes capillary fringe) | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Depth (in): | N/A |

**Wetland Hydrology Present?**      Yes ☐      No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A

Remarks:      Indicators of wetland hydrology were absent. Direct or indirect indicators of seasonal or permanent soil saturation or inundation were not observed.

## 10.2 APPENDIX B. WETLAND RATING FORMS



Wetland name or number Anacopper - Strandberg Wetland A

## RATING SUMMARY – Western Washington

Name of wetland (or ID #): Anacopper - Strandberg Wetland A Date of site visit: 10/9/17

Rated by Sigrid Williams & Karla Gallina Trained by Ecology? ☒ Yes ☐ No Date of training 10/15/17 <sup>SW</sup> 6/14/17 <sup>KG</sup> 3/19 <sup>NB</sup>

HGM Class used for rating Depressional Wetland has multiple HGM classes? ☐ Y ☒ N

NOTE: Form is not complete without the figures requested (figures can be combined).

Source of base aerial photo/map Google Earth

OVERALL WETLAND CATEGORY III (based on functions ☒ or special characteristics ☐)

### 1. Category of wetland based on FUNCTIONS

\_\_\_\_\_ Category I – Total score = 23 - 27

\_\_\_\_\_ Category II – Total score = 20 - 22

A Category III – Total score = 16 - 19

\_\_\_\_\_ Category IV – Total score = 9 - 15

| FUNCTION                       | Improving<br>Water Quality | Hydrologic | Habitat   |        |
|--------------------------------|----------------------------|------------|-----------|--------|
| Circle the appropriate ratings |                            |            |           |        |
| Site Potential                 | H (M) L                    | (H) M L    | H (M) A L |        |
| Landscape Potential            | H (M) L                    | (H) M L    | H M (L)   |        |
| Value                          | H (M) L                    | H M (L)    | H (M) L   | TOTAL  |
| Score Based on<br>Ratings      | A: 6                       | A: 7       | A: 5      | A = 18 |

Score for each  
function based  
on three  
ratings  
(order of ratings  
is not  
important)

9 = H,H,H

8 = H,H,M

7 = H,H,L

7 = H,M,M

6 = H,M,L

6 = M,M,M

5 = H,L,L

5 = M,M,L

4 = M,L,L

3 = L,L,L

### 2. Category based on SPECIAL CHARACTERISTICS of wetland

| CHARACTERISTIC                     | CATEGORY    |
|------------------------------------|-------------|
| Estuarine                          | I II        |
| Wetland of High Conservation Value | I           |
| Bog                                | I           |
| Mature Forest                      | I           |
| Old Growth Forest                  | I           |
| Coastal Lagoon                     | I II        |
| Interdunal                         | I II III IV |
| None of the above                  | N/A         |

Wetland name or number Anacopper - Strandberg Wetland A

## Maps and figures required to answer questions correctly for Western Washington

### Depressional Wetlands

| Map of:                                                                                                                           | To answer questions: | Figure # |
|-----------------------------------------------------------------------------------------------------------------------------------|----------------------|----------|
| Cowardin plant classes                                                                                                            | D 1.3, H 1.1, H 1.4  | 1        |
| Hydroperiods                                                                                                                      | D 1.4, H 1.2         | 1        |
| Location of outlet ( <i>can be added to map of hydroperiods</i> )                                                                 | D 1.1, D 4.1         | 1        |
| Boundary of area within 150 ft of the wetland ( <i>can be added to another figure</i> )                                           | D 2.2, D 5.2         | 1        |
| Map of the contributing basin                                                                                                     | D 4.3, D 5.3         | 4        |
| 1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat | H 2.1, H 2.2, H 2.3  | 5        |
| Screen capture of map of 303(d) listed waters in basin (from Ecology website)                                                     | D 3.1, D 3.2         | 2        |
| Screen capture of list of TMDLs for WRIA in which unit is found (from web)                                                        | D 3.3                | 3        |

### Riverine Wetlands

| Map of:                                                                                                                           | To answer questions: | Figure # |
|-----------------------------------------------------------------------------------------------------------------------------------|----------------------|----------|
| Cowardin plant classes                                                                                                            | H 1.1, H 1.4         |          |
| Hydroperiods                                                                                                                      | H 1.2                |          |
| Ponded depressions                                                                                                                | R 1.1                |          |
| Boundary of area within 150 ft of the wetland ( <i>can be added to another figure</i> )                                           | R 2.4                |          |
| Plant cover of trees, shrubs, and herbaceous plants                                                                               | R 1.2, R 4.2         |          |
| Width of unit vs. width of stream ( <i>can be added to another figure</i> )                                                       | R 4.1                |          |
| Map of the contributing basin                                                                                                     | R 2.2, R 2.3, R 5.2  |          |
| 1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat | H 2.1, H 2.2, H 2.3  |          |
| Screen capture of map of 303(d) listed waters in basin (from Ecology website)                                                     | R 3.1                |          |
| Screen capture of list of TMDLs for WRIA in which unit is found (from web)                                                        | R 3.2, R 3.3         |          |

### Lake Fringe Wetlands

| Map of:                                                                                                                           | To answer questions:       | Figure # |
|-----------------------------------------------------------------------------------------------------------------------------------|----------------------------|----------|
| Cowardin plant classes                                                                                                            | L 1.1, L 4.1, H 1.1, H 1.4 |          |
| Plant cover of trees, shrubs, and herbaceous plants                                                                               | L 1.2                      |          |
| Boundary of area within 150 ft of the wetland ( <i>can be added to another figure</i> )                                           | L 2.2                      |          |
| 1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat | H 2.1, H 2.2, H 2.3        |          |
| Screen capture of map of 303(d) listed waters in basin (from Ecology website)                                                     | L 3.1, L 3.2               |          |
| Screen capture of list of TMDLs for WRIA in which unit is found (from web)                                                        | L 3.3                      |          |

### Slope Wetlands

| Map of:                                                                                                                           | To answer questions: | Figure # |
|-----------------------------------------------------------------------------------------------------------------------------------|----------------------|----------|
| Cowardin plant classes                                                                                                            | H 1.1, H 1.4         |          |
| Hydroperiods                                                                                                                      | H 1.2                |          |
| Plant cover of <b>dense</b> trees, shrubs, and herbaceous plants                                                                  | S 1.3                |          |
| Plant cover of <b>dense, rigid</b> trees, shrubs, and herbaceous plants ( <i>can be added to figure above</i> )                   | S 4.1                |          |
| Boundary of 150 ft buffer ( <i>can be added to another figure</i> )                                                               | S 2.1, S 5.1         |          |
| 1 km Polygon: Area that extends 1 km from entire wetland edge - including polygons for accessible habitat and undisturbed habitat | H 2.1, H 2.2, H 2.3  |          |
| Screen capture of map of 303(d) listed waters in basin (from Ecology website)                                                     | S 3.1, S 3.2         |          |
| Screen capture of list of TMDLs for WRIA in which unit is found (from web)                                                        | S 3.3                |          |



Wetland name or number Anacopper - Strandberg Wetland A

## HGM Classification of Wetlands in Western Washington

For questions 1-7, the criteria described must apply to the entire unit being rated.

If the hydrologic criteria listed in each question do not apply to the entire unit being rated, you probably have a unit with multiple HGM classes. In this case, identify which hydrologic criteria in questions 1-7 apply, and go to Question 8.

1. Are the water levels in the entire unit usually controlled by tides except during floods?

☒ **NO** - go to 2

**YES** - the wetland class is **Tidal Fringe** - go to 1.1

- 1.1 Is the salinity of the water during periods of annual low flow below 0.5 ppt (parts per thousand)?

**NO** - **Saltwater Tidal Fringe (Estuarine)**

**YES** - **Freshwater Tidal Fringe**

*If your wetland can be classified as a Freshwater Tidal Fringe use the forms for **Riverine** wetlands. If it is Saltwater Tidal Fringe it is an **Estuarine** wetland and is not scored. This method **cannot** be used to score functions for estuarine wetlands.*

2. The entire wetland unit is flat and precipitation is the only source (>90%) of water to it. Groundwater and surface water runoff are NOT sources of water to the unit.

☒ **NO** - go to 3

**YES** - The wetland class is **Flats**

*If your wetland can be classified as a Flats wetland, use the form for **Depressional** wetlands.*

3. Does the entire wetland unit **meet all** of the following criteria?

\_\_\_ The vegetated part of the wetland is on the shores of a body of permanent open water (without any plants on the surface at any time of the year) at least 20 ac (8 ha) in size;

\_\_\_ At least 30% of the open water area is deeper than 6.6 ft (2 m).

☒ **NO** - go to 4

**YES** - The wetland class is **Lake Fringe** (Lacustrine Fringe)

4. Does the entire wetland unit **meet all** of the following criteria?

\_\_\_ The wetland is on a slope (*slope can be very gradual*),

\_\_\_ The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks,

\_\_\_ The water leaves the wetland **without being impounded**.

☒ **NO** - go to 5

**YES** - The wetland class is **Slope**

**NOTE:** Surface water does not pond in these type of wetlands except occasionally in very small and shallow depressions or behind hummocks (depressions are usually <3 ft diameter and less than 1 ft deep).

5. Does the entire wetland unit **meet all** of the following criteria?

\_\_\_ The unit is in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river,

\_\_\_ The overbank flooding occurs at least once every 2 years.



Wetland name or number Anacopper - Strandberg Wetland A

**NO** - go to 6

**YES** - The wetland class is **Riverine**

**NOTE:** The Riverine unit can contain depressions that are filled with water when the river is not flooding

6. Is the entire wetland unit in a topographic depression in which water ponds, or is saturated to the surface, at some time during the year? *This means that any outlet, if present, is higher than the interior of the wetland.*

**NO** - go to 7

**YES** The wetland class is **Depressional**

7. Is the entire wetland unit located in a very flat area with no obvious depression and no overbank flooding? The unit does not pond surface water more than a few inches. The unit seems to be maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

**NO** - go to 8

**YES** - The wetland class is **Depressional**

8. Your wetland unit seems to be difficult to classify and probably contains several different HGM classes. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small stream within a Depressional wetland has a zone of flooding along its sides. **GO BACK AND IDENTIFY WHICH OF THE HYDROLOGIC REGIMES DESCRIBED IN QUESTIONS 1-7 APPLY TO DIFFERENT AREAS IN THE UNIT** (make a rough sketch to help you decide). Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within the wetland unit being scored.

**NOTE:** Use this table only if the class that is recommended in the second column represents 10% or more of the total area of the wetland unit being rated. If the area of the HGM class listed in column 2 is less than 10% of the unit; classify the wetland using the class that represents more than 90% of the total area.

| HGM classes within the wetland unit being rated                    | HGM class to use in rating |
|--------------------------------------------------------------------|----------------------------|
| Slope + Riverine                                                   | Riverine                   |
| Slope + Depressional                                               | Depressional               |
| Slope + Lake Fringe                                                | Lake Fringe                |
| Depressional + Riverine along stream within boundary of depression | Depressional               |
| Depressional + Lake Fringe                                         | Depressional               |
| Riverine + Lake Fringe                                             | Riverine                   |
| Salt Water Tidal Fringe and any other class of freshwater wetland  | Treat as ESTUARINE         |

*If you are still unable to determine which of the above criteria apply to your wetland, or if you have **more than 2 HGM classes** within a wetland boundary, classify the wetland as Depressional for the rating.*

Wetland name or number Anacopper - Strandberg Wetland A

### DEPRESSIONAL AND FLATS WETLANDS

#### Water Quality Functions - Indicators that the site functions to improve water quality

##### D 1.0. Does the site have the potential to improve water quality?

###### D 1.1. Characteristics of surface water outflows from the wetland:

- Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet).  
points = 3
- Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet.  
points = 2
- Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing  
points = 1
- Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch.  
points = 1

2

###### D 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions). Yes = 4 No = 0

0

###### D 1.3. Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowardin classes):

- Wetland has persistent, ungrazed, plants > 95% of area  
points = 5
- Wetland has persistent, ungrazed, plants > 1/2 of area  
points = 3
- Wetland has persistent, ungrazed plants > 1/10 of area  
points = 1
- Wetland has persistent, ungrazed plants < 1/10 of area  
points = 0

3

###### D 1.4. Characteristics of seasonal ponding or inundation:

- This is the area that is ponded for at least 2 months. See description in manual.
- Area seasonally ponded is > 1/2 total area of wetland  
points = 4
- Area seasonally ponded is > 1/4 total area of wetland  
points = 2
- Area seasonally ponded is < 1/4 total area of wetland  
points = 0

4

Total for D 1

Add the points in the boxes above

9

Rating of Site Potential If score is: \_\_\_ 12-16 = H ✓ 6-11 = M \_\_\_ 0-5 = L Record the rating on the first page

##### D 2.0. Does the landscape have the potential to support the water quality function of the site?

###### D 2.1. Does the wetland unit receive stormwater discharges? Yes = 1 No = 0

1

###### D 2.2. Is > 10% of the area within 150 ft of the wetland in land uses that generate pollutants? Yes = 1 No = 0

1

###### D 2.3. Are there septic systems within 250 ft of the wetland? Yes = 1 No = 0

0

###### D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in questions D 2.1-D 2.3?

Source \_\_\_\_\_ Yes = 1 No = 0

0

Total for D 2

Add the points in the boxes above

2

Rating of Landscape Potential If score is: \_\_\_ 3 or 4 = H ✓ 1 or 2 = M \_\_\_ 0 = L Record the rating on the first page

##### D 3.0. Is the water quality improvement provided by the site valuable to society?

###### D 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the 303(d) list? Yes = 1 No = 0

0

###### D 3.2. Is the wetland in a basin or sub-basin where an aquatic resource is on the 303(d) list? Yes = 1 No = 0

1

###### D 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality (answer YES if there is a TMDL for the basin in which the unit is found)? Yes = 2 No = 0

0

Total for D 3

Add the points in the boxes above

1

Rating of Value If score is: \_\_\_ 2-4 = H ✓ 1 = M \_\_\_ 0 = L Record the rating on the first page



Wetland name or number Anacopper-Strandberg Wetland A

| DEPRESSIONAL AND FLATS WETLANDS                                                                                                                                                                                                       |            |                                   |                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----------------------------------|-------------------------------------|
| Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradation                                                                                                                                   |            |                                   |                                     |
| D 4.0. Does the site have the potential to reduce flooding and erosion?                                                                                                                                                               |            |                                   |                                     |
| D 4.1. Characteristics of surface water outflows from the wetland:                                                                                                                                                                    |            |                                   |                                     |
| Wetland is a depression or flat depression with no surface water leaving it (no outlet)                                                                                                                                               | points = 4 | 4                                 |                                     |
| Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet                                                                                                                               | points = 2 |                                   |                                     |
| Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch                                                                                                                                         | points = 1 |                                   |                                     |
| Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing                                                                                                                                     | points = 0 |                                   |                                     |
| D 4.2. Depth of storage during wet periods: Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part.                      |            |                                   |                                     |
| Marks of ponding are 3 ft or more above the surface or bottom of outlet                                                                                                                                                               | points = 7 | 7                                 |                                     |
| Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet                                                                                                                                                              | points = 5 |                                   |                                     |
| Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet                                                                                                                                                                  | points = 3 |                                   |                                     |
| The wetland is a "headwater" wetland                                                                                                                                                                                                  | points = 3 |                                   |                                     |
| Wetland is flat but has small depressions on the surface that trap water                                                                                                                                                              | points = 1 |                                   |                                     |
| Marks of ponding less than 0.5 ft (6 in)                                                                                                                                                                                              | points = 0 |                                   |                                     |
| D 4.3. Contribution of the wetland to storage in the watershed: Estimate the ratio of the area of upstream basin contributing surface water to the wetland to the area of the wetland unit itself.                                    |            |                                   |                                     |
| The area of the basin is less than 10 times the area of the unit                                                                                                                                                                      | points = 5 | 5                                 |                                     |
| The area of the basin is 10 to 100 times the area of the unit                                                                                                                                                                         | points = 3 |                                   |                                     |
| The area of the basin is more than 100 times the area of the unit                                                                                                                                                                     | points = 0 |                                   |                                     |
| Entire wetland is in the Flats class                                                                                                                                                                                                  | points = 5 |                                   |                                     |
| Total for D 4                                                                                                                                                                                                                         |            | Add the points in the boxes above | 16                                  |
| Rating of Site Potential If score is: <input checked="" type="checkbox"/> 12-16 = H <input type="checkbox"/> 6-11 = M <input type="checkbox"/> 0-5 = L                                                                                |            |                                   | Record the rating on the first page |
| D 5.0. Does the landscape have the potential to support hydrologic functions of the site?                                                                                                                                             |            |                                   |                                     |
| D 5.1. Does the wetland receive stormwater discharges?                                                                                                                                                                                |            | Yes = 1 No = 0                    | 1                                   |
| D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff?                                                                                                                                     |            | Yes = 1 No = 0                    | 1                                   |
| D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)?                                                       |            | Yes = 1 No = 0                    | 1                                   |
| Total for D 5                                                                                                                                                                                                                         |            | Add the points in the boxes above | 3                                   |
| Rating of Landscape Potential If score is: <input checked="" type="checkbox"/> 3 = H <input type="checkbox"/> 1 or 2 = M <input type="checkbox"/> 0 = L                                                                               |            |                                   | Record the rating on the first page |
| D 6.0. Are the hydrologic functions provided by the site valuable to society?                                                                                                                                                         |            |                                   |                                     |
| D 6.1. The unit is in a landscape that has flooding problems. Choose the description that best matches conditions around the wetland unit being rated. Do not add points. Choose the highest score if more than one condition is met. |            |                                   |                                     |
| The wetland captures surface water that would otherwise flow down-gradient into areas where flooding has damaged human or natural resources (e.g., houses or salmon redds):                                                           |            |                                   | 0                                   |
| <input checked="" type="checkbox"/> Flooding occurs in a sub-basin that is immediately down-gradient of unit.                                                                                                                         | points = 2 |                                   |                                     |
| <input type="checkbox"/> Surface flooding problems are in a sub-basin farther down-gradient.                                                                                                                                          | points = 1 |                                   |                                     |
| Flooding from groundwater is an issue in the sub-basin.                                                                                                                                                                               | points = 1 |                                   |                                     |
| The existing or potential outflow from the wetland is so constrained by human or natural conditions that the water stored by the wetland cannot reach areas that flood. Explain why _____                                             | points = 0 |                                   |                                     |
| There are no problems with flooding downstream of the wetland.                                                                                                                                                                        |            | points = 0                        |                                     |
| D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan?                                                                                                              |            | Yes = 2 No = 0                    | 0                                   |
| Total for D 6                                                                                                                                                                                                                         |            | Add the points in the boxes above | 0                                   |
| Rating of Value If score is: <input type="checkbox"/> 2-4 = H <input type="checkbox"/> 1 = M <input checked="" type="checkbox"/> 0 = L                                                                                                |            |                                   | Record the rating on the first page |



Wetland name or number Anacopper-Strandberg Wetland A

These questions apply to wetlands of all HGM classes.

**HABITAT FUNCTIONS - Indicators that site functions to provide important habitat**

**H 1.0. Does the site have the potential to provide habitat?**

H 1.1. Structure of plant community: Indicators are Cowardin classes and strata within the Forested class. Check the Cowardin plant classes in the wetland. Up to 10 patches may be combined for each class to meet the threshold of 1/4ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked.

- |                                                                                       |                                  |
|---------------------------------------------------------------------------------------|----------------------------------|
| <input type="checkbox"/> Aquatic bed                                                  | 4 structures or more: points = 4 |
| <input checked="" type="checkbox"/> Emergent                                          | 3 structures: points = 2         |
| <input checked="" type="checkbox"/> Scrub-shrub (areas where shrubs have > 30% cover) | 2 structures: points = 1         |
| <input type="checkbox"/> Forested (areas where trees have > 30% cover)                | 1 structure: points = 0          |
- If the unit has a Forested class, check if:
- ☐ The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the Forested polygon

1

**H 1.2. Hydroperiods**

Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or 1/4ac to count (see text for descriptions of hydroperiods).

- |                                                                      |                                     |
|----------------------------------------------------------------------|-------------------------------------|
| <input checked="" type="checkbox"/> Permanently flooded or inundated | 4 or more types present: points = 3 |
| <input checked="" type="checkbox"/> Seasonally flooded or inundated  | 3 types present: points = 2         |
| <input type="checkbox"/> Occasionally flooded or inundated           | 2 types present: points = 1         |
| <input checked="" type="checkbox"/> Saturated only                   | 1 type present: points = 0          |
- ☐ Permanently flowing stream or river in, or adjacent to, the wetland
- ☐ Seasonally flowing stream in, or adjacent to, the wetland
- ☐ Lake Fringe wetland
- ☐ Freshwater tidal wetland

2

**H 1.3. Richness of plant species**

Count the number of plant species in the wetland that cover at least 10 ft<sup>2</sup>.

Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle

- |                              |            |
|------------------------------|------------|
| If you counted: > 19 species | points = 2 |
| 5 - 19 species               | points = 1 |
| < 5 species                  | points = 0 |

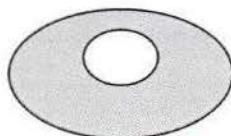
1

**H 1.4. Interspersion of habitats**

Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. If you have four or more plant classes or three classes and open water, the rating is always high.



None = 0 points



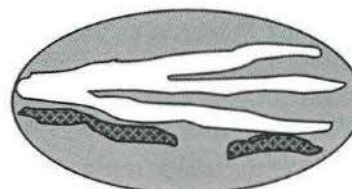
Low = 1 point



Moderate = 2 points



All three diagrams in this row are HIGH = 3 points



1

Wetland name or number Anacopper-Strandberg Wetland A

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                   |   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|---|
| <p>H 1.5. Special habitat features:</p> <p>Check the habitat features that are present in the wetland. The number of checks is the number of points.</p> <p><input type="checkbox"/> Large, downed, woody debris within the wetland (&gt; 4 in diameter and 6 ft long).</p> <p><input type="checkbox"/> Standing snags (dbh &gt; 4 in) within the wetland</p> <p><input type="checkbox"/> Undercut banks are present for at least 6.6 ft (2 m) and/ or overhanging plants extends at least 3.3 ft (1 m) over a stream (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m)</p> <p><input type="checkbox"/> Stable steep banks of fine material that might be used by beaver or muskrat for denning (&gt; 30 degree slope) OR signs of recent beaver activity are present (cut shrubs or trees that have not yet weathered where wood is exposed)</p> <p><input checked="" type="checkbox"/> At least 1/4 ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-laying by amphibians)</p> <p><input checked="" type="checkbox"/> Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strata)</p> |                                   | 2 |
| Total for H 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Add the points in the boxes above | 7 |

Rating of Site Potential If score is: 15-18 = H ☒ 7-14 = M ☐ 0-6 = L

Record the rating on the first page

|                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                   |    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|----|
| <p>H 2.0. Does the landscape have the potential to support the habitat functions of the site?</p>                                                                                                                                                                                                                                                                                                                                                           |                                   |    |
| <p>H 2.1. Accessible habitat (include only habitat that directly abuts wetland unit).</p> <p>Calculate: %undisturbed habitat <u>0</u> + [(%moderate and low intensity land uses)/2] <u>2</u> = <u>2</u> %</p> <p>If total accessible habitat is:</p> <p>&gt; 1/3 (33.3%) of 1 km Polygon points = 3</p> <p>20-33% of 1 km Polygon points = 2</p> <p>10-19% of 1 km Polygon points = 1</p> <p>&lt; 10% of 1 km Polygon points = <u>0</u></p>                 |                                   | 0  |
| <p>H 2.2. Undisturbed habitat in 1 km Polygon around the wetland.</p> <p>Calculate: %undisturbed habitat <u>0</u> + [(%moderate and low intensity land uses)/2] <u>13</u> = <u>13</u> %</p> <p>Undisturbed habitat &gt; 50% of Polygon points = 3</p> <p>Undisturbed habitat 10-50% and in 1-3 patches points = 2</p> <p>Undisturbed habitat 10-50% and &gt; 3 patches points = <u>1</u></p> <p>Undisturbed habitat &lt; 10% of 1 km Polygon points = 0</p> |                                   | 1  |
| <p>H 2.3. Land use intensity in 1 km Polygon: If</p> <p>&gt; 50% of 1 km Polygon is high intensity land use points = <u>(-2)</u></p> <p>≤ 50% of 1 km Polygon is high intensity points = 0</p>                                                                                                                                                                                                                                                              |                                   | -2 |
| Total for H 2                                                                                                                                                                                                                                                                                                                                                                                                                                               | Add the points in the boxes above | -1 |

Rating of Landscape Potential If score is: ☐ 4-6 = H ☐ 1-3 = M ☒ < 1 = L

Record the rating on the first page

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  |   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---|
| <p>H 3.0. Is the habitat provided by the site valuable to society?</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |   |
| <p>H 3.1. Does the site provide habitat for species valued in laws, regulations, or policies? Choose only the highest score that applies to the wetland being rated.</p> <p>Site meets ANY of the following criteria: points = 2</p> <p><input checked="" type="checkbox"/> It has 3 or more priority habitats within 100 m (see next page)</p> <p><input checked="" type="checkbox"/> It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)</p> <p><input checked="" type="checkbox"/> It is mapped as a location for an individual WDFW priority species</p> <p><input checked="" type="checkbox"/> It is a Wetland of High Conservation Value as determined by the Department of Natural Resources</p> <p><input checked="" type="checkbox"/> It has been categorized as an important habitat site in a local or regional comprehensive plan, in a Shoreline Master Plan, or in a watershed plan</p> <p>Site has 1 or 2 priority habitats (listed on next page) within 100 m points = <u>1</u></p> <p>Site does not meet any of the criteria above points = 0</p> |  | 1 |

Rating of Value If score is: ☐ 2 = H ☒ 1 = M ☐ 0 = L

Record the rating on the first page



Wetland name or number Anacopper - Strandberg Wetland A

## WDFW Priority Habitats

Priority habitats listed by WDFW (see complete descriptions of WDFW priority habitats, and the counties in which they can be found, in: Washington Department of Fish and Wildlife, 2008. Priority Habitat and Species List. Olympia, Washington. 177 pp. <http://wdfw.wa.gov/publications/00165/wdfw00165.pdf> or access the list from here: <http://wdfw.wa.gov/conservation/phs/list/>)

Count how many of the following priority habitats are within 330 ft (100 m) of the wetland unit: **NOTE:** This question is independent of the land use between the wetland unit and the priority habitat.

- **Aspen Stands:** Pure or mixed stands of aspen greater than 1 ac (0.4 ha).
- **Biodiversity Areas and Corridors:** Areas of habitat that are relatively important to various species of native fish and wildlife (full descriptions in WDFW PHS report).
- **Herbaceous Balds:** Variable size patches of grass and forbs on shallow soils over bedrock.
- **Old-growth/Mature forests:** Old-growth west of Cascade crest – Stands of at least 2 tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) > 32 in (81 cm) dbh or > 200 years of age. Mature forests – Stands with average diameters exceeding 21 in (53 cm) dbh; crown cover may be less than 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth; 80-200 years old west of the Cascade crest.
- **Oregon White Oak:** Woodland stands of pure oak or oak/conifer associations where canopy coverage of the oak component is important (full descriptions in WDFW PHS report p. 158 – see web link above).
- **Riparian:** The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.
- **Westside Prairies:** Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (full descriptions in WDFW PHS report p. 161 – see web link above).
- **Instream:** The combination of physical, biological, and chemical processes and conditions that interact to provide functional life history requirements for instream fish and wildlife resources.
- **Nearshore:** Relatively undisturbed nearshore habitats. These include Coastal Nearshore, Open Coast Nearshore, and Puget Sound Nearshore. (full descriptions of habitats and the definition of relatively undisturbed are in WDFW report – see web link on previous page).
- **Caves:** A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in soils, rock, ice, or other geological formations and is large enough to contain a human.
- **Cliffs:** Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation.
- **Talus:** Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft (0.15 - 2.0 m), composed of basalt, andesite, and/or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs.
- ✓ **Snags and Logs:** Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to enable cavity excavation/use by wildlife. Priority snags have a diameter at breast height of > 20 in (51 cm) in western Washington and are > 6.5 ft (2 m) in height. Priority logs are > 12 in (30 cm) in diameter at the largest end, and > 20 ft (6 m) long.

**Note:** All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed elsewhere.



Wetland name or number Anacopper - Strandberg Wetland A

### CATEGORIZATION BASED ON SPECIAL CHARACTERISTICS

| Wetland Type                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Category              |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| <i>Check off any criteria that apply to the wetland. Circle the category when the appropriate criteria are met.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                       |
| <b>SC 1.0. Estuarine wetlands</b><br>Does the wetland meet the following criteria for Estuarine wetlands?<br>— The dominant water regime is tidal,<br>— Vegetated, and<br>— With a salinity greater than 0.5 ppt <div style="text-align: right;">Yes – Go to SC 1.1    <b>(No) = Not an estuarine wetland</b></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                       |
| <b>SC 1.1.</b> Is the wetland within a National Wildlife Refuge, National Park, National Estuary Reserve, Natural Area Preserve, State Park or Educational, Environmental, or Scientific Reserve designated under WAC 332-30-151?<br><div style="text-align: right;">Yes = <b>Category I</b>    No - Go to SC 1.2</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Cat. I                |
| <b>SC 1.2.</b> Is the wetland unit at least 1 ac in size and meets at least two of the following three conditions?<br>— The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing, and has less than 10% cover of non-native plant species. (If non-native species are <i>Spartina</i> , see page 25)<br>— At least ¼ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or unmowed grassland.<br>— The wetland has at least two of the following features: tidal channels, depressions with open water, or contiguous freshwater wetlands.<br><div style="text-align: right;">Yes = <b>Category I</b>    No = <b>Category II</b></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Cat. I<br><br>Cat. II |
| <b>SC 2.0. Wetlands of High Conservation Value (WHCV)</b><br><b>SC 2.1.</b> Has the WA Department of Natural Resources updated their website to include the list of Wetlands of High Conservation Value?<br><div style="text-align: right;">Yes – Go to SC 2.2    No – Go to SC 2.3</div> <b>SC 2.2.</b> Is the wetland listed on the WDNR database as a Wetland of High Conservation Value?<br><div style="text-align: right;">Yes = <b>Category I</b>    <b>(No) = Not a WHCV</b></div> <b>SC 2.3.</b> Is the wetland in a Section/Township/Range that contains a Natural Heritage wetland?<br><a href="http://www1.dnr.wa.gov/nhp/refdesk/datasetsearch/wnhpwetlands.pdf">http://www1.dnr.wa.gov/nhp/refdesk/datasetsearch/wnhpwetlands.pdf</a><br><div style="text-align: right;">Yes – <b>Contact WNHP/WDNR and go to SC 2.4</b>    No = <b>Not a WHCV</b></div> <b>SC 2.4.</b> Has WDNR identified the wetland within the S/T/R as a Wetland of High Conservation Value and listed it on their website?<br><div style="text-align: right;">Yes = <b>Category I</b>    No = <b>Not a WHCV</b></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Cat. I                |
| <b>SC 3.0. Bogs</b><br>Does the wetland (or any part of the unit) meet both the criteria for soils and vegetation in bogs? <i>Use the key below. If you answer YES you will still need to rate the wetland based on its functions.</i><br><b>SC 3.1.</b> Does an area within the wetland unit have organic soil horizons, either peats or mucks, that compose 16 in or more of the first 32 in of the soil profile?<br><div style="text-align: right;">Yes – Go to SC 3.3    <b>(No) – Go to SC 3.2</b></div> <b>SC 3.2.</b> Does an area within the wetland unit have organic soils, either peats or mucks, that are less than 16 in deep over bedrock, or an impermeable hardpan such as clay or volcanic ash, or that are floating on top of a lake or pond?<br><div style="text-align: right;">Yes – Go to SC 3.3    <b>(No) = Is not a bog</b></div> <b>SC 3.3.</b> Does an area with peats or mucks have more than 70% cover of mosses at ground level, AND at least a 30% cover of plant species listed in Table 4?<br><div style="text-align: right;">Yes = <b>Is a Category I bog</b>    No – Go to SC 3.4</div> <b>NOTE:</b> If you are uncertain about the extent of mosses in the understory, you may substitute that criterion by measuring the pH of the water that seeps into a hole dug at least 16 in deep. If the pH is less than 5.0 and the plant species in Table 4 are present, the wetland is a bog.<br><b>SC 3.4.</b> Is an area with peats or mucks forested (> 30% cover) with Sitka spruce, subalpine fir, western red cedar, western hemlock, lodgepole pine, quaking aspen, Engelmann spruce, or western white pine, AND any of the species (or combination of species) listed in Table 4 provide more than 30% of the cover under the canopy?<br><div style="text-align: right;">Yes = <b>Is a Category I bog</b>    No = <b>Is not a bog</b></div> | Cat. I                |

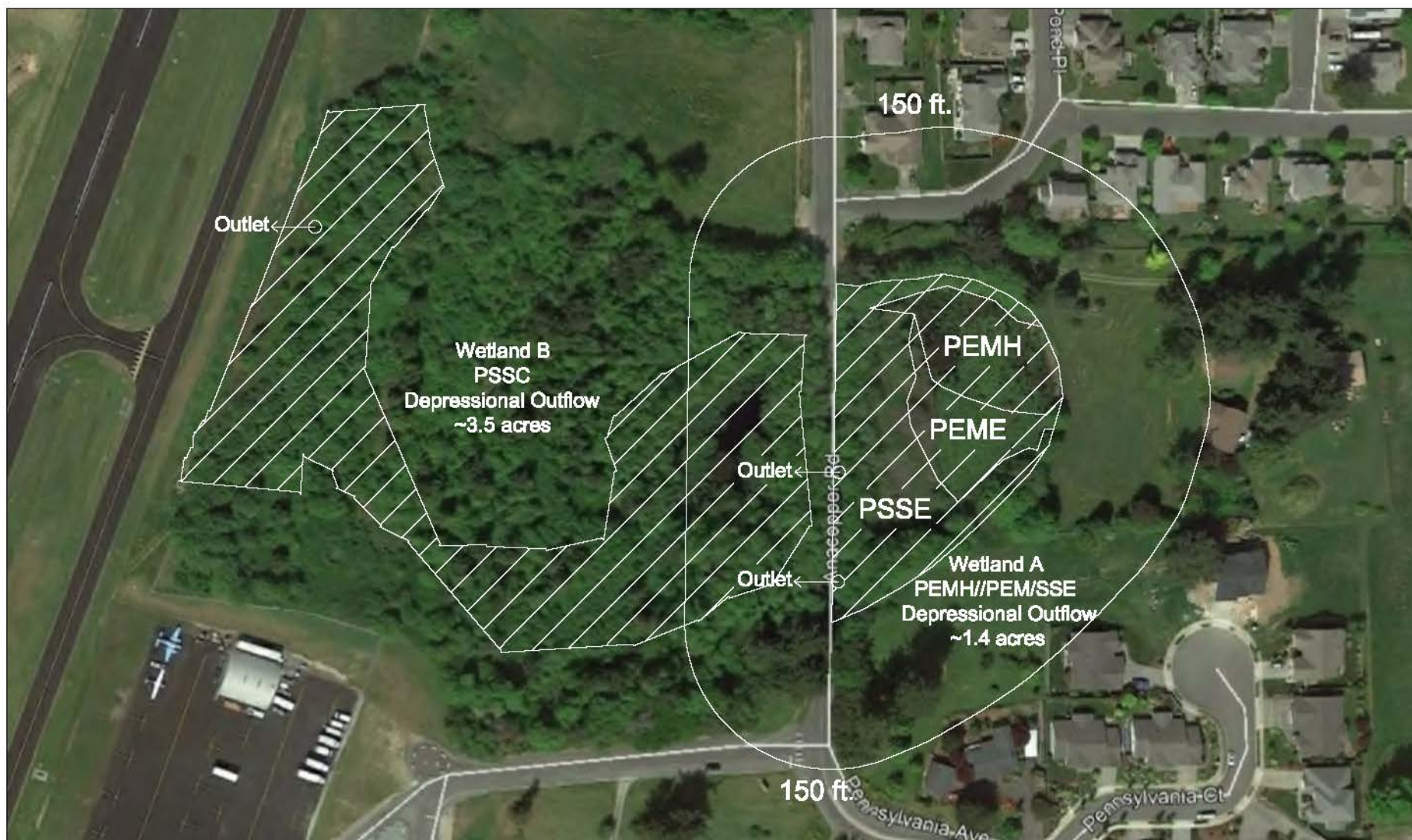
Wetland name or number Anacopper - Strandberg Wetland A

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|
| <p><b>SC 4.0. Forested Wetlands</b></p> <p>Does the wetland have at least <u>1 contiguous acre</u> of forest that meets one of these criteria for the WA Department of Fish and Wildlife's forests as priority habitats? <i>If you answer YES you will still need to rate the wetland based on its functions.</i></p> <ul style="list-style-type: none"> <li>— <b>Old-growth forests</b> (west of Cascade crest): Stands of at least two tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) that are at least 200 years of age OR have a diameter at breast height (dbh) of 32 in (81 cm) or more.</li> <li>— <b>Mature forests</b> (west of the Cascade Crest): Stands where the largest trees are 80- 200 years old OR the species that make up the canopy have an average diameter (dbh) exceeding 21 in (53 cm).</li> </ul> <p>Yes = Category I    <b>(No) = Not a forested wetland for this section</b></p>                                                                                                                                                                                                                                                                                                                      | <p>Cat. I</p>                                              |
| <p><b>SC 5.0. Wetlands in Coastal Lagoons</b></p> <p>Does the wetland meet all of the following criteria of a wetland in a coastal lagoon?</p> <ul style="list-style-type: none"> <li>— The wetland lies in a depression adjacent to marine waters that is wholly or partially separated from marine waters by sandbanks, gravel banks, shingle, or, less frequently, rocks</li> <li>— The lagoon in which the wetland is located contains ponded water that is saline or brackish (&gt; 0.5 ppt) during most of the year in at least a portion of the lagoon (<i>needs to be measured near the bottom</i>)</li> </ul> <p>Yes – Go to SC 5.1    <b>(No) = Not a wetland in a coastal lagoon</b></p> <p><b>SC 5.1. Does the wetland meet all of the following three conditions?</b></p> <ul style="list-style-type: none"> <li>— The wetland is relatively undisturbed (has no diking, ditching, filling, cultivation, grazing), and has less than 20% cover of aggressive, opportunistic plant species (see list of species on p. 100).</li> <li>— At least ¼ of the landward edge of the wetland has a 100 ft buffer of shrub, forest, or un-grazed or un-mowed grassland.</li> <li>— The wetland is larger than 1/10 ac (4350 ft<sup>2</sup>)</li> </ul> <p>Yes = Category I    No = Category II</p> | <p>Cat. I</p> <p>Cat. II</p>                               |
| <p><b>SC 6.0. Interdunal Wetlands</b></p> <p>Is the wetland west of the 1889 line (also called the Western Boundary of Upland Ownership or WBUO)? <i>If you answer yes you will still need to rate the wetland based on its habitat functions.</i></p> <p>In practical terms that means the following geographic areas:</p> <ul style="list-style-type: none"> <li>— Long Beach Peninsula: Lands west of SR 103</li> <li>— Grayland-Westport: Lands west of SR 105</li> <li>— Ocean Shores-Copalis: Lands west of SR 115 and SR 109</li> </ul> <p>Yes – Go to SC 6.1    <b>(No) = not an interdunal wetland for rating</b></p> <p><b>SC 6.1. Is the wetland 1 ac or larger and scores an 8 or 9 for the habitat functions on the form (rates H,H,H or H,H,M for the three aspects of function)?</b></p> <p>Yes = Category I    No – Go to SC 6.2</p> <p><b>SC 6.2. Is the wetland 1 ac or larger, or is it in a mosaic of wetlands that is 1 ac or larger?</b></p> <p>Yes = Category II    No – Go to SC 6.3</p> <p><b>SC 6.3. Is the unit between 0.1 and 1 ac, or is it in a mosaic of wetlands that is between 0.1 and 1 ac?</b></p> <p>Yes = Category III    No = Category IV</p>                                                                                                                  | <p>Cat I</p> <p>Cat. II</p> <p>Cat. III</p> <p>Cat. IV</p> |
| <p><b>Category of wetland based on Special Characteristics</b></p> <p>If you answered No for all types, enter "Not Applicable" on Summary Form</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <p>N/A</p>                                                 |

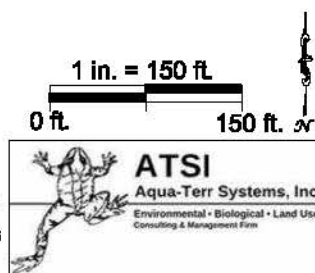
Wetland name or number Anacopper - Strandberg Wetland A

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**Figure 1. Wetland Map**  
 Strandberg-The Crossing  
 Parcel Number: P31752  
 1905 Anacopper Mine Road, Anacortes, Washington  
 Section 3, Township 36 N, Range 01 E, WM  
 February 2020

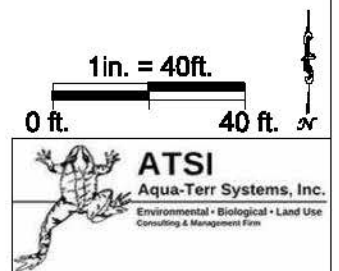


**Note:** Basemap obtained from Google Earth (Imagery Date: 2 May 2015). Wetland B location and information obtained from Grette Associates LLC (4 September 2015) with alterations by ATSI. Wetland B is not described as part of this rating. The wetland boundaries and locations are approximate and do not constitute a legal land survey.



**Figure 2. 303d List Map**  
**Strandberg-The Crossing**  
**Parcel Number: P31752**  
**1905 Anacopper Mine Road, Anacortes, Washington**  
**Section 3, Township 36 N, Range 01 E, WM**  
**February 2020**

**Note:** Basemap obtained from the Department of Ecology.

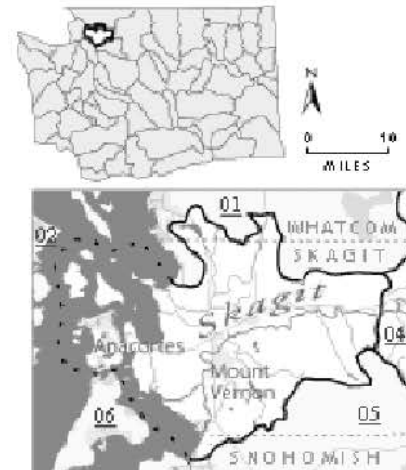


# Water Quality Improvement Projects (TMDLs)

[Water Quality Improvement](#) > [Water Quality Improvement Projects by WRIA](#) > WRIA 3: Lower Skagit-Samish

## WRIA 3: Lower Skagit-Samish

The following table lists overview information and links to specific water quality improvement projects (including total maximum daily loads, or TMDLs) for this water resource inventory area ([WRIA](#)). Please use links (where available) for more information on a project.



### Counties

- [Skagit](#)
- [Snohomish](#)
- [Whatcom](#)

| Waterbody Name                   | Pollutant(s)     | Status**                                                  | TMDL Lead                                      |
|----------------------------------|------------------|-----------------------------------------------------------|------------------------------------------------|
| <a href="#">Campbell Lake</a>    | Total Phosphorus | EPA approved                                              | <a href="#">Tricia Shoblom</a><br>425-649-7288 |
| <a href="#">Erie Lake</a>        | Total Phosphorus | EPA approved                                              | <a href="#">Tricia Shoblom</a><br>425-649-7288 |
| <a href="#">Lake Ketchum</a>     | Total Phosphorus | Under development as a straight to implementation project | <a href="#">Tricia Shoblom</a><br>425-649-7288 |
| <a href="#">Padilla Bay</a>      | Fecal Coliform   | Under development                                         | <a href="#">Danielle DeVoe</a><br>425-649-7036 |
| <a href="#">Samish Watershed</a> | Fecal Coliform   | EPA approved<br>Has an implementation plan                | <a href="#">Danielle DeVoe</a><br>425-649-7036 |
| <a href="#">Skagit Basin</a>     | Fecal Coliform   | EPA approved<br>Has an implementation plan                | <a href="#">Danielle DeVoe</a><br>425-649-7036 |
|                                  | Temperature      | EPA approved                                              |                                                |

\*\* **Status** will be listed as one of the following: *Approved by EPA, Under Development or Implementation*

### For more information about WRIA 3:

- [Waterbodies in WRIA 3](#) - using the Water Quality Assessment Query Tool
- [Watershed Information for WRIA 3](#)

\* The Department of Ecology and other state resource agencies frequently use a system of 62 "Water Resource Inventory Areas" or "WRIAs" to refer to the state's major watershed basins.

### Figure 3. TMDL List

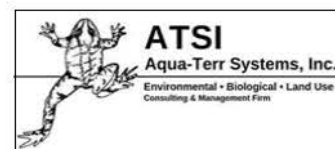
Stranberg-The Crossing

Parcel Number: P31752

1905 Anacopper Mine Road, Anacortes, Washington

Section 3, Township 35 N, Range 01 E, WM

February 2020



**Note** List obtained from the Department of Ecology.





**Figure 4. Basin Map**

Strandberg-The Crossing

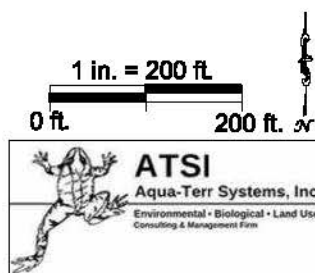
Parcel Number: P31752

1905 Anacopper Mine Road, Anacortes, Washington

Section 3, Township 36 N, Range 01 E, WM

February 2020

Wetland A: ~1.4 acres vs. Basin A: ~13.3 acres



**Note:** Basemap obtained from Google Earth (Imagery Date: 2 May 2015). The wetland boundaries and locations are approximate and do not constitute a legal land survey.





**Figure 5. 1 Km Map**  
**Strandberg-the Crossing**  
**Parcel Number: P31752**  
**1905 Anacopper Mine Road, Anacortes, Washington**  
**Section 3, Township 35 N, Range 01 E, WM**  
**February 2020**

**M = Moderately Disturbed**  
**H = Highly Disturbed**

**1 in. = 1,300 ft.**

0 ft.

1.300 ft

**ATSI**

... Aqua-Terr Systems, Inc.

**Aqua-Ten Systems, Inc.**  
Environmental • Biological • Land Use  
Consulting & Management Firm

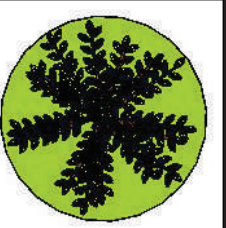
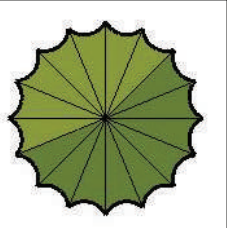
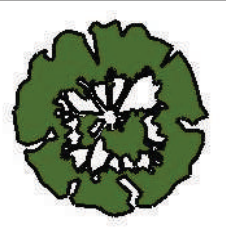
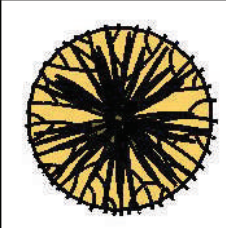
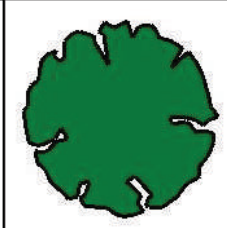
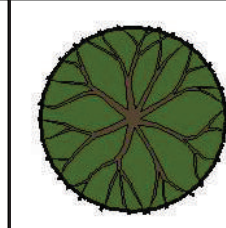
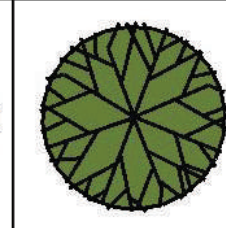
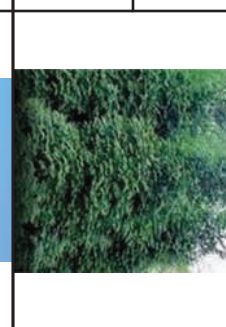
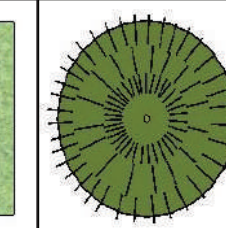
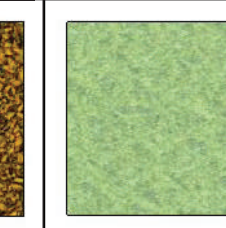
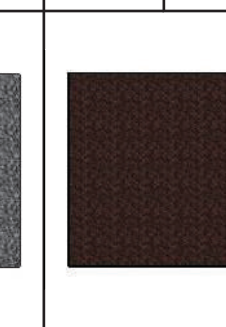
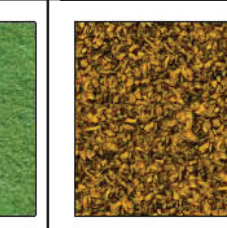
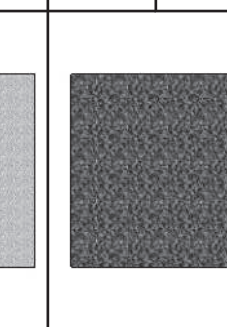
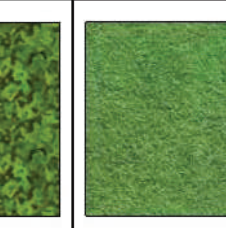
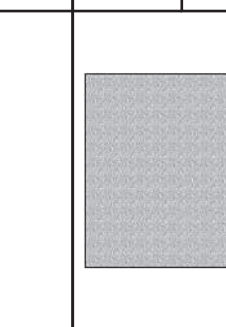
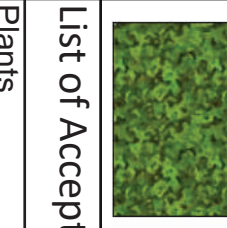
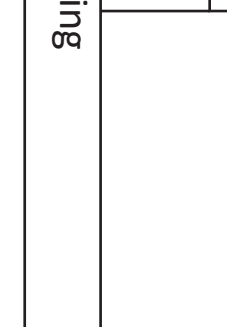
Environmental • Biologic  
Consulting & Management Firm

**Note:** Basemap obtained from Google Earth (Imagery Date: 2 May 2015). The wetland boundaries and locations are approximate and do not constitute a legal land survey.

### 10.3 APPENDIX C. LANDSCAPE PLAN



LANDSCAPE LEGEND

|                                                                                       |                                                                              |                                                                                       |
|---------------------------------------------------------------------------------------|------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  | 1<br>Cornus Sericea<br>Quantity: 31                                          |  |
|  | 2<br>Myrica Californica<br>Quantity: 63                                      |  |
|  | 3<br>Betula papyrifera<br>Quantity: 26                                       |  |
|  | 4<br>Fruit Tree<br>Plumb / Apple / Pear<br>Quantity: 7                       |  |
|  | 5<br>Populus<br>tremuloides<br>Quantity: 14                                  |  |
|  | 6<br>Peltandra acerifolia<br>Quantity: 5                                     |  |
|  | 7<br>Populus tremula<br>Erecta<br>Quantity: 11                               |  |
|  | 8<br>Thuja plicata<br>"Green Giant"<br>Quantity: 17                          |  |
|   | 9<br>Pseudotsuga<br>Menziesii<br>Quantity: 21                                |   |
|    | 10<br>Chip Path<br>Quantity: 11                                              |    |
|    | 11<br>General Landscape<br>See List of Acceptable<br>General Landscaping     |    |
|    | 12<br>Crushed Gravel<br>and Oyster Shell<br>Pervious Walkway<br>Quantity: 15 |    |
|    | 13<br>Existing Wetland<br>Vegetation                                         |    |
| List of Acceptable General Landscaping                                                |                                                                              |                                                                                       |
| Plants                                                                                |                                                                              |                                                                                       |
| 1. Japanese Holly (Ilex Crenata)                                                      |                                                                              |                                                                                       |
| 2. Red Sword Fern                                                                     |                                                                              |                                                                                       |
| 3. Mexican Feather Grass (Stipa Tenissima)                                            |                                                                              |                                                                                       |
| 4. Tall Oregon Grape (Mahonia Aquifolium)                                             |                                                                              |                                                                                       |
| 5. Salal (Gaultheria Shalton)                                                         |                                                                              |                                                                                       |
| 6. Krimklim (Aretosapphos)                                                            |                                                                              |                                                                                       |
| 7. Red Flowering Currant (Ribes Sanguineum)                                           |                                                                              |                                                                                       |
| 8. Rhodod. - (Mixed)                                                                  |                                                                              |                                                                                       |
| 9. Western Azalea (Mixed)                                                             |                                                                              |                                                                                       |
| 10. Strawberry Tree (Larbutus)                                                        |                                                                              |                                                                                       |
| Perennials                                                                            |                                                                              |                                                                                       |
| 1. Spanish Lavender                                                                   |                                                                              |                                                                                       |
| 2. Silene Nemoralis (Sage)                                                            |                                                                              |                                                                                       |
| 3. Parsimon Sage                                                                      |                                                                              |                                                                                       |
| 4. Yarrow                                                                             |                                                                              |                                                                                       |
| 5. Black Eyed Susan                                                                   |                                                                              |                                                                                       |



BUILDER INFO:  
MAILING ADDRESS:  
P.O. BOX 319  
ANACORTES WA 98221  
PHONE:  
360-293-7431  
WEB:  
www.strandbergconstruction.com

PROJECT / CLIENT INFO  
THE CROSSING  
1905 Anacopper RD, Anacortes, WA 98221

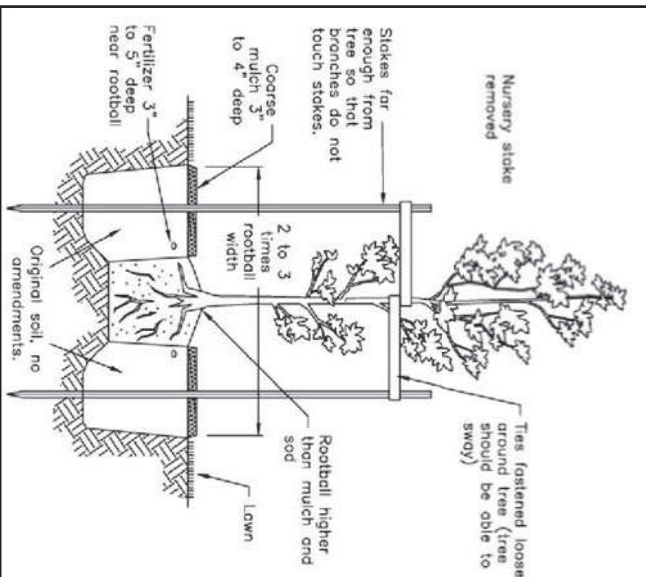
LANDSCAPE PLAN PH I  
OWNER APPROVAL

FLAT CALCULATIONS:

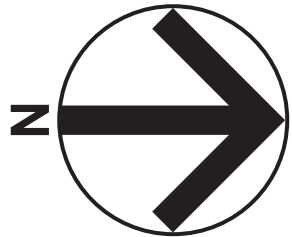
|                                                |           |
|------------------------------------------------|-----------|
| WETLAND TRACT: 104,382.58 SF                   | 99,284.17 |
| COTTAGE TRACT W/ DET. POND: 53,736.72 (54.12%) |           |
| COTTAGE TRACT LANDSCAPING: 22,846.25           |           |
| 3 LOT TRACT: 13,019.24 (48.23%)                |           |

- NOTE:
- SOIL TO MEET BMP 15.13 REQUIREMENTS
  - LANDSCAPE PLAN TO COMPLY WITH AMC 19.65.040
  - PLANT MATERIAL AND INSTALLATION PER AMC 19.65.050
  - LANDSCAPING TYPES PER AMC 19.65.060 (WHERE APPLICABLE)
  - LANDSCAPING SITE DESIGN PER AMC 19.65.070 (WHERE APPLICABLE)
  - MAINTENANCE PER AMC 19.65.050
  - IRRIGATION PER AMC 19.65.050
  - PERFORMANCE ASSURANCE / BONDING PER AMC 19.65.100
  - TREE PRESERVATION PER SUBMITTED REPORT BY BARTLETT CONSULTING
  - TREE DENSITY CALC. PER SUBMITTED REPORT BY BARTLETT CONSULTING

GENERAL PLANTING DETAIL  
NOT TO SCALE



FOR EXISTING TREES SEE  
TREE PRESERVATION PLAN



LANDSCAPE PLAN

SCALE: 1" = 20'





| LANDSCAPE LEGEND |  |  |  | JASON STERLING |                 | DESIGNED BY |
|------------------|--|--|--|----------------|-----------------|-------------|
|                  |  |  |  | SCALE          | 1" = 20' U.N.O. |             |
|                  |  |  |  | DATE           | 01/27/2020      |             |
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**City of Anacortes**  
*Planning, Community &  
Economic Development*

**Date Received:**

8/14/20

16 July 2020

Nels Strandberg  
Strandberg Construction, Inc.  
PO Box 319, Anacortes, WA 98221  
Phone: (360) 293-7431  
[nels@strandbergconstruction.com](mailto:nels@strandbergconstruction.com)

**Re: Strandberg-The Crossings, Anacortes, WA; ATSI Critical Areas Assessment Report Addendum Letter**

Dear Mr. Strandberg,

ATSI has been retained by you, the Client, to prepare this addendum to our February 2020 Critical Areas Assessment Report for your proposed, The Crossings, housing development project (ATSI February 2020). The approximate 5.20 acre proposed project property is located at 1905 Anacopper Road (parcel number P31752), Anacortes, Washington within a portion of Section 23, Township 35 north, Range 01 east, WM.

This addendum addresses comments from the City of Anacortes documents provided in review of the Clients LPS-2020-0001 application for The Crossings. Said documents include the following:

- **29 April 2020** Memorandum from Tess Cooper, Associate Planner (City of Anacortes 29 April 2020)
- **1 May 2020** Letter from Libby Grage, Planning Manager (City of Anacortes 1 May 2020)

The specific items we address are taken directly from the before mentioned or other referenced items and are provided in ***bold italics*** with our responses following. Our responses also take into consideration, the Client provided correspondence with appropriate references and ATSI approved experts in *non bold italics*, and the revised project permit sheets (see Revised Project Permit Sheets attached).

Mailing: c/o Karla Gallina, 1 Lake Louise Drive #4  
Physical: 1337 Lincoln Street #2  
Bellingham, WA 98229  
Cell: (360) 393-9921 Office: (360) 389-5593



## **METHODS**

### **Anacortes Municipal Code Provisions**

This addendum has been prepared following the City of Anacortes, Critical Areas Ordinance Chapter 17.70 (City of Anacortes 2008).

### **Guidance**

This addendum has been prepared following guidance provided by Ecology, Corps, and USEPA titled:

- Wetland Mitigation in Washington State – Part 1: Agency Policies and Guidance (Version 1) (Ecology, Corps, and USEPA March 2006)
- Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans (Version 1) (Ecology, Corps, and USEPA March 2006)

### **Credentials**

ATSI's biological staff includes Karla Gallina, Olin Anderson, and Steven Walker whose qualifications are as follows (resumes available upon request). We complete relevant workshops and courses to maintain professional certifications and to have a current understanding of the best available science.

Karla Gallina, BS, PWS, CERP is owner and senior biologist for ATSI with a focus on project acquisition and management and technical writing and editing. Mrs. Gallina has a BS degree in natural resources/environmental science from Paul Smith's College in New York State and has been a biologist with ATSI since 2008. Mrs. Gallina's relevant qualifications are as follows:

- PWS certified by the SWS PCP (#2340)
- CERP certified through Society of Ecological Restorations CERP Program (#161)
- Training from Ecology on the 2004 Wetland Rating System for Western Washington (Hruby 2004)
- Qualified to rate wetlands per the Washington State Wetland Rating System for Western Washington: 2014 Update (Hruby 2014)
- Qualified to write BAs per WSDOT requirements as a Senior Author
- Completed Ecology training for Determining the OHWM (Ecology October 2016)

Olin Anderson, MLA is a biologist with ATSI with a focus on field work, CAD, GIS, and technical writing. Mr. Anderson has an MLA from the University of Illinois, a BS in geography from Northern Illinois University, and a certificate in wetland delineation from SVC. Mr. Anderson has over 10 years of working experience in designing and implementing a variety of ecological restoration projects. Mr. Anderson has been a biologist with ATSI since December of 2019.

Steven Walker, BS is an associate biologist with ATSI with a focus on field work, GIS, and technical writing. Mr. Walker has a BS in environmental conservation from SVC and has been a biologist with ATSI since March 2020.

## **29 APRIL 2020 CITY OF ANACORTES MEMORANDUM**

- 1. The delineation flagging is mostly missing on site, however the few flags that remain appear to be accurate, while the wetland edge is fairly prominent without flagging, flags should remain in place until after all permitting is reviewed and approved.***

*Wetland flags were surveyed by a licensed surveyor immediately after their installation by a certified wetland biologist, given the months/years between the wetland delineation and actual city review some of the flags may have gone missing, they are easily replaced (Strandberg Construction, Inc. 2020).*

- 2. The report and worksheets were reviewed for accuracy, there are few items identified on the rating worksheets, but they do not appear to make a drastic change in the rating results. Please correct and resubmit for review (see attached).***

While ATSI has edits, there are no changes to the wetland category (see Revised Wetland Rating Forms Per City of Anacortes 29 April 2020 Comments attached).

Additionally, in response to the comments on page 43 of our report, ***generally 10 foot radius*** and ***usually 3 foot = 1 meter radius***, per page 57 of the 1987 wetland delineation manual, plot sizes are per those recorded on our data forms (Environmental Laboratory 1987). Therefore, it is our understanding our plot sizes are correct and the norm when collecting associated data.

- 3. Upon brief observation, the water levels appear to be different in Wetland A and Wetland B, this may be an indicator that the wetlands are not hydrologically connected except for the overflows. The consultant should more clearly articulate the reasoning behind determining Wetlands A and B are functionally separate. Guidance is provided from Chis Luerkens of DOE on how to use the rating guidance to determine separation.***

Wetland A outlets during high water events, southwest off the property via two mapped culverts under Anacopper Road and in to Wetland B.

One culvert was reviewed in January 2020 and determined to be a 12 inch pipe installed fairly recently, within the last 20 years. Significant rainfall occurred prior to the visit and Wetland A was observed very full with water moving slowing from Wetland A to Wetland B. Additionally, the pipe was observed to be high, with the top approximately 12 inches vertical distance from the road surface. As such, it appears the pipe was installed as an overflow versus a connection. It was approximated that 8 to 10 months a year there is no water in the culvert as water levels in both wetlands have been observed to recede significantly in even slightly drier weather (Strandberg 13 January 2020).

Additionally, per Grette Associates 4 September 2015 wetland report, the ponded portion of ATSI/Grette Wetland B is fed by surface water passing under Anacopper Road from the east which is depicted as an inlet in their associated wetland rating figure Sheet 2. In other words, ATSI Wetland A is providing hydrology to Wetland

B via culvert. Furthermore, while Grette does not connect Wetland B to ATSI's Wetland A as the same unit, it does include ATSI's Wetland A in Wetland B's contributing basin per their associated wetland rating figure Sheet 11 (Grette 4 September 2015).

Finally, per Ecology wetland rating guidance, "When a Depressional wetland is divided by a human-made feature, such as a road embankment, the wetland should not be divided into different units if there is a level surface-water connection between the two parts of the wetland. Water should be able to flow equally well between the two areas. For example, if there is a wetland on either side of a road with a culvert connecting the two, and both sides of the culvert are partially or completely underwater for most of the year, the wetland should be treated as one unit. Make the down gradient wetland a separate unit, however, if the bottom of the culvert is above the high water marks in the receiving wetland, or the high water marks on either side of the road or dike differ by more than 6 in of elevation (Hruby 2014) ." As there is not a level surface water connection and water does not flow equally well between Wetland A and Wetland B, they should be considered separate units. In other words, water from Wetland A overflows into Wetland B during wet season high water events and outside of said events, water ponds in Wetland A and Wetland B with no hydrologic connection.

The beforementioned said, it is ATSI's best professional judgement Wetlands A and B are considered two separate units.

4. ***Buffer enhancement and restoration plan section 5.4 on page 16 of the Wetland Report describes the buffer enhancement area to be approximately 42,857 square feet in area and the voluntary restoration area to be 2,488 square feet in area. The enhancement of the 42,857 includes planting 19 Douglas Fir Trees and allowing the grass to grow tall creating an herbaceous forested meadow. The voluntary restoration includes removal of the gravel driveway, tilling the soil, and hydro-seeding an herbaceous grass seed mix. Staff questions the approach of the proposed enhancement and restoration specifically the herbaceous meadow in an urban environment for reasons including fire danger, and aesthetics of unmown grass as well as the lack of functional improvement to buffer functions with such a high density development upslope from the wetland. To ensure protection of the wetland staff recommends a shrub/scrub buffer planting plan with more appropriate plant densities. For example a 42,000 square foot planting area with trees at 10 foot on center spacing, would require 420 trees using industry standard density calculations; the proposed 19 trees seems substantially under numbered (i.e. the 2,488 sf area calls for 25 trees). The plan also lacks a monitoring and contingency plan for the enhancement and restoration efforts. Staff recommends a revised enhancement/restoration plan.***

Due to the complexities of the response for this comment, ATSI provides a **timeline** and portions of Anacortes Municipal code in **bold** below.



**4 May 2020** Tess, can you show me in the code where a “mitigation plan” is a required at The Crossings? It is my understanding that anything I did in that buffer as far as improvements was above and beyond, Karla and I have talked at length on this. If we were wrong we were wrong, but I don’t see it in the code (Strandberg Construction, Inc. 4 May 2020).

**5 May 2020** The following code sections are the basis for determining that a buffer enhancement/ planting plan be required for the project (City of Anacortes 5 May 2020).

**Anacortes Municipal Code 17.70.340.F.1**

The standard buffer widths listed in Table 17.70.340(1) presume the existence of a relatively intact native vegetation community in the buffer zone adequate to protect the wetland functions and values at the time of the proposed activity.

*The buffer zone on the subject site is not currently comprised of a relatively intact native vegetation community. It is mowed field. The report does not explain how the existing buffer zone is adequate to protect the wetland functions and values at the time of the proposed activity.*

Per our report;

- Page 12, “Wetland buffer enhancement includes planting 19 Douglas fir trees and allowing the mowed lawn to grow, thus creating an herbaceous meadow with a forested canopy component...to offer green space adjacent the residential development.”
- Page 13, “Although our client is not proposing buffer reduction as part of their project proposal, the following measure to minimize impacts will be adhered to:...”
- Page 15, “...will be converted from mowed lawn to an herbaceous meadow with a forested canopy component resulting in a net increase in ecological function of both the wetland buffer and wetland...currently vegetated with mowed lawn and therefore offers minimal ecological value...converting from mowed lawn to an herbaceous meadow with a forested component.”

Furthermore, moving from a mowed lawn to a native forested herbaceous meadow will increase functionality by filtering upgradient runoff pollutants and potential erosive flows (should be none given stormwater management to the site), removing fertilizer and/or pesticides from use, and providing shade, food, shelter, and/or perches from the trees and grown grasses. There is also a “fire break” by not including trees directly adjacent the development and having a general landscaping offset from the development.

**Anacortes Municipal Code 17.70.340.F.3**

**3. Increased Wetland Buffer Widths.** The administrator shall require increased buffer widths in accordance with the recommendations of an experienced, qualified professional wetland scientist, and the best available science on a case-by-case basis when a larger buffer is necessary to protect wetland functions and values based on site-specific characteristics. This determination shall be based on one or more of the following criteria:

- a. A larger buffer is needed to protect other critical areas;
- b. The buffer or adjacent uplands has a slope greater than fifteen percent or is susceptible to erosion and standard erosion-control measures will not prevent adverse impacts to the wetland; or
- c. The buffer area has minimal vegetative cover. In lieu of increasing the buffer width where existing buffer vegetation is inadequate to protect the wetland functions and values, implementation of a buffer planting plan may substitute. Where a buffer planting plan is proposed, it shall include densities that are not less than three feet on center for shrubs and eight feet on center for trees and require monitoring and maintenance to ensure success. Existing buffer vegetation is considered “inadequate” and will need to be enhanced through additional native plantings and (if appropriate) removal of nonnative plants when: (1) nonnative or invasive plant species provide the dominant cover Not true for the site, (2) vegetation is lacking due to disturbance and wetland resources could be adversely affected Not true for the site, or (3) enhancement plantings in the buffer could significantly improve buffer functions What we are proposing will improve buffer functions.

***The subject buffer has a slope greater than 15% and minimal vegetative cover.*** The slope is just over 15% at 16% per the project engineer (Herrigstad 2 January 2020) and while there is minimal vegetative cover currently, we propose to add trees, allow the grass to grow, and implement minimizing measures, thus an increase in vegetative cover which will protect the wetland functions and values...***Per (c), above, a buffer planting plan may substitute for increasing the buffer width.*** However, unless Ecology says otherwise, what we propose, is not inadequate to protect wetland functions and values, rather there will be an increase in functionality.

**Anacortes Municipal Code 17.70.340 Performance standards—General requirements.**

**A. Activities may only be permitted in a wetland or wetland buffer if the applicant can show that the proposed activity will not degrade the functions and functional performance of the wetland and other critical areas.**

***Activities are proposed within the wetland buffer (pathway and stormwater facilities), but the report does not discuss how those activities will not degrade the functions and functional performance of the wetland.***

Regarding the pathway, the voluntary restoration of the road should offset the impacts from the trail, i.e. gravel compacted impervious surface to a slightly more extensive mulched pervious trail.

Regarding stormwater, per page 15-16 of our report:

#### “5.3 WETLAND BUFFER WIDTH AVERAGING

...This project will include wetland buffer averaging that will result in 1,372 square feet of wetland buffer reduction and 1,416 square feet of wetland buffer addition in compliance with COA CAO Chapter 17.70.340.4 as detailed below (Figure 5; COA 2008):

a. It will not reduce wetland functions or functional performance;

The proposed 1,372 square foot impacted buffer area is currently comprised of mowed lawn. The proposed reduction will still maintain at least a 95 foot wetland buffer (Figure 5). This buffer reduction area will be offset by 1,416 square feet of wetland buffer addition that will be converted from mowed lawn to an herbaceous meadow with a forested canopy component resulting in a net increase in ecological function of both the wetland buffer and the wetland (Figure 5).

b. The wetland contains variations in sensitivity due to existing physical characteristics or the character of the buffer varies in slope, soils, or vegetation, and the wetland would benefit from a wider buffer in places and would not be adversely impacted by a narrower buffer in other places;

The proposed buffer reduction will decrease the wetland buffer by 15 feet at the most. The entire buffer reduction area is currently vegetated with mowed lawn and therefore offers minimal ecological value. The proposed buffer reduction is necessary in order for the property boundaries to be straight, and for the project to achieve the goal of creating 18 lots within the property. This buffer reduction will not come at the expense of ecological function for the following reasons:

- The buffer reduction area will be offset with additional buffer area.
- The entire wetland buffer, including the additional buffer area, will be converted from mowed lawn to an herbaceous meadow with a forested canopy component.

c. The total area contained in the buffer area after averaging is no less than that which would be contained within the standard buffer;

The proposed averaging will result in 1,372 square feet of wetland buffer reduction and 1,416 square feet of wetland buffer addition (Figure 5).

d. For Category I and II wetlands the buffer width is not reduced to less than seventy-five percent of the standard width.

While not applicable as Wetland A is a Category III wetland, the buffer will only be reduced by a maximum of 86 percent (Figure 5).”

**2020** *I believe it is completely unfair for the city at this stage in the planning to request a more detail mitigation plan and associated monitoring plan. We have been discussing this in detail for well over 1 year both formally and informally. We have always stated that the field (buffer) would be left to grow and we would supplement with some trees. This is the first we have heard the city is unhappy with the approach. After much consideration, with our biologist, arborist, and*



*considering comments from the neighbors during the neighborhood meeting, we will supplement the mostly treeless eastern buffer, with 19 Douglas Firs. The site currently has about 19 full grown Douglas Fir trees located in the development area, located on approximately an acre of land, which will need to be removed. We are doing our best to replace those trees, we are not replanting a wetland but a raised buffer that is not wet, in fact it is very dry, which is why Douglas fir have typically done well there. 19 Full grown Douglas Fir will do a nice job foresting the area. This buffer has typically been mowed, it can be left unmown in a few weeks, there are plenty of natural areas that have been mowed.*

*Additionally:*

- 1. 110 ft of establish grass is one if not the best way to protect a wetland from water quality issues.*
- 2. If slopes are considered steep, there is no better way to protect a slope from erosion than an existing grass field, that is not and has not eroded.*
- 3. A 2-year maintenance bond is typical for a development in the City of Anacortes, we are more than happy to guarantee the 19 trees planted with in that Bond (Strandberg Construction, Inc. 2020).*

**2 July 2020** Revised site/landscape plan to include 30 foot mitigation buffer near the wetland per request by City of Anacortes (Strandberg Construction, Inc. 2 July 2020).

**16 July 2020** ATSI prepared the mitigation plan below per revised sheet L1 (see Revised Project Permit Sheets attached page 18).

### **1 MAY 2020 CITY OF ANACORTES LETTER**

***3. The proposed stormwater outfall located within the buffer should be discussed in the wetland report, including conformance to Ecology guidance and COA code.***

While the outfall was shown on our proposed conditions figure, it was not called out nor specifically discussed per Ecology guidance and the City of Anacortes code. This was resolved by adding the outfall verbiage to our figure (see Revised Figure 5. Proposed Conditions, Wetland Buffer Enhancement, & Restoration attached). Said outfall, a buried storm drain pipe connected to a perforated level spreader discharge pipe on a quarry spall pad, was designed per Ecology (see Ecology 2014 Stormwater Management Manual for Western Washington V-4.5.3 Outfall Systems attached) and Anacortes standards by Dale Herrigstad, the project stormwater engineer to protect wetlands (Herrigstad 2 January 2020 tab 8 on page 36).

Additionally, per the current Anacortes Municipal Code section 17.70.340.F.7.c. "Stormwater Management Facilities. Stormwater management outfall facilities, including LID improvements, are allowed in accordance with an approved critical areas report with no net loss of function to the wetland and wetland buffer...(City of Anacortes 2008)". That being said, while the outfall will have minimal square footage of impacts to the buffer, said impacts will be offset through gravel road restoration within the buffer, and the outfall will maintain hydrology to the wetland, thus preserving

function. As such, there will be no net loss of function to the wetland and wetland buffer.

### **MITIGATION PLAN**

An approximate 30 foot wide buffer enhancement area will be planted with native shrub species to increase native vegetation percent cover, habitat, and functionality.

### **Planting Plan**

#### *Plant Lists*

A total of 265 shrubs will be planted on 4 foot centers per Table 1 below.

| <b>Table 1. Buffer Enhancement Area Plant List.</b> |                    |                |                          |                   |                 |
|-----------------------------------------------------|--------------------|----------------|--------------------------|-------------------|-----------------|
| <b>Scientific Name</b>                              | <b>Common Name</b> | <b>Spacing</b> | <b>Wetland Indicator</b> | <b>Size (min)</b> | <b>Quantity</b> |
| <b>Shrubs</b>                                       |                    |                |                          |                   |                 |
| <i>Holodiscus discolor</i>                          | Oceanspray         | 4 ft           | FACU                     | Bareroot          | 53              |
| <i>Mahonia aquifolium</i>                           | Tall Oregon Grape  | 4 ft           | FACU                     | Bareroot          | 53              |
| <i>Symphoricarpos albus</i>                         | Snowberry          | 4 ft           | FACU                     | Bareroot          | 53              |
| <i>Gaultheria shallon</i>                           | Salal              | 4 ft           | FACU                     | Bareroot          | 53              |
| <i>Rosa nutkana</i>                                 | Nootka rose        | 4 ft           | FAC                      | Bareroot          | 53              |
| <b>TOTAL</b>                                        |                    |                |                          |                   | <b>265</b>      |

#### *Procurement & Schedule*

Species may be substituted, with consultation of a qualified wetland biologist, if quantities of the recommended species are not available, or to increase diversity. Vegetation for enhancement planting shall be provided by a local native plant nursery which has stock from the Puget Sound lowlands and originating preferably within Whatcom or Skagit County. Larger stock may be used, including 1 gallon container grown plants instead of bareroot. Plants will be installed in the autumn and/or late winter/early spring, simultaneously with project construction. The installation date may change in association with changes to the project construction date.

#### *Preparation*

The buffer enhancement area shall be, at a minimum, mowed or cut with a string trimmer, prior to planting.

#### *Installation*

Plant holes shall be twice as wide as the pot and as deep as the root size, or for bare root plants, the hole shall be a minimum of 6 inch wide and as deep as the root. The soil removed from the holes shall be used as backfill, or it may be amended and mixed with compost if determined necessary. Installation shall follow digging to prevent the plant roots and backfill from drying. If present, sod shall be removed and set aside as it is not to be replaced around the base of the newly installed plant. Soil shall be broken up so there are no large clumps. The plant shall be held gently in a vertical position while the hole is backfilled with soil, the base shall be tamped to remove air pockets, and following

planting shall be watered promptly. Staked, plastic plant protectors may be required to protect stems from rodent predation and potential maintenance damage, unless species are not known for heavy predation (e.g. salal, Oregon grape, etc.). Protectors shall be removed as the plants begin to outgrow them, typically in the third year.

### *Mulch*

Mulching shall occur to minimize growth of competitive species, hold moisture, provide a combination of organic matter and soil microorganisms to enhance soil fertility, and to identify the location of the installed vegetation. A minimum 2 foot wide collar, 4 inches deep and 1 inch from the plant stem, to minimize the chances for decay, of wood chip mulch shall be spread for each installed plant. The mulch shall be comprised of roots, stems, and branches of mixed tree and shrub species. The mulch shall not have nonnative/invasive plant stock.

### *Nonnative/Invasives*

It is necessary to manage all nonnative/invasive species within the buffer enhancement area. See the maintenance section that follows for guidance.

### *Irrigation*

If conditions warrant, due to annual dryness and lack of ground moisture, as is typical for most buffer plantings, supplemental irrigation will be necessary. It is the responsibility of the Client to ensure plants survive and providing up to 1 inch of water per plant per week if necessary due to extended dry periods.

## **Protection**

Protection of the mitigation site will be by fencing, signage, and conservation easement.

### *Fencing*

To prevent use of the mitigation site, a split rail fence with minimal openings/gates as needed for maintenance access will be installed on both side of the trail (Strandberg Construction, Inc. 25 June 2020).

### *Signage*

Protection signs will be installed along both sides of the fence.

### *Conservation Easement*

A conservation easement shall be prepared for the mitigation site and filed with Skagit County.



## Buffer Enhancement Area Mitigation Goals/Objectives

| Table 2. Performance Standards. |               |                                                                                                                        |                                                      |
|---------------------------------|---------------|------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| Year                            | 1. Size       | 2. Vegetation                                                                                                          | 3. Protection                                        |
| 1                               | 1. 30 ft wide | 1. Invasives: N/A<br>2. Native Plantings: 95% Survival                                                                 | 1. Fencing<br>2. Signage<br>3. Conservation Easement |
| 2                               |               | 1. Invasives: 0% cover knotweed, <10% cover Table 3<br>2. Native Plantings: >5% Cover (Diversity/Richness >3 species)  |                                                      |
| 3                               |               | 1. Invasives: 0% cover knotweed, <10% cover Table 3<br>2. Native Plantings: >20% Cover (Diversity/Richness >3 species) |                                                      |
| 4                               |               | 1. Invasives: 0% cover knotweed, <10% cover Table 3<br>2. Native Plantings: >40% Cover (Diversity/Richness >3 species) |                                                      |
| 5                               |               | 1. Invasives: 0% cover knotweed, <10% cover Table 3<br>2. Native Plantings: >60% Cover (Diversity/Richness >3 species) |                                                      |

### Performance Standard 1 Size

1.1 The planting area shall be 30 feet wide throughout the 5 year monitoring period (Table 2).

### Performance Standard 2 Vegetation

2.1 Nonnative/invasive knotweed (*Polygonum cuspidatum*) shall not be present within the buffer enhancement area (0 percent cover) and the nonnative/invasive species listed in, but not limited to, Table 3, shall not exceed 10 percent cover (Table 2).

| Table 3. Common Nonnative/Invasive Species |                                   |
|--------------------------------------------|-----------------------------------|
| Scientific Name                            | Common Name                       |
| <i>Buddleia davidii</i>                    | Butterfly Bush                    |
| <i>Calystegia sepium</i>                   | Hedge Bindweed                    |
| <i>Cirsium arvense</i>                     | Canada Thistle                    |
| <i>Cirsium vulgare</i>                     | Bull Thistle                      |
| <i>Conium maculatum</i>                    | Poison Hemlock                    |
| <i>Cytisus scoparius</i>                   | Scotch Broom                      |
| <i>Epilobium hirsutum</i>                  | Hairy Willow Herb/Codlins & Cream |
| <i>Hedera helix</i>                        | English Ivy                       |
| <i>Ilex aquifolium</i>                     | English Holly                     |
| <i>Iris pseudacorus</i>                    | Paleyellow Iris                   |
| <i>Lythrum salicaria</i>                   | Purple Loosestrife                |
| <i>Phalaris arundinacea</i>                | Reed Canarygrass                  |
| <i>Rubus armeniacus</i>                    | Himalayan Blackberry              |
| <i>Rubus laciniatus</i>                    | Evergreen Blackberry              |
| <i>Senecio jacobaea</i>                    | Tansy Ragwort                     |

2.2 In Year 1, 95 percent of the plants installed will survive. In Year 2, the installed plants will have at least 5 percent cover, in Year 3, at least 20 percent cover, in Year 4, at least 40 percent cover, and in Year 5, at least 60 percent cover. The buffer enhancement area will have at least three species throughout the 5 year monitoring period (Table 3).

### **Performance Standard 3 Protection**

3.1 A split rail fence with minimal openings/gates as needed for maintenance access will be installed on both side of the trail (Table 3).

3.2 Protection signs will be installed along both sides of the fence (Table 3).

3.3 A conservation easement shall be prepared for the mitigation site and filed with Skagit County (Table 3).

### **As Built**

An as built report will be prepared by a qualified biologist and submitted to the City of Anacortes to provide an after construction baseline to monitor observations and management decisions. The as built report shall include a description of work completed to date, an as built map, and photographs from fixed reference point locations.

### **Monitoring**

Monitoring shall be conducted by a qualified biologist via site visits. The site will be visited annually during the spring and fall for a period of 5 years or until the site is deemed successful. Qualitative data collection protocols will be utilized. All data will be recorded in a field book. Pictures will be taken from fixed photo point locations that best represent the buffer enhancement area and random locations to show whether a specific performance standard is or is not being met. All data and photographs will be synthesized into a monitoring report. The method of data collection for each monitoring goal and subsequent performance standards is provided below. It should be noted that, in addition to the specific data collected by the following methods, general data will be collected during site visits and includes, but is not limited to: wildlife observations, temperature, and current weather within the previous 24 hours. Reports shall be submitted by December 31st of the applicable monitoring year. The report shall include monitoring results, the progress of the buffer enhancement area toward meeting the performance standards described above, and color photographs.

#### **Goal 1 Size**

The size of the buffer enhancement area will be confirmed by visual observation construction limit extent and with a tape measure as needed.

#### **Goal 2 Vegetation**

Vegetation will be monitored through visual observation.

#### **Goal 3 Protection**

The fencing and signage will be monitoring through visual observation. A copy of the conservation easement will be submitted to Skagit County with notification to the project biologist when said action is completed by the Client.

### **Maintenance**

The buffer enhancement area shall be maintained to ensure the performance standards are achieved. Therefore, the following applies:

- The nonnative/invasive species listed in, but not limited to, Table 3 above shall be managed. Hand pulling or motorized cutting is the preferred method and shall be the first approach during maintenance. However, the nonnative/invasive plants can be sprayed with suitable herbicide by a licensed applicator.
- If watering is required due to a long summer drought, it will occur either by hand or sprinkler.
- Trash shall be removed by hand and disposed of in a proper location.

### **Financial Guarantee**

Financial guarantee will be tied with the landscape bond.

### **DISCLAIMER**

We have used the most current, established methods to make determinations as to the location, size, and types of critical areas located on and adjacent to the property. All the above statements are based on our best professional judgment. Although we follow the local, state, and federal criteria, we cannot guarantee their determination will correspond with ours. Please note that regulations pertaining to critical areas are subject to change over time.

### **SUMMARY**

This addendum addressed comments from the City of Anacortes documents provided in review of the Clients LPS-2020-0001 application for The Crossings. We trust the before mentioned information is sufficient for approval by the City of Anacortes.



Please do not hesitate to contact ATSI if you have questions or require additional information. Thank you.

Respectfully,



Karla Gallina, BS, PWS, CERP  
Owner/Senior Biologist  
Qualified WSDOT BA Senior Author  
[KarlaG@AquaTerrSystemsInc.com](mailto:KarlaG@AquaTerrSystemsInc.com)



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Bellingham, WA 98229  
Cell: (360) 393-9921 Office: (360) 389-5593

Olin Anderson, MLA  
Biologist  
[OlinA@AquaTerrSystemsInc.com](mailto:OlinA@AquaTerrSystemsInc.com)

**COPY TO**

City of Anacortes

**ATTACHMENTS**

- Strandberg Revised Project Permit Sheets (19 pages)
- ATSI Revised Wetland Rating Forms Per City of Anacortes 29 April 2020 Comments (6 pages)
- ATSI Revised Figure 5. Proposed Conditions, Wetland Buffer Enhancement, & Restoration (1 page)
- Ecology 2014 Stormwater Management Manual for Western Washington V-4.5.3 Outfall Systems (10 pages)

## **ABBREVIATIONS & ACRONYMS**

Aqua-Terr Systems, Inc. (ATSI)  
Biological Assessment (BA)  
Bachelor of Science (BS)  
Computer Aided Design (CAD)  
Certified Ecological Restoration Practitioner (CERP)  
Feet (ft)  
Geographic Information Systems (GIS)  
Low Impact Development (LID)  
Master of Landscape Architecture (MLA)  
Minimum (min)  
Ordinary High Water Mark (OHWM)  
Professional Certification Program (PCP)  
Professional Wetland Scientist (PWS)  
Skagit Valley College (SVC)  
Society of Wetland Scientists (SWS)  
United States Army Corps of Engineers (Corps)  
United States Environmental Protection Agency (USEPA)  
Washington State Department of Ecology (Ecology)  
Washington State Department of Transportation (WSDOT)  
Willamette Meridian (WM)

## **REFERENCES**

Aqua-Terr Systems, Inc. February 2020. Critical Areas Assessment Report: Strandberg – The Crossing Anacortes, Washington.

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City of Anacortes. 1 May 2020. Re: LPS-2020-0001-The Crossings Cottage Development Technical Review Comments.

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Strandberg, Nels. 13 January 2020. Personal email communication.

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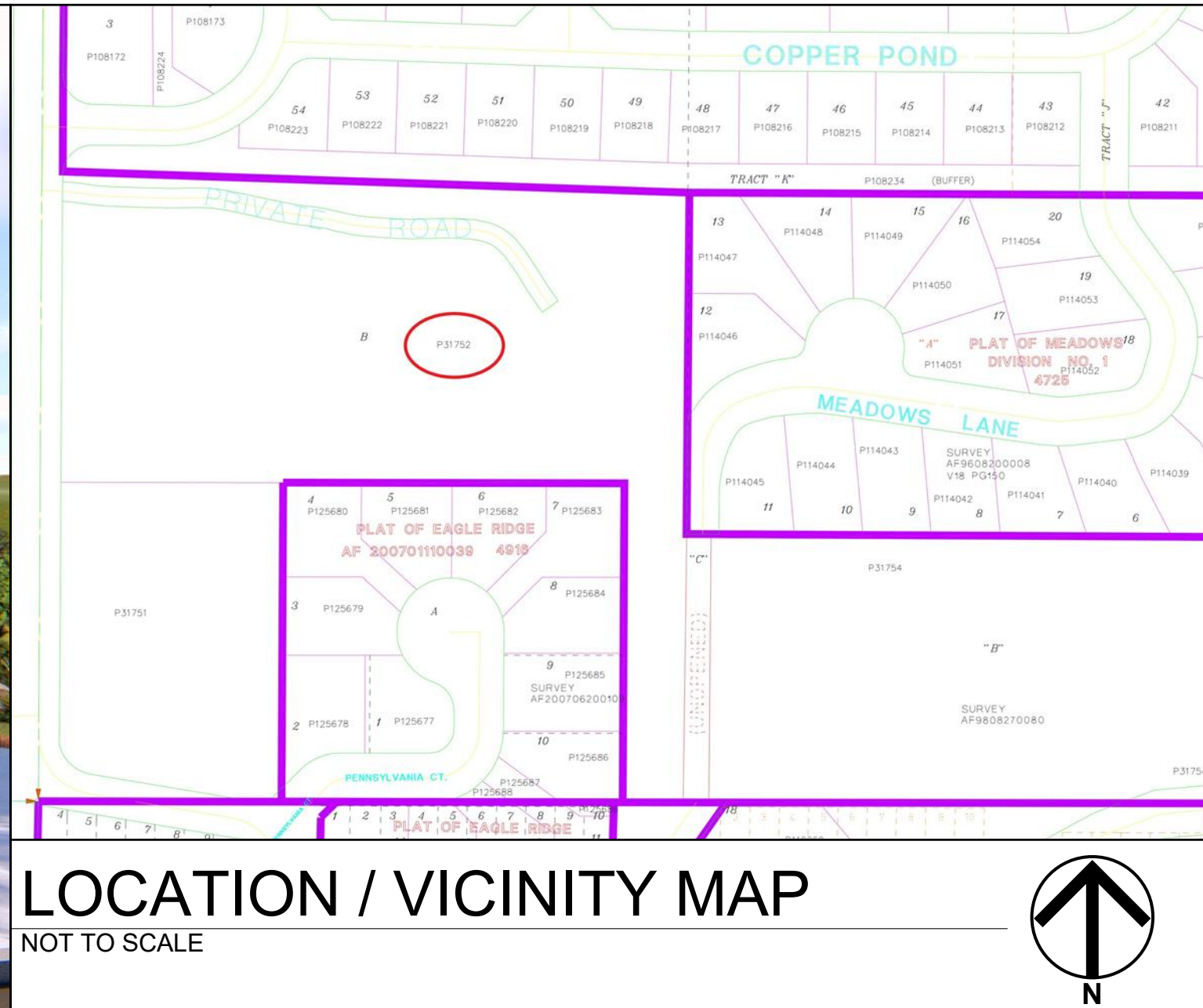
<https://fortress.wa.gov/ecy/publications/summarypages/1606029.html>



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Washington State Department of Ecology, United States Army Corps of Engineers Seattle District, and United States Environmental Protection Agency Region 10. March 2006. Wetland Mitigation in Washington State – Part 2: Developing Mitigation Plans (Version 1). Washington State Department of Ecology Publication #06-06-011b. Olympia, WA.



|                                                                                                                                                                                          |  |                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                                            |                                                                                                                                                        |  |                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------|
| PROJECT DESCRIPTION                                                                                                                                                                      |  | <div></div>                                                                                                                                                                                                                       |  |                                                                                                                                            | PROJECT INFORMATION                                                                                                                                    |  | DESIGNED BY<br>JASON STERLING    |
| “THE CROSSING” A 18-UNIT COTTAGE COMMUNITY, AND 3 STANDARD R2 RESIDENTIAL LOTS.                                                                                                          |  |                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                                            | PARCEL: P31752                                                                                                                                         |  | SCALE<br>1/4" = 1' U.N.O.        |
|                                                                                                                                                                                          |  |                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                                            | PROJECT ADDRESS:<br>1905 Anacopper Rd, Anacortes, WA 98221                                                                                             |  | DATE<br>01/31/2020               |
|                                                                                                                                                                                          |  |                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                                            | SECTION: 23<br>TOWNSHIP: 35<br>RANGE: 01                                                                                                               |  | 05/27/2020                       |
|                                                                                                                                                                                          |  |                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                                            |                                                                                                                                                        |  | 07/01/2020                       |
|                                                                                                                                                                                          |  |                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                                            | LEGAL DISCRPTION:<br>(5.2000 ac) SW1/4 SW1/4 SW1/4 EXC W 586FT OF S 325FT THOF & EXC W 20FT & EXC N 33FT THOF TGW PTN S 33FT OF N 693FT DESC AF#887647 |  | <div>Strandberg<br/>DESIGN</div> |
| ZONE: R-2                                                                                                                                                                                |  |                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                                            |                                                                                                                                                        |  |                                  |
| USE CLASSIFICATION:<br>LOTS 1-18: COTTAGE HOUSING<br>LOTS 19-21: SINGLE-FAMILY                                                                                                           |  |                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                                            |                                                                                                                                                        |  |                                  |
| DENSITY & DIMENSIONAL CALCS.:<br>SETBACK & HEIGHT LIMITATIONS                                                                                                                            |  |                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                                            |                                                                                                                                                        |  |                                  |
| MAXIMUM FRONT SETBACK 20 FEET<br>MAXIMUM SIDE SETBACK 20 FEET<br>MAXIMUM REAR SETBACK 20 FEET<br>MAXIMUM BUILDING HEIGHT (FROM AVG. ORG. GRADE) COTTAGES: 25 FEET<br>NORMAL SFR: 35 FEET |  |                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                                            |                                                                                                                                                        |  |                                  |
| COVERAGE CALCULATIONS<br>SQUARE FOOTAGE OF THE ENTIRE LOT: 226,334 SF<br>GROSS SITE AREA: 5.19 A                                                                                         |  | TOTAL SQ. FT. OF LOTS 1-18: 42,351 SF<br>TOTAL SQ. FT. OF HOUSE FOOTPRINTS 1-18: 22,824 SF<br>18" ROOF OVERHANGS ESTIMATE: 4,644 SF<br>TOTAL SQ. FT. OF LOTS 19-21: 22,847 SF<br>TOTAL SQ. FT. OF HOUSE FOOTPRINTS 19-21: 7,980 SF<br>2" ROOF OVERHANGS ESTIMATE: 1,455 SF<br>TOTAL BUILDING COVERAGE ON ENTIRE LOT (13.6%): 30,804 SF<br>SIDEWALK ALONG ROAD: 3,607 SF<br>DRIVEWAYS & ROAD: 25,015 SF |  | TOTAL IMPERVIOUS COVERAGE (28.95%): 65,525 SF<br>TOTAL ALLOWABLE IMP. COVERAGE (50%): 113,165 SF                                           |                                                                                                                                                        |  |                                  |
| DENSITY:<br>DENSITY ALLOWED PER 5.19 ACRES:20.76 UNITS<br>18 COTTAGES: 9 UNITS<br>3 SOUTH SFR: 3 UNITS<br>TOTAL DENSITY PER PROJECT: 10 UNITS                                            |  | RANGE OF DESIGN:<br>COTTAGES WILL HAVE AN ESTIMATED:<br>LIVING AREA: 1,200 SF<br>GARAGE: 300 SF<br>BEDROOMS: 2<br>STORIES: 2<br>MAX HT.: 25'                                                                                                                                                                                                                                                           |  | SFR ON 3 SOUTH LOTS<br>WILL HAVE AN ESTIMATED:<br>MAIN LIVING: 2,100+ SF<br>GARAGE: 528+ SF<br>BEDROOMS: 3+<br>STORIES: 1+<br>MAX HT.: 35' |                                                                                                                                                        |  |                                  |
| PARKING:<br>GUEST PARKING REQUIREMENTS:<br>GUEST PARKING: 1 PER 4 UNITS.<br>18 UNITS NEED 5 GUEST PARKING SPOTS.<br>11 GUST PARKING SPOTS PROVIDED.                                      |  | OFF-STREET PARKING CALCULATIONS:<br>PARKING REQUIRED: 1.5 PER UNIT.<br>18 UNITS NEED 27 PARKING STALLS.<br>34 PARKING STALLS PROVIDED.                                                                                                                                                                                                                                                                 |  | <div></div>                                           |                                                                                                                                                        |  |                                  |
| OWNER APPROVAL                                                                                                                                                                           |  |                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                                            |                                                                                                                                                        |  |                                  |
| INITIAL<br>PAGE #                                                                                                                                                                        |  |                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                                            |                                                                                                                                                        |  |                                  |
| PAGE:                                                                                                                                                                                    |  |                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                                            |                                                                                                                                                        |  |                                  |
| 1 of 19                                                                                                                                                                                  |  |                                                                                                                                                                                                                                                                                                                                                                                                        |  |                                                                                                                                            |                                                                                                                                                        |  |                                  |





COMMON AREA, GENERAL LANDSCAPING AND BUFFERS: 28,428 SF

NOTE:  
Density: Per 19.43.010(D)(3) The 18 cottages are the equivalent to 9 dwelling units. Per R2 zone, 4 dwelling units per acre are allowed. Lot is 5.2 acres.  
Development is required to have at least 1 cluster made up of a min. of 3 cottages. There are 4 clusters of houses provided. Clusters are shown:  
1. Cyan – 4 cottages  
2. Yellow – 6 cottages  
3. Green – 4 cottages  
4. Red – 4 cottages  
20' Setbacks provided at development frontage and external side and rear property lines of the entire cottage development.  
Cottage design to incorporate 3' x 3' minimum covered entry from pedestrian path.  
Driveway standards:  
Table 19.53.040(B)  
Residential shared driveway standards.  
Max. # units: Max. length Min. Paved width Min. Easement width Turnaround?  
Up to 3 150' 16' 20' No  
Up to 5 150' 20' 20' No  
Up to 6 >150' 20' 20' Yes – approved  
turnaround  
Individual cottages, for the purposes of these shared driveway standards, count as one-half dwelling unit.  
Or as determined by the Fire Department based on the number of units and the provision of fire suppression sprinklers.  
See AMC 19.52.050 for related standards.  
Internal circulation for cottages and driveways to keep to AMC 19.53  
Guest parking requirements:  
Guest parking: 1 per 4 units.  
18 Units need 5 guest parking spots.  
11 Guest parking spots provided.  
Off-Street parking calculations:  
Parking required: 1.5 per unit.  
18 Units need 27 parking stalls.  
34 parking stalls provided.  
Uncovered parking clusters have no more than 5 spaces  
Garages to have a footprint of less than 300 SF, and will adhere to cottage design standards.  
Landscaping area required:  
Must be min. 20% of whole cottage development.



SETBACK & HEIGHT LIMITATIONS

|                                                |                                          |
|------------------------------------------------|------------------------------------------|
| MAXIMUM FRONT SETBACK                          | 20 FEET                                  |
| MAXIMUM SIDE SETBACK                           | 20 FEET                                  |
| MAXIMUM REAR SETBACK                           | 20 FEET                                  |
| MAXIMUM BUILDING HEIGHT (FROM AVG. ORG. GRADE) | COTTAGES: 25 FEET<br>NORMAL SFR: 35 FEET |

COVERAGE CALCULATIONS

|                                                |            |
|------------------------------------------------|------------|
| SQUARE FOOTAGE OF THE ENTIRE LOT:              | 226,334 SF |
| GROSS SITE AREA:                               | 5.19 A     |
| TOTAL SQ. FT. OF LOTS 1-18:                    | 42,351 SF  |
| TOTAL SQ. FT. OF HOUSE FOOTPRINTS 1-18:        | 22,824 SF  |
| 18' ROOF OVERHANGS ESTIMATE:                   | 4,644 SF   |
| TOTAL SQ. FT. OF LOTS 19-21:                   | 22,847 SF  |
| TOTAL SQ. FT. OF HOUSE FOOTPRINTS 19-21:       | 7,980 SF   |
| 2' ROOF OVERHANGS ESTIMATE:                    | 1,455 SF   |
| TOTAL BUILDING COVERAGE ON ENTIRE LOT (13.6%): | 30,804 SF  |
| SIDEWALK ALONG ROAD:                           | 3,607 SF   |
| DRIVEWAYS & ROAD:                              | 25,015 SF  |

|                                      |            |
|--------------------------------------|------------|
| TOTAL IMPERVIOUS COVERAGE (28.95%):  | 65,525 SF  |
| TOTAL ALLOWABLE IMP. COVERAGE (50%): | 113,165 SF |

DESIGNED BY  
JASON STERLING

SCALE  
1" = 20' U.N.O.

DATE  
01/31/2020

05/27/2020

07/01/2020

Strandberg  
DESIGN

BUILDER INFO:  
MAILING ADDRESS:  
P.O. BOX 319  
ANACORTES WA 98221  
PHONE:  
360-295-7431  
WEB:  
www.strandbergconstruction.com

PROJECT / CLIENT INFO  
THE CROSSINGS

1905 Anacopper RD, Anacortes, WA 98221

SITE PLAN FOR THE CROSSING

OWNER APPROVAL

INITIAL  
PAGE #  
C1

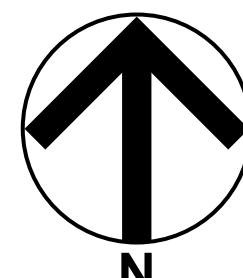
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NOTE:  
Large circles at cottage corners have a 10' radius. Small circles have a 5' radius.  
Cottages have a min. of a 10' separation from other cottages.  
Cottages have a min. of a 5' separation from pedestrian paths.  
Cottages are setback 10' from any access lane servicing 4 or more cottages, and 5' from access lanes servicing 3 or less.

SITE PLAN SETBACK CALCS.  
SCALE: 1" = 20'



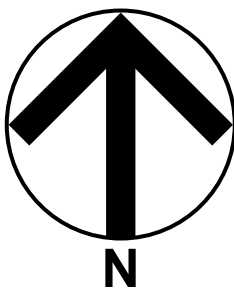
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|---------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| DESIGNED BY<br>JASON STERLING                                                                                                               |                                                                   |
| SCALE<br>1" = 20' U.N.O.                                                                                                                    |                                                                   |
| DATE<br>01/31/2020                                                                                                                          |                                                                   |
| 05/27/2020                                                                                                                                  |                                                                   |
| 07/01/2020                                                                                                                                  |                                                                   |
|                                                                                                                                             |                                                                   |
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| PROJECT / CLIENT INFO<br><br>THE CROSSINGS<br><br>1905 Anacopper RD, Anacortes, WA 98221                                                    |                                                                   |
| SITE PLAN SETBACK<br>CALCS.                                                                                                                 | OWNER APPROVAL<br>INITIAL<br>PAGE #<br><br>C2<br>PAGE:<br>3 of 19 |

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SITE PLAN OPEN SPACE CALCS.  
SCALE: 1" = 20'



| COMMON OPEN SPACE CALCULATIONS PER AMC 19.43.010.D.3.i |                 |                                         |
|--------------------------------------------------------|-----------------|-----------------------------------------|
| # OF UNITS                                             | RATIO           | COMMON OPEN SPACE REQUIRED/PROVIDED     |
| 18                                                     | 400 SF PER UNIT | 7,200 SF REQUIRED<br>17,152 SF PROVIDED |

NOTE:

Common open space required per AMC 19.43.010.D.3.i:  
400 sf per cottage x 18 lots =  
7,200 sf of common open space required  
Common open provided: 17,152 sf

Common open space shaded in blue. No dimension less than 15'.

All common open spaces have at least 50% of the clustered cottages abutting the open space.

All cottages are within 100-foot walking distance of common open space and feature a direct pedestrian connection to the common open space.

Private open space required per AMC 19.43.010.D.3.k:  
200 sf per cottage.  
Each cottage has a 10' x 20' private open space.

Private open spaces don't infringe on any critical areas/buffers, or steep slopes.

DESIGNED BY  
JASON STERLING

SCALE  
1" = 20' U.N.O.

DATE  
01/31/2020

05/27/2020

07/01/2020

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SITE PLAN OPEN SPACE CALCS.

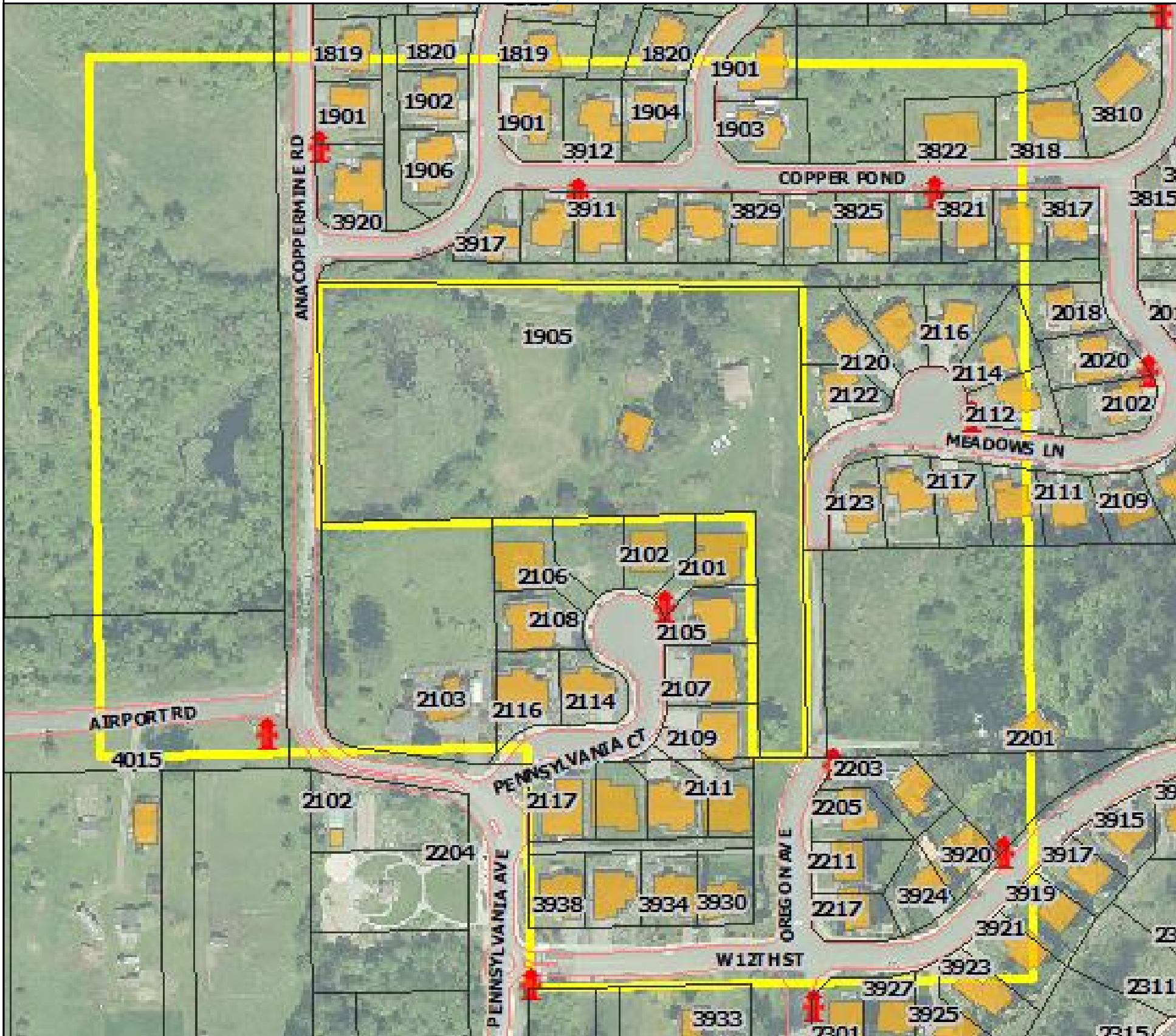
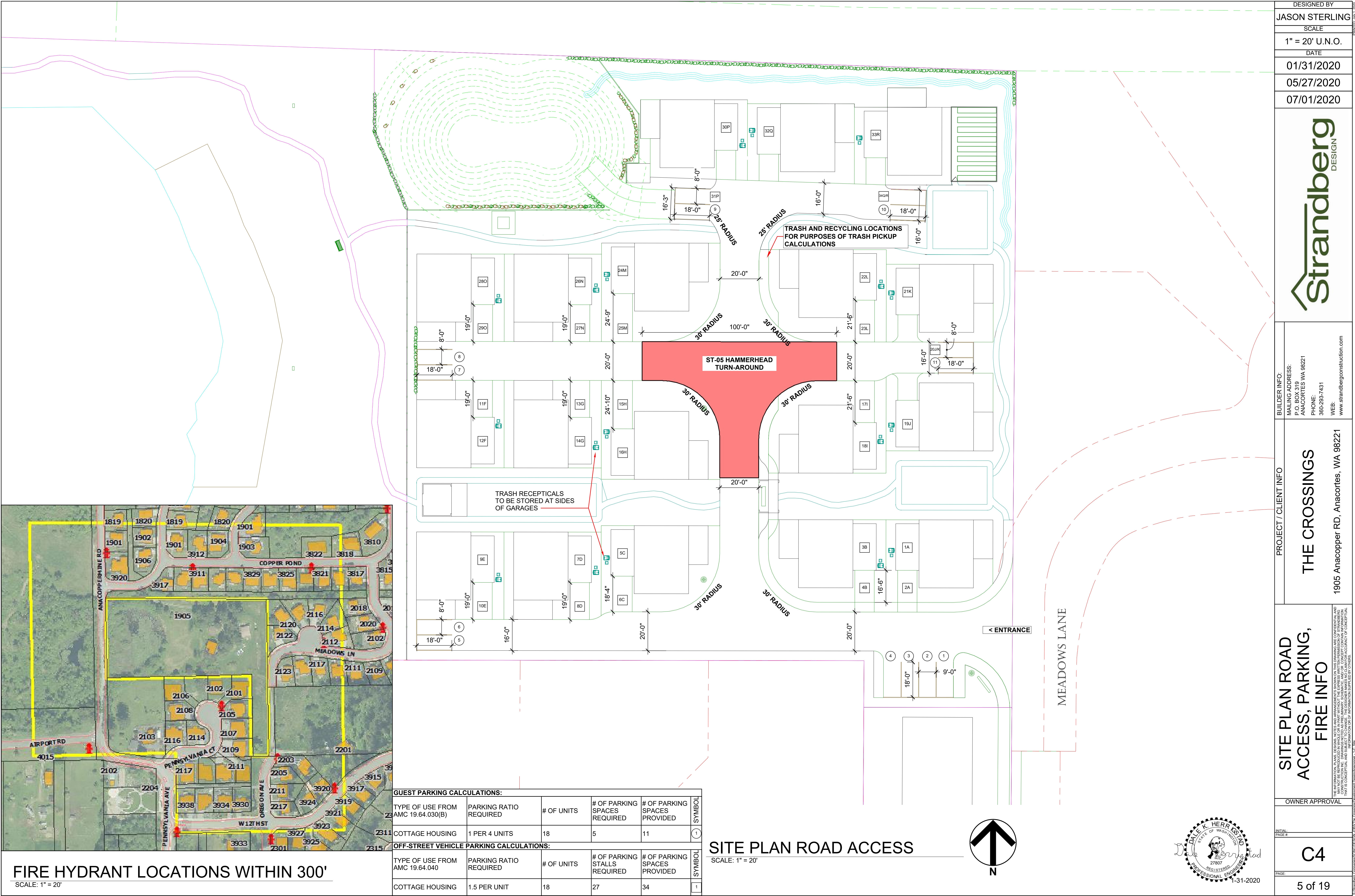
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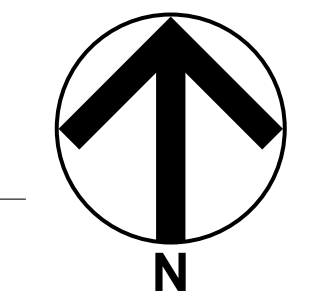
FIRE HYDRANT LOCATIONS WITHIN 300'

SCALE: 1" = 20'

| GUEST PARKING CALCULATIONS:              |                        |            |                              |                              |        |
|------------------------------------------|------------------------|------------|------------------------------|------------------------------|--------|
| TYPE OF USE FROM AMC 19.64.030(B)        | PARKING RATIO REQUIRED | # OF UNITS | # OF PARKING SPACES REQUIRED | # OF PARKING SPACES PROVIDED | SYMBOL |
| COTTAGE HOUSING                          | 1 PER 4 UNITS          | 18         | 5                            | 11                           | 1      |
| OFF-STREET VEHICLE PARKING CALCULATIONS: |                        |            |                              |                              |        |
| TYPE OF USE FROM AMC 19.64.040           | PARKING RATIO REQUIRED | # OF UNITS | # OF PARKING STALLS REQUIRED | # OF PARKING SPACES PROVIDED | SYMBOL |
| COTTAGE HOUSING                          | 1.5 PER UNIT           | 18         | 27                           | 34                           | 1      |

SITE PLAN ROAD ACCESS

SCALE: 1" = 20'



DESIGNED BY  
JASON STERLING

SCALE  
1" = 20' U.N.O.

DATE  
01/31/2020

05/27/2020

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PROJECT / CLIENT INFO

THE CROSSINGS

1905 Anacopper RD, Anacortes, WA 98221

SITE PLAN ROAD  
ACCESS, PARKING,  
FIRE INFO

OWNER APPROVAL

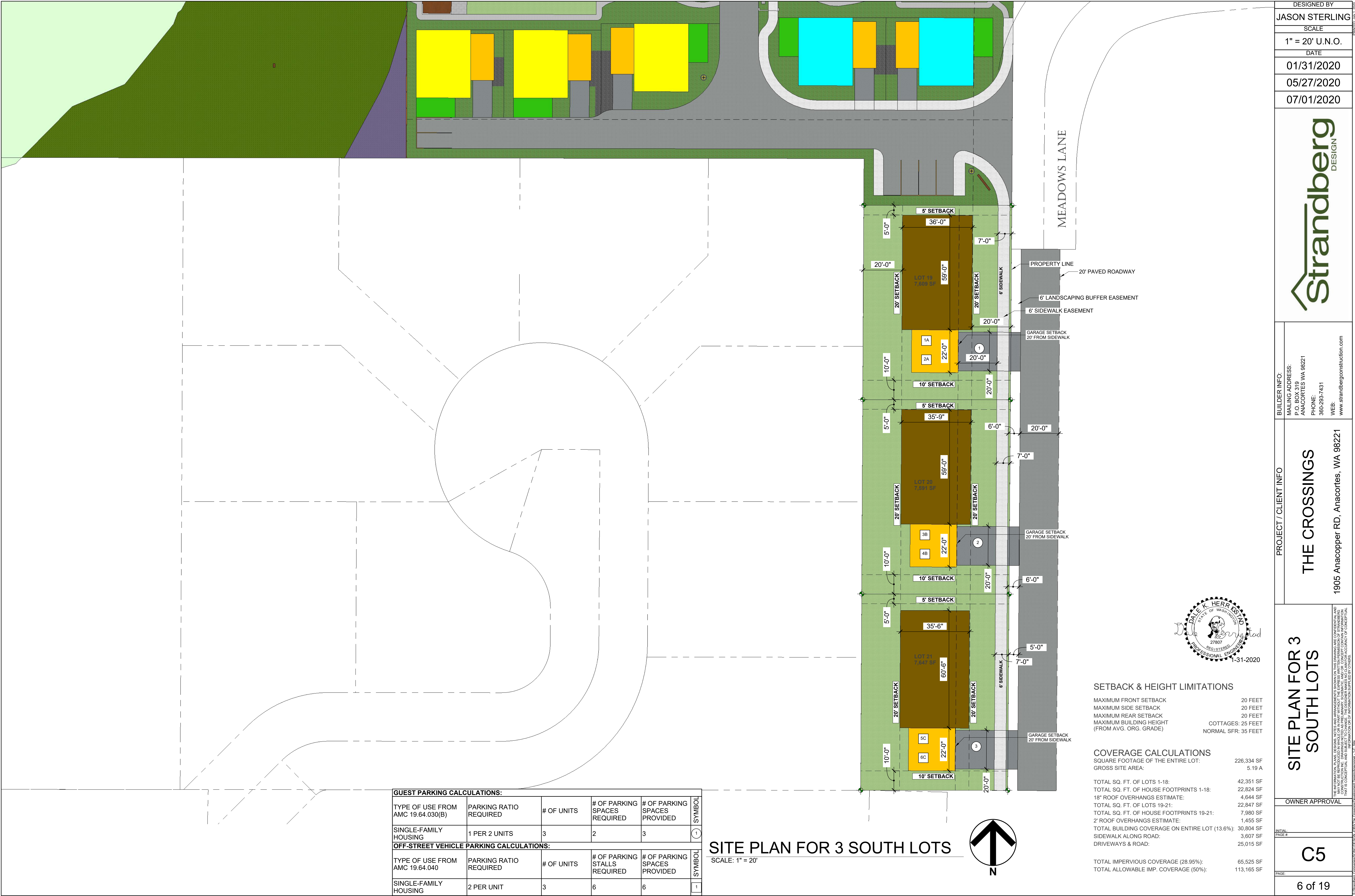
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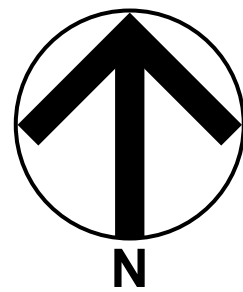




| GUEST PARKING CALCULATIONS:              |                        |            |                              |                              |        |
|------------------------------------------|------------------------|------------|------------------------------|------------------------------|--------|
| TYPE OF USE FROM AMC 19.64.030(B)        | PARKING RATIO REQUIRED | # OF UNITS | # OF PARKING SPACES REQUIRED | # OF PARKING SPACES PROVIDED | SYMBOL |
| SINGLE-FAMILY HOUSING                    | 1 PER 2 UNITS          | 3          | 2                            | 3                            | 1      |
| OFF-STREET VEHICLE PARKING CALCULATIONS: |                        |            |                              |                              |        |
| TYPE OF USE FROM AMC 19.64.040           | PARKING RATIO REQUIRED | # OF UNITS | # OF PARKING STALLS REQUIRED | # OF PARKING SPACES PROVIDED | SYMBOL |
| SINGLE-FAMILY HOUSING                    | 2 PER UNIT             | 3          | 6                            | 6                            | 1      |

SITE PLAN FOR 3 SOUTH LOTS

SCALE: 1" = 20'



SETBACK & HEIGHT LIMITATIONS

|                                                |                                          |
|------------------------------------------------|------------------------------------------|
| MAXIMUM FRONT SETBACK                          | 20 FEET                                  |
| MAXIMUM SIDE SETBACK                           | 20 FEET                                  |
| MAXIMUM REAR SETBACK                           | 20 FEET                                  |
| MAXIMUM BUILDING HEIGHT (FROM AVG. ORG. GRADE) | COTTAGES: 25 FEET<br>NORMAL SFR: 35 FEET |

COVERAGE CALCULATIONS

|                                   |            |
|-----------------------------------|------------|
| SQUARE FOOTAGE OF THE ENTIRE LOT: | 226,334 SF |
| GROSS SITE AREA:                  | 5.19 A     |

|                                                |           |
|------------------------------------------------|-----------|
| TOTAL SQ. FT. OF LOTS 1-18:                    | 42,351 SF |
| TOTAL SQ. FT. OF HOUSE FOOTPRINTS 1-18:        | 22,824 SF |
| 18" ROOF OVERHANGS ESTIMATE:                   | 4,644 SF  |
| TOTAL SQ. FT. OF LOTS 19-21:                   | 22,847 SF |
| TOTAL SQ. FT. OF HOUSE FOOTPRINTS 19-21:       | 7,980 SF  |
| 2" ROOF OVERHANGS ESTIMATE:                    | 1,455 SF  |
| TOTAL BUILDING COVERAGE ON ENTIRE LOT (13.6%): | 30,804 SF |
| SIDEWALK ALONG ROAD:                           | 3,607 SF  |
| DRIVEWAYS & ROAD:                              | 25,015 SF |

|                                      |            |
|--------------------------------------|------------|
| TOTAL IMPERVIOUS COVERAGE (28.95%):  | 65,525 SF  |
| TOTAL ALLOWABLE IMP. COVERAGE (50%): | 113,165 SF |

DESIGNED BY  
JASON STERLING

SCALE  
1" = 20' U.N.O.

DATE  
01/31/2020

05/27/2020

07/01/2020

BUILDER INFO:  
MAILING ADDRESS:  
P.O. BOX 319  
ANACORTES WA 98221

PHONE:  
360-293-7431

WEB:  
www.strandbergconstruction.com

PROJECT / CLIENT INFO

THE CROSSINGS

1905 Anacopper RD, Anacortes, WA 98221

SITE PLAN FOR 3 SOUTH LOTS

OWNER APPROVAL

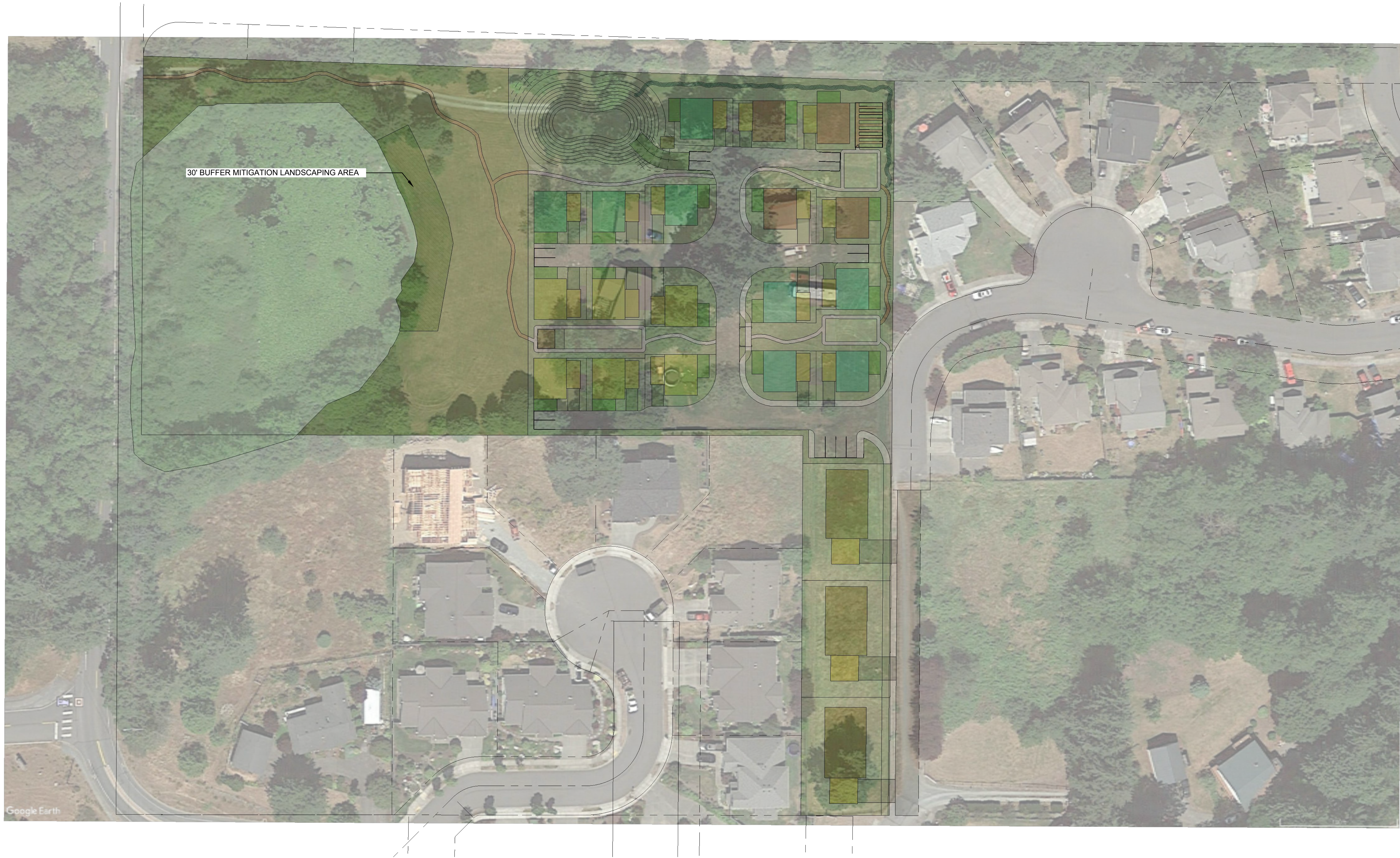
INITIAL  
PAGE #

C5

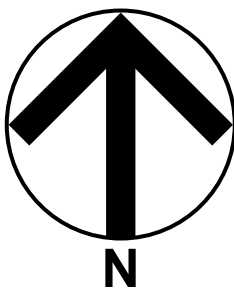
PAGE  
6 of 19

THE INFORMATION, PLANS, DESIGN, NOTES AND ARRANGEMENTS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND MAY NOT BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT THE EXPRESS WRITTEN PERMISSION OF STRANDBERG DESIGN. THE INFORMATION IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, INCLUDING BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE INFORMATION IS NOT TO BE USED FOR ANY OTHER PROJECT OR FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN PERMISSION OF STRANDBERG DESIGN. THE INFORMATION IS NOT TO BE USED FOR ANY OTHER PROJECT OR FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN PERMISSION OF STRANDBERG DESIGN.





SITE PLAN FOR 3 SOUTH LOTS  
SCALE: 1" = 40'



|                 |
|-----------------|
| DESIGNED BY     |
| JASON STERLING  |
| SCALE           |
| 1" = 20' U.N.O. |
| DATE            |
| 01/31/2020      |
| 05/27/2020      |
| 07/01/2020      |



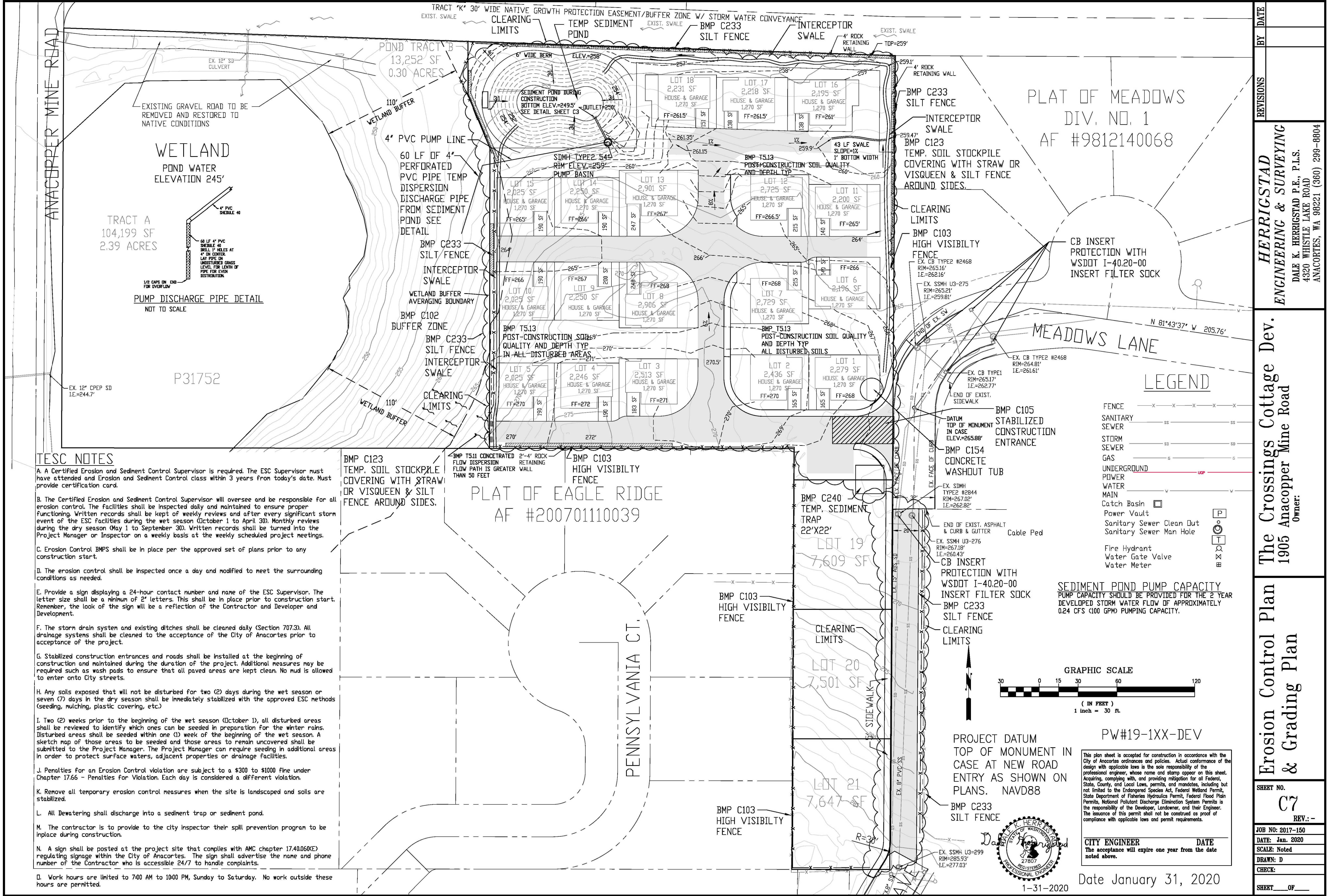
|                                |
|--------------------------------|
| BUILDER INFO:                  |
| MAILING ADDRESS:               |
| P.O. BOX 319                   |
| ANACORTES WA 98221             |
| PHONE:                         |
| 360-295-7431                   |
| WEB:                           |
| www.strandbergconstruction.com |

|                                        |
|----------------------------------------|
| PROJECT / CLIENT INFO                  |
| THE CROSSINGS                          |
| 1905 Anacopper RD, Anacortes, WA 98221 |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FULL SITE WITH AERIAL PHOTO                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <small>THE INFORMATION, PLANS, DESIGN, NOTES AND ARRANGEMENTS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND MAY NOT BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE EXPRESS WRITTEN PERMISSION OF STRANDBERG DESIGN. THE INFORMATION IS FOR YOUR INFORMATION ONLY AND IS NOT TO BE USED FOR ANY OTHER PURPOSE. THE INFORMATION IS NOT TO BE USED FOR ANY OTHER PURPOSE. THE INFORMATION IS NOT TO BE USED FOR ANY OTHER PURPOSE. THE INFORMATION IS NOT TO BE USED FOR ANY OTHER PURPOSE.</small> |

|                |
|----------------|
| OWNER APPROVAL |
| INITIAL        |
| PAGE #         |
| C6             |
| PAGE           |
| 7 of 19        |





TESC NOTES

- A. A Certified Erosion and Sediment Control Supervisor is required. The ESC Supervisor must have attended and Erosion and Sediment Control class within 3 years from today's date. Must provide certification card.
- B. The Certified Erosion and Sediment Control Supervisor will oversee and be responsible for all erosion control. The facilities shall be inspected daily and maintained to ensure proper functioning. Written records shall be kept of weekly reviews and after every significant storm event of the ESC facilities during the wet season (October 1 to April 30). Monthly reviews during the dry season (May 1 to September 30). Written records shall be turned into the Project Manager or Inspector on a weekly basis at the weekly scheduled project meetings.
- C. Erosion Control BMPs shall be in place per the approved set of plans prior to any construction start.
- D. The erosion control shall be inspected once a day and modified to meet the surrounding conditions as needed.
- E. Provide a sign displaying a 24-hour contact number and name of the ESC Supervisor. The letter size shall be a minimum of 2" letters. This shall be in place prior to construction start. Remember, the look of the sign will be a reflection of the Contractor and Developer and Development.
- F. The storm drain system and existing ditches shall be cleaned daily (Section 707.3). All drainage systems shall be cleaned to the acceptance of the City of Anacortes prior to acceptance of the project.
- G. Stabilized construction entrances and roads shall be installed at the beginning of construction and maintained during the duration of the project. Additional measures may be required such as wash pads to ensure that all paved areas are kept clean. No mud is allowed to enter onto City streets.
- H. Any soils exposed that will not be disturbed for two (2) days during the wet season or seven (7) days in the dry season shall be immediately stabilized with the approved ESC methods (seeding, mulching, plastic covering, etc.)
- I. Two (2) weeks prior to the beginning of the wet season (October 1), all disturbed areas shall be reviewed to identify which ones can be seeded in preparation for the winter rains. Disturbed areas shall be seeded within one (1) week of the beginning of the wet season. A sketch map of those areas to be seeded and those areas to remain uncovered shall be submitted to the Project Manager. The Project Manager can require seeding in additional areas in order to protect surface waters, adjacent properties or drainage facilities.
- J. Penalties for an Erosion Control violation are subject to a \$300 to \$1000 fine under Chapter 17.66 - Penalties for Violation. Each day is considered a different violation.
- K. Remove all temporary erosion control measures when the site is landscaped and soils are stabilized.
- L. All Dewatering shall discharge into a sediment trap or sediment pond.
- M. The contractor is to provide to the city inspector their spill prevention program to be in place during construction.
- N. A sign shall be posted at the project site that complies with AMC chapter 17.40.060(E) regulating signage within the City of Anacortes. The sign shall advertise the name and phone number of the Contractor who is accessible 24/7 to handle complaints.
- O. Work hours are limited to 7:00 AM to 10:00 PM, Sunday to Saturday. No work outside these hours are permitted.

REVISIONS

BY

DATE

**HERRIGSTAD**  
**ENGINEERING & SURVEYING**  
DALE K. HERRIGSTAD P.E., P.L.S.  
4320 WHISTLE LAKE ROAD  
ANACORTES, WA 98221 (360) 299-8804

**The Crossings Cottage Dev.**  
1905 Anacopper Mine Road  
Owner:

**Erosion Control Plan**  
**& Grading Plan**

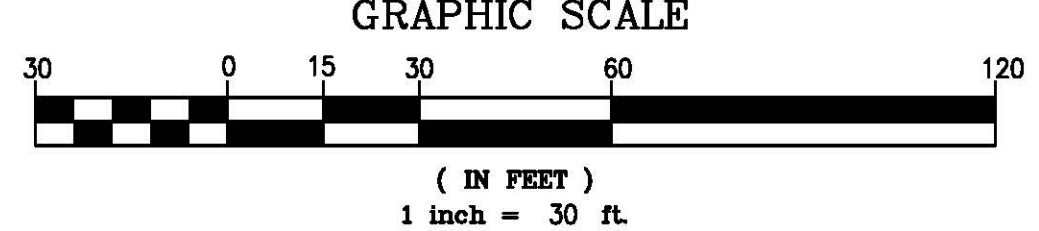
**SHEET NO.**  
**C7**  
**REV. -**

**JOB NO:** 2017-150  
**DATE:** Jan. 2020  
**SCALE:** Noted  
**DRAWN:** D  
**CHECK:**  
**SHEET** **OF**

This plan sheet is accepted for construction in accordance with the City of Anacortes ordinances and policies. Actual conformance of the design with applicable laws is the sole responsibility of the professional engineer, whose name and stamp appear on this sheet. Acquiring, complying with, and providing mitigation for all Federal, State, County, and Local Laws, permits, and mandates, including but not limited to the Endangered Species Act, Federal Wetland Permit, State Department of Fisheries Hydraulics Permit, Federal Flood Plain Permits, National Pollutant Discharge Elimination System Permits is the responsibility of the Developer, Landowner, and their Engineer. The issuance of this permit shall not be construed as proof of compliance with applicable laws and permit requirements.

**CITY ENGINEER** **DATE**  
The acceptance will expire one year from the date noted above.

Date January 31, 2020



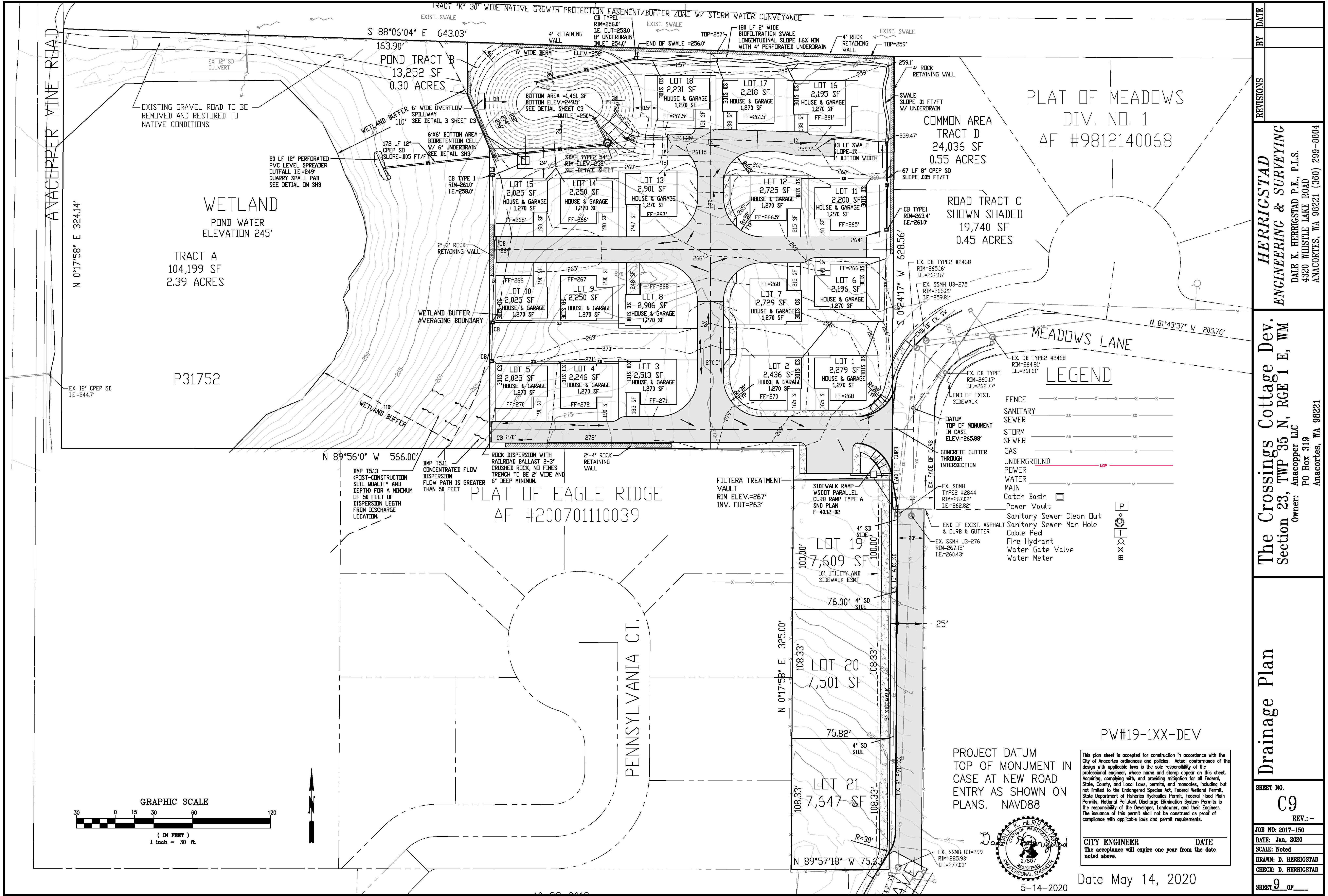
PROJECT DATUM  
TOP OF MONUMENT IN  
CASE AT NEW ROAD  
ENTRY AS SHOWN ON  
PLANS. NAVD88











| REVISIONS                                                                                                                                                  | BY | DATE |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|----|------|
|                                                                                                                                                            |    |      |
| <b>HERRIGSTAD</b><br><b>ENGINEERING &amp; SURVEYING</b><br>DALE K. HERRIGSTAD P.E., P.L.S.<br>4320 WHISTLE LAKE ROAD<br>ANACORTES, WA 98021 (360) 299-8804 |    |      |
| <b>The Crossings Cottage Dev.</b><br>Section 23, TWP 35 N, RGE 1 E, WM<br>Owner: Anacopper LLC<br>PO Box 319<br>Anacortes, WA 98221                        |    |      |
| <b>Drainage Plan</b>                                                                                                                                       |    |      |
| SHEET NO. <b>C9</b><br>REV.: -                                                                                                                             |    |      |
| JOB NO: 2017-150<br>DATE: Jan, 2020<br>SCALE: Noted<br>DRAWN: D. HERRIGSTAD<br>CHECK: D. HERRIGSTAD                                                        |    |      |
| SHEET <b>9</b> OF <b>9</b>                                                                                                                                 |    |      |

PW#19-1XX-DEV

This plan sheet is accepted for construction in accordance with the City of Anacortes ordinances and policies. Actual conformance of the design with applicable laws is the sole responsibility of the professional engineer, whose name and stamp appear on this sheet. Acquiring, complying with, and providing mitigation for all Federal, State, County, and Local Laws, permits, and mandates, including but not limited to the Endangered Species Act, Federal Wetland Permit, State Department of Fisheries Hydraulics Permit, Federal Flood Plain Permits, National Pollutant Discharge Elimination System Permits is the responsibility of the Developer, Landowner, and their Engineer. The issuance of this permit shall not be construed as proof of compliance with applicable laws and permit requirements.

**CITY ENGINEER** **DATE**  
The acceptance will expire one year from the date noted above.

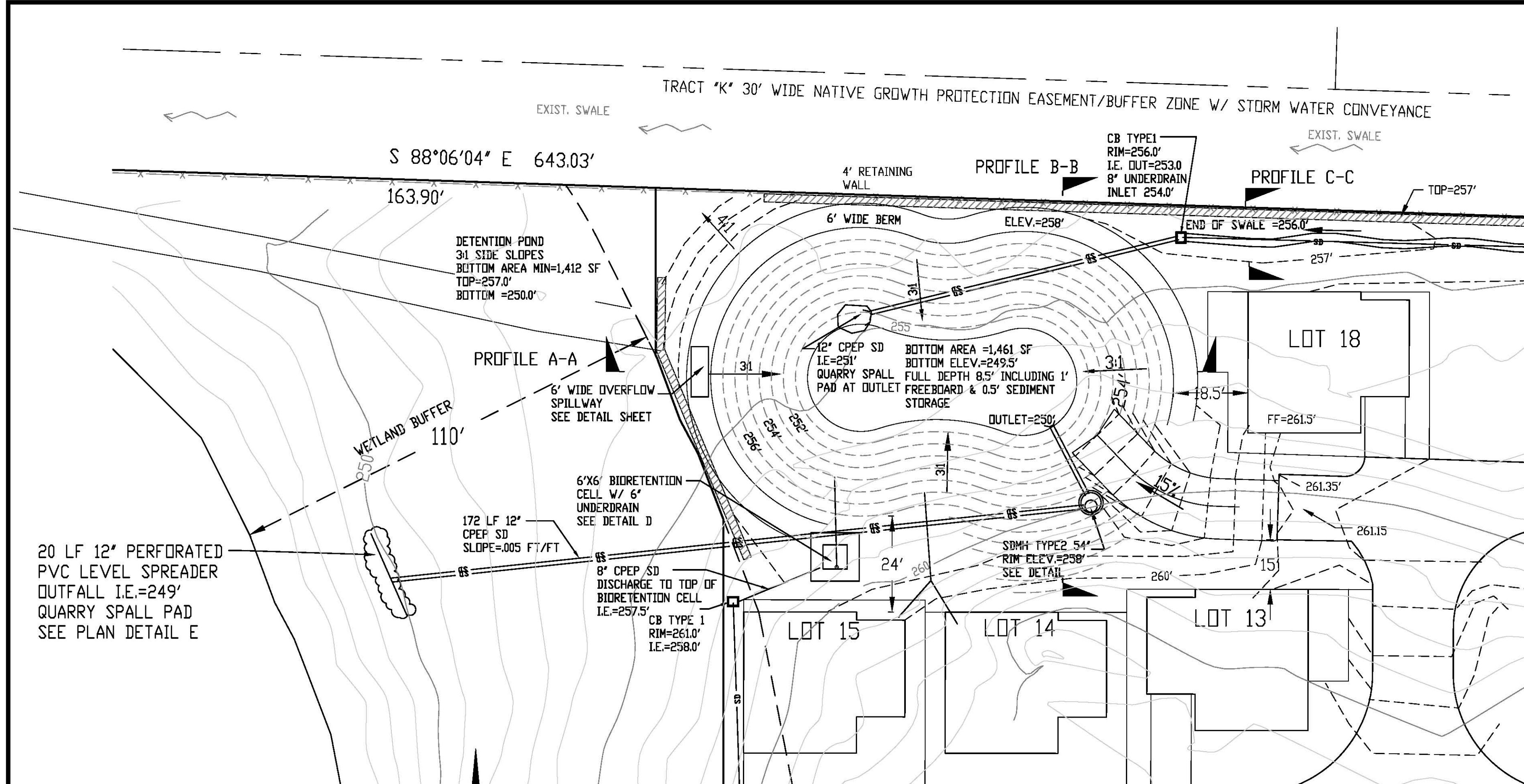
Date May 14, 2020

PROJECT DATUM  
TOP OF MONUMENT IN  
CASE AT NEW ROAD  
ENTRY AS SHOWN ON  
PLANS. NAVD88

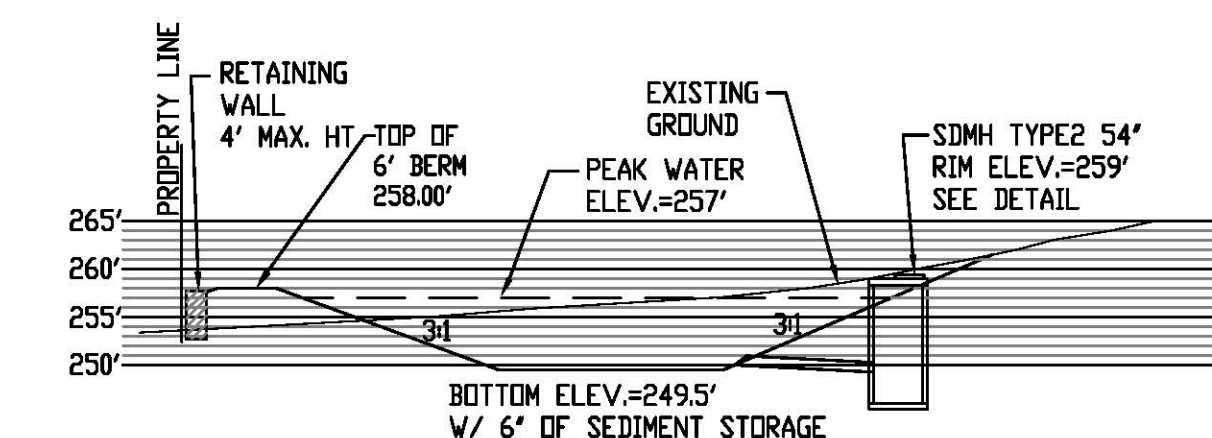
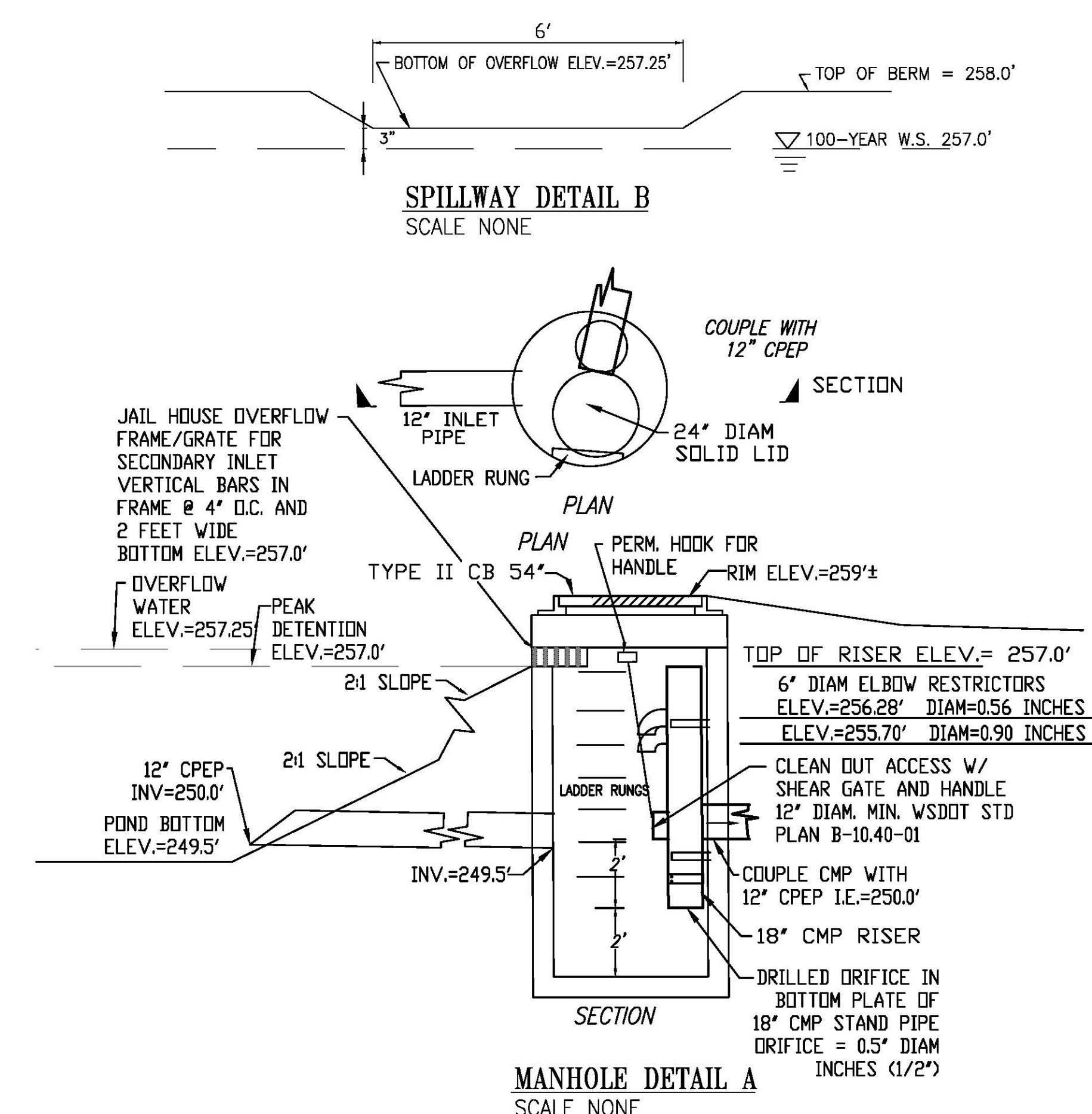
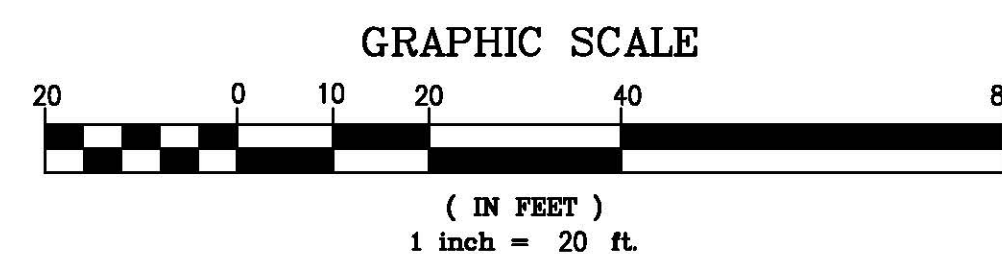
10-28-2019

5-14-2020

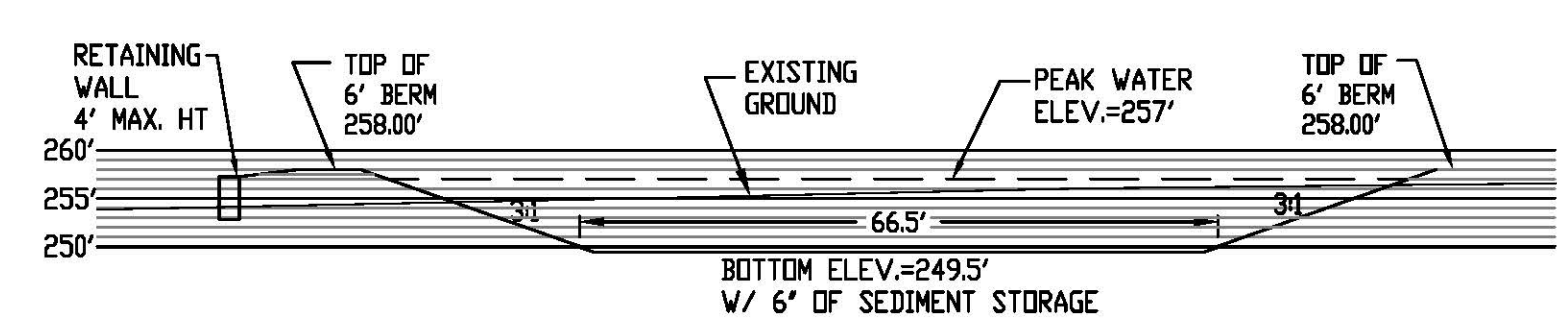




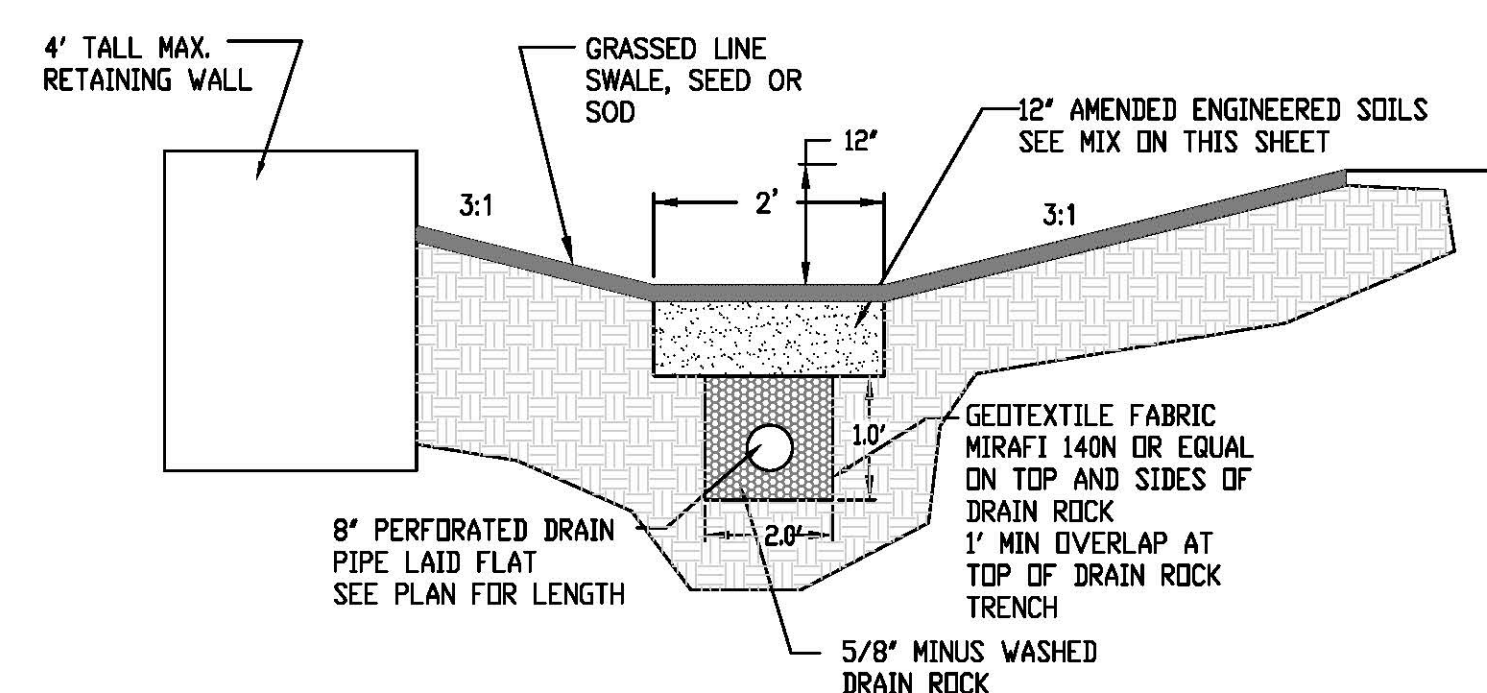
DETENTION POND AND SEDIMENT POND DURING CONSTRUCTION



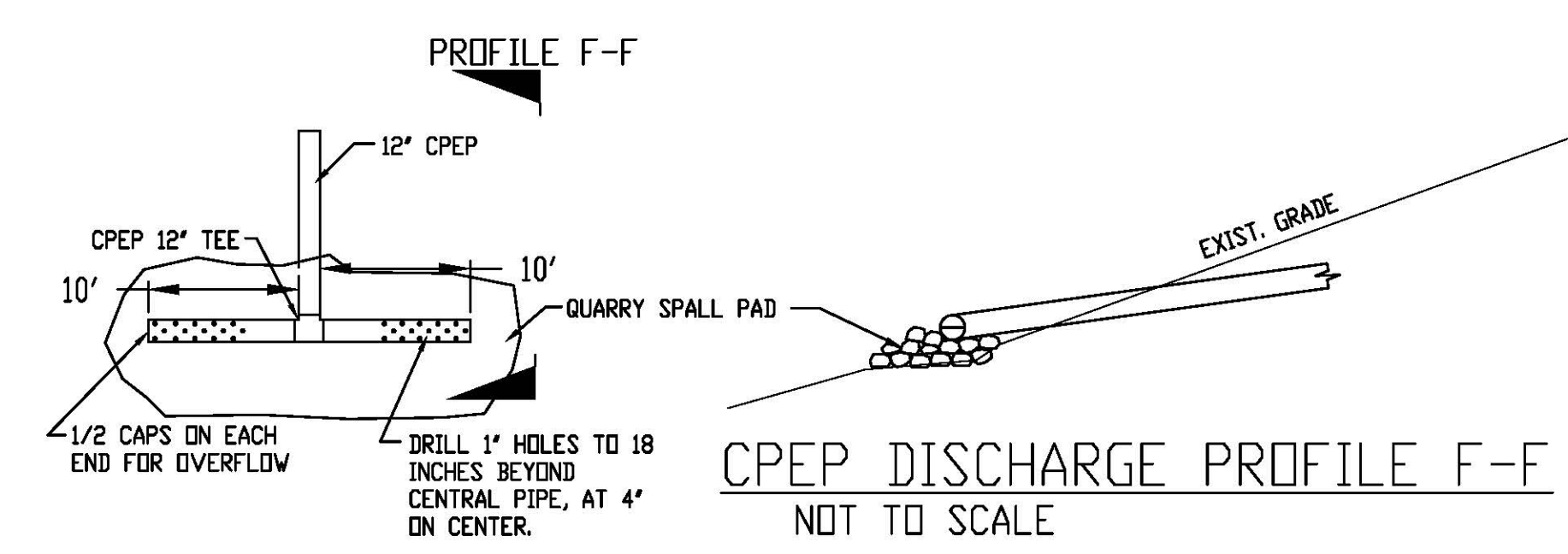
PROFILE B-B  
SCALE: 1"=20' HOR/VERT.



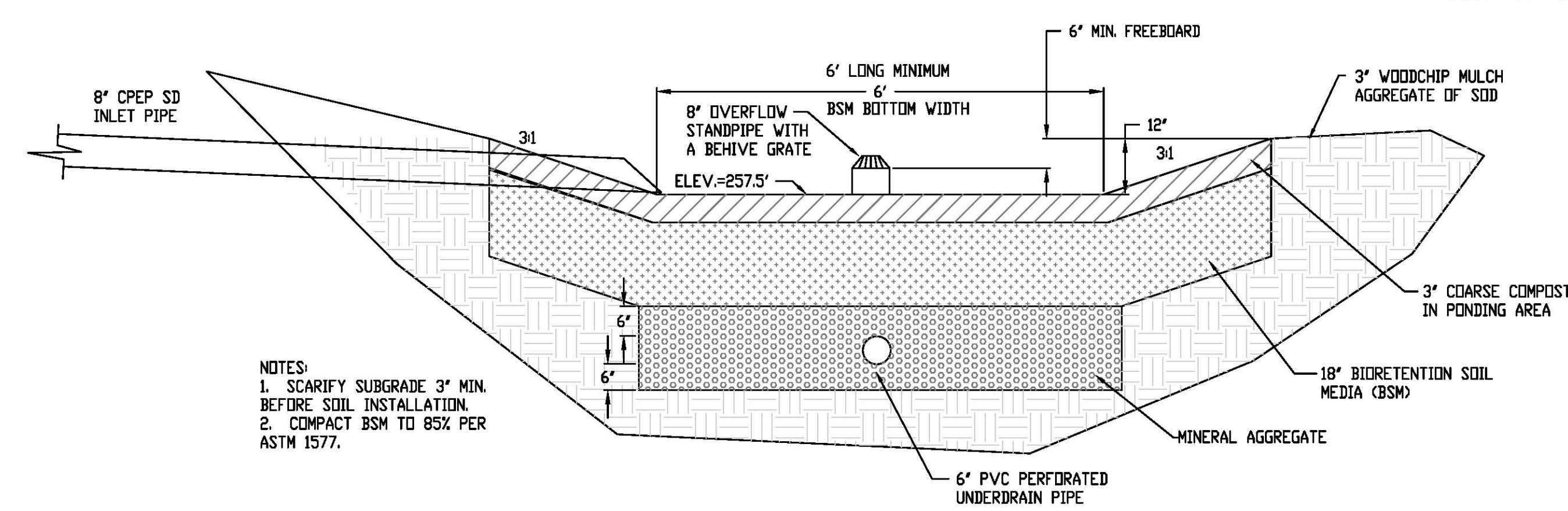
PROFILE A-A  
SCALE: 1"=20' HOR/VERT.



SWALE SECTION C-C  
SCALE: NONE



CPEP DISCHARGE DETAIL PLAN E  
NOT TO SCALE



BIORETENTION CELL SECTION DETAIL D  
NOT TO SCALE

PROJECT DATUM  
TOP OF MONUMENT IN  
CASE AT NEW ROAD  
ENTRY AS SHOWN ON  
PLANS. NAVD88



PW#19-1XX-DEV

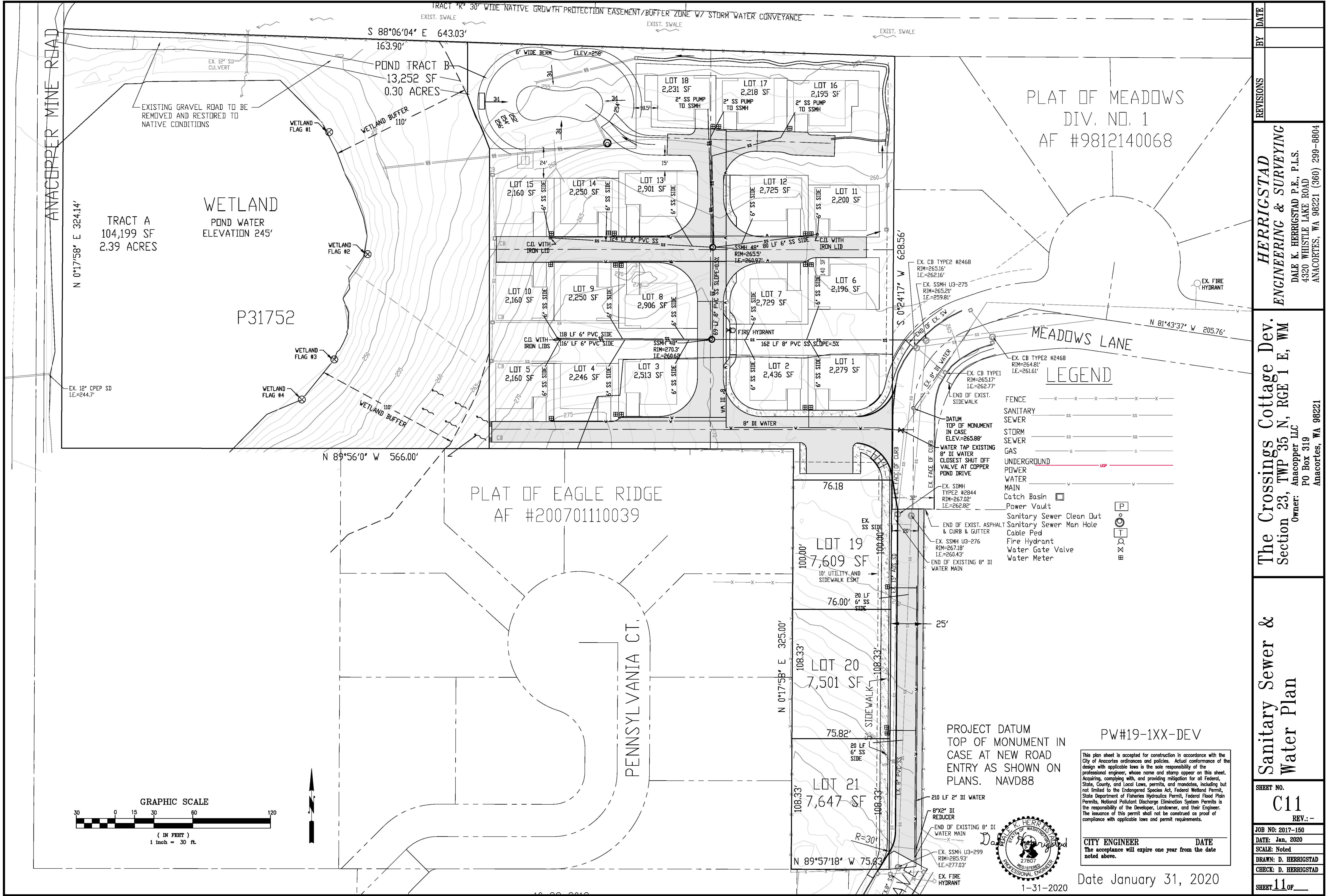
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CITY ENGINEER \_\_\_\_\_ DATE \_\_\_\_\_  
The acceptance will expire one year from the date noted above.

Date January 31, 2020

| REVISIONS                                                                                                                                                  | BY | DATE |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|----|------|
|                                                                                                                                                            |    |      |
|                                                                                                                                                            |    |      |
|                                                                                                                                                            |    |      |
|                                                                                                                                                            |    |      |
| <b>HERRIGSTAD</b><br><b>ENGINEERING &amp; SURVEYING</b><br>DALE K. HERRIGSTAD P.E., P.L.S.<br>4320 WHISTLE LAKE ROAD<br>ANACORTES, WA 98221 (360) 299-8804 |    |      |
| <b>The Crossings Cottage Dev.</b><br>Section 23, TWP 35 N, RGE 1 E, WM<br>Owner: Anacopper LLC<br>PO Box 319<br>Anacortes, WA 98221                        |    |      |
| <b>Pond Plan &amp; Details</b>                                                                                                                             |    |      |
| SHEET NO. <b>C10</b><br>REV.: -                                                                                                                            |    |      |
| JOB NO: 2017-150<br>DATE: Jan, 2020<br>SCALE: Noted<br>DRAWN: D. HERRIGSTAD<br>CHECK: D. HERRIGSTAD<br>SHEET 10 OF 10                                      |    |      |





**HERRIGSTAD**  
**ENGINEERING & SURVEYING**  
DALE K. HERRIGSTAD P.E., P.L.S.  
4320 WHISTLE LAKE ROAD  
ANACORTES, WA 98021 (360) 299-8804

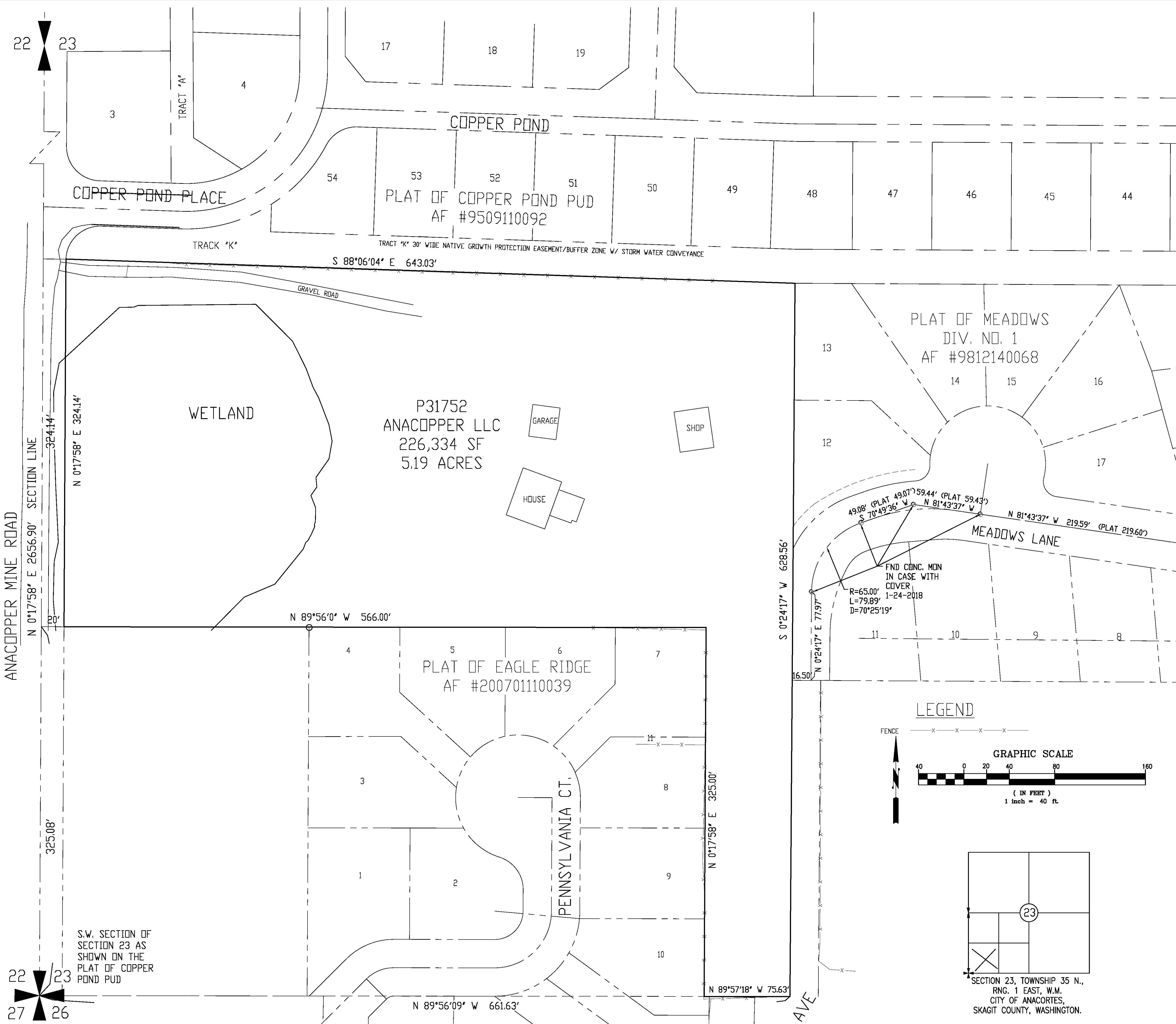
**The Crossings Cottage Dev.**  
Section 23, TWP 35 N, RGE 1 E, WM  
Owner: Anacopper LLC  
PO Box 319  
Anacortes, WA 98221

**Sanitary Sewer & Water Plan**

**SHEET NO. C11**  
REV.: -

**JOB NO: 2017-150**  
**DATE: Jan, 2020**  
**SCALE: Noted**  
**DRAWN: D. HERRIGSTAD**  
**CHECK: D. HERRIGSTAD**  
**SHEET 11 OF 11**





LEGAL DESCRIPTION

PARCEL "A":  
The Southwest 1/4 of the Southwest 1/4 of the Southwest 1/4 of Section 23, Township 35 North, Range 1 East, W.M.; EXCEPT the West 586.00 feet of the South 325.00 feet thereof; ALSO EXCEPT the West 20 feet thereof; AND ALSO EXCEPT the North 33 feet thereof;

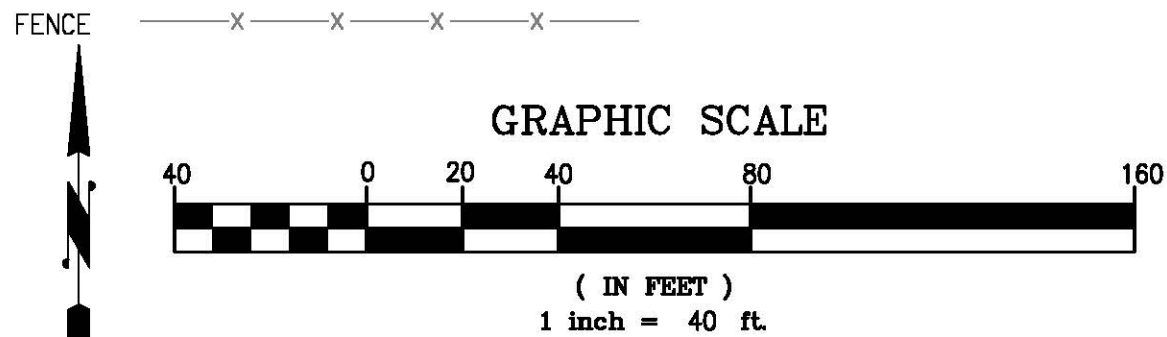
Situate in the County of Skagit, State of Washington.

PARCEL "B":  
That portion of the North 33 feet of the Southwest 1/4 of the Southwest 1/4 of the Southwest 1/4 of Section 23, Township 35 North, Range 1 East, W.M., described as follows:

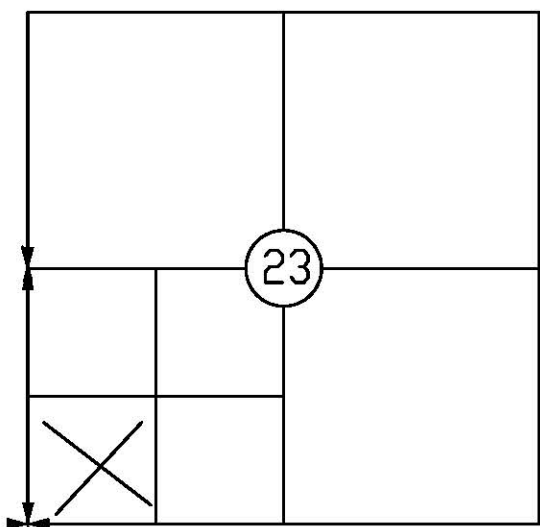
Beginning at the Southeast corner of Tract C (being the Southeast corner of said North 33 feet of the Southwest 1/4 of the Southwest 1/4 of the Southwest 1/4 of said Section 23) of that certain Survey recorded April 11, 1978, in Volume 2 of Surveys, page 85, under Auditor's File No. 877240, records of Skagit County, Washington; thence West along the South line of said Tract C to the Southwest corner thereof; thence North along the West line of said Tract C, a distance of 18 feet; thence Southeasterly in a straight line to the point of beginning.

Situate in the County of Skagit, State of Washington,

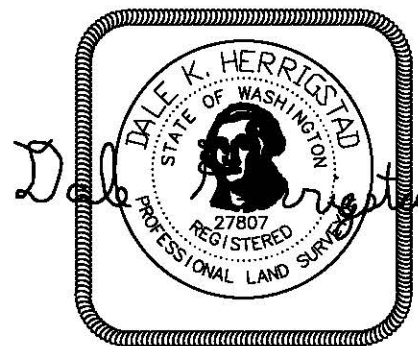
LEGEND



- NOTES
1. FOUND CONCRETE MONUMENT IN CASE, 1-24-2018.
  2. FOUND REBAR AND CAP OR REBAR W/OUT CAP AS NOTED.
  3. BASIS OF BEARINGS: Plat of The Meadows AF #9812140068, center line of Meadows Lane.
  4. EQUIPMENT USED: Carlson CR2 2" TOTAL STATION.
  5. ERROR OF CLOSURE MEETS WASHINGTON STATE SURVEY STANDARDS.
  6. SURVEY METHOD: STANDARD FIELD TRAVERSE.



SECTION 23, TOWNSHIP 35 N.,  
RNG. 1 EAST, W.M.  
CITY OF ANACORTES,  
SKAGIT COUNTY, WASHINGTON.



1-31-2020

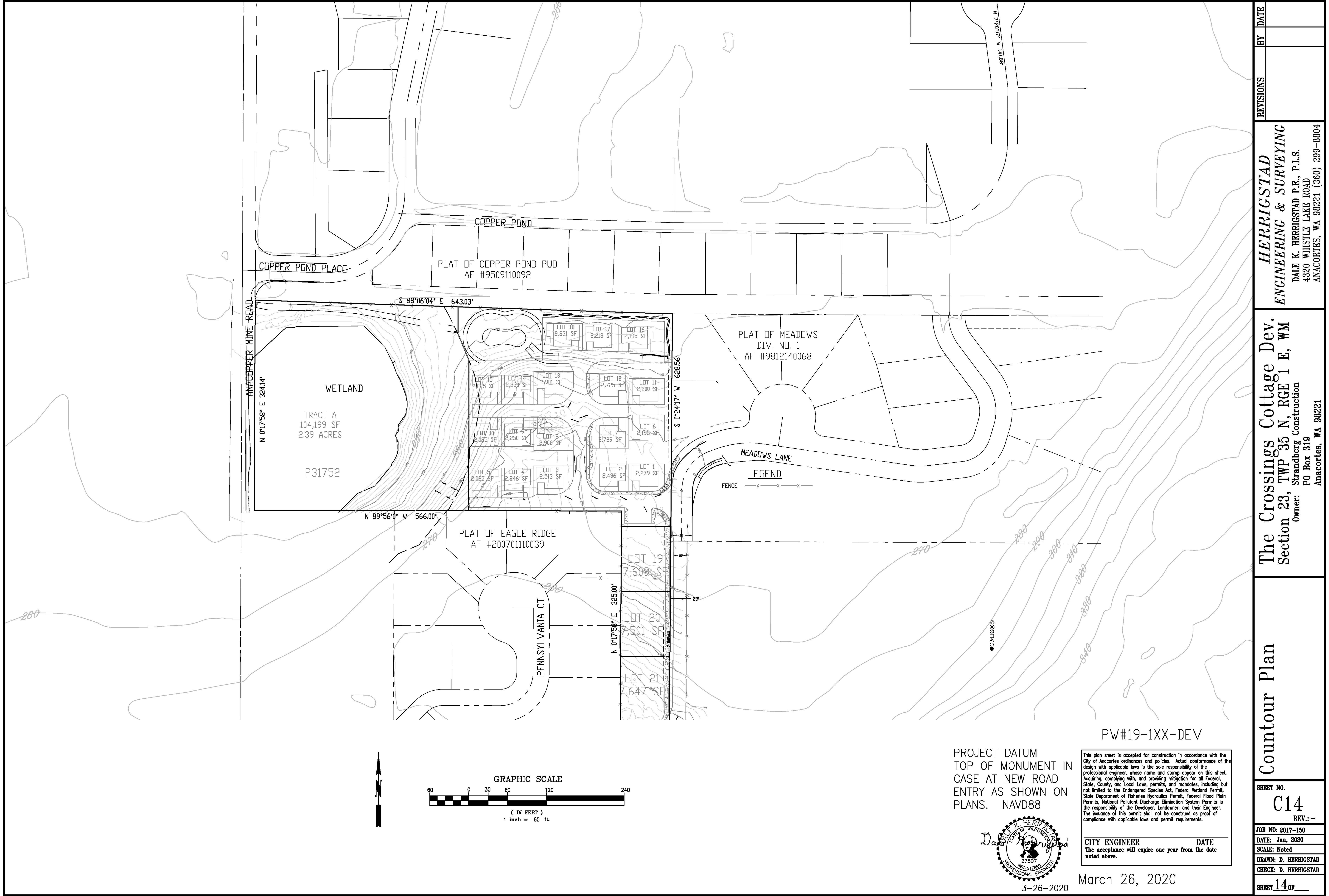
Date January 31, 2020

| REVISIONS                                                                                                                                | BY      | DATE |
|------------------------------------------------------------------------------------------------------------------------------------------|---------|------|
|                                                                                                                                          |         |      |
| HERRIGSTAD<br>ENGINEERING & SURVEYING<br>DALE K. HERRIGSTAD P.E., P.L.S.<br>4320 WHISTLE LAKE ROAD<br>ANACORTES, WA 98221 (360) 299-8804 |         |      |
| The Crossings Cottage Dev.<br>Section 23, TWP 35 N, RGE 1 E, WM<br>Owner: Anacopper LLC<br>PO Box 319<br>Anacortes, WA 98221             |         |      |
| Boundary Survey                                                                                                                          |         |      |
| SHEET NO.                                                                                                                                | C12     |      |
| JOB NO: 2017-150                                                                                                                         | REV.: - |      |
| DATE: Jan, 2020                                                                                                                          |         |      |
| SCALE: Noted                                                                                                                             |         |      |
| DRAWN: D. HERRIGSTAD                                                                                                                     |         |      |
| CHECK: D. HERRIGSTAD                                                                                                                     |         |      |
| SHEET 12 OF                                                                                                                              |         |      |





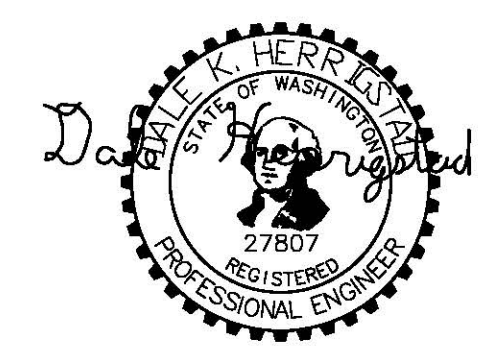




| REVISIONS                                                                                                                                |  | BY | DATE |
|------------------------------------------------------------------------------------------------------------------------------------------|--|----|------|
| HERRIGSTAD<br>ENGINEERING & SURVEYING<br>DALE K. HERRIGSTAD P.E., P.L.S.<br>4320 WHISTLE LAKE ROAD<br>ANACORTES, WA 98221 (360) 299-8804 |  |    |      |
| The Crossings Cottage Dev.<br>Section 23, TWP 35 N, RGE 1 E, WM<br>Owner: Strandberg Construction<br>PO Box 319<br>Anacortes, WA 98221   |  |    |      |
| Countour Plan                                                                                                                            |  |    |      |
| SHEET NO.<br>C14<br>REV.: -                                                                                                              |  |    |      |
| JOB NO: 2017-150                                                                                                                         |  |    |      |
| DATE: Jan, 2020                                                                                                                          |  |    |      |
| SCALE: Noted                                                                                                                             |  |    |      |
| DRAWN: D. HERRIGSTAD                                                                                                                     |  |    |      |
| CHECK: D. HERRIGSTAD                                                                                                                     |  |    |      |
| SHEET 14 OF                                                                                                                              |  |    |      |

PW#19-1XX-DEV

PROJECT DATUM  
TOP OF MONUMENT IN  
CASE AT NEW ROAD  
ENTRY AS SHOWN ON  
PLANS. NAVD88

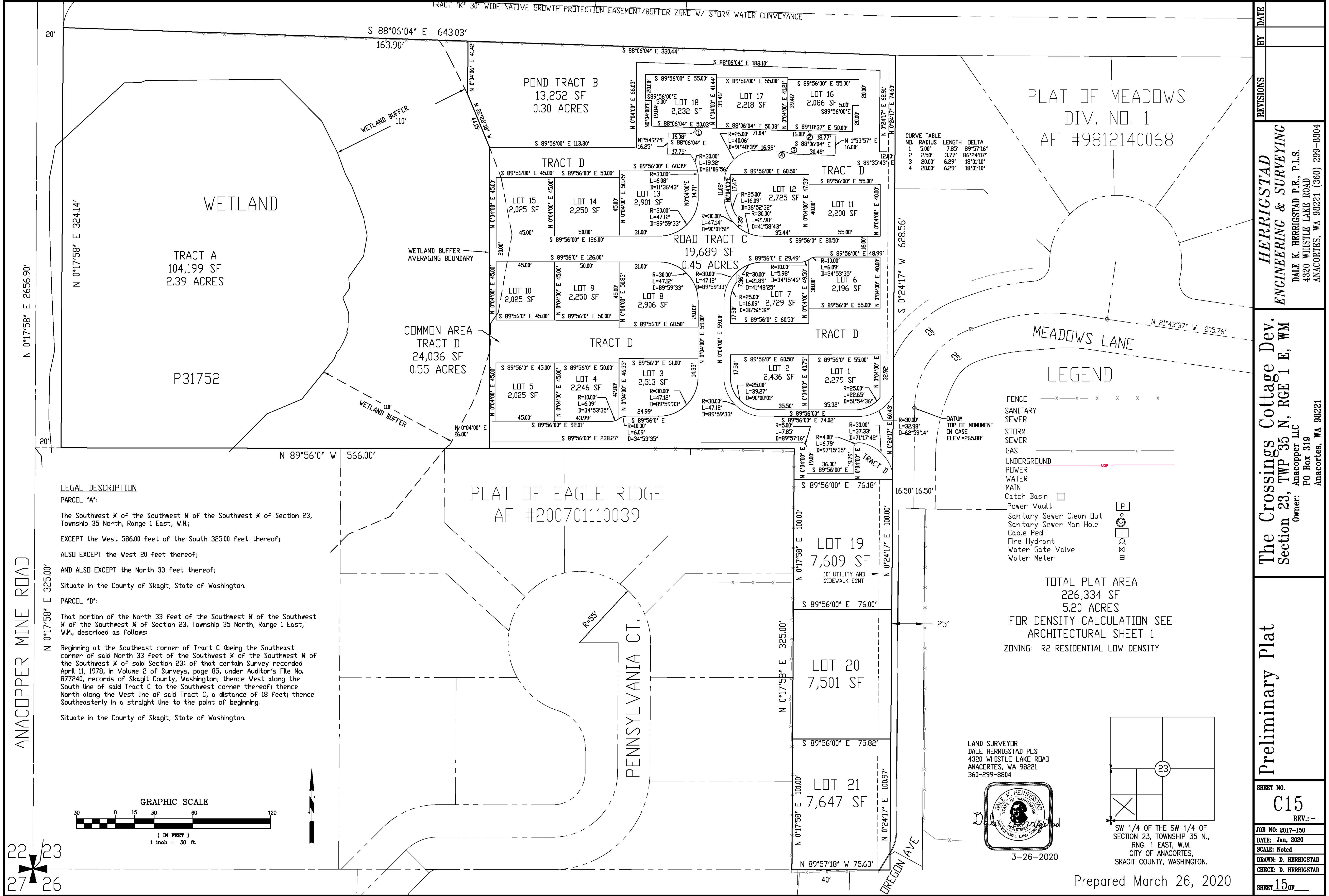


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CITY ENGINEER      DATE  
The acceptance will expire one year from the date noted above.

March 26, 2020

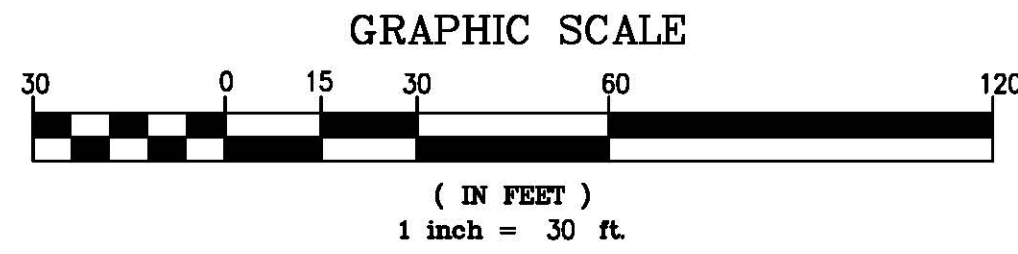




LEGAL DESCRIPTION

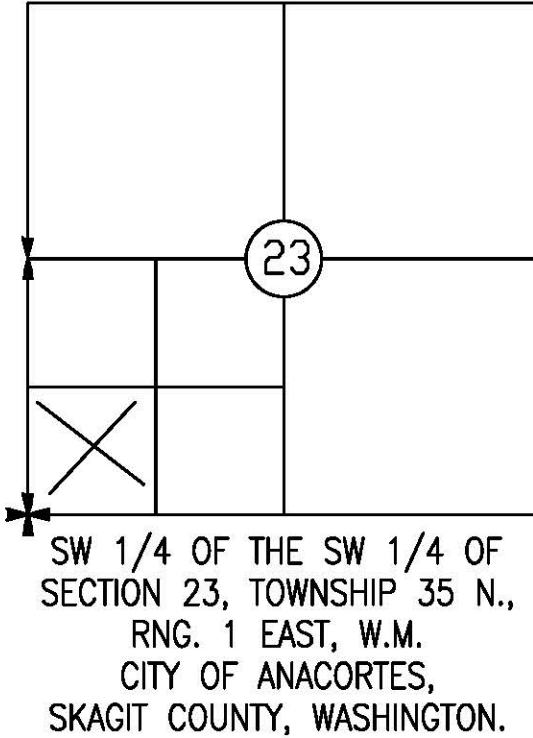
PARCEL "A":  
The Southwest ¼ of the Southwest ¼ of the Southwest ¼ of Section 23, Township 35 North, Range 1 East, W.M.;  
EXCEPT the West 586.00 feet of the South 325.00 feet thereof;  
ALSO EXCEPT the West 20 feet thereof;  
AND ALSO EXCEPT the North 33 feet thereof;  
Situate in the County of Skagit, State of Washington.

PARCEL "B":  
That portion of the North 33 feet of the Southwest ¼ of the Southwest ¼ of the Southwest ¼ of Section 23, Township 35 North, Range 1 East, W.M., described as follows:  
Beginning at the Southeast corner of Tract C (being the Southeast corner of said North 33 feet of the Southwest ¼ of the Southwest ¼ of the Southwest ¼ of said Section 23) of that certain Survey recorded April 11, 1978, in Volume 2 of Surveys, page 85, under Auditor's File No. 877240, records of Skagit County, Washington; thence West along the South line of said Tract C to the Southwest corner thereof; thence North along the West line of said Tract C, a distance of 18 feet; thence Southeasterly in a straight line to the point of beginning.  
Situate in the County of Skagit, State of Washington.



LAND SURVEYOR  
DALE HERRIGSTAD PLS  
4320 WHISTLE LAKE ROAD  
ANACORTES, WA 98221  
360-299-8804

DALE K. HERRIGSTAD  
REGISTERED PROFESSIONAL LAND SURVEYOR  
STATE OF WASHINGTON  
3-26-2020

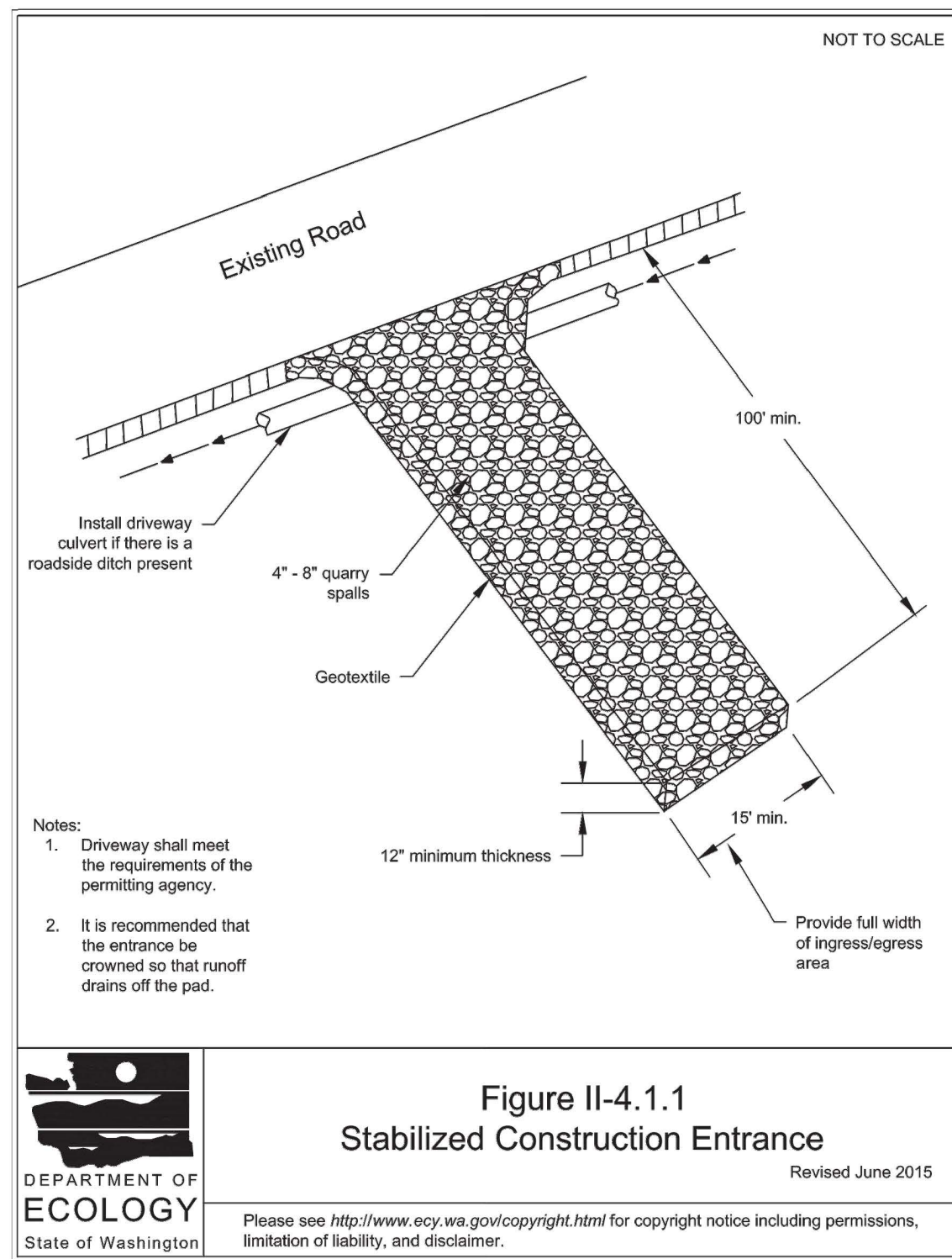


TOTAL PLAT AREA  
226,334 SF  
5.20 ACRES  
FOR DENSITY CALCULATION SEE  
ARCHITECTURAL SHEET 1  
ZONING: R2 RESIDENTIAL LOW DENSITY

| REVISIONS                                                                                                                                | BY | DATE |
|------------------------------------------------------------------------------------------------------------------------------------------|----|------|
| HERRIGSTAD<br>ENGINEERING & SURVEYING<br>DALE K. HERRIGSTAD P.E., P.L.S.<br>4320 WHISTLE LAKE ROAD<br>ANACORTES, WA 98221 (360) 299-8804 |    |      |
| The Crossings Cottage Dev.<br>Section 23, TWP 35 N, RGE 1 E, WM<br>Owner: Anacopper LLC<br>PO Box 319<br>Anacortes, WA 98221             |    |      |
| Preliminary Plat                                                                                                                         |    |      |
| SHEET NO. C15<br>REV.: -                                                                                                                 |    |      |
| JOB NO: 2017-150<br>DATE: Jan, 2020<br>SCALE: Noted<br>DRAWN: D. HERRIGSTAD<br>CHECK: D. HERRIGSTAD                                      |    |      |
| SHEET 15 OF 15                                                                                                                           |    |      |



Figure II-4.1.1 Stabilized Construction Entrance

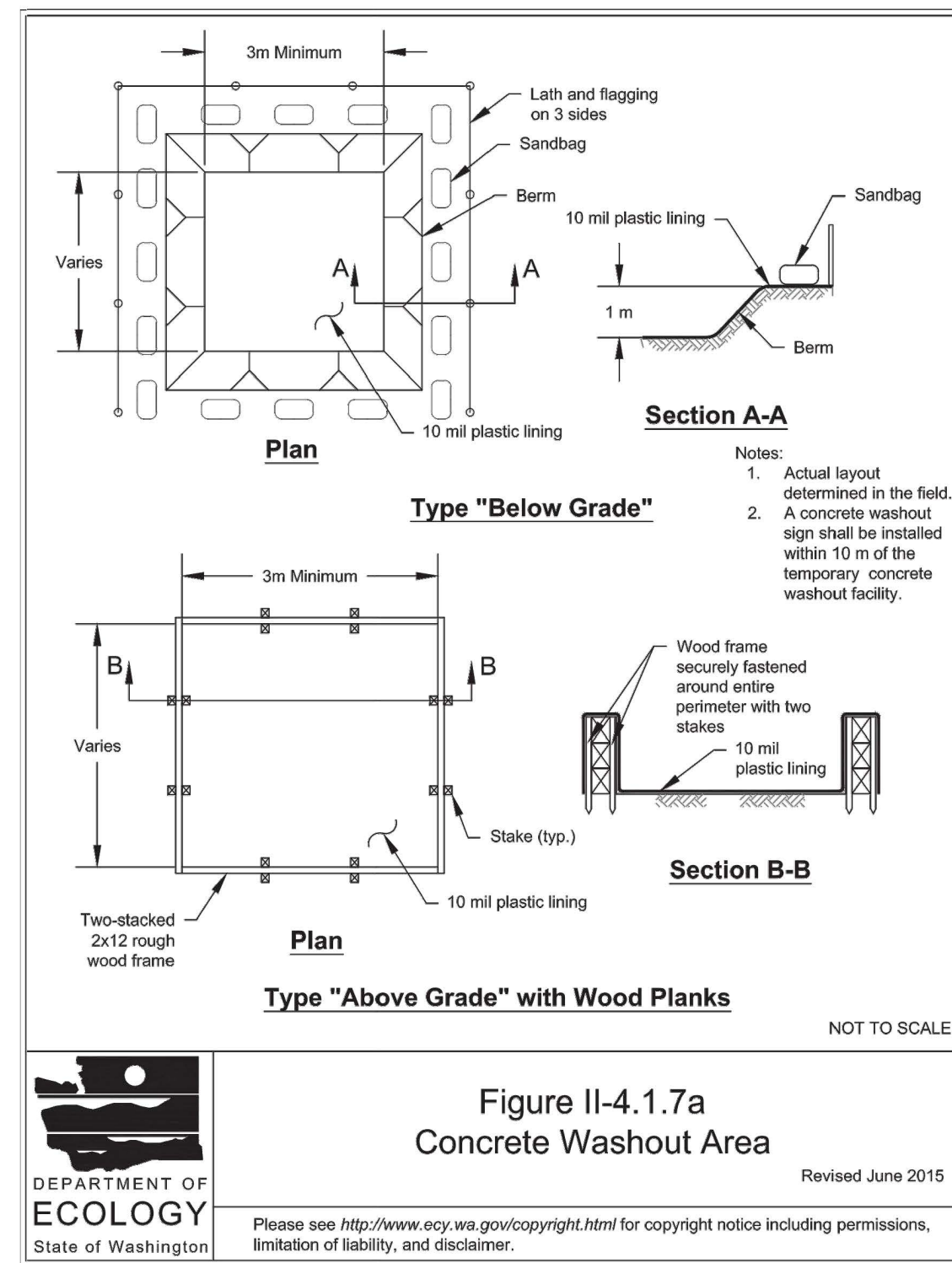


2014 Stormwater Management Manual for Western Washington  
Volume II - Chapter 4 - Page 273

BMP C107: Construction Road/Parking Area Stabilization

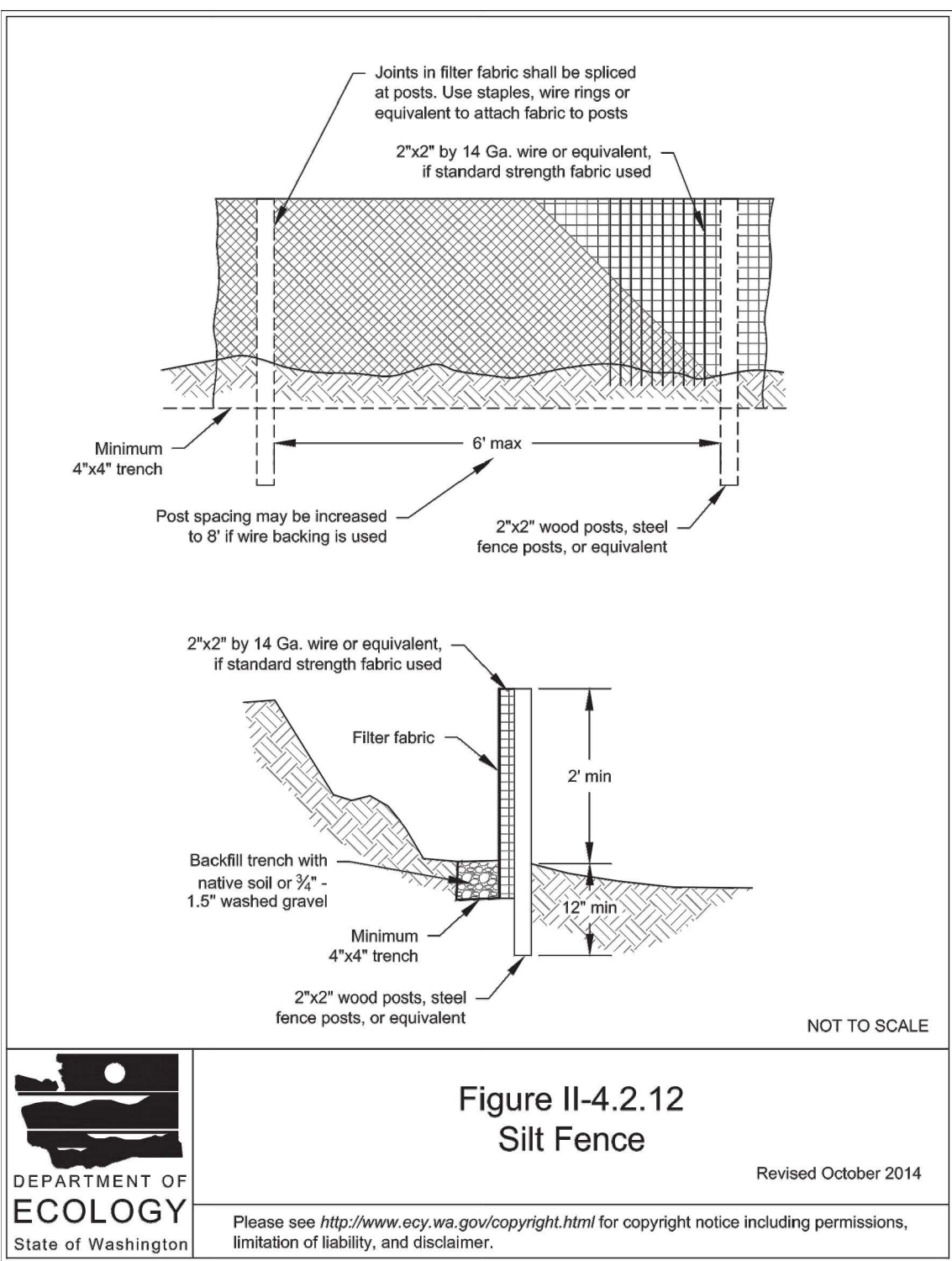
- Purpose** Stabilizing subdivision roads, parking areas, and other on-site vehicle transportation routes immediately after grading reduces erosion caused by construction traffic or runoff.
- Conditions of Use** Roads or parking areas shall be stabilized wherever they are constructed, whether permanent or temporary, for use by construction traffic. • High Visibility Fencing (see [BMP C103](#)) shall be installed, if necessary, to limit the access of vehicles to only those roads and parking areas that are stabilized.
- Design and Installation Specifications**
- On areas that will receive asphalt as part of the project, install the first lift as soon as possible.
  - A 6-inch depth of 2- to 4-inch crushed rock, gravel base, or crushed surfacing base course shall be applied immediately after grading or utility installation. A 4-inch course of asphalt treated base (ATB) may also be used, or the road/parking area may be paved. It may also be possible to use cement or calcium chloride for soil stabilization. If cement or cement kiln dust is used for roadbase stabilization, pH monitoring and BMPs ([BMPs C252](#) and [C253](#)) are necessary to evaluate and minimize the effects on stormwater. If the area will not be used for permanent roads, parking areas, or structures, a 6-inch depth of hog fuel may also be used, but this is likely to require more maintenance. Whenever possible, construction roads and parking areas shall be placed on a firm, compacted subgrade.
  - Temporary road gradients shall not exceed 15 percent. Roadways shall be carefully graded to drain. Drainage ditches shall be provided on each side of the roadway in the case of a crowned section, or on one side in the case of a super-elevated section. Drainage ditches shall be directed to a sediment control BMP.
  - Rather than relying on ditches, it may also be possible to grade the road so that runoff sheet-flows into a heavily vegetated area with a well-developed topsoil. Landscaped areas are not adequate. If this area has at least 50 feet of vegetation that water can flow through, then it is generally preferable to use the vegetation to treat runoff, rather than a sediment pond or trap. The 50 feet shall not include wetlands or their buffers. If runoff is allowed to sheetflow through adjacent vegetated areas, it is vital to design the roadways and parking areas so that no concentrated runoff is created.
  - Storm drain inlets shall be protected to prevent sediment-laden water entering the storm drain system (see [BMP C220](#)).
- Maintenance Standards** Inspect stabilized areas regularly, especially after large storm events. Crushed rock, gravel base, etc., shall be added as required to maintain a stable driving surface and to stabilize any areas that have eroded. Following construction, these areas shall be restored to pre-construction condition or better to prevent future erosion. Perform street cleaning at the end of each day or more often if necessary.

Figure II-4.1.7a Concrete Washout Area



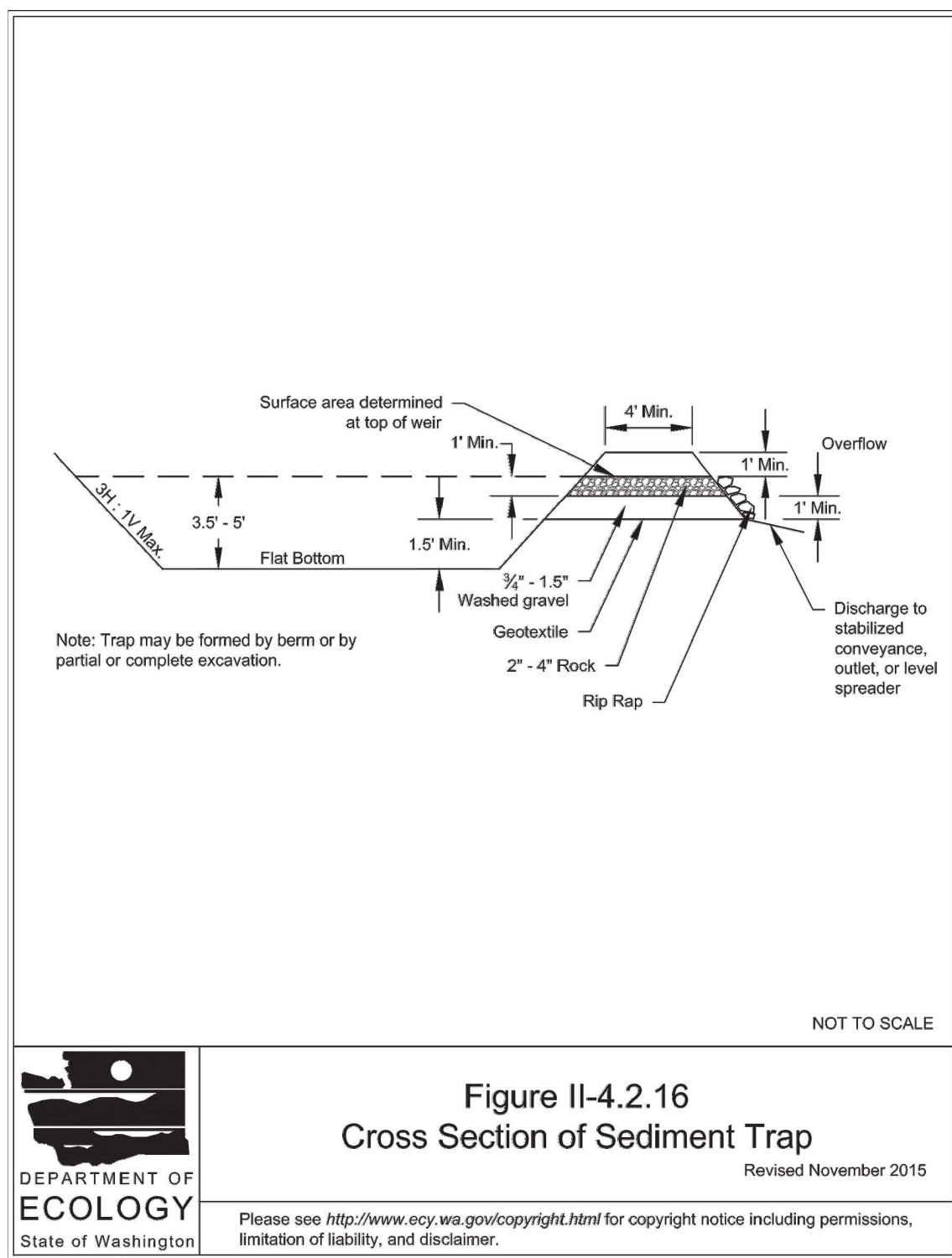
2014 Stormwater Management Manual for Western Washington  
Volume II - Chapter 4 - Page 322

Figure II-4.2.12 Silt Fence



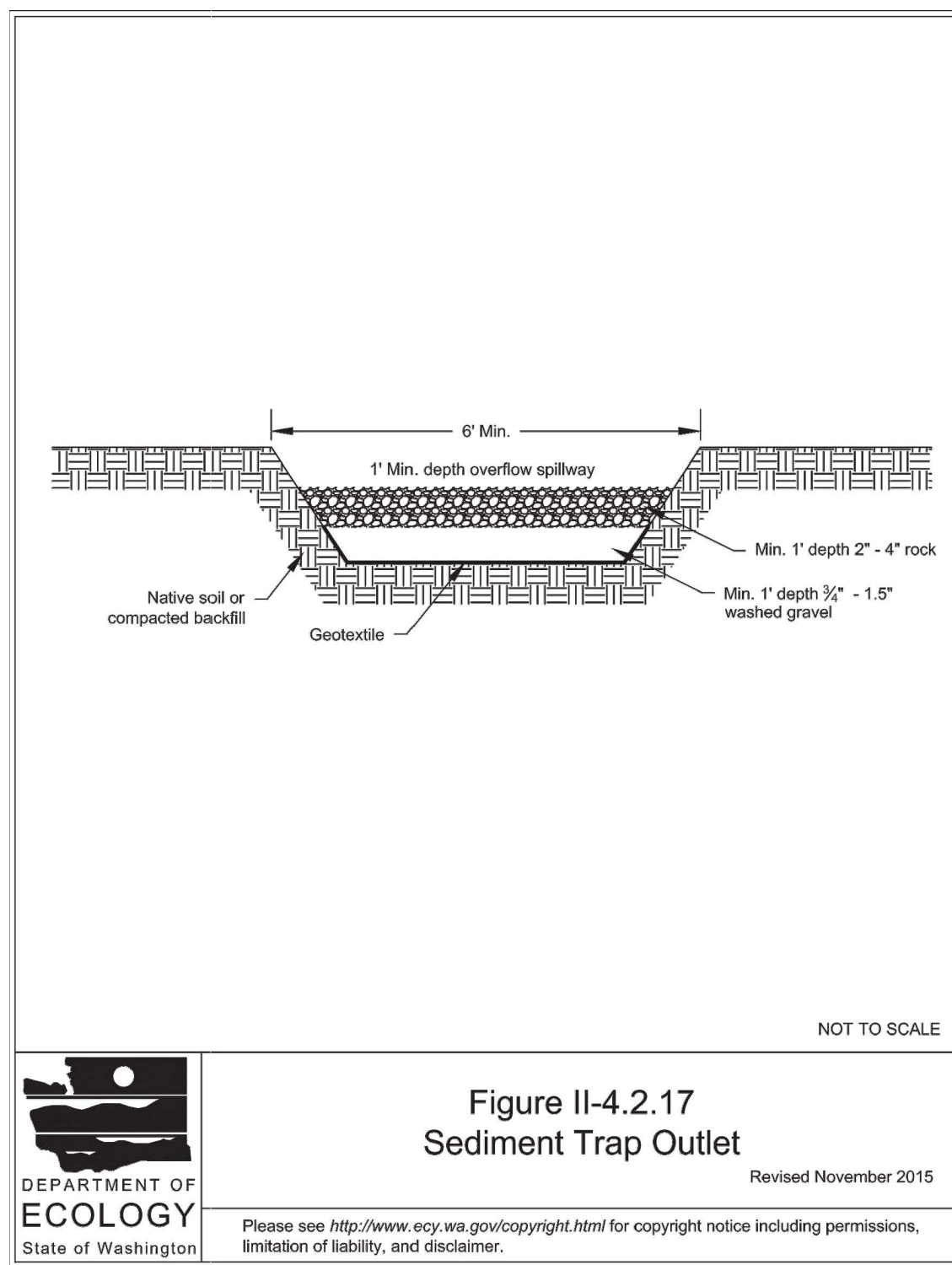
2014 Stormwater Management Manual for Western Washington  
Volume II - Chapter 4 - Page 369

Figure II-4.2.16 Cross Section of Sediment Trap



2014 Stormwater Management Manual for Western Washington  
Volume II - Chapter 4 - Page 386

Figure II-4.2.17 Sediment Trap Outlet

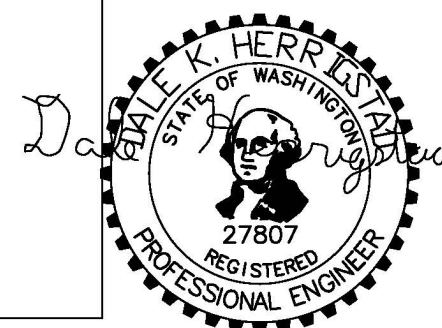


2014 Stormwater Management Manual for Western Washington  
Volume II - Chapter 4 - Page 387

PW#19-1XX-DEV

This plan sheet is accepted for construction in accordance with the City of Anacortes ordinances and policies. Actual conformance of the design with applicable laws is the sole responsibility of the professional engineer, whose name and stamp appear on this sheet. Acquiring, complying with, and providing mitigation for all Federal, State, County, and Local Laws, permits, and mandates, including but not limited to the Endangered Species Act, Federal Wetland Permit, State Department of Fisheries Hydraulics Permit, Federal Flood Plain Permits, National Pollutant Discharge Elimination System Permits is the responsibility of the Developer, Landowner, and their Engineer. The issuance of this permit shall not be construed as proof of compliance with applicable laws and permit requirements.

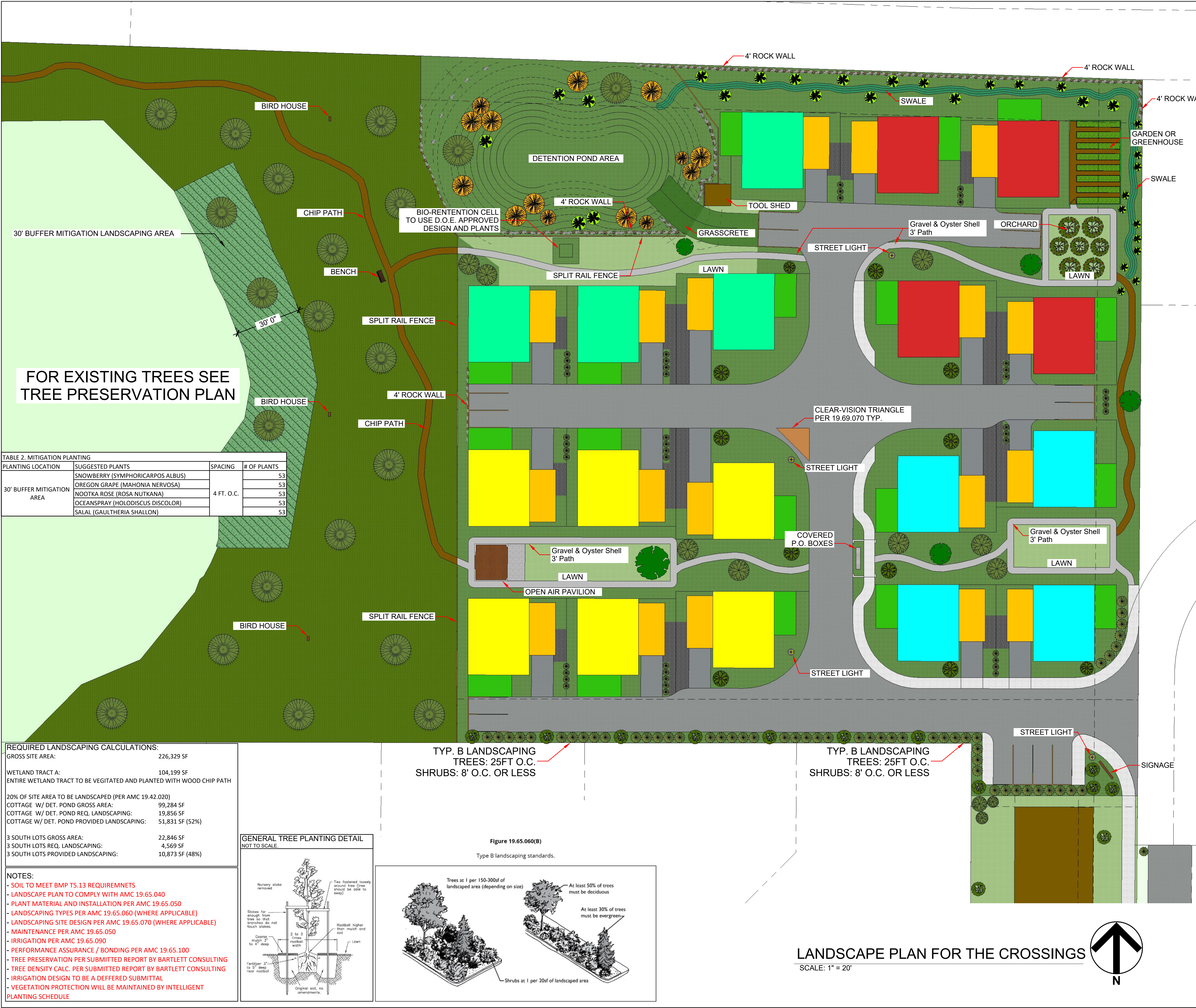
CITY ENGINEER DATE  
The acceptance will expire one year from the date noted above.



Date May 14, 2020

| REVISIONS                                                                                                                                | BY | DATE |
|------------------------------------------------------------------------------------------------------------------------------------------|----|------|
|                                                                                                                                          |    |      |
| HERRIGSTAD<br>ENGINEERING & SURVEYING<br>DALE K. HERRIGSTAD P.E., P.L.S.<br>4320 WHISTLE LAKE ROAD<br>ANACORTES, WA 98221 (360) 299-8804 |    |      |
| The Crossings Cottage Dev.<br>Section 23, TWP 35 N, RGE 1 E, WM<br>Owner: Anacopper LLC<br>PO Box 319<br>Anacortes, WA 98221             |    |      |
| BMP Details                                                                                                                              |    |      |
| SHEET NO. C16 REV.: -                                                                                                                    |    |      |
| JOB NO: 2017-150                                                                                                                         |    |      |
| DATE: Jan, 2020                                                                                                                          |    |      |
| SCALE: Noted                                                                                                                             |    |      |
| DRAWN: D. HERRIGSTAD                                                                                                                     |    |      |
| CHECK: D. HERRIGSTAD                                                                                                                     |    |      |
| SHEET 16 OF 16                                                                                                                           |    |      |

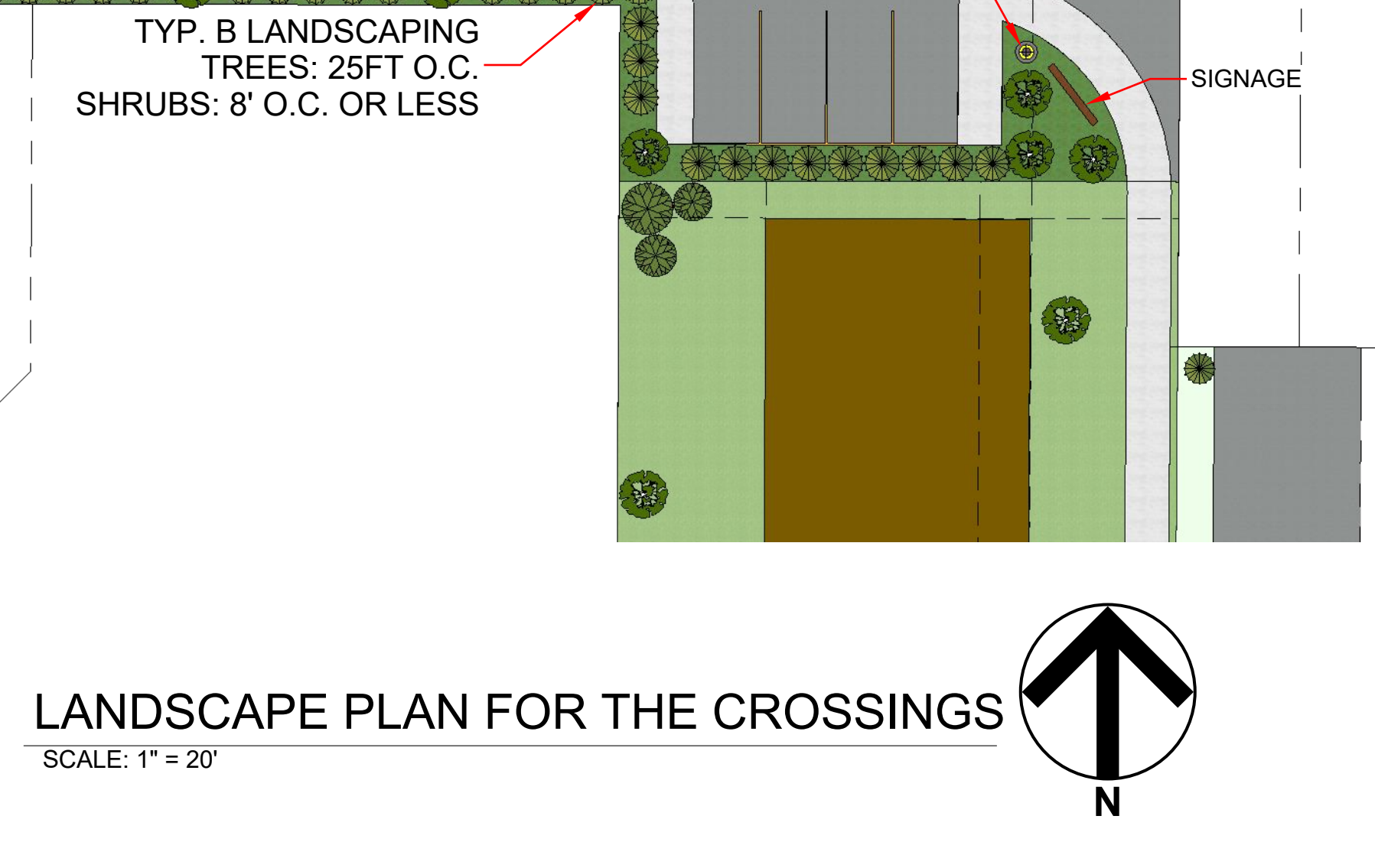
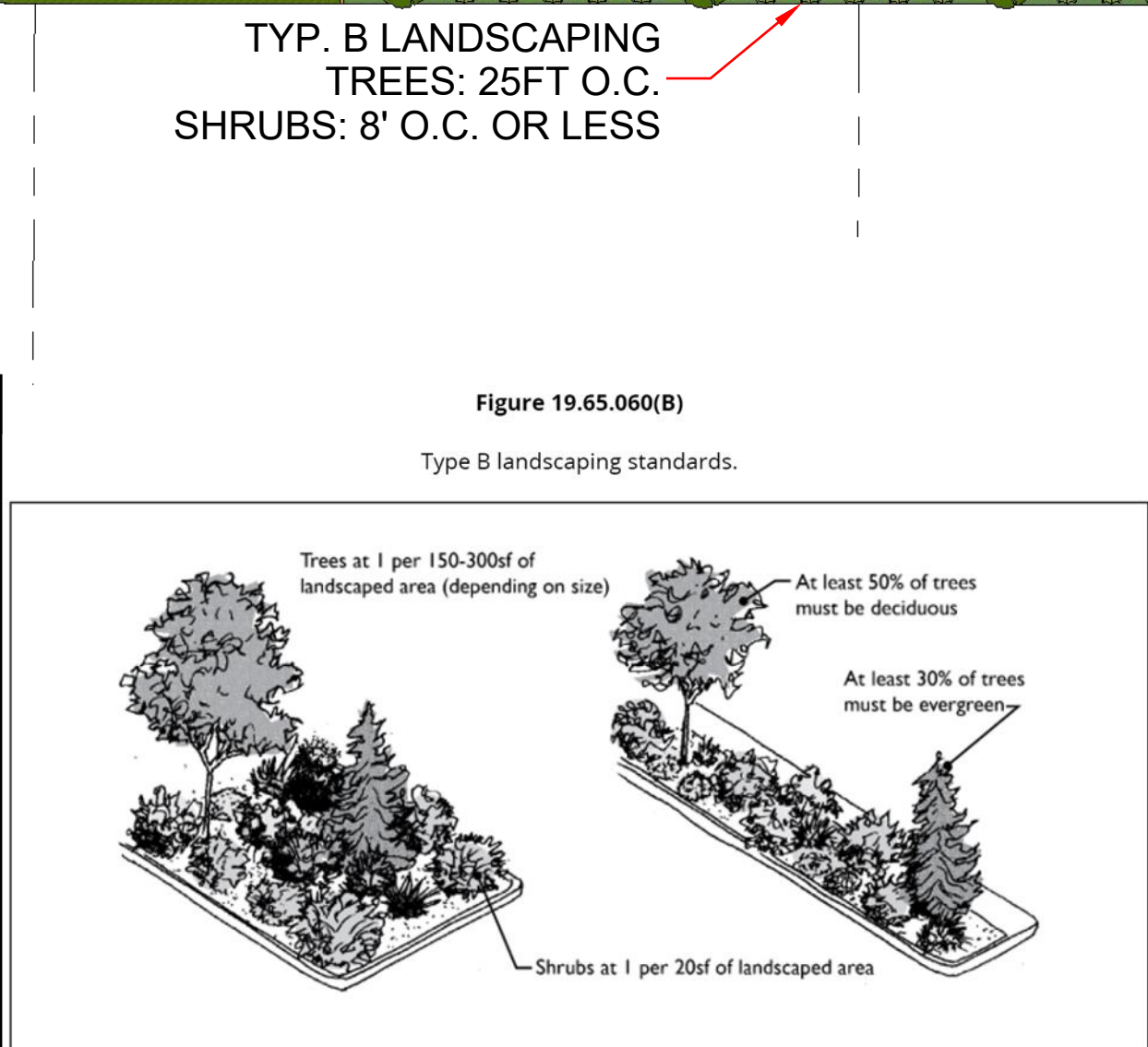
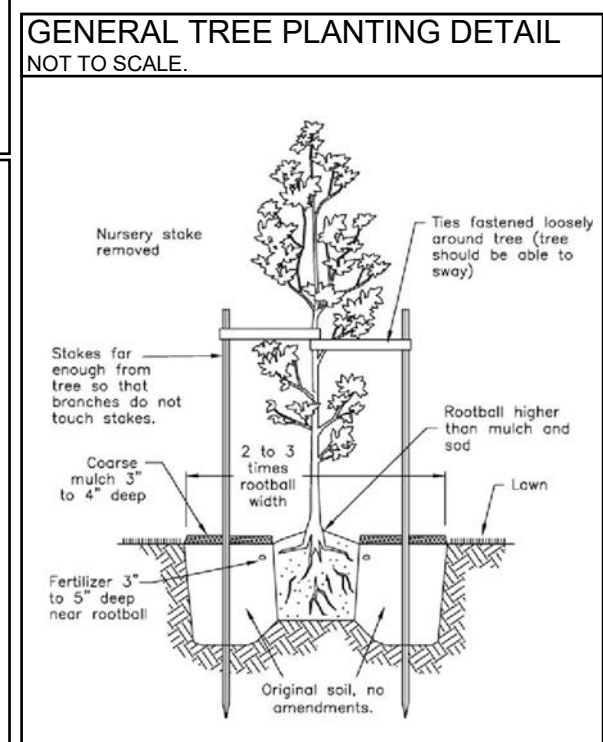




| TABLE 2. MITIGATION PLANTING |                                  |            |             |
|------------------------------|----------------------------------|------------|-------------|
| PLANTING LOCATION            | SUGGESTED PLANTS                 | SPACING    | # OF PLANTS |
| 30' BUFFER MITIGATION AREA   | SNOWBERRY (SYMPHORICARPOS ALBUS) | 4 FT. O.C. | 53          |
|                              | OREGON GRAPE (MAHONIA NERVOSA)   |            | 53          |
|                              | NOOTKA ROSE (ROSA NUTKANA)       |            | 53          |
|                              | OCEANSPRAY (HOLODISCUS DISCOLOR) |            | 53          |
|                              | SALAL (GAULTHERIA SHALLON)       |            | 53          |

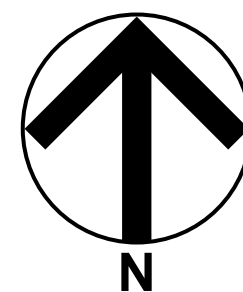
| REQUIRED LANDSCAPING CALCULATIONS:                                   |                 |
|----------------------------------------------------------------------|-----------------|
| GROSS SITE AREA:                                                     | 226,329 SF      |
| WETLAND TRACT A:                                                     | 104,199 SF      |
| ENTIRE WETLAND TRACT TO BE VEGETATED AND PLANTED WITH WOOD CHIP PATH |                 |
| 20% OF SITE AREA TO BE LANDSCAPED (PER AMC 19.42.020)                |                 |
| COTTAGE W/ DET. POND GROSS AREA:                                     | 99,284 SF       |
| COTTAGE W/ DET. POND REQ. LANDSCAPING:                               | 19,856 SF       |
| COTTAGE W/ DET. POND PROVIDED LANDSCAPING:                           | 51,831 SF (52%) |
| 3 SOUTH LOTS GROSS AREA:                                             | 22,846 SF       |
| 3 SOUTH LOTS REQ. LANDSCAPING:                                       | 4,569 SF        |
| 3 SOUTH LOTS PROVIDED LANDSCAPING:                                   | 10,873 SF (48%) |

- NOTES:
- SOIL TO MEET BMP T5.13 REQUIREMENTS
  - LANDSCAPE PLAN TO COMPLY WITH AMC 19.65.040
  - PLANT MATERIAL AND INSTALLATION PER AMC 19.65.050
  - LANDSCAPING TYPES PER AMC 19.65.060 (WHERE APPLICABLE)
  - LANDSCAPING SITE DESIGN PER AMC 19.65.070 (WHERE APPLICABLE)
  - MAINTENANCE PER AMC 19.65.080
  - IRRIGATION PER AMC 19.65.090
  - PERFORMANCE ASSURANCE / BONDING PER AMC 19.65.100
  - TREE PRESERVATION PER SUBMITTED REPORT BY BARTLETT CONSULTING
  - TREE DENSITY CALC. PER SUBMITTED REPORT BY BARTLETT CONSULTING
  - IRRIGATION DESIGN TO BE A DEFERRED SUBMITTAL
  - VEGETATION PROTECTION WILL BE MAINTAINED BY INTELLIGENT PLANTING SCHEDULE



## LANDSCAPE PLAN FOR THE CROSSINGS

SCALE: 1" = 20'



### LANDSCAPE LEGEND

|  |                                                                      |  |
|--|----------------------------------------------------------------------|--|
|  | 1 Cornus Sericea                                                     |  |
|  | Red Twig Dogwood<br>Quantity: 31<br>1 GAL.                           |  |
|  | 2 Myrica Californica                                                 |  |
|  | Wax Myrtle<br>Quantity: 63<br>1 GAL.                                 |  |
|  | 3 Betula papyrifera                                                  |  |
|  | White Paper Birch<br>Quantity: 23<br>6 FT Tall                       |  |
|  | 4 Fruit Tree                                                         |  |
|  | Plumb / Apple / Pear<br>Quantity: 7<br>6 FT Tall                     |  |
|  | 5 Populus Tremuloides                                                |  |
|  | Quaking Aspen<br>Quantity: 14<br>6 FT Tall                           |  |
|  | 6 Platanus Acerifolia                                                |  |
|  | London Planetree<br>Quantity: 5<br>6 FT Tall                         |  |
|  | 7 Populus tremula 'Erecta'                                           |  |
|  | Swedish Aspen<br>Quantity: 14<br>6 FT Tall                           |  |
|  | 8 Thuja Plicata 'Green Giant'                                        |  |
|  | Green Giant Arborvitae<br>Quantity: 17<br>6 FT Tall                  |  |
|  | 9 Pseudotsuga Menziesii                                              |  |
|  | Douglas Fir<br>Quantity: 21<br>6 FT Tall                             |  |
|  | 10 Mulch Planter Area                                                |  |
|  | 12 Chip Path                                                         |  |
|  | 13 5/8" Crushed Gravel                                               |  |
|  | 14 General Landscaping<br>See List of Acceptable General Landscaping |  |
|  | 15 5/8" Crushed Gravel and Oyster Shell Pervious Walkway             |  |
|  | 16 Existing Wetland Vegetation                                       |  |

#### List of Acceptable General Landscaping

Plants

- Japanese Holly (Ilex Crenata)
- Red Sword Fern
- Mexican Feather Grass (Stipa Tenuissima)
- Tall Oregon Grape (Mahonia Aquifolium)
- Salal (Gaultheria Shallon)
- Kinnikinnic (Aretostaphylos)
- Red Flowering Currant (Ribes Sanquineum)
- Rhodi - (Mixed)
- Western Azalea (Mixed)
- Strawberry Tree (Arbutus)

Perennials

- Spanish Lavender
- Salvia Nemorosa Caradonna (Sage)
- Passion Sage
- Yarrow
- Black Eyed Susan

Type of irrigation to be drip, soaker hose & standard spray style sprinklers. Will meet AMC 19.65.090.

DESIGNED BY  
JASON STERLING

SCALE  
1" = 20' U.N.O.

DATE  
01/31/2020

05/27/2020

07/01/2020

**Strandberg**  
DESIGN

BUILDER INFO:  
MAILING ADDRESS:  
P.O. BOX 319  
ANACORTES WA 98221  
PHONE:  
360-293-7431  
WEB:  
www.strandbergconstruction.com

PROJECT / CLIENT INFO  
**THE CROSSINGS**  
1905 Anacopper RD, Anacortes, WA 98221

**LANDSCAPE PLAN FOR THE CROSSINGS**

OWNER APPROVAL

INITIAL  
PAGE #

**L1**

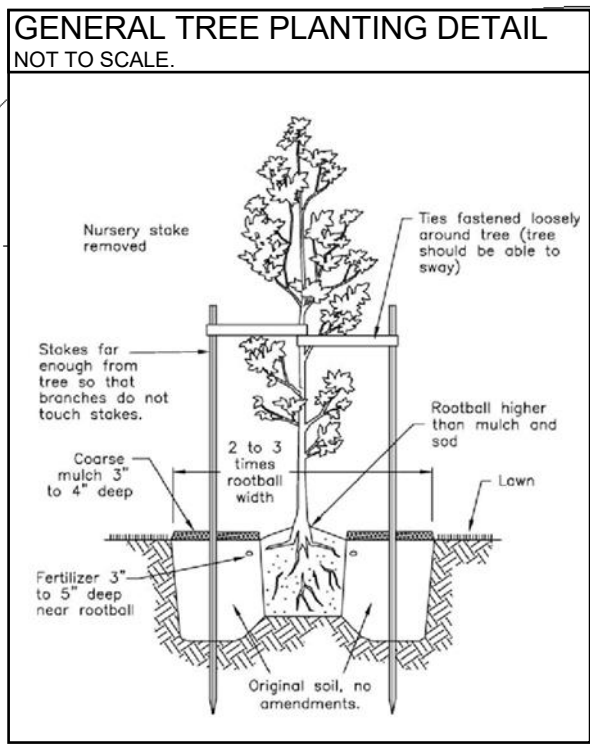
PAGE  
18 of 19





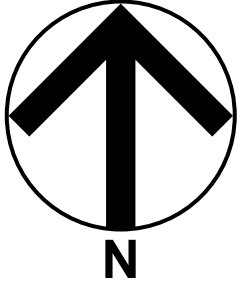
|                                                                      |                 |
|----------------------------------------------------------------------|-----------------|
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| 3 SOUTH LOTS PROVIDED LANDSCAPING:                                   | 10,873 SF (48%) |

- NOTES:
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  - IRRIGATION DESIGN TO BE A DEFERRED SUBMITTAL
  - VEGETATION PROTECTION WILL BE MAINTAINED BY INTELLIGENT PLANTING SCHEDULE



## LANDSCAPE PLAN FOR 3 SOUTH LOTS

SCALE: 1" = 20'



LANDSCAPE LEGEND

|  |                                                                    |  |
|--|--------------------------------------------------------------------|--|
|  | 1 Cornus Sericea                                                   |  |
|  | Red Twig Dogwood<br>Quantity: 31<br>1 GAL.                         |  |
|  | 2 Myrica Californica                                               |  |
|  | Wax Myrtle<br>Quantity: 63<br>1 GAL.                               |  |
|  | 3 Betula papyrifera                                                |  |
|  | White Paper Birch<br>Quantity: 23<br>6 FT Tall                     |  |
|  | 4 Fruit Tree                                                       |  |
|  | Plumb / Apple / Pear<br>Quantity: 7<br>6 FT Tall                   |  |
|  | 5 Populus Tremuloides                                              |  |
|  | Quaking Aspen<br>Quantity: 14<br>6 FT Tall                         |  |
|  | 6 Platanus Acerifolia                                              |  |
|  | London Planetree<br>Quantity: 5<br>6 FT Tall                       |  |
|  | 7 Populus tremula 'Erecta'                                         |  |
|  | Swedish Aspen<br>Quantity: 14<br>6 FT Tall                         |  |
|  | 8 Thuja Plicata 'Green Giant'                                      |  |
|  | Green Giant Arborvitae<br>Quantity: 17<br>6 FT Tall                |  |
|  | 9 Pseudotsuga Menziesii                                            |  |
|  | Douglas Fir<br>Quantity: 21<br>6 FT Tall                           |  |
|  | 10 Mulch Planter Area                                              |  |
|  | 12 Chip Path                                                       |  |
|  | 5/8" Crushed Gravel                                                |  |
|  | 14 General Landscape<br>See List of Acceptable General Landscaping |  |
|  | 5/8" Crushed Gravel and Oyster Shell Pervious Walkway              |  |
|  | 16 Existing Wetland Vegetation                                     |  |

DESIGNED BY  
JASON STERLING

SCALE  
1" = 20' U.N.O.

DATE  
01/31/2020

05/27/2020

07/01/2020

BUILDER INFO:  
MAILING ADDRESS:  
P.O. BOX 319  
ANACORTES WA 98221  
PHONE:  
360-293-7431  
WEB:  
www.strandbergconstruction.com

PROJECT / CLIENT INFO  
THE CROSSINGS  
1905 Anacopper RD, Anacortes, WA 98221

LANDSCAPE PLAN FOR  
3 SOUTH LOTS  
THE INFORMATION, PLANS, DESIGN, NOTES AND ARRANGEMENTS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND MAY NOT BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT THE WRITTEN PERMISSION OF STRANDBERG DESIGN. THE INFORMATION IS PROVIDED AS IS, WITHOUT WARRANTY OF ANY KIND, AND THE USER ASSUMES ALL LIABILITY FOR ANY DAMAGE, LOSS OR INJURY, INCLUDING REASONABLE ATTORNEY'S FEES, ARISING OUT OF OR FROM THE USE OF THIS INFORMATION. THE USER ASSUMES ALL LIABILITY FOR ANY DAMAGE, LOSS OR INJURY, INCLUDING REASONABLE ATTORNEY'S FEES, ARISING OUT OF OR FROM THE USE OF THIS INFORMATION.

OWNER APPROVAL  
INITIAL  
PAGE #  
L2  
PAGE  
19 of 19



Wetland name or number Anacopper - Strandberg Wetland A

## RATING SUMMARY – Western Washington

Name of wetland (or ID #): Anacopper-Strandberg Wetland A Date of site visit: 10/9/17  
Rated by Sigrid Williams & Karla Gallina Trained by Ecology? ☒ Yes ☐ No Date of training 10/15 <sup>SW</sup> & 6/14 <sup>KG</sup> + 3/19 <sup>NB</sup>  
+ Nathan Goldschmidt  
HGM Class used for rating Depressional Wetland has multiple HGM classes? ☐ Y ☒ N

NOTE: Form is not complete without the figures requested (figures can be combined).

Source of base aerial photo/map Google Earth

OVERALL WETLAND CATEGORY III (based on functions ☒ or special characteristics ☐)

### 1. Category of wetland based on FUNCTIONS

Category I – Total score = 23 - 27

Category II – Total score = 20 - 22

A Category III – Total score = 16 - 19

Category IV – Total score = 9 - 15

| FUNCTION                       | Improving<br>Water Quality | Hydrologic | Habitat   |        |
|--------------------------------|----------------------------|------------|-----------|--------|
| Circle the appropriate ratings |                            |            |           |        |
| Site Potential                 | H (M) L                    | (H) M L    | H (M) A L |        |
| Landscape Potential            | H (M) L                    | (H) M L    | H M (L)   |        |
| Value                          | H (M) L                    | H M (L)    | H (M) L   | TOTAL  |
| Score Based on<br>Ratings      | A: 6                       | A: 7       | A: 5      | A = 18 |

Score for each  
function based  
on three  
ratings  
(order of ratings  
is not  
important)

9 = H,H,H  
8 = H,H,M  
7 = H,H,L  
7 = H,M,M  
6 = H,M,L  
6 = M,M,M  
5 = H,L,L  
5 = M,M,L  
4 = M,L,L  
3 = L,L,L

### 2. Category based on SPECIAL CHARACTERISTICS of wetland

| CHARACTERISTIC                     | CATEGORY    |
|------------------------------------|-------------|
| Estuarine                          | I II        |
| Wetland of High Conservation Value | I           |
| Bog                                | I           |
| Mature Forest                      | I           |
| Old Growth Forest                  | I           |
| Coastal Lagoon                     | I II        |
| Interdunal                         | I II III IV |
| None of the above                  | N/A         |

No Change per City Comments



Wetland name or number Anacopper - Strandberg Wetland A

| DEPRESSIONAL AND FLATS WETLANDS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| Water Quality Functions - Indicators that the site functions to improve water quality                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                     |
| <b>D 1.0. Does the site have the potential to improve water quality?</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                     |
| <b>D 1.1. Characteristics of surface water outflows from the wetland:</b><br>Wetland is a depression or flat depression (QUESTION 7 on key) with no surface water leaving it (no outlet). points = 3<br>Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet. points = 2<br>Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing points = 1<br>Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch. points = 1 | 2                                   |
| <b>D 1.2. The soil 2 in below the surface (or duff layer) is true clay or true organic (use NRCS definitions). Yes = 4 No = 0</b>                                                                                                                                                                                                                                                                                                                                                                                                                        | 0                                   |
| <b>D 1.3. Characteristics and distribution of persistent plants (Emergent, Scrub-shrub, and/or Forested Cowardin classes):</b><br>Wetland has persistent, ungrazed, plants > 95% of area points = 5<br>Wetland has persistent, ungrazed, plants > 1/2 of area points = 3<br>Wetland has persistent, ungrazed plants > 1/10 of area points = 1<br>Wetland has persistent, ungrazed plants < 1/10 of area points = 0                                                                                                                                       | 3                                   |
| <b>D 1.4. Characteristics of seasonal ponding or inundation:</b><br>This is the area that is ponded for at least 2 months. See description in manual.<br>Area seasonally ponded is > 1/2 total area of wetland points = 4<br>Area seasonally ponded is > 1/4 total area of wetland points = 2<br>Area seasonally ponded is < 1/4 total area of wetland points = 0                                                                                                                                                                                        | 4                                   |
| Total for D 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Add the points in the boxes above 9 |

Rating of Site Potential If score is: 12-16 = H 6-11 = M 0-5 = L Record the rating on the first page

|                                                                                                                                                          |                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| <b>D 2.0. Does the landscape have the potential to support the water quality function of the site?</b>                                                   |                                     |
| <b>D 2.1. Does the wetland unit receive stormwater discharges?</b> Yes = 1 No = 0                                                                        | 1                                   |
| <b>D 2.2. Is &gt; 10% of the area within 150 ft of the wetland in land uses that generate pollutants?</b> Yes = 1 No = 0                                 | 1                                   |
| <b>D 2.3. Are there septic systems within 250 ft of the wetland?</b> Yes = 1 No = 0                                                                      | 0                                   |
| <b>D 2.4. Are there other sources of pollutants coming into the wetland that are not listed in questions D 2.1-D 2.3?</b><br>Source _____ Yes = 1 No = 0 | 0                                   |
| Total for D 2                                                                                                                                            | Add the points in the boxes above 2 |

Rating of Landscape Potential If score is: 3 or 4 = H 1 or 2 = M 0 = L Record the rating on the first page

|                                                                                                                                                                                                             |                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| <b>D 3.0. Is the water quality improvement provided by the site valuable to society?</b>                                                                                                                    |                                     |
| <b>D 3.1. Does the wetland discharge directly (i.e., within 1 mi) to a stream, river, lake, or marine water that is on the 303(d) list?</b> Yes = 1 No = 0                                                  | 0                                   |
| <b>D 3.2. Is the wetland in a basin or sub-basin where an aquatic resource is on the 303(d) list?</b> Yes = 1 No = 0                                                                                        | 1                                   |
| <b>D 3.3. Has the site been identified in a watershed or local plan as important for maintaining water quality (answer YES if there is a TMDL for the basin in which the unit is found)?</b> Yes = 2 No = 0 | 0                                   |
| Total for D 3                                                                                                                                                                                               | Add the points in the boxes above 1 |

Rating of Value If score is: 2-4 = H 1 = M 0 = L Record the rating on the first page

\* Site currently on aptic, but will be irrelevant with onset of the proposed project. If changed to Yes = 1, will not change overall category.

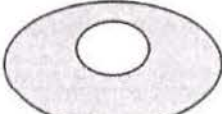
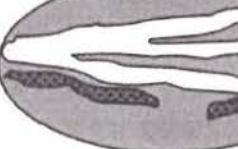


Wetland name or number Anacopper-Strandberg Wetland A

| DEPRESSIONAL AND FLATS WETLANDS                                                                                                                                                                                                              |                                   |                                                                                                                       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| Hydrologic Functions - Indicators that the site functions to reduce flooding and stream degradation                                                                                                                                          |                                   |                                                                                                                       |
| <b>D 4.0. Does the site have the potential to reduce flooding and erosion?</b>                                                                                                                                                               |                                   |                                                                                                                       |
| <b>D 4.1. Characteristics of surface water outflows from the wetland:</b>                                                                                                                                                                    |                                   |                                                                                                                       |
| Wetland is a depression or flat depression with no surface water leaving it (no outlet)                                                                                                                                                      | points = 0                        | <div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">4</div> <div>Was Typo</div> </div> |
| Wetland has an intermittently flowing stream or ditch, OR highly constricted permanently flowing outlet                                                                                                                                      | points = 2                        |                                                                                                                       |
| Wetland is a flat depression (QUESTION 7 on key), whose outlet is a permanently flowing ditch                                                                                                                                                | points = 1                        |                                                                                                                       |
| Wetland has an unconstricted, or slightly constricted, surface outlet that is permanently flowing                                                                                                                                            | points = 0                        |                                                                                                                       |
| <b>D 4.2. Depth of storage during wet periods:</b> Estimate the height of ponding above the bottom of the outlet. For wetlands with no outlet, measure from the surface of permanent water or if dry, the deepest part.                      |                                   |                                                                                                                       |
| Marks of ponding are 3 ft or more above the surface or bottom of outlet                                                                                                                                                                      | points = 7                        | 7                                                                                                                     |
| Marks of ponding between 2 ft to < 3 ft from surface or bottom of outlet                                                                                                                                                                     | points = 5                        |                                                                                                                       |
| Marks are at least 0.5 ft to < 2 ft from surface or bottom of outlet                                                                                                                                                                         | points = 3                        |                                                                                                                       |
| The wetland is a "headwater" wetland                                                                                                                                                                                                         | points = 3                        |                                                                                                                       |
| Wetland is flat but has small depressions on the surface that trap water                                                                                                                                                                     | points = 1                        |                                                                                                                       |
| Marks of ponding less than 0.5 ft (6 in)                                                                                                                                                                                                     | points = 0                        |                                                                                                                       |
| <b>D 4.3. Contribution of the wetland to storage in the watershed:</b> Estimate the ratio of the area of upstream basin contributing surface water to the wetland to the area of the wetland unit itself.                                    |                                   |                                                                                                                       |
| The area of the basin is less than 10 times the area of the unit                                                                                                                                                                             | points = 5                        | 5                                                                                                                     |
| The area of the basin is 10 to 100 times the area of the unit                                                                                                                                                                                | points = 3                        |                                                                                                                       |
| The area of the basin is more than 100 times the area of the unit                                                                                                                                                                            | points = 0                        |                                                                                                                       |
| Entire wetland is in the Flats class                                                                                                                                                                                                         | points = 5                        |                                                                                                                       |
| Total for D 4                                                                                                                                                                                                                                | Add the points in the boxes above | 16                                                                                                                    |
| Rating of Site Potential If score is: <input checked="" type="checkbox"/> 12-16 = H <input type="checkbox"/> 6-11 = M <input type="checkbox"/> 0-5 = L Record the rating on the first page                                                   |                                   |                                                                                                                       |
| <b>D 5.0. Does the landscape have the potential to support hydrologic functions of the site?</b>                                                                                                                                             |                                   |                                                                                                                       |
| D 5.1. Does the wetland receive stormwater discharges?                                                                                                                                                                                       | Yes = 1 No = 0                    | 1                                                                                                                     |
| D 5.2. Is >10% of the area within 150 ft of the wetland in land uses that generate excess runoff?                                                                                                                                            | Yes = 1 No = 0                    | 1                                                                                                                     |
| D 5.3. Is more than 25% of the contributing basin of the wetland covered with intensive human land uses (residential at >1 residence/ac, urban, commercial, agriculture, etc.)?                                                              | Yes = 1 No = 0                    | 1                                                                                                                     |
| Total for D 5                                                                                                                                                                                                                                | Add the points in the boxes above | 3                                                                                                                     |
| Rating of Landscape Potential If score is: <input checked="" type="checkbox"/> 3 = H <input type="checkbox"/> 1 or 2 = M <input type="checkbox"/> 0 = L Record the rating on the first page                                                  |                                   |                                                                                                                       |
| <b>D 6.0. Are the hydrologic functions provided by the site valuable to society?</b>                                                                                                                                                         |                                   |                                                                                                                       |
| <b>D 6.1. The unit is in a landscape that has flooding problems.</b> Choose the description that best matches conditions around the wetland unit being rated. Do not add points. Choose the highest score if more than one condition is met. |                                   |                                                                                                                       |
| The wetland captures surface water that would otherwise flow down-gradient into areas where flooding has damaged human or natural resources (e.g., houses or salmon redds):                                                                  |                                   |                                                                                                                       |
| <input checked="" type="checkbox"/> Flooding occurs in a sub-basin that is immediately down-gradient of unit.                                                                                                                                | points = 2                        | 0                                                                                                                     |
| <input type="checkbox"/> Surface flooding problems are in a sub-basin farther down-gradient.                                                                                                                                                 | points = 1                        |                                                                                                                       |
| Flooding from groundwater is an issue in the sub-basin.                                                                                                                                                                                      | points = 1                        |                                                                                                                       |
| The existing or potential outflow from the wetland is so constrained by human or natural conditions that the water stored by the wetland cannot reach areas that flood. Explain why _____                                                    | points = 0                        |                                                                                                                       |
| There are no problems with flooding downstream of the wetland.                                                                                                                                                                               | points = 0                        |                                                                                                                       |
| <b>D 6.2. Has the site been identified as important for flood storage or flood conveyance in a regional flood control plan?</b>                                                                                                              |                                   |                                                                                                                       |
| Yes = 2 No = 0                                                                                                                                                                                                                               |                                   | 0                                                                                                                     |
| Total for D 6                                                                                                                                                                                                                                | Add the points in the boxes above | 0                                                                                                                     |
| Rating of Value If score is: <input type="checkbox"/> 2-4 = H <input type="checkbox"/> 1 = M <input checked="" type="checkbox"/> 0 = L Record the rating on the first page                                                                   |                                   |                                                                                                                       |



Wetland name or number Anacopper-Strandberg Wetland A

| These questions apply to wetlands of all HGM classes.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| HABITAT FUNCTIONS - Indicators that site functions to provide important habitat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |   |
| H 1.0. Does the site have the potential to provide habitat?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |   |
| <p>H 1.1. Structure of plant community: Indicators are Cowardin classes and strata within the Forested class. Check the Cowardin plant classes in the wetland. Up to 10 patches may be combined for each class to meet the threshold of 1/4ac or more than 10% of the unit if it is smaller than 2.5 ac. Add the number of structures checked.</p> <p><i>Types</i> <input checked="" type="checkbox"/> Aquatic bed 4 structures or more: points = 4<br/> <input checked="" type="checkbox"/> Emergent 3 structures: points = 2<br/> <input checked="" type="checkbox"/> Scrub-shrub (areas where shrubs have &gt; 30% cover) 2 structures: points = 1<br/> <input type="checkbox"/> Forested (areas where trees have &gt; 30% cover) 1 structure: points = 0</p> <p>If the unit has a Forested class, check if:<br/> <input type="checkbox"/> The Forested class has 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) that each cover 20% within the Forested polygon</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 1 |
| <p>H 1.2. Hydroperiods</p> <p>Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or 1/4ac to count (see text for descriptions of hydroperiods).</p> <p><input checked="" type="checkbox"/> Permanently flooded or inundated 4 or more types present: points = 3<br/> <input checked="" type="checkbox"/> Seasonally flooded or inundated 3 types present: points = 2<br/> <input type="checkbox"/> Occasionally flooded or inundated 2 types present: points = 1<br/> <input checked="" type="checkbox"/> Saturated only 1 type present: points = 0</p> <p><input type="checkbox"/> Permanently flowing stream or river in, or adjacent to, the wetland<br/> <input type="checkbox"/> Seasonally flowing stream in, or adjacent to, the wetland<br/> <input type="checkbox"/> Lake Fringe wetland 2 points<br/> <input type="checkbox"/> Freshwater tidal wetland 2 points</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 2 |
| <p>H 1.3. Richness of plant species</p> <p>Count the number of plant species in the wetland that cover at least 10 ft<sup>2</sup>.<br/>         Different patches of the same species can be combined to meet the size threshold and you do not have to name the species. Do not include Eurasian milfoil, reed canarygrass, purple loosestrife, Canadian thistle</p> <p>If you counted: &gt; 19 species points = 2<br/>         5 - 19 species points = 1<br/>         &lt; 5 species points = 0</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 1 |
| <p>H 1.4. Interspersion of habitats</p> <p>Decide from the diagrams below whether interspersion among Cowardin plants classes (described in H 1.1), or the classes and unvegetated areas (can include open water or mudflats) is high, moderate, low, or none. If you have four or more plant classes or three classes and open water, the rating is always high.</p> <div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="text-align: center;">  <p>None = 0 points</p> </div> <div style="text-align: center;">  <p>Low = 1 point</p> </div> <div style="text-align: center;">  <p>Moderate = 2 points</p> </div> </div> <p style="text-align: center; color: green; font-weight: bold;">Stays Same</p> <div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> </div> <p>All three diagrams in this row are HIGH = 3 points</p> | 1 |



Not within 330 feet

Wetland name or number Anacopper-Strandberg Wetland 4

### H1.5. Special habitat features:

Check the habitat features that are present in the wetland. The number of checks is the number of points.

- ☐ Large, downed, woody debris within the wetland (> 4 in diameter and 6 ft long).
- ☐ Standing snags (dbh > 4 in) within the wetland
- ☐ Undercut banks are present for at least 6.6 ft (2 m) and/or overhanging plants extends at least 3.3 ft (1 m) over a stream (or ditch) in, or contiguous with the wetland, for at least 33 ft (10 m)
- ☐ Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present (cut shrubs or trees that have not yet weathered where wood is exposed)
- ☒ At least 1/4 ac of thin-stemmed persistent plants or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-laying by amphibians)
- ☒ Invasive plants cover less than 25% of the wetland area in every stratum of plants (see H 1.1 for list of strata)

2

Total for H 1

Add the points in the boxes above

7

Rating of Site Potential If score is: 15-18 = H ☒ 7-14 = M ☐ 0-6 = L

Record the rating on the first page

### H2.0. Does the landscape have the potential to support the habitat functions of the site?

#### H2.1. Accessible habitat (include only habitat that directly abuts wetland unit).

Calculate: %undisturbed habitat 0 + [(%moderate and low intensity land uses)/2] 2 = 2 %

If total accessible habitat is:

> 1/3 (33.3%) of 1 km Polygon

points = 3

20-33% of 1 km Polygon

points = 2

10-19% of 1 km Polygon

points = 1

< 10% of 1 km Polygon

points = 0

0

#### H2.2. Undisturbed habitat in 1 km Polygon around the wetland.

Calculate: %undisturbed habitat 0 + [(%moderate and low intensity land uses)/2] 13 = 13 %

Undisturbed habitat > 50% of Polygon

points = 3

Undisturbed habitat 10-50% and in 1-3 patches

points = 2

Undisturbed habitat 10-50% and > 3 patches

points = 1

Undisturbed habitat < 10% of 1 km Polygon

points = 0

1

#### H2.3. Land use intensity in 1 km Polygon: If

> 50% of 1 km Polygon is high intensity land use

points = -2

≤ 50% of 1 km Polygon is high intensity

points = 0

-2

Total for H2

Add the points in the boxes above

-1

Rating of Landscape Potential If score is: 4-6 = H ☐ 1-3 = M ☒ < 1 = L

Record the rating on the first page

### H3.0. Is the habitat provided by the site valuable to society?

#### H3.1. Does the site provide habitat for species valued in laws, regulations, or policies? Choose only the highest score that applies to the wetland being rated.

Site meets ANY of the following criteria:

points = 2

☒ It has 3 or more priority habitats within 100 m (see next page)

☒ It provides habitat for Threatened or Endangered species (any plant or animal on the state or federal lists)

☒ It is mapped as a location for an individual WDFW priority species

☒ It is a Wetland of High Conservation Value as determined by the Department of Natural Resources

☒ It has been categorized as an important habitat site in a local or regional comprehensive plan, in a

Shoreline Master Plan, or in a watershed plan

Site has 1 or 2 priority habitats (listed on next page) within 100 m

points = 1

Site does not meet any of the criteria above

points = 0

1

Rating of Value If score is: 2 = H ☒ 1 = M ☐ 0 = L

Record the rating on the first page



Wetland name or number Anacopper - Strandberg Wetland A

## WDFW Priority Habitats

Priority habitats listed by WDFW (see complete descriptions of WDFW priority habitats, and the counties in which they can be found, in: Washington Department of Fish and Wildlife. 2008. Priority Habitat and Species List. Olympia, Washington. 177 pp. <http://wdfw.wa.gov/publications/00165/wdfw00165.pdf> or access the list from here: <http://wdfw.wa.gov/conservation/phs/list/>)

Count how many of the following priority habitats are within 330 ft (100 m) of the wetland unit: **NOTE: This question is independent of the land use between the wetland unit and the priority habitat.**

- **Aspen Stands:** Pure or mixed stands of aspen greater than 1 ac (0.4 ha).
- **Biodiversity Areas and Corridors:** Areas of habitat that are relatively important to various species of native fish and wildlife (full descriptions in WDFW PHS report).
- **Herbaceous Balds:** Variable size patches of grass and forbs on shallow soils over bedrock.
- **Old-growth/Mature forests:** Old-growth west of Cascade crest - Stands of at least 2 tree species, forming a multi-layered canopy with occasional small openings; with at least 8 trees/ac (20 trees/ha) > 32 in (81 cm) dbh or > 200 years of age. Mature forests - Stands with average diameters exceeding 21 in (53 cm) dbh; crown cover may be less than 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth; 80-200 years old west of the Cascade crest.
- **Oregon White Oak:** Woodland stands of pure oak or oak/conifer associations where canopy coverage of the oak component is important (full descriptions in WDFW PHS report p. 158 - see web link above).
- **Riparian:** The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.
- **Westside Prairies:** Herbaceous, non-forested plant communities that can either take the form of a dry prairie or a wet prairie (full descriptions in WDFW PHS report p. 161 - see web link above).
- **Instream:** The combination of physical, biological, and chemical processes and conditions that interact to provide functional life history requirements for instream fish and wildlife resources.
- **Nearshore:** Relatively undisturbed nearshore habitats. These include Coastal Nearshore, Open Coast Nearshore, and Puget Sound Nearshore. (full descriptions of habitats and the definition of relatively undisturbed are in WDFW report - see web link on previous page).
- **Caves:** A naturally occurring cavity, recess, void, or system of interconnected passages under the earth in soils, rock, ice, or other geological formations and is large enough to contain a human.
- **Cliffs:** Greater than 25 ft (7.6 m) high and occurring below 5000 ft elevation.
- **Talus:** Homogenous areas of rock rubble ranging in average size 0.5 - 6.5 ft (0.15 - 2.0 m), composed of basalt, andesite, and/or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs.
- ✓ **Snags and Logs:** Trees are considered snags if they are dead or dying and exhibit sufficient decay characteristics to enable cavity excavation/use by wildlife. Priority snags have a diameter at breast height of > 20 in (51 cm) in western Washington and are > 6.5 ft (2 m) in height. Priority logs are > 12 in (30 cm) in diameter at the largest end, and > 20 ft (6 m) long. Within 330 feet

**Note:** All vegetated wetlands are by definition a priority habitat but are not included in this list because they are addressed elsewhere.





### V-4.5.3 Outfall Systems

Properly designed outfalls are critical to reducing the chance of adverse impacts as the result of concentrated discharges from pipe systems and culverts, both on-site and downstream. Outfall systems include rock splash pads, flow dispersal trenches, gabion or other energy dissipaters, and tightline systems. A tightline system is typically a continuous length of pipe used to convey flows down a steep or sensitive slope with appropriate energy dissipation at the discharge end.

#### **General Design Criteria**

Provided below are general design criteria for both Outfall Features and Tightline Systems.

#### **Outfall Features**

At a minimum, all outfalls must be provided with a rock splash pad (see Figure V-4.5.7 Pipe/Culvert Outfall Discharge Protection (p.822)) except as specified below and in V-4.6 Maintenance Standards for Drainage Facilities (p.829):

- The flow dispersal trenches shown in Figure V-4.5.8 Flow Dispersal Trench (p.823) and Figure V-4.5.9 Alternative Flow Dispersal Trench (p.824) should only be used when both criteria below are met:
  1. An outfall is necessary to disperse concentrated flows across uplands where no conveyance system exists and the natural (existing) discharge is unconcentrated; and
  2. The 100-year peak discharge rate is less than or equal to 0.5 cfs.
- For freshwater outfalls with a design velocity greater than 10 fps, a gabion dissipater or engineered energy dissipater may be required. There are many possible designs.

*Note The gabion outfall detail shown in Figure Figure V-4.5.10 Gabion Outfall Detail (p.825) is illustrative only. A design engineered to specific site conditions must be developed.*

- Tightline systems may be needed to prevent aggravation or creation of a downstream erosion problem.
- In marine waters, rock splash pads and gabion structures are not recommended due to corrosion and destruction of the structure, particularly in high energy environments. Diffuser Tee structures, such as that depicted in Figure V-4.5.11 Diffuser TEE (an example of energy dissipating end feature) (p.827), are also not generally recommended in or above the intertidal zone. They may be acceptable in low bank or rock shoreline locations. Stilling basins or bubble-up structures are acceptable.

Generally, tightlines trenched to extreme low water or dissipation of the discharge energy above the ordinary high water line are preferred. Outfalls below extreme low water may still need an energy dissipation device (e.g., a tee structure) to prevent nearby erosion.

- Engineered energy dissipaters, including stilling basins, drop pools, hydraulic jump basins, baffled aprons, and bucket aprons, are required for outfalls with design velocity greater than 20 fps. These should be designed using published or commonly known techniques found in such references as *Hydraulic Design of Energy Dissipaters for Culverts and Channels*, published by the Federal Highway Administration of the United States Department of Transportation; *Open Channel Flow*, by V.T. Chow; *Hydraulic Design of Stilling Basins and Energy Dissipaters*, EM 25, Bureau of Reclamation (1978); and other publications, such as those prepared by the Soil Conservation Service (now Natural Resource Conservation Service).
- Alternate mechanisms may be used, such as bubble-up structures that eventually drain and structures fitted with reinforced concrete posts. If any alternate mechanisms are to be considered, they should be designed using sound hydraulic principles and consideration of ease of construction and maintenance.
- Mechanisms that reduce velocity prior to discharge from an outfall are encouraged. Some of these are drop manholes and rapid expansion into pipes of much larger size. Other discharge end features may be used to dissipate the discharge energy. An example of an end feature is the use of a Diffuser Tee with holes in the front half, as shown in [Figure V-4.5.11 Diffuser TEE \(an example of energy dissipating end feature\)](#) (p.827).

*Note: stormwater outfalls submerged in a marine environment can be subject to plugging due to biological growth and shifting debris and sediments. Therefore, unless intensive maintenance is regularly performed, they may not meet their designed function.*

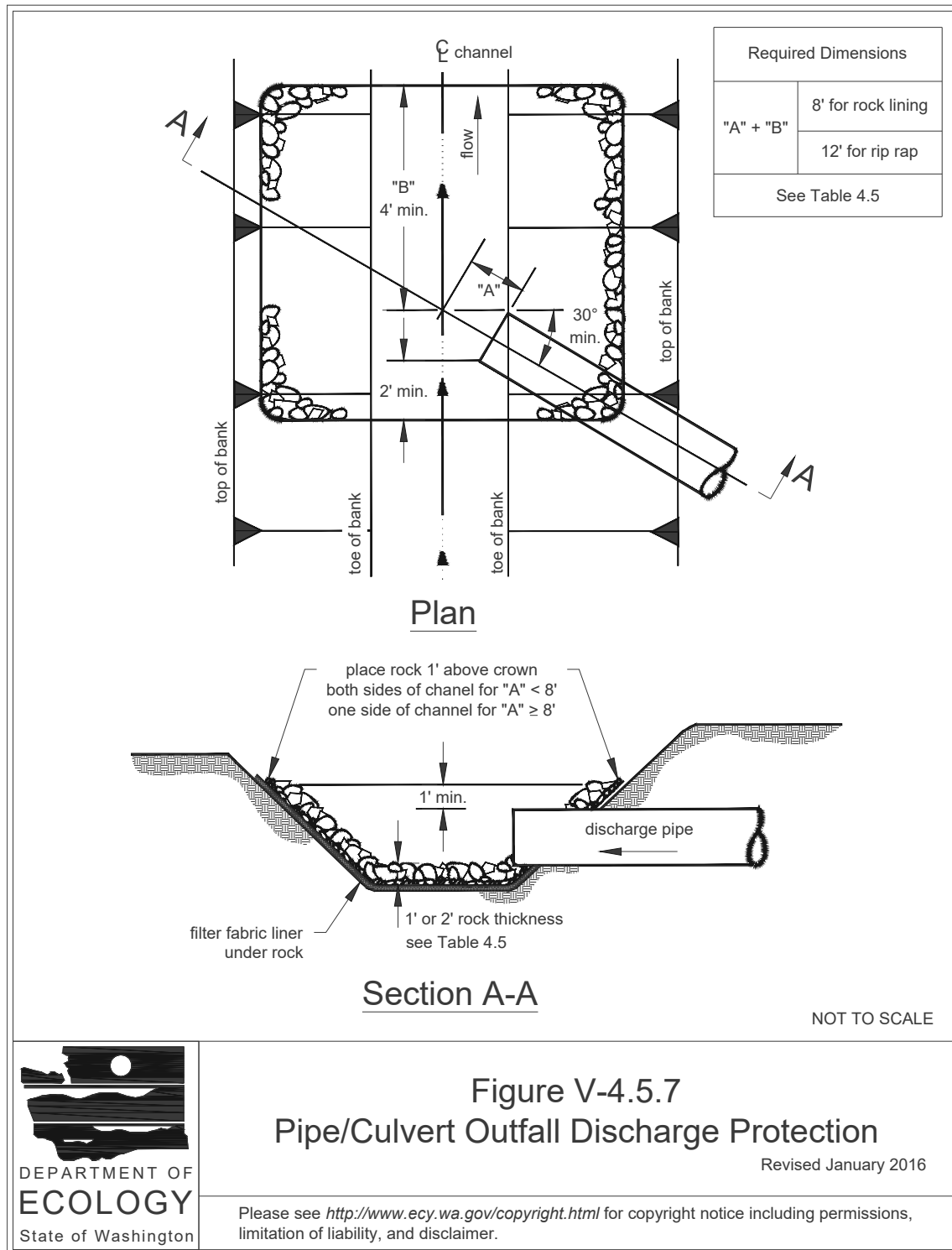
- New pipe outfalls can provide an opportunity for low-cost fish habitat improvements. For example, an alcove of low-velocity water can be created by constructing the pipe outfall and associated energy dissipater back from the stream edge and digging a channel, over widened to the upstream side, from the outfall to the stream (as shown in [Figure V-4.5.12 Fish Habitat Improvement at New Outfalls](#) (p.828)). Overwintering juvenile and migrating adult salmonids may use the alcove as shelter during high flows. Potential habitat improvements should be discussed with the Washington Department of Fish and Wildlife biologist prior to inclusion in design.
- Bank stabilization, bioengineering and habitat features may be required for disturbed areas.



- Outfall structures should be located where they minimize impacts to fish, shellfish, and their habitats.
- One caution to note is that the in-stream sample gabion mattress energy dissipater may not be acceptable within the ordinary high water mark of fish-bearing waters or where gabions will be subject to abrasion from upstream channel sediments. A four-sided gabion basket located outside the ordinary high water mark should be considered for these applications.

*Note: A Hydraulic Project Approval (Chapter 77.55 RCW) and an Army Corps of Engineers permit may be required for any work within the ordinary high water mark. Other provisions of the RCW or the Hydraulics Code - Chapter 220-110 WAC may also apply. Contact the appropriate regional office of the State Department of Fish and Wildlife.*

**Figure V-4.5.7 Pipe/Culvert Outfall Discharge Protection**



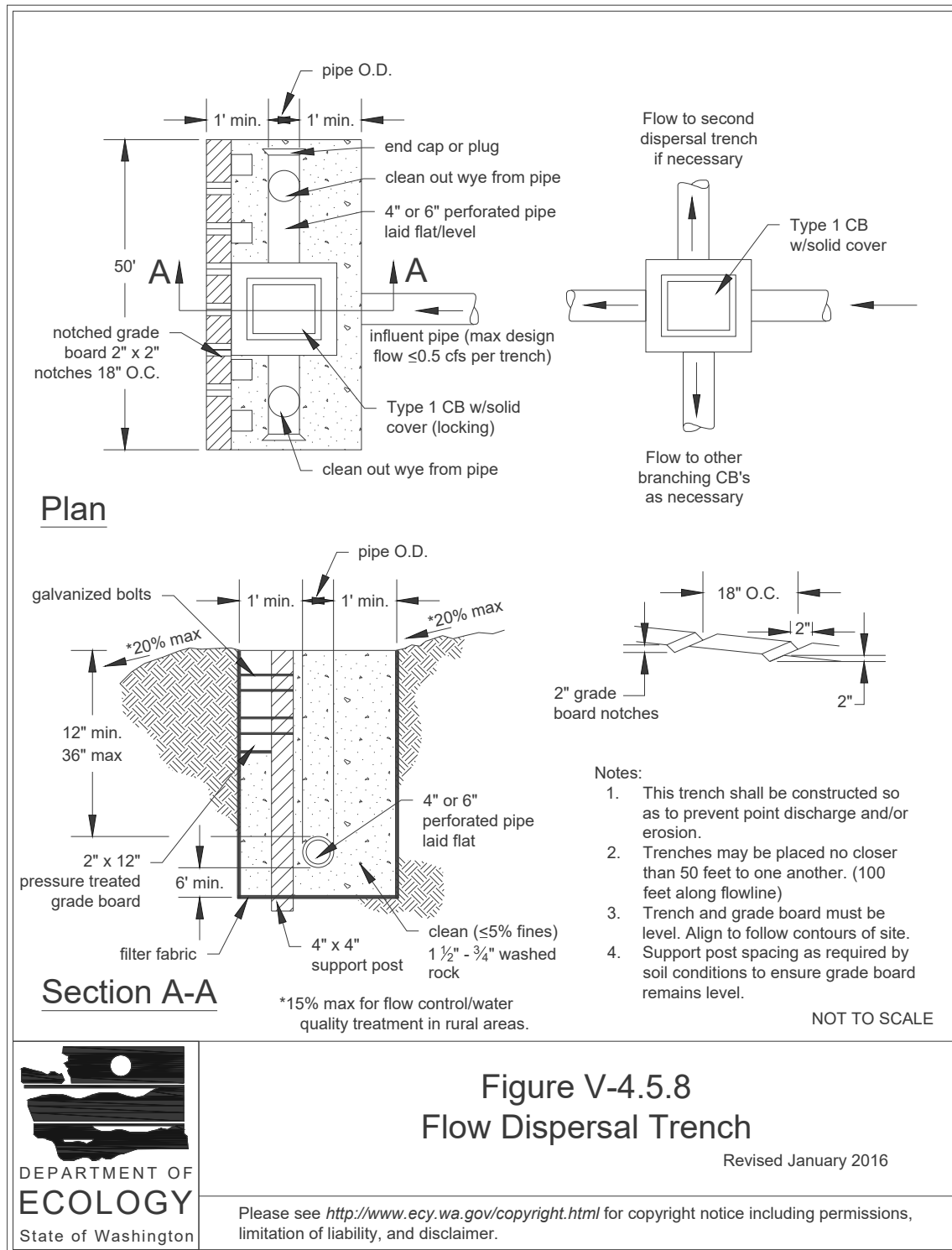
**Figure V-4.5.7**  
**Pipe/Culvert Outfall Discharge Protection**

Revised January 2016

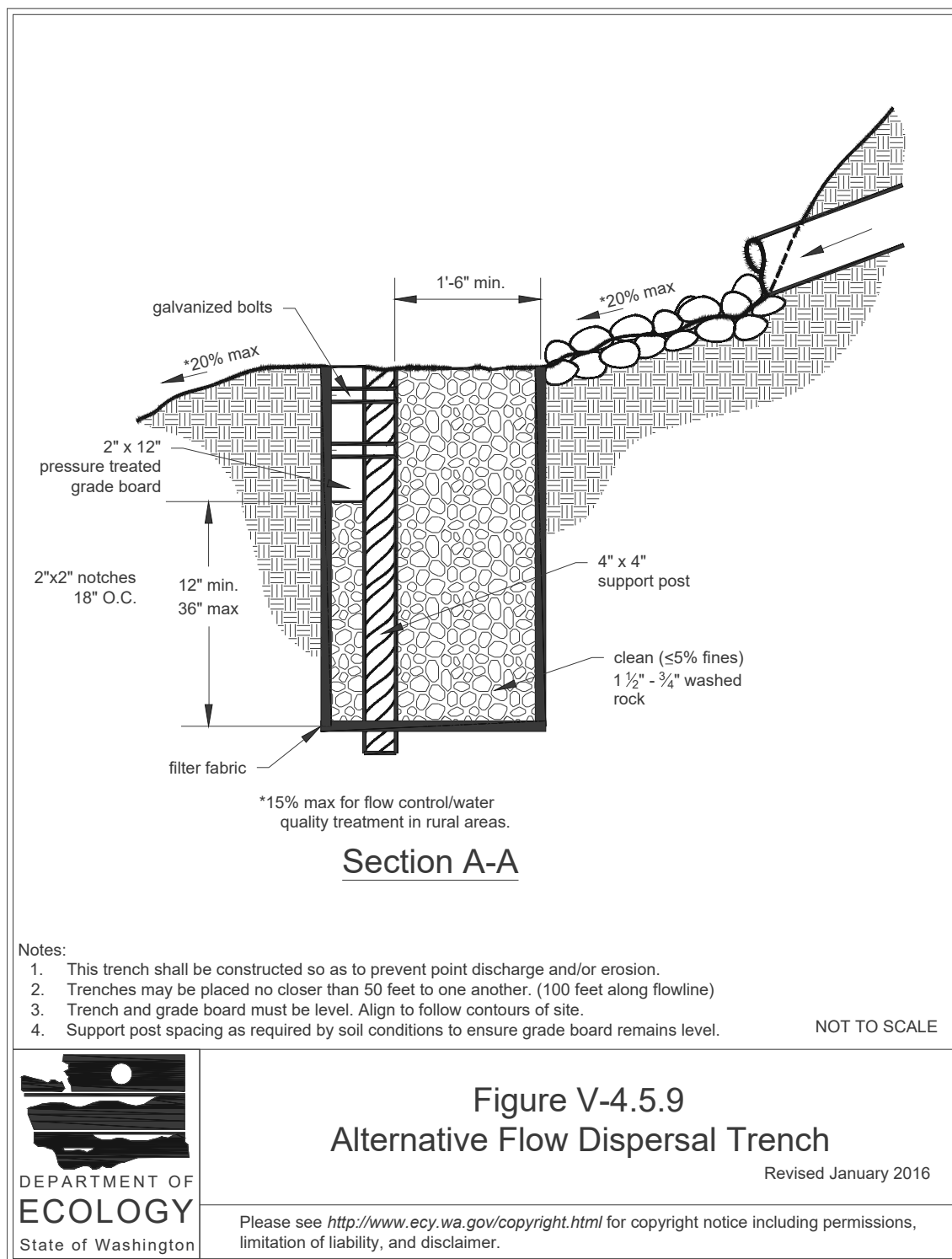
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**Figure V-4.5.8 Flow Dispersal Trench**

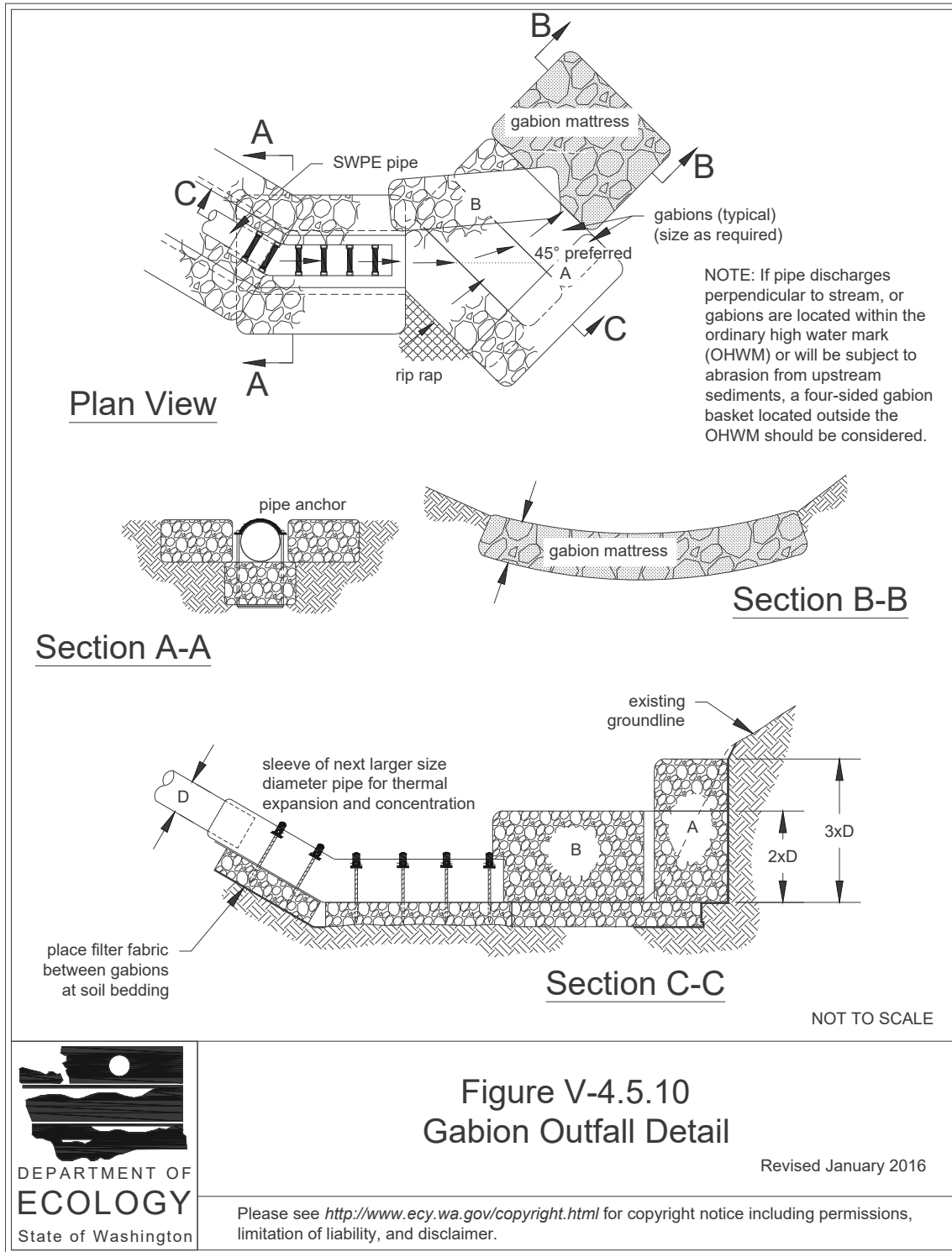


**Figure V-4.5.9 Alternative Flow Dispersal Trench**





**Figure V-4.5.10 Gabion Outfall Detail**

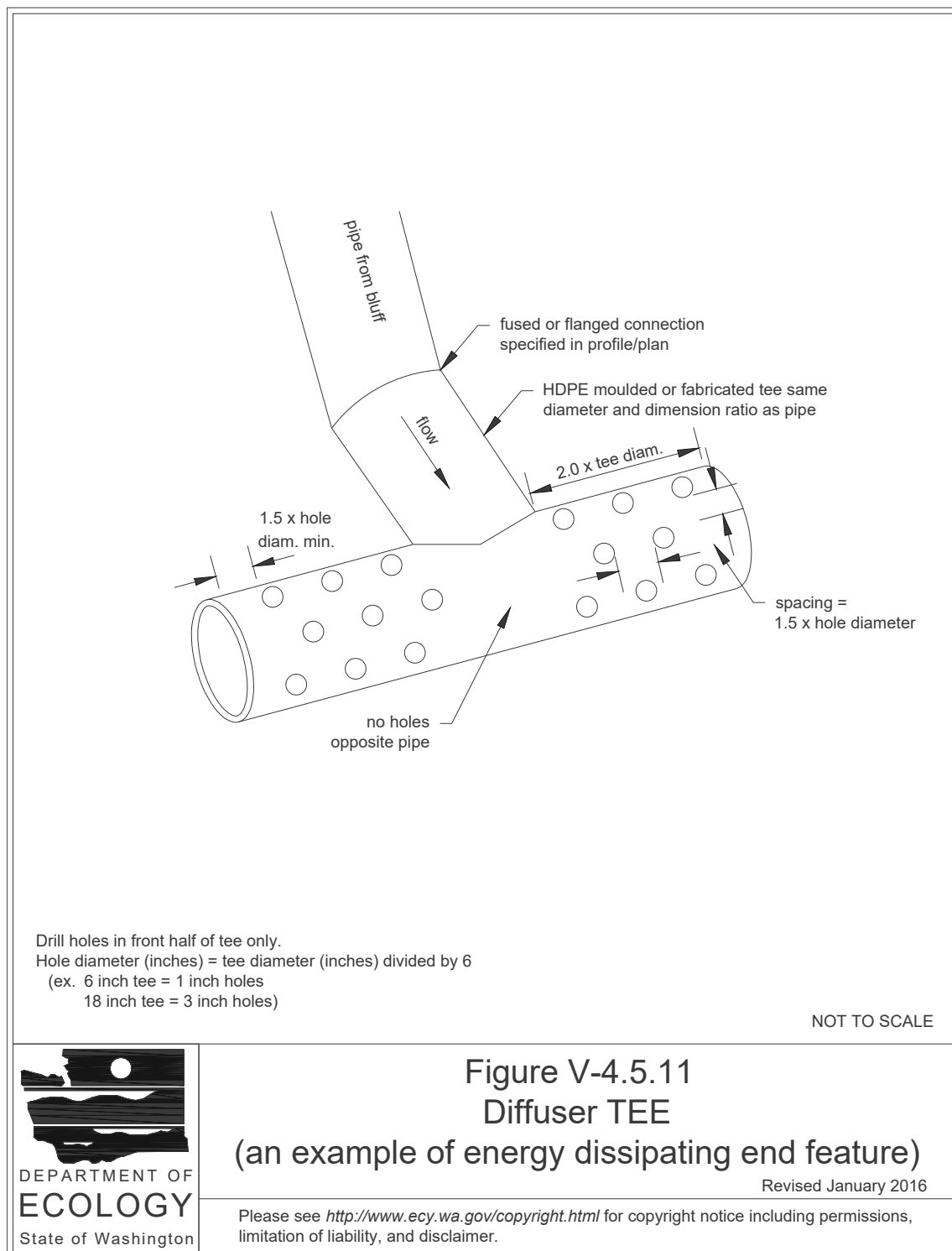


## Tightline Systems

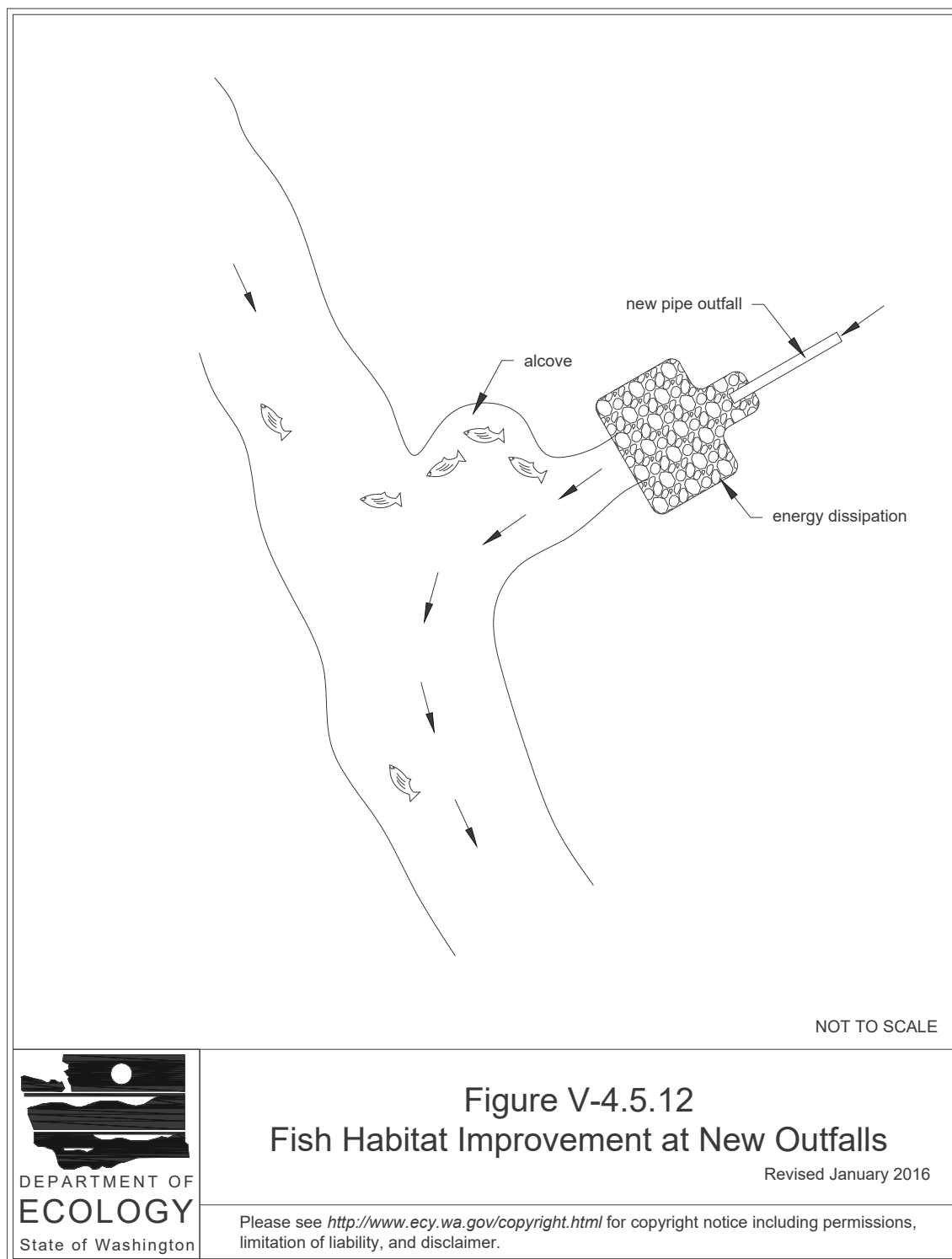
- Outfall tightlines may be installed in trenches with standard bedding on slopes up to 20%. In order to minimize disturbance to slopes greater than 20%, it is recommended that tightlines be placed at grade with proper pipe anchorage and support.
- Except as indicated above, tightlines or conveyances that traverse the marine intertidal zone and connect to outfalls must be buried to a depth sufficient to avoid exposure of the line during storm events or future changes in beach elevation. If non-native material is used to bed the tightline, such material shall be covered with at least 3 feet of native bed material or equivalent.
- High density polyethylene pipe (HDPP) tightlines must be designed to address the material limitations, particularly thermal expansion and contraction and pressure design, as specified by the manufacturer. The coefficient of thermal expansion and contraction for solid wall polyethylene pipe (SWPE) is on the order of 0.001 inch per foot per Fahrenheit degree. Sliding sleeve connections must be used to address this thermal expansion and contraction. These sleeve connections consist of a section of the appropriate length of the next larger size diameter of pipe into which the outfall pipe is fitted. These sleeve connections must be located as close to the discharge end of the outfall system as is practical.
- Due to the ability of HDPP tightlines to transmit flows of very high energy, special consideration for energy dissipation must be made. Details of a sample gabion mattress energy dissipater have been provided as Figure V-4.5.10 Gabion Outfall Detail (p.825). Flows of very high energy will require a specifically engineered energy dissipater structure.



**Figure V-4.5.11 Diffuser TEE (an example of energy dissipating end feature)**



**Figure V-4.5.12 Fish Habitat Improvement at New Outfalls**







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March 5, 2020

Libby Grage  
Planning Manager  
City of Anacortes  
City Hall Municipal Building  
904 6th Street  
Anacortes, WA 98221

Cc: Steve Lange, City of Anacortes Engineering

Subject: The Crossing – Traffic Study

Dear Ms. Grage,

This traffic study is for The Crossing, the “Project”, a residential development on land parcel no. P3175. This letter-report updates the December 9, 2019 Level 1 Traffic Study for this development, based on neighborhood feedback identified by City of Anacortes staff.

### **Project Description**

The Project address is 1905 Anacopper Mine Road. A vicinity map and site plan are attached as Figures 1 and 2.

The existing site includes one single-family residence and associated outparcels, with an existing driveway off Anacopper Mine Road just south of Copper Pond Lane.

The Project includes redevelopment of the site with 18 cottages and 3 single-family homes (Lots 1, 2 and 3). Vehicle access to the property is proposed off Oregon Ave. Specifically, the multifamily cottages would share access off a private driveway to the west of Oregon Ave, just south of where Meadows Lane transitions into Oregon Ave. The new single-family homes are proposed to each have separate driveways off Oregon Ave and south of the driveway for the cottages. None of the lots have driveways fronting Anacopper Mine Road.

With redevelopment, the missing section of Oregon Ave between Meadows Lane and W 12th Street will be built-out to local road standards.

### **Existing Street Network**

The following outlines the existing traffic network near the site.

- Anacopper Mine Road is classified as a Minor Arterial. The roadway includes one travel lane northbound and southbound. Shoulder sections are paved and narrow, and the road slopes up from Oakes Ave. The posted speed is 25 mph, and there were no pedestrians or bicycles observed during field visits.
- Pennsylvania Ave is a local road that transitions to Anacopper Mine Road north of Airport Road. The W 12th Street intersection includes a mini-roundabout, and a hardscaped center median exists in the vicinity of Tursi Park.
- Copper Pond Place, Copper Pond, Meadows Lane and W 12th Street are local roads with one-lane in each direction and on-street parking. Each roadway includes curb, gutter and sidewalk.
- Oregon Ave is a two-lane local road. One single-family home located at the southeast corner of Meadows Lane and Oregon Ave. A hedge, which appears to be located on the private property and outside of the right-of-way, is at the southeast corner of Meadows Lane and Oregon Ave.

### **Trip Generation, Distribution and Assignment**

Trip generation was forecast using data from the 10th Edition of the ITE Trip Generation Manual. Table 1 summarizes the daily and peak hour trip generation forecast.

**Table 1: Trip Generation Forecast**

| <b>Land Use (ITE Land Use)</b>  | <b>Units</b> | <b>Rate</b> | <b>%-In</b> | <b>%out</b> | <b>Trips-In</b> | <b>Trips-Out</b> | <b>Trips-Total</b> |
|---------------------------------|--------------|-------------|-------------|-------------|-----------------|------------------|--------------------|
| Cottages (LU 220)               | 18           | 7.32        | 50%         | 50%         | 66              | 66               | 132                |
| Single-Family (LU 210)          | 3            | 9.44        | 50%         | 50%         | 14              | 14               | 28                 |
| Existing Single-Family (LU 210) | (1)          | (9.44)      | 50%         | 50%         | (5)             | (5)              | (9)                |
| <b>Daily Trips</b>              |              |             |             |             | <b>75</b>       | <b>75</b>        | <b>151</b>         |
| Proposed Cottages (LU 220)      | 18           | 0.46        | 23%         | 77%         | 2               | 6                | 8                  |
| Proposed Single-Family (LU 210) | 3            | 0.74        | 25%         | 75%         | 1               | 2                | 2                  |
| Existing Single-Family (LU 210) | (1)          | (0.74)      | 25%         | 75%         | (0)             | (1)              | (1)                |
| <b>AM Peak Hour Trips</b>       |              |             |             |             | <b>2</b>        | <b>7</b>         | <b>10</b>          |
| Proposed Cottages (LU 220)      | 18           | 0.56        | 63%         | 37%         | 6               | 4                | 10                 |
| Proposed Single-Family (LU 210) | 3            | 0.99        | 63%         | 37%         | 2               | 1                | 3                  |
| Existing Single-Family (LU 210) | (1)          | (0.99)      | 63%         | 37%         | (1)             | (0)              | (1)                |
| <b>PM Peak Hour Trips</b>       |              |             |             |             | <b>8</b>        | <b>4</b>         | <b>12</b>          |

Figure 3 illustrates the peak hour trip distribution and assignment forecasts, based on existing traffic volumes.

Peak hour traffic impacts to the local residential neighborhood are not anticipated to be significant.

### **Traffic Operations**

Peak hour intersection levels-of-service (LOS) and delay were evaluated at Pennsylvania Ave and 12th Street and at Anacopper Mine Road and Copper Pond Place.

#### *Traffic Volumes*

On Tuesday, November 5, 2019, PM peak hour traffic volumes were collected at Pennsylvania Ave and 12th Street to incorporate into an update to the City of Anacortes' Concurrency Management System. On Tuesday, February 25, 2020, AM and PM peak hour traffic volumes were collected at Anacopper Mine Road and Copper Pond Place.

The City of Anacortes' Concurrency Model showed negligible growth in the local area.

Figure 4 illustrates the existing traffic volumes. With no growth identified in the Concurrency Model, the year 2019 volumes were assumed as a reasonable representation of current (year 2020) conditions.

To evaluate future conditions, a conservative 1% annual growth rate was applied to the existing traffic volumes to forecast future non-Project neighborhood growth between now and six years from now (year 2026). Figure 5 illustrates the future peak hour traffic volumes without the Project.

Peak hour project generated trips were added to the future without-Project volumes to forecast future conditions with the Project, see Figure 6.

#### *Level of Service*

Intersection LOS measures the capacity at the intersection. For this study LOS was evaluated using the Synchro computer program, per HCM6 methodology, and using the SIDRA computer program, per the WSDOT policy. The LOS standard in the City of Anacortes is "C".

Table 2 summarizes the existing and future intersection LOS without and with the Project.



**Table 2: Level-of-Service**

| Intersection                                 | Control    | 2020 Existing |       | 2026 Without-Project |       | 2026 With-Project |       |
|----------------------------------------------|------------|---------------|-------|----------------------|-------|-------------------|-------|
|                                              |            | LOS           | Delay | LOS                  | Delay | LOS               | Delay |
| Anacopper Mine Rd / Copper Pond Pl (AM Peak) | WB Stop    | A             | 9.3   | A                    | 9.3   | A                 | 9.3   |
| Anacopper Mine Rd / Copper Pond Pl (PM Peak) | WB Stop    | A             | 9.6   | A                    | 9.7   | A                 | 9.8   |
| Pennsylvania / W 12th St (PM Peak)           | Roundabout | A             | 6.0   | A                    | 6.0   | A                 | 6.0   |

Copper Pond Lane is stop sign controlled approaching Anacopper Mine Road, the latter which is free flowing. This stop sign controlled intersection is computed to operate at LOS “A” in both the AM and PM peak hours without and with the Project. Future traffic volume impacts at this intersection are negligible and the intersection’s LOS meets the City of Anacortes’ LOS “C” standard.

The mini-roundabout at Pennsylvania Ave and W 12th St is computed to operate at LOS A, with a volume-to-capacity ratio under 0.10, in the PM peak hour. With the Project, future traffic volume impacts at this intersection are negligible and the intersection’s LOS meets the City of Anacortes’ LOS “C” standard.

### **Sight Distance Analysis**

The City of Anacortes references the AASHTO Green Book for minimum sight distance requirements. AASHTO defines stopping and intersection sight distance as follows:

- Stopping sight distance is the sum of the distance traveled by a vehicle during the driver’s brake reaction time and the vehicle’s braking distance. Stopping sight distance measures whether a driver in an approaching vehicle can recognize an object in its drive-path, apply the vehicle brakes and stop the vehicle prior to striking the object. For this analysis the “object” is located at the edge of the roadway at the site accesses.
- Intersection sight distance is greater than stopping distance and is typically provided to enhance traffic operations. Intersection sight distance is measured (1) for driver of a vehicle approaching an intersection to anticipate and avoid potential collisions and (2) for a driver of a vehicle stopped at an intersection to decide when to enter or cross the intersecting roadway.

AASHTO states that “[i]f the available sight distance for an entering or crossing vehicle is at least equal to the appropriate stopping sight distance for the major road, then driveway have sufficient sight distance to anticipate and avoid a collision.”

Table 3 and Figures 7 to 14 summarize the available sight distance measures.

The proposed driveways meet stopping sight distance criteria. Vehicles approaching the driveways have sufficient sight distance to see an object at each driveway and break to avoid a potential collision.

The intersection sight distance guidelines are satisfied in both directions at the single-family driveways for Lots 2 and 3. The intersection sight distance guidelines are also satisfied to the south of the single-family Lot 1 and the cottages driveways.

The intersection sight distance guidelines are not met at the cottages driveway for vehicles approaching the site from the north, on Meadows Lane. There is approximately 200 feet of available intersection sight distance before the sightline is blocked by an existing hedge at the southeast corner of Oregon Ave and Meadows Lane. The AASHTO intersection sight distance recommendation is 280 feet.

**Table 3: Sight Distance**

| Sight Distance             | At Driveway   | Guideline (ft.) <sup>1</sup> | Measure (ft.) | Guideline Met? | Reference |
|----------------------------|---------------|------------------------------|---------------|----------------|-----------|
| <b>Cottages Driveway</b>   |               |                              |               |                |           |
| Stopping                   | Looking North | 155                          | 155           | Yes            | Figure 7  |
| Stopping                   | Looking South | 155                          | 155           | Yes            | Figure 7  |
| Intersection               | Looking North | 280                          | 200           | No             | Figure 8  |
| Intersection               | Looking South | 280                          | 280           | Yes            | Figure 8  |
| <b>Single-Family Lot 1</b> |               |                              |               |                |           |
| Stopping                   | Looking North | 155                          | 155           | Yes            | Figure 9  |
| Stopping                   | Looking South | 155                          | 155           | Yes            | Figure 9  |
| Intersection               | Looking North | 280                          | 255           | No             | Figure 10 |
| Intersection               | Looking South | 280                          | 280           | Yes            | Figure 10 |
| <b>Single-Family Lot 2</b> |               |                              |               |                |           |
| Stopping                   | Looking North | 155                          | 155           | Yes            | Figure 11 |
| Stopping                   | Looking South | 155                          | 155           | Yes            | Figure 11 |
| Intersection               | Looking North | 280                          | 280           | Yes            | Figure 12 |
| Intersection               | Looking South | 280                          | 280           | Yes            | Figure 12 |
| <b>Single-Family Lot 3</b> |               |                              |               |                |           |
| Stopping                   | Looking North | 155                          | 155           | Yes            | Figure 13 |
| Stopping                   | Looking South | 155                          | 155           | Yes            | Figure 13 |
| Intersection               | Looking North | 280                          | 280           | Yes            | Figure 14 |
| Intersection               | Looking South | 280                          | 280           | Yes            | Figure 14 |

1. AASHTO Guidelines based on a 25-mph design speed

The intersection sight distance guidelines are not met at the single-family Lot 1 lot driveway for vehicles approaching the site from the north, on Meadows Lane. There is approximately 255 feet of intersection sight distance before the sightline is blocked by an existing hedge at the southeast corner of Oregon Ave and Meadows Lane. The AASHTO intersection sight distance recommendation is 280 feet.

It would be preferable if the existing hedge could be trimmed down to two feet in height or removed to achieve the desired intersection sight distance. Alternatives to trimming or removing the hedge include enhancing traffic operations by installing of advance-advisory signage to notify approaching vehicles of the upcoming driveways and limited sightline as they approach sight from Meadows Lane to Oregon Ave.

It is noted that the local area is residential, and the road layout and roadside furniture provides existing physical traffic calming features (such as sidewalk, on-street parking, roadside landscaping, and a meandering roadway) that may reduce the potential for speeding. With slower speeds, the sightlines required to support intersection sight distance are reduced. It is noted that an 18-mph design speed would support about 200 feet of intersection sight distance.

### **Safety**

The WSDOT crash records were reviewed between 2017 and 2019 for the local roadways surrounding the site. No crashers were reported at Copper Pond and Ohio Ave or at Oregon Ave and 12th Street. In 2018, one crash was reported on Anacopper Mine Road north of Copper Pond Lane. The incident resulting in property damage only. In 2019, there were three crashes in the vicinity of the Project:

- On Anacopper Mine Road north of Airport Road involving alcohol.
- On Anacopper Mine Road at Airport Road involving a vehicle making an improper backing maneuver.
- On W 12th St east of Pennsylvania Ave involving a vehicle striking a signpost off of the road.



There were no incidents reported that involved pedestrians or cyclists. Also, none of the incidents above involved speeding.

While there was an uptick in crashes on Anacopper Mine Road/Pennsylvania Ave in 2019, there were no incidents to suggest a crash concern.

#### *Pedestrian Safety on Anacopper Mine Road*

Neighborhood comments raised a concern over the lack of pedestrian facilities on Anacopper Mine Road south of Copper Pond Place. As stated above, there were no reported pedestrian incidents on Anacopper Mine Road.

The Project driveways front Meadows Court/Oregon Ave and site traffic is not anticipated to need to use Anacopper Mine Road for non-motorized access to the site.

Use of the public neighborhood non-motorized facilities east of Anacopper Mine Road are sufficient to accommodate the pedestrian and bicycle activity forecast with the Project. No Project specific improvements are recommended.

#### *Copper Pond and Ohio Ave*

Neighborhood comments raised concerns of drivers speeding and not stopping at the intersection of Copper Pond and Ohio Ave.

The MUTCD stop sign application guidelines were reviewed to determine any justification for the existing and future intersection stop signs. The criteria at attached for reference.

A review of field conditions, suggests with there is more than adequate sight distance at the intersection, which may also contribute to drivers disregarding the stop signs.

Also, there were no crashes reported at the Copper Pond and Ohio Ave intersection in the past three years.

The Applicant is not recommended to take any action at the Anacopper Mine Road and Copper Pond Lane intersection. The City of Anacortes may also consider removing the stop sign and replacing it with a yield sign.

If a speeding concern does exist, this may be addressed via a temporary electronic speed radar warning sign or additional police presence.

#### **Summary and Recommendations**

The proposed development is forecast to generate 151 new daily trips and 12 new PM peak hour trips to the local road network. The tips impacts are not anticipated to adversely impact the local road network.

With development, the Oregon Ave will be connected between Meadows Lane and W 12th Street. Four site accesses are proposed: one driveway to the cottages and one driveway each to the three single-family homes.

Major local intersections are forecast to operate at LOS "A" and satisfy the City of Anacortes' LOS "C" standard.

Sightlines at measured at the driveways show that each driveway location supports the AASHTO stopping sight distance guidelines. AASHTO intersection sight distance guidelines are also satisfied in both directions at the single-family Lots 2 and 3 driveways. AASHTO Intersection sight distance guidelines are only satisfied to the south of the single-family Lot 1 and the cottages driveways.

To the north of the site, the intersection sight distance is impacted by an existing hedge at the southeast side of Meadows Lane and the roadway curves from the west to south to Oregon Ave. At the cottages, there is about 200 feet of available intersection sight distance, which is 80 feet short of the AASHTO recommendation. At the single-family Lot 1 driveway, there is about 255 feet of available intersection sight distance, which is about 25

feet short of the AASHTO recommendation. It is preferable that the existing hedge be trimmed or removed. Both driveways for Lot 1 and cottages satisfy stopping sight distance guidelines, which reduces the potential for a collision due to approaching traffic.

Mitigation, for pedestrian impacts is not recommended on Anacopper Mine Road, the non-motorized facilities to the east of the roadway are sufficient to accommodate existing pedestrian traffic and the Project.

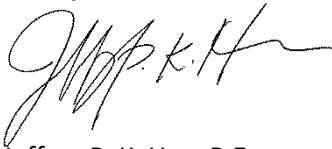
Mitigation, by the Applicant, is not recommended at Copper Pond and Ohio Ave. We suggest that consideration for the City of Anacortes to install a temporary electronic speed radar warning sign or providing an additional police presence.

Other mitigation measures to enhance the traffic operations include the installation of advance signage to notify approaching driver of the driveway.

I trust that this traffic study will be sufficient to support your entitlement permit. If you or the reviewer have any questions, please feel free to contact me at your convenience.

Thank you and sincerely,

**Transportation Solutions, Inc.**



Jeffrey P. K. Hee, P.E.  
Sr. Project Engineer



3/5/2020



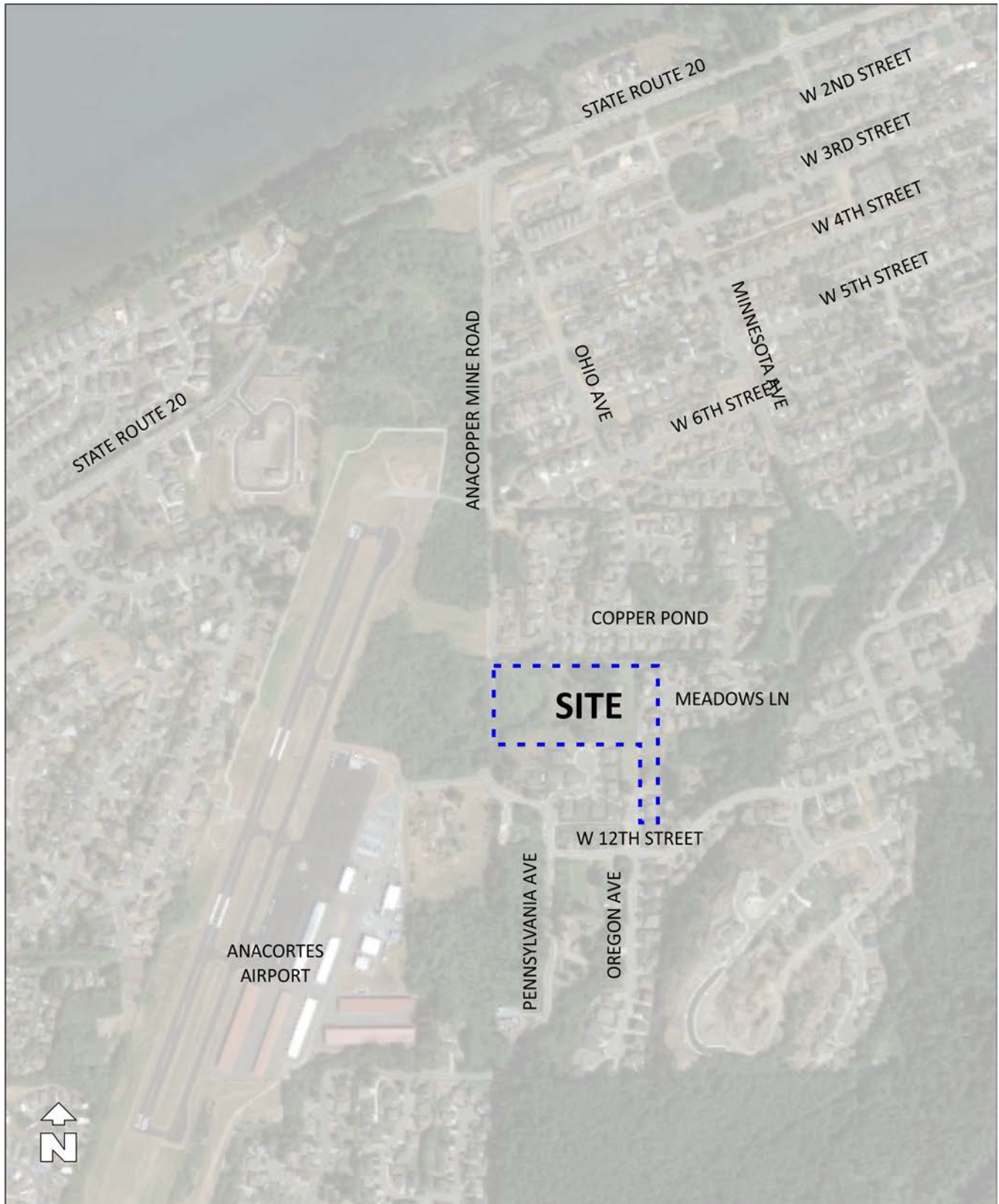
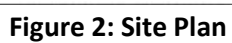


Figure 1: Vicinity Map





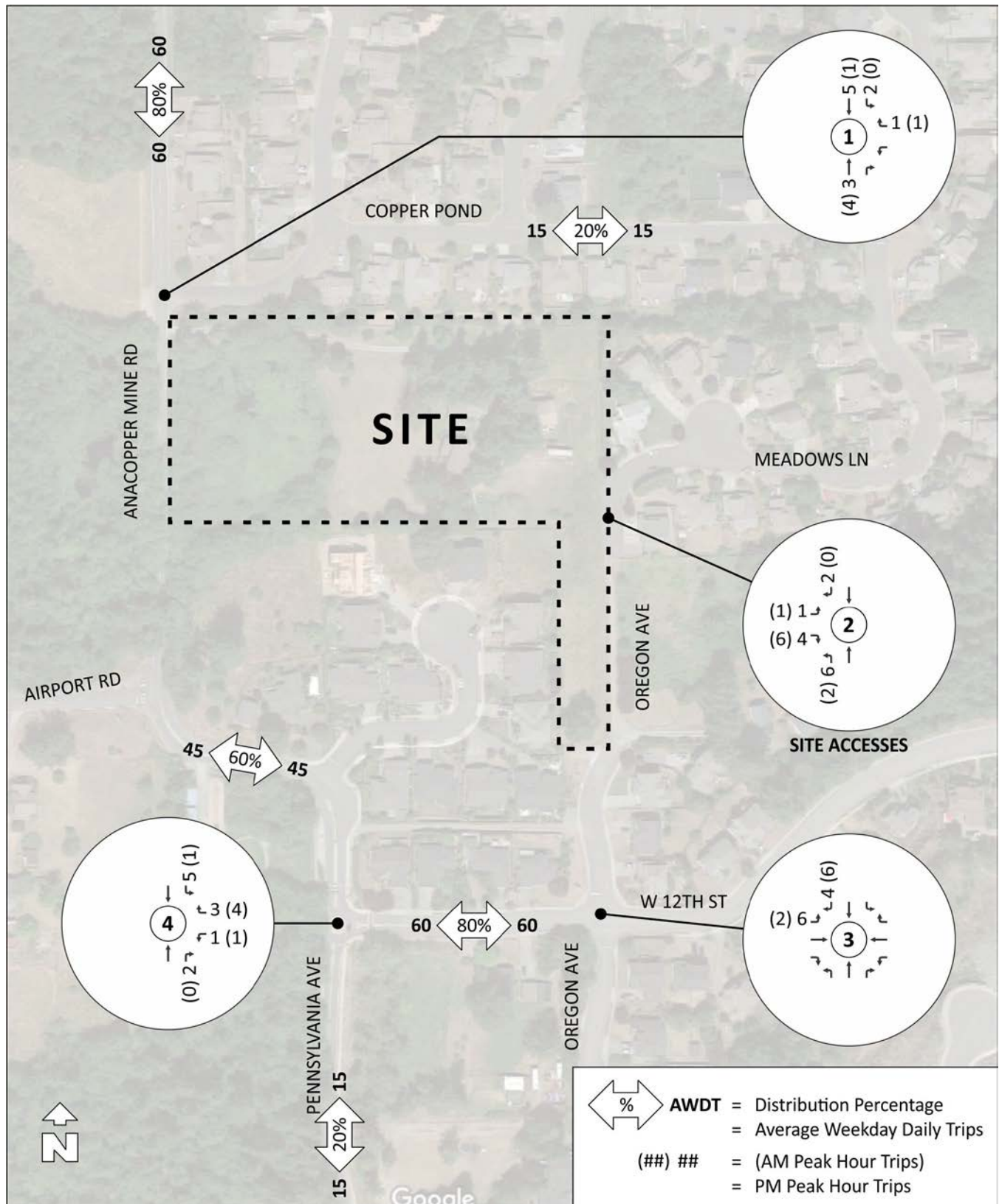


Figure 3: AM and PM Peak Hour Trip Distribution

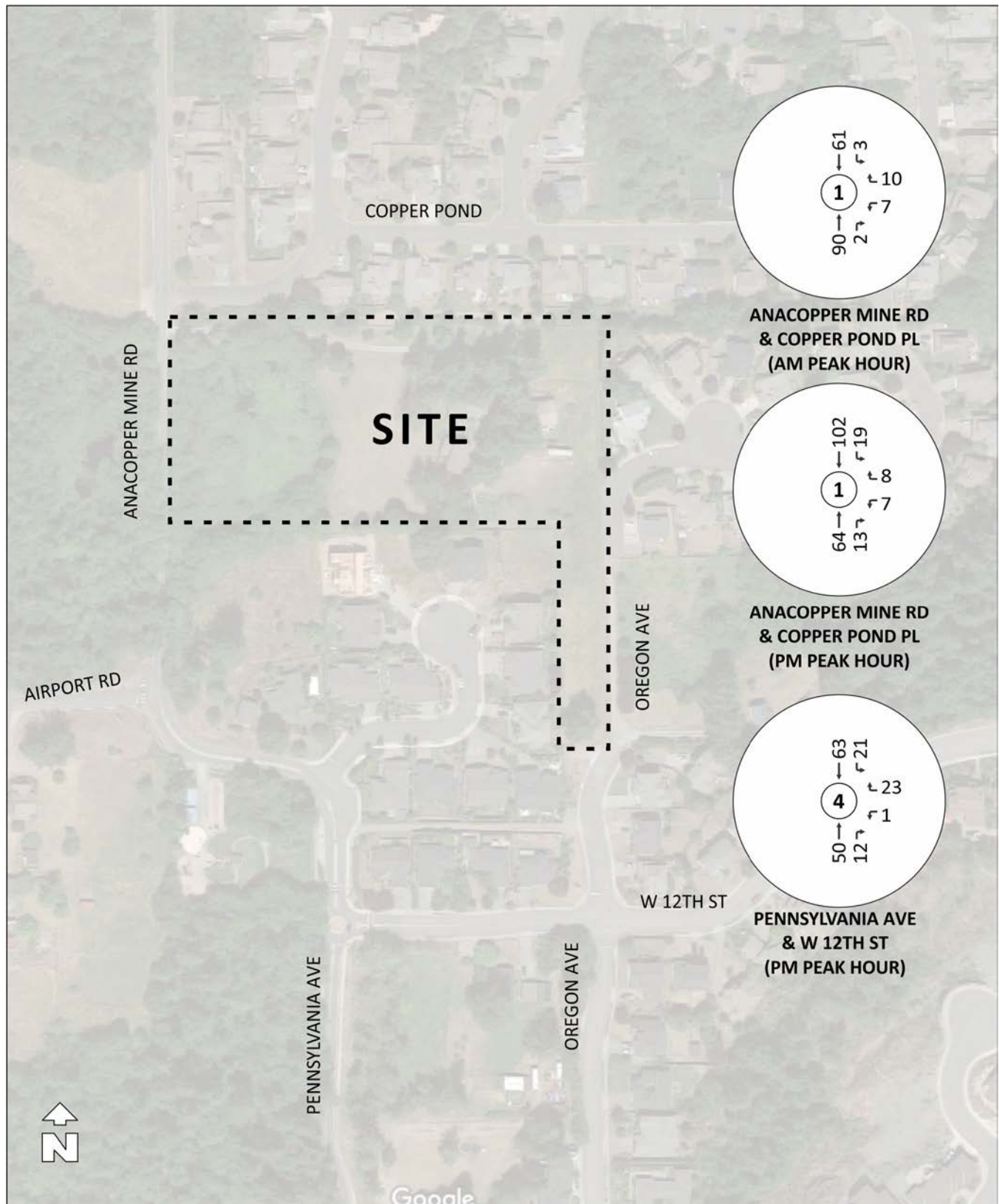


Figure 4: Existing Peak Hour Volumes



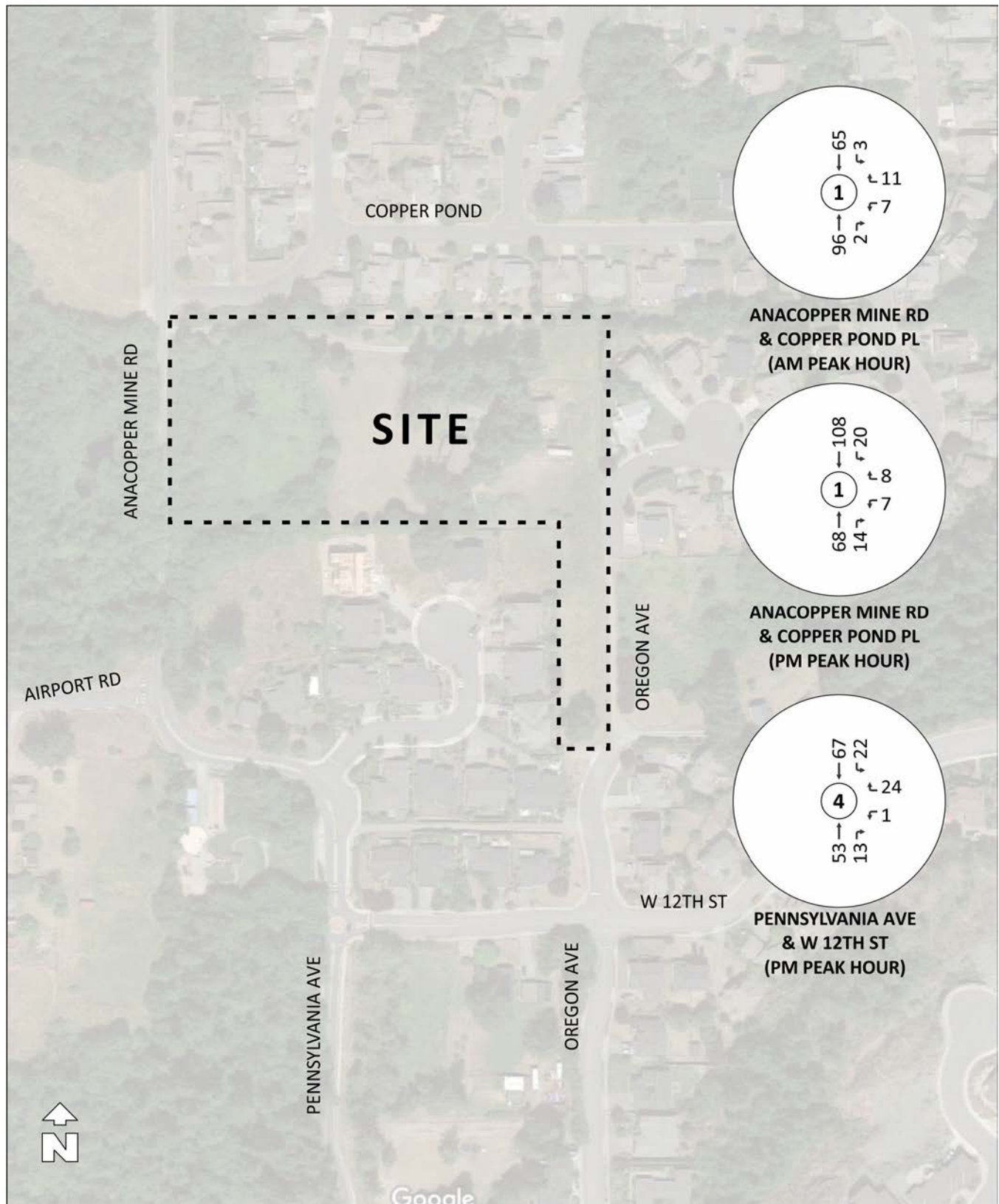


Figure 5: Future Without-Project Peak Hour Volumes

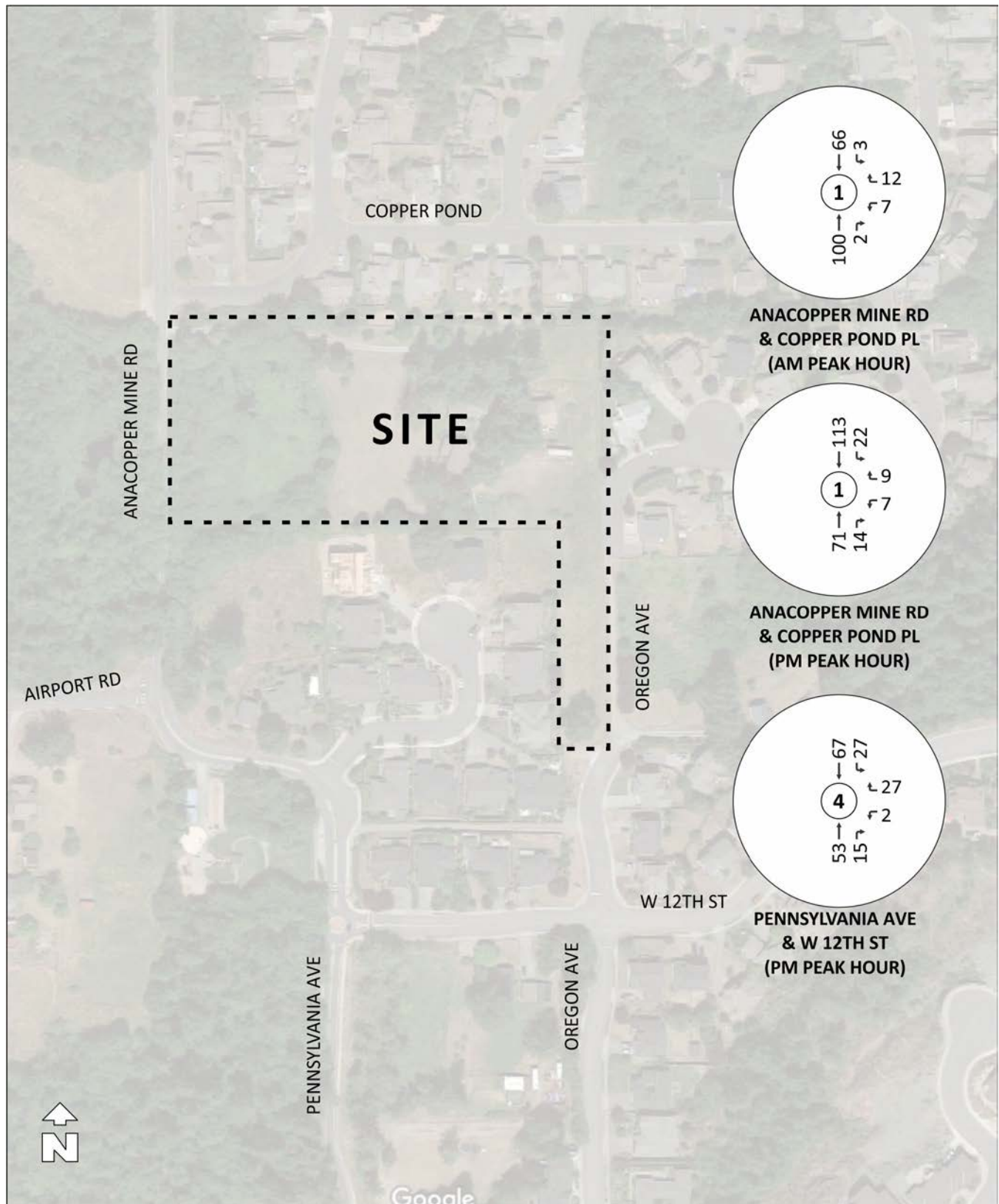
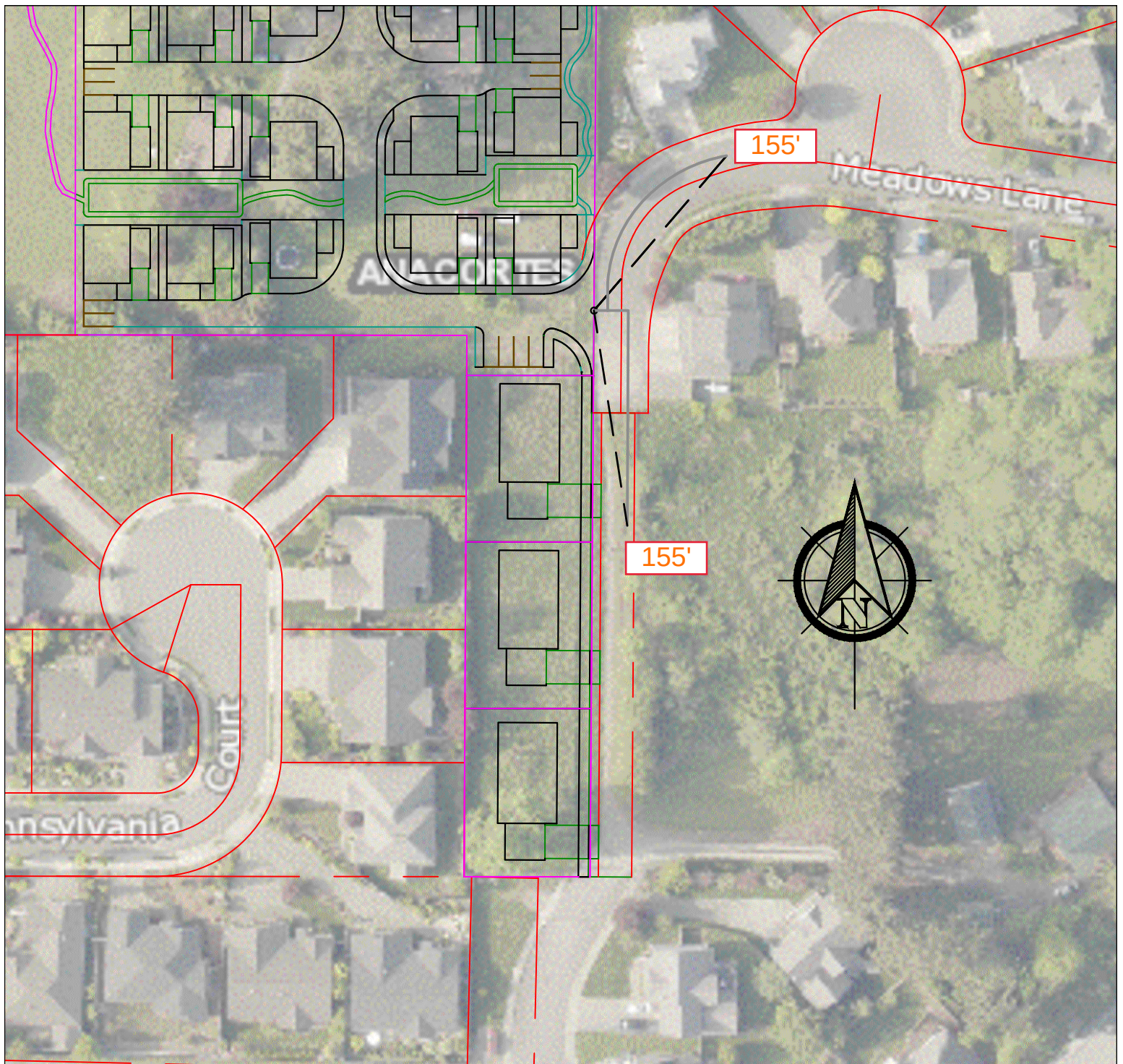


Figure 6: Future With-Project Peak Hour Volumes





## LEGEND

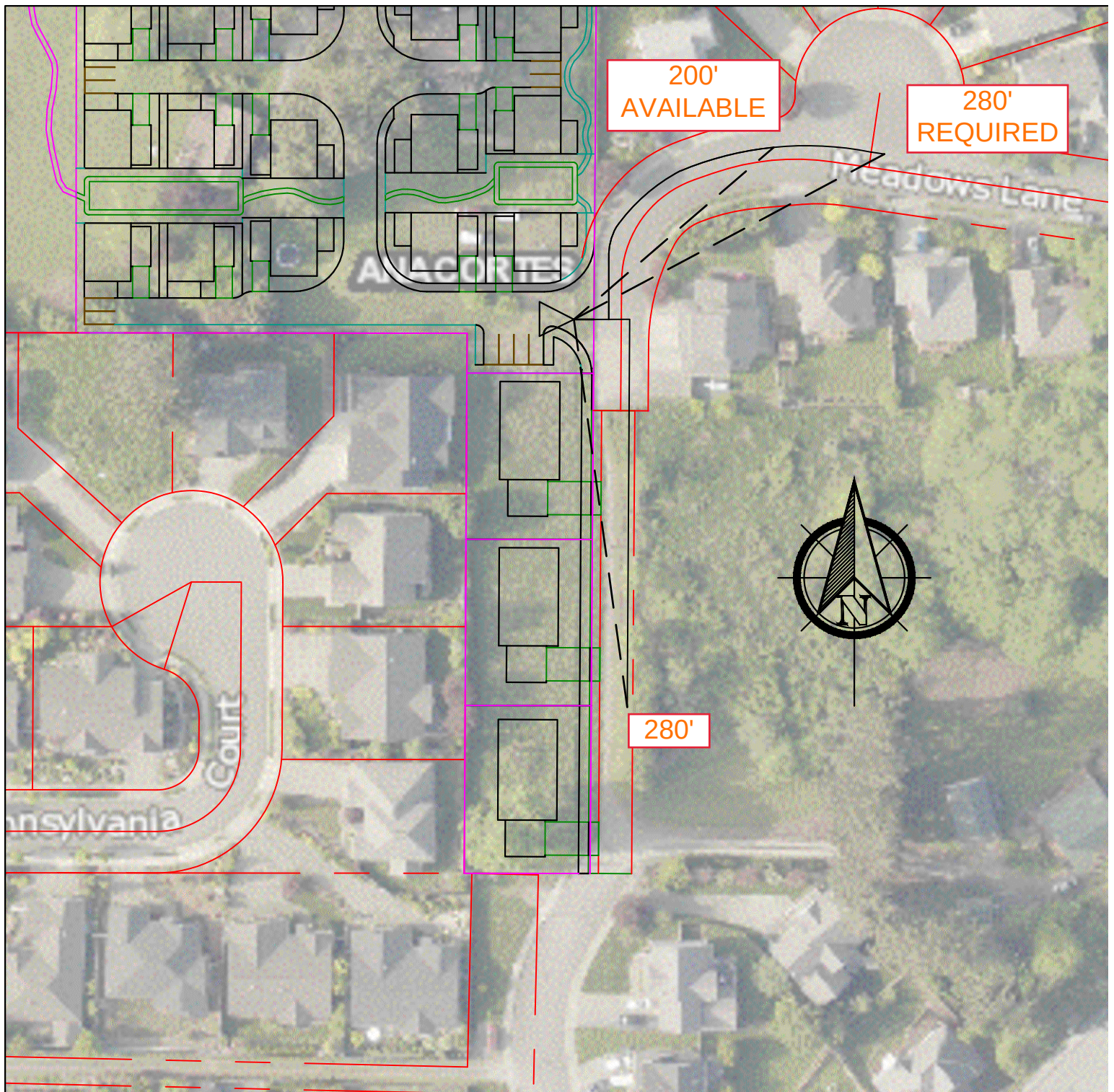
● STOPPING DISTANCE OBJECT AT DRIVEWAY AT EDGE OF TRAVEL-WAY

— STOPPING SIGHT DISTANCE

— — SIGHTLINE

Figure 7: Cottages-Stopping Sight Distance





## LEGEND

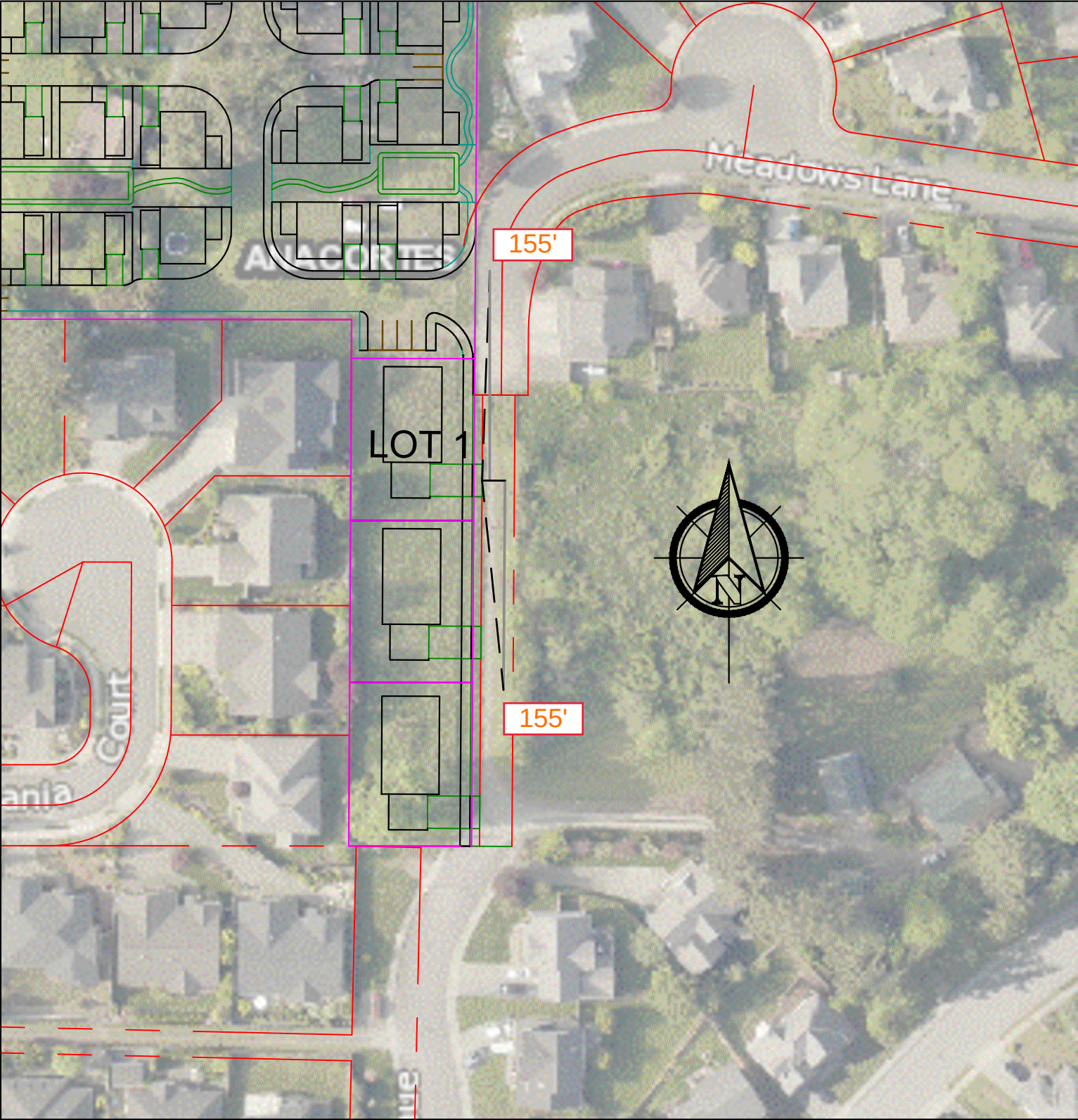
△ DRIVER EYE - OFFSET 14.5' FROM TRAVEL-WAY

— INTERSECTION SIGHT DISTANCE

-- SIGHTLINE

Figure 8: Cottages Intersection Sight Distance



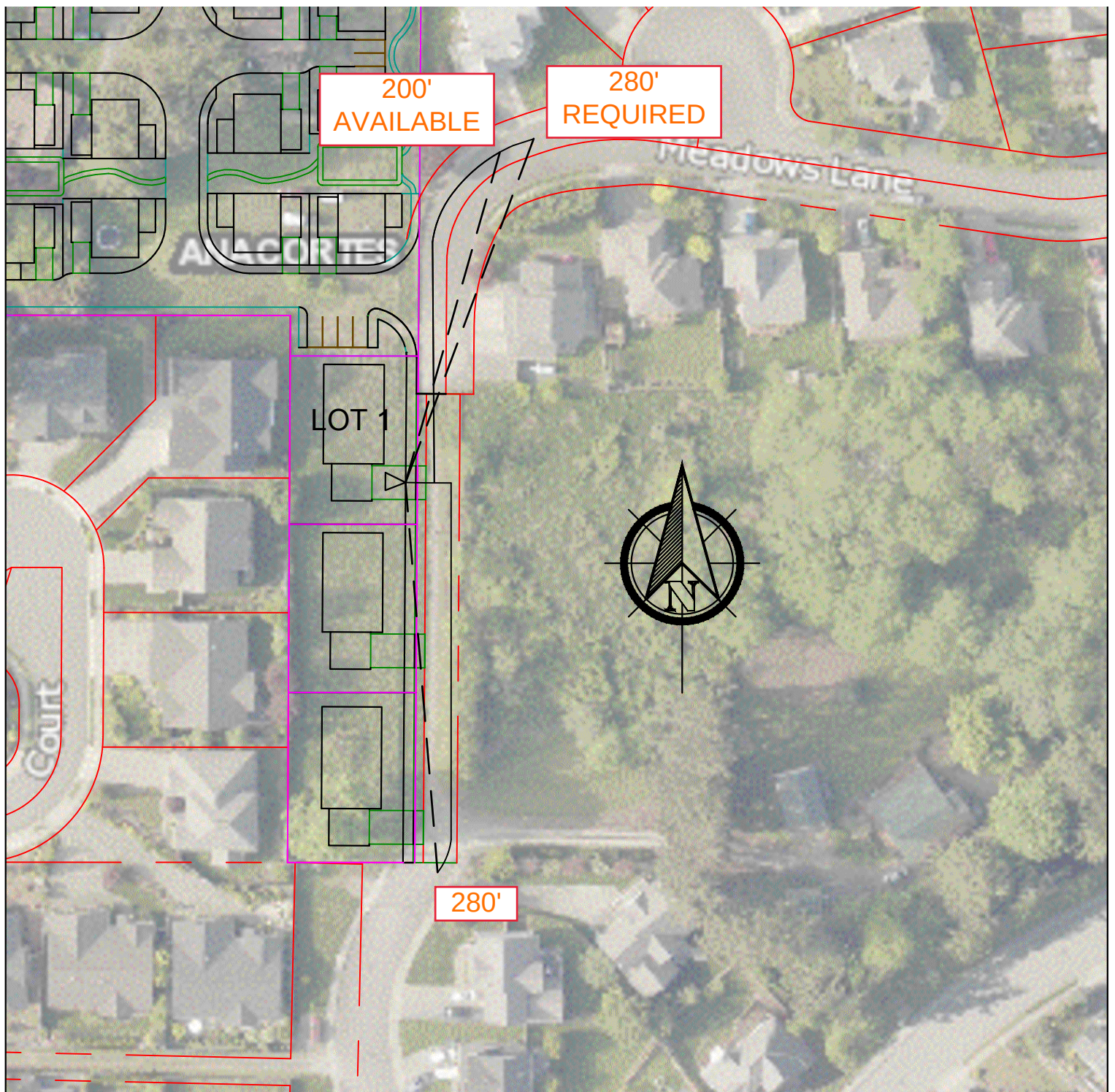


**LEGEND**

- STOPPING DISTANCE OBJECT AT DRIVEWAY AT EDGE OF TRAVEL-WAY
- STOPPING SIGHT DISTANCE
- — SIGHTLINE

Figure 9: Lot 1 Single-Family Stopping Slight Distance





## LEGEND



DRIVER EYE - OFFSET 14.5' FROM TRAVEL-WAY



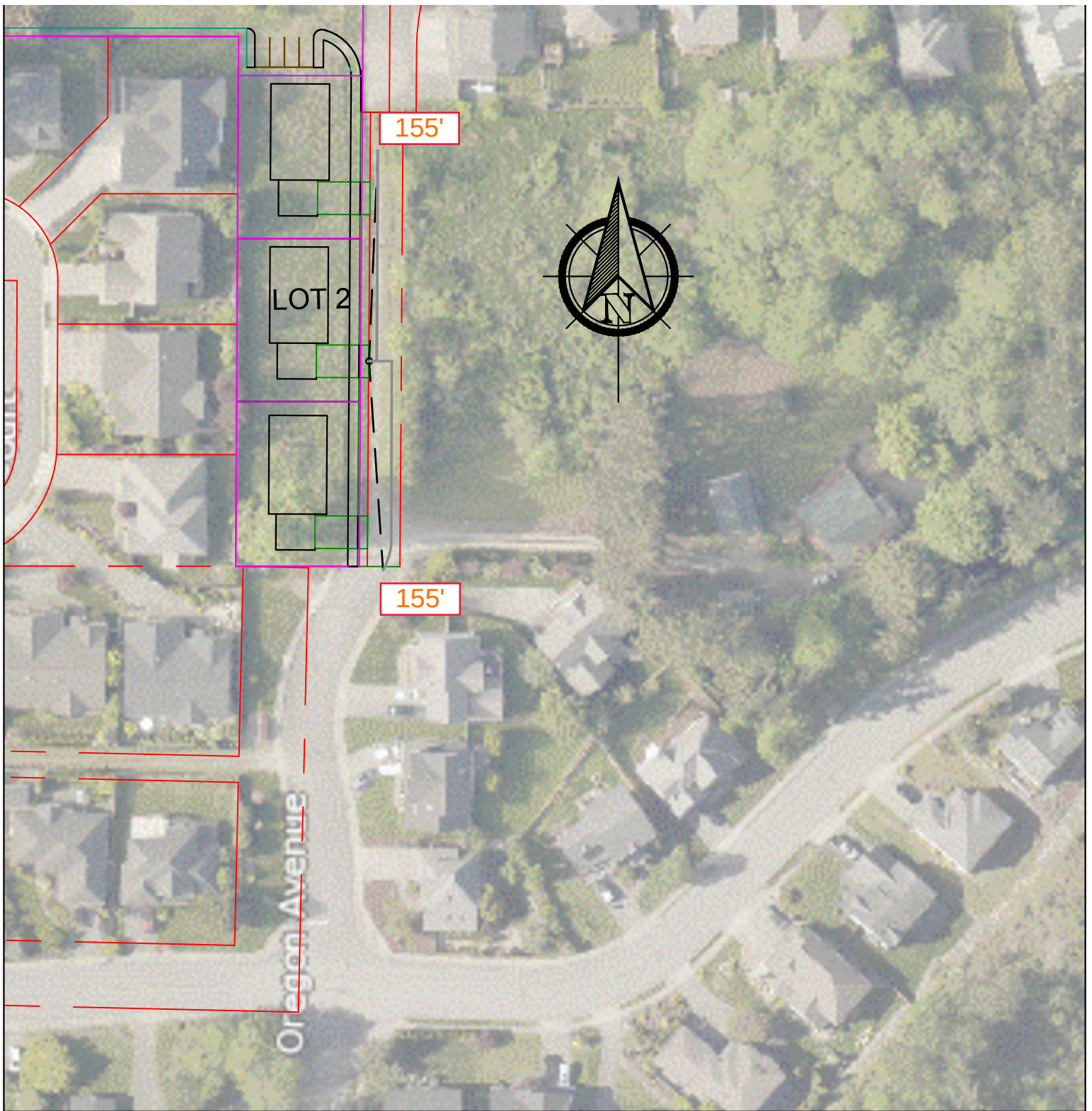
INTERSECTION SIGHT DISTANCE



SIGHTLINE

Figure 10: Lot 1 Single-Family Intersection Sight Distance





## LEGEND

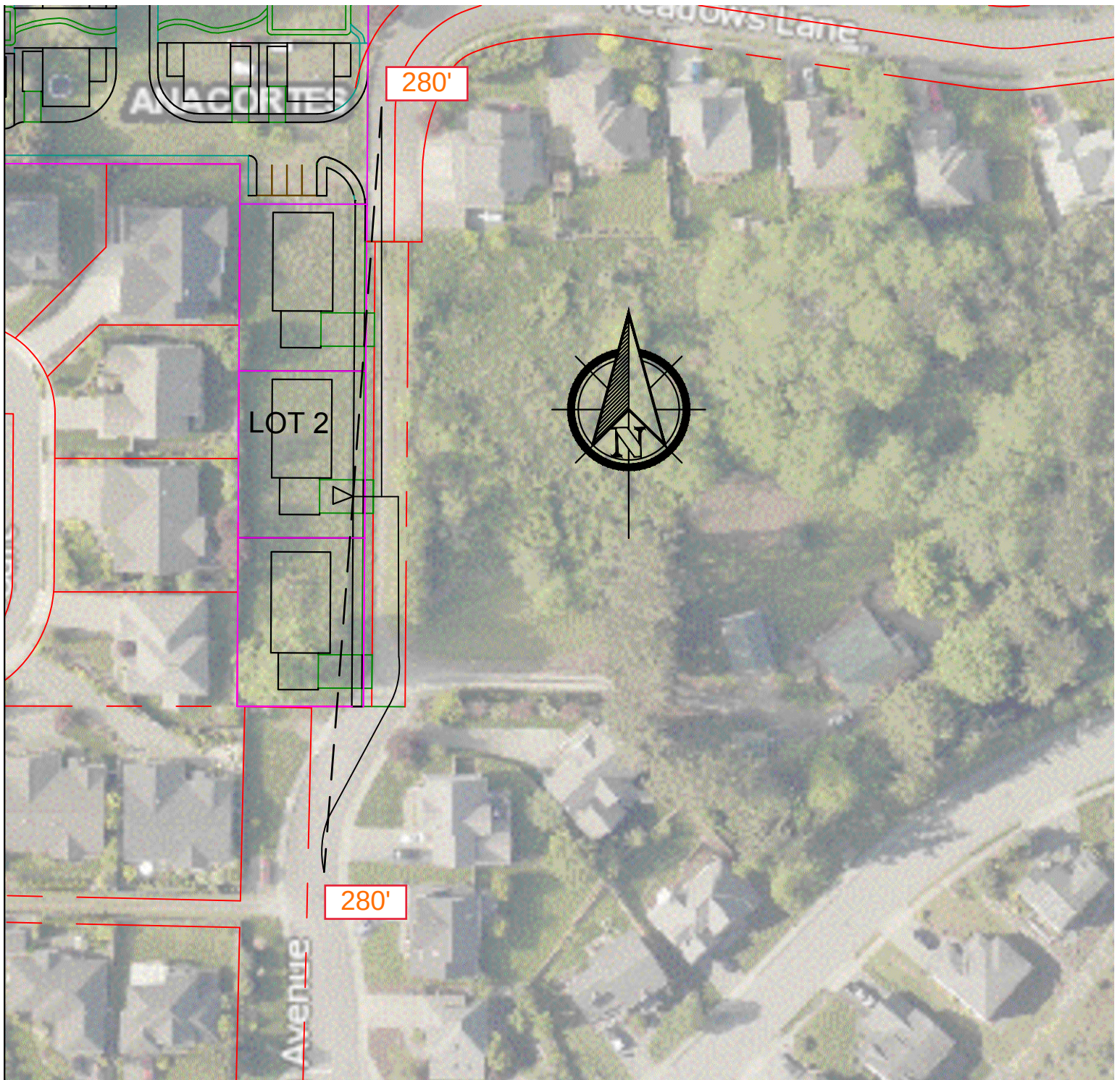
● STOPPING DISTANCE OBJECT AT DRIVEWAY AT EDGE OF TRAVEL-WAY

— STOPPING SIGHT DISTANCE

— SIGHTLINE

Figure 11: Lot 2 Single-Family Stopping Sight Distance





## LEGEND



DRIVER EYE - OFFSET 14.5' FROM TRAVEL-WAY



INTERSECTION SIGHT DISTANCE



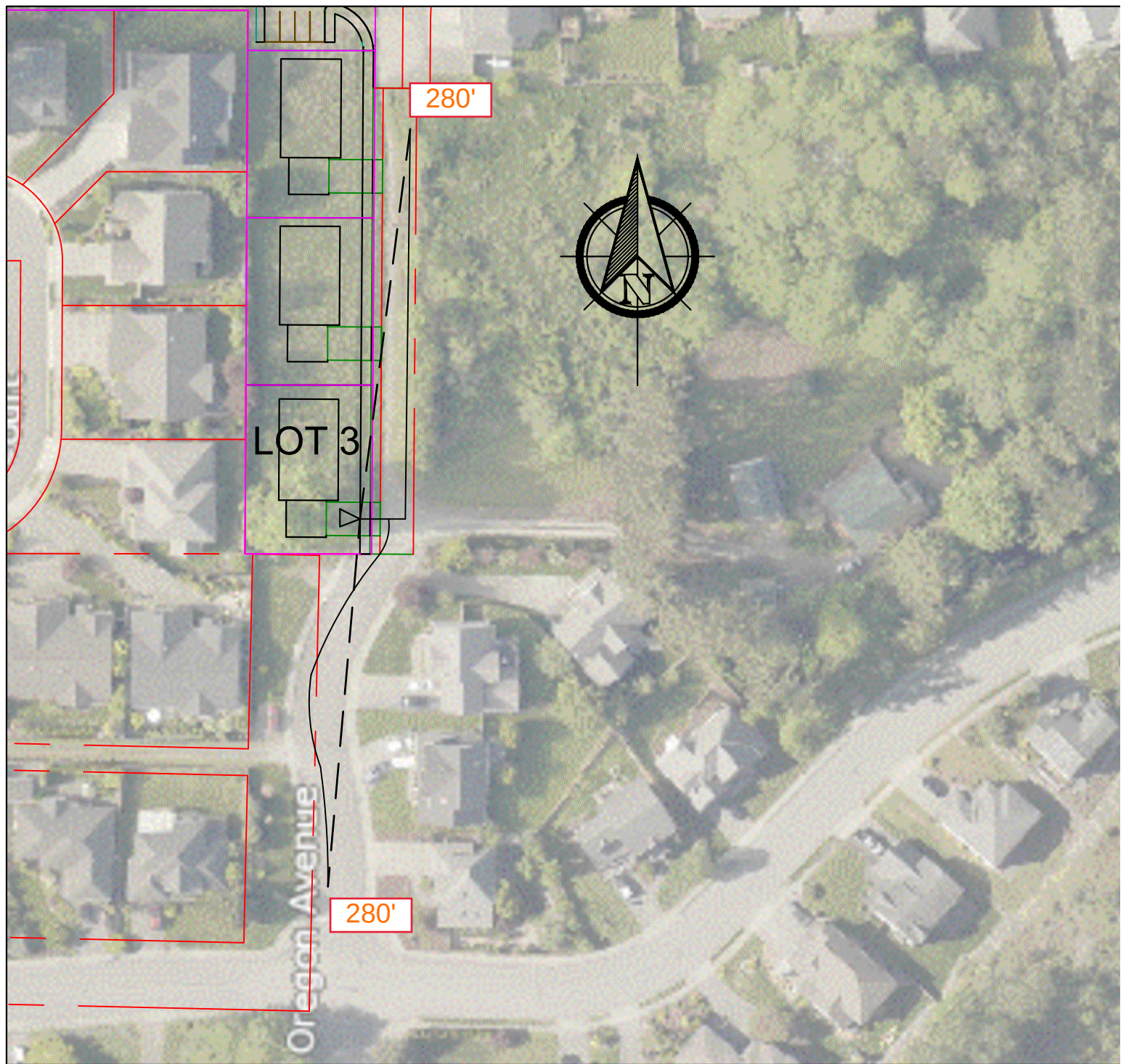
SIGHTLINE

Figure 12: Lot 2 Single-Family Intersection Sight Distance









## LEGEND



DRIVER EYE - OFFSET 14.5' FROM TRAVEL-WAY

INTERSECTION SIGHT DISTANCE

SIGHTLINE

Figure 14: Lot 3 Single-Family Intersection Sight Distance





Prepared for: **Transportation Solutions, Inc.**  
**Traffic Count Consultants, Inc.**

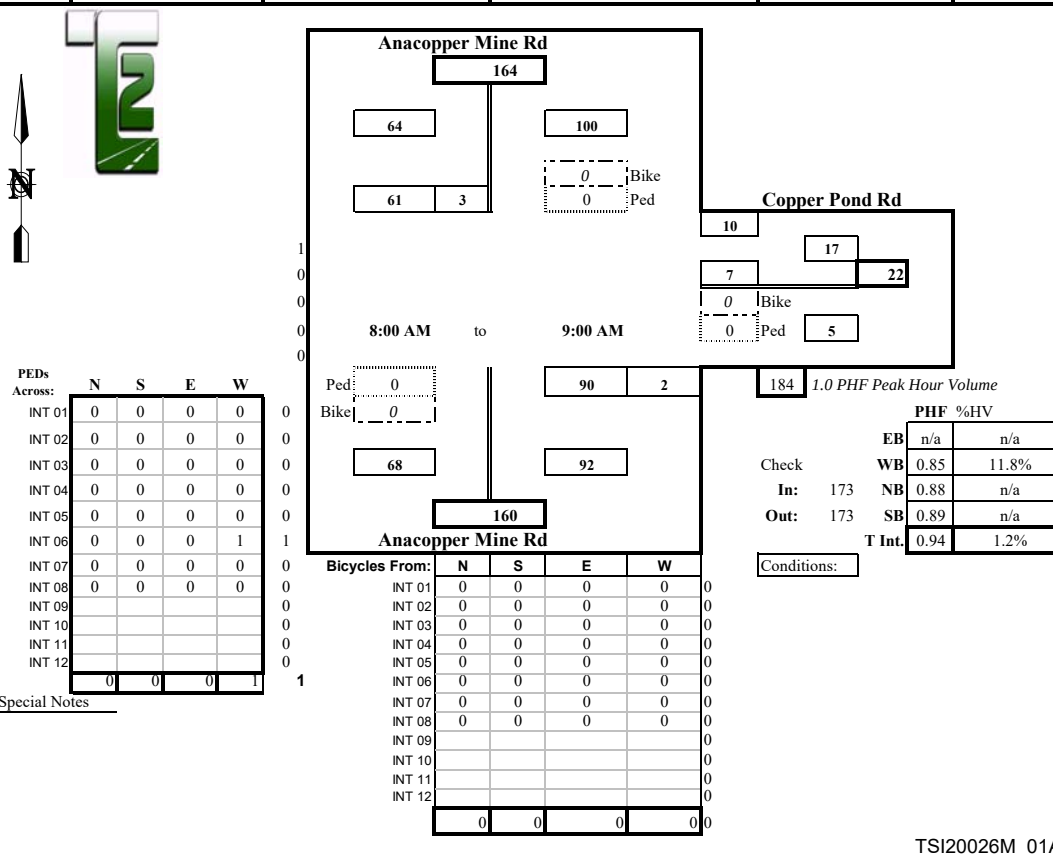
Phone: (253) 770-1407 FAX: (253) 770-1411 E-Mail: Team@TC2inc.com

WBE/DBE

**Intersection:** Anacopper Mine Rd & Copper Pond Rd  
**Location:** Anacortes, WA

**Date of Count:** Tue 02/25/2020  
**Checked By:** Cameron

| Time Interval Ending at       | From North on (SB) Anacopper Mine Rd |   |    |   | From South on (NB) Anacopper Mine Rd |   |    |   | From East on (WB) Copper Pond Rd |   |   |    | From West on (EB) 0 |   |   |   | Interval Total |
|-------------------------------|--------------------------------------|---|----|---|--------------------------------------|---|----|---|----------------------------------|---|---|----|---------------------|---|---|---|----------------|
|                               | T                                    | L | S  | R | T                                    | L | S  | R | T                                | L | S | R  | T                   | L | S | R |                |
| 7:15 A                        | 0                                    | 1 | 12 | 0 | 1                                    | 0 | 16 | 0 | 0                                | 6 | 0 | 6  | 0                   | 0 | 0 | 0 | 41             |
| 7:30 A                        | 1                                    | 0 | 4  | 0 | 0                                    | 0 | 17 | 1 | 1                                | 2 | 0 | 6  | 0                   | 0 | 0 | 0 | 30             |
| 7:45 A                        | 1                                    | 2 | 2  | 0 | 0                                    | 0 | 22 | 1 | 0                                | 2 | 0 | 4  | 0                   | 0 | 0 | 0 | 33             |
| 8:00 A                        | 0                                    | 1 | 10 | 0 | 0                                    | 0 | 26 | 0 | 0                                | 1 | 0 | 4  | 0                   | 0 | 0 | 0 | 42             |
| 8:15 A                        | 0                                    | 0 | 18 | 0 | 0                                    | 0 | 16 | 1 | 1                                | 4 | 0 | 0  | 0                   | 0 | 0 | 0 | 39             |
| 8:30 A                        | 0                                    | 1 | 15 | 0 | 0                                    | 0 | 24 | 1 | 1                                | 2 | 0 | 3  | 0                   | 0 | 0 | 0 | 46             |
| 8:45 A                        | 0                                    | 0 | 14 | 0 | 0                                    | 0 | 26 | 0 | 0                                | 1 | 0 | 4  | 0                   | 0 | 0 | 0 | 45             |
| 9:00 A                        | 0                                    | 2 | 14 | 0 | 0                                    | 0 | 24 | 0 | 0                                | 0 | 0 | 3  | 0                   | 0 | 0 | 0 | 43             |
| 9:15 A                        | 0                                    | 0 | 0  | 0 | 0                                    | 0 | 0  | 0 | 0                                | 0 | 0 | 0  | 0                   | 0 | 0 | 0 | 0              |
| 9:30 A                        | 0                                    | 0 | 0  | 0 | 0                                    | 0 | 0  | 0 | 0                                | 0 | 0 | 0  | 0                   | 0 | 0 | 0 | 0              |
| 9:45 A                        | 0                                    | 0 | 0  | 0 | 0                                    | 0 | 0  | 0 | 0                                | 0 | 0 | 0  | 0                   | 0 | 0 | 0 | 0              |
| 10:00 A                       | 0                                    | 0 | 0  | 0 | 0                                    | 0 | 0  | 0 | 0                                | 0 | 0 | 0  | 0                   | 0 | 0 | 0 | 0              |
| Total Survey                  |                                      |   |    |   |                                      |   |    |   |                                  |   |   |    |                     |   |   |   |                |
| Peak Hour: 8:00 AM to 9:00 AM |                                      |   |    |   |                                      |   |    |   |                                  |   |   |    |                     |   |   |   |                |
| Total                         | 0                                    | 3 | 61 | 0 | 0                                    | 0 | 90 | 2 | 2                                | 7 | 0 | 10 | 0                   | 0 | 0 | 0 | 173            |
| Approach                      | 64                                   |   |    |   | 92                                   |   |    |   | 17                               |   |   |    | 0                   |   |   |   | 173            |
| %HV                           | n/a                                  |   |    |   | n/a                                  |   |    |   | 11.8%                            |   |   |    | n/a                 |   |   |   | 1.2%           |
| PHF                           | 0.89                                 |   |    |   | 0.88                                 |   |    |   | 0.85                             |   |   |    | n/a                 |   |   |   | 0.94           |





Prepared for: **Transportation Solutions, Inc**  
**Traffic Count Consultants, Inc.**

Phone: (253) 770-1407 FAX: (253) 770-1411 E-Mail: Team@TC2inc.com

WBE/DBE

**Intersection:** Anacopper Mine Rd & Copper Pond Rd  
**Location:** Anacortes, WA

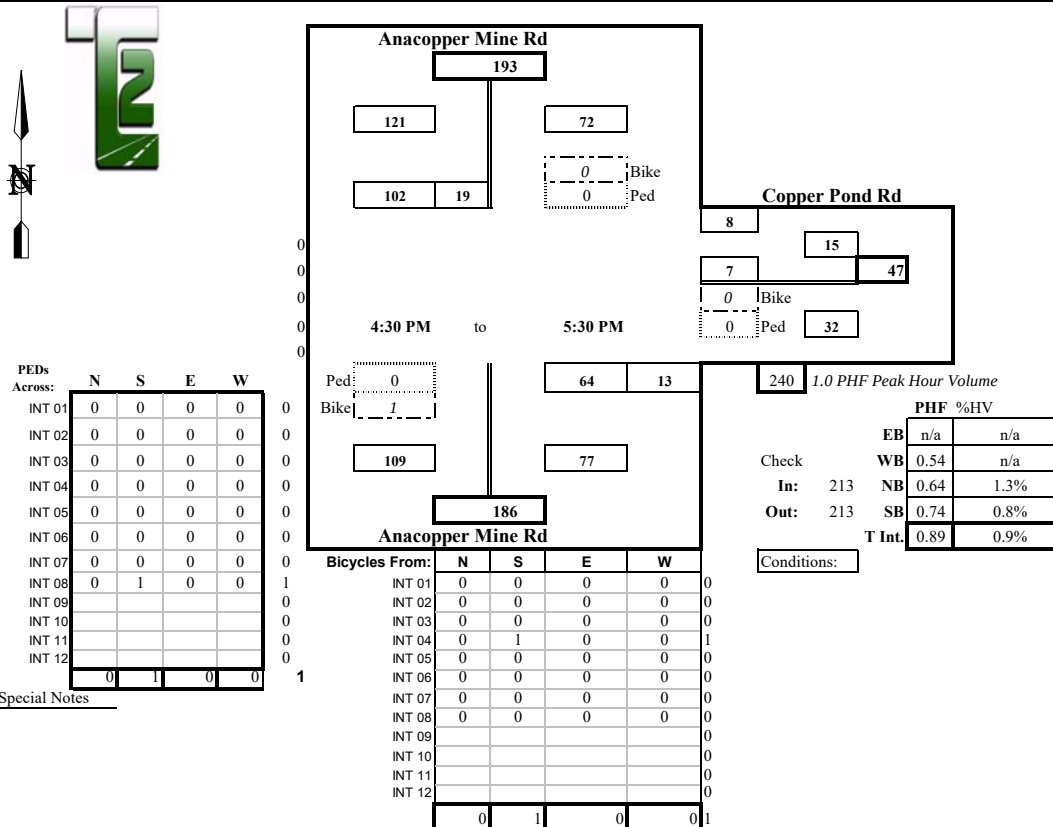
**Date of Count:** Tue 02/25/2020  
**Checked By:** Cameron

| Time Interval Ending at | From North on (SB) Anacopper Mine Rd |   |    |   | From South on (NB) Anacopper Mine Rd |   |    |   | From East on (WB) Copper Pond Rd |   |   |   | From West on (EB) 0 |   |   |   | Interval Total |
|-------------------------|--------------------------------------|---|----|---|--------------------------------------|---|----|---|----------------------------------|---|---|---|---------------------|---|---|---|----------------|
|                         | T                                    | L | S  | R | T                                    | L | S  | R | T                                | L | S | R | T                   | L | S | R |                |
| 4:15 P                  | 0                                    | 6 | 31 | 0 | 1                                    | 0 | 17 | 0 | 1                                | 2 | 0 | 2 | 0                   | 0 | 0 | 0 | 58             |
| 4:30 P                  | 0                                    | 2 | 22 | 0 | 0                                    | 0 | 16 | 1 | 1                                | 2 | 0 | 3 | 0                   | 0 | 0 | 0 | 46             |
| 4:45 P                  | 0                                    | 5 | 22 | 0 | 0                                    | 0 | 27 | 3 | 0                                | 2 | 0 | 1 | 0                   | 0 | 0 | 0 | 60             |
| 5:00 P                  | 0                                    | 4 | 20 | 0 | 0                                    | 0 | 12 | 3 | 0                                | 4 | 0 | 3 | 0                   | 0 | 0 | 0 | 46             |
| 5:15 P                  | 1                                    | 4 | 25 | 0 | 0                                    | 0 | 14 | 6 | 0                                | 1 | 0 | 4 | 0                   | 0 | 0 | 0 | 54             |
| 5:30 P                  | 0                                    | 6 | 35 | 0 | 1                                    | 0 | 11 | 1 | 0                                | 0 | 0 | 0 | 0                   | 0 | 0 | 0 | 53             |
| 5:45 P                  | 0                                    | 5 | 16 | 0 | 0                                    | 0 | 10 | 2 | 0                                | 0 | 0 | 2 | 0                   | 0 | 0 | 0 | 35             |
| 6:00 P                  | 0                                    | 6 | 15 | 0 | 0                                    | 0 | 17 | 3 | 0                                | 2 | 0 | 2 | 0                   | 0 | 0 | 0 | 45             |
| 6:15 P                  | 0                                    | 0 | 0  | 0 | 0                                    | 0 | 0  | 0 | 0                                | 0 | 0 | 0 | 0                   | 0 | 0 | 0 | 0              |
| 6:30 P                  | 0                                    | 0 | 0  | 0 | 0                                    | 0 | 0  | 0 | 0                                | 0 | 0 | 0 | 0                   | 0 | 0 | 0 | 0              |
| 6:45 P                  | 0                                    | 0 | 0  | 0 | 0                                    | 0 | 0  | 0 | 0                                | 0 | 0 | 0 | 0                   | 0 | 0 | 0 | 0              |
| 7:00 P                  | 0                                    | 0 | 0  | 0 | 0                                    | 0 | 0  | 0 | 0                                | 0 | 0 | 0 | 0                   | 0 | 0 | 0 | 0              |

|              |   |    |     |   |   |   |     |    |   |    |   |    |   |   |   |   |     |
|--------------|---|----|-----|---|---|---|-----|----|---|----|---|----|---|---|---|---|-----|
| Total Survey | 1 | 38 | 186 | 0 | 2 | 0 | 124 | 19 | 2 | 13 | 0 | 17 | 0 | 0 | 0 | 0 | 397 |
|--------------|---|----|-----|---|---|---|-----|----|---|----|---|----|---|---|---|---|-----|

Peak Hour: 4:30 PM to 5:30 PM

|          |      |    |     |   |      |   |    |    |      |   |   |   |     |   |   |   |      |
|----------|------|----|-----|---|------|---|----|----|------|---|---|---|-----|---|---|---|------|
| Total    | 1    | 19 | 102 | 0 | 1    | 0 | 64 | 13 | 0    | 7 | 0 | 8 | 0   | 0 | 0 | 0 | 213  |
| Approach | 121  |    |     |   | 77   |   |    |    | 15   |   |   |   | 0   |   |   |   | 213  |
| %HV      | 0.8% |    |     |   | 1.3% |   |    |    | n/a  |   |   |   | n/a |   |   |   | 0.9% |
| PHF      | 0.74 |    |     |   | 0.64 |   |    |    | 0.54 |   |   |   | n/a |   |   |   | 0.89 |





HCM 6th TWSC  
103: Anacopper Mine Rd (Existing) & Copper Pond (AM)

02/28/2020

Intersection

Int Delay, s/veh 1.1

| Movement                 | WBL                                                                               | WBR  | NBT                                                                               | NBR  | SBL  | SBT                                                                               |
|--------------------------|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------|------|------|-----------------------------------------------------------------------------------|
| Lane Configurations      |  |      |  |      |      |  |
| Traffic Vol, veh/h       | 7                                                                                 | 10   | 90                                                                                | 2    | 3    | 61                                                                                |
| Future Vol, veh/h        | 7                                                                                 | 10   | 90                                                                                | 2    | 3    | 61                                                                                |
| Conflicting Peds, #/hr   | 0                                                                                 | 0    | 0                                                                                 | 0    | 0    | 0                                                                                 |
| Sign Control             | Stop                                                                              | Stop | Free                                                                              | Free | Free | Free                                                                              |
| RT Channelized           | -                                                                                 | None | -                                                                                 | None | -    | None                                                                              |
| Storage Length           | 0                                                                                 | -    | -                                                                                 | -    | -    | -                                                                                 |
| Veh in Median Storage, # | 0                                                                                 | -    | 0                                                                                 | -    | -    | 0                                                                                 |
| Grade, %                 | 0                                                                                 | -    | 0                                                                                 | -    | -    | 0                                                                                 |
| Peak Hour Factor         | 85                                                                                | 85   | 88                                                                                | 88   | 89   | 89                                                                                |
| Heavy Vehicles, %        | 12                                                                                | 12   | 0                                                                                 | 0    | 0    | 0                                                                                 |
| Mvmt Flow                | 8                                                                                 | 12   | 102                                                                               | 2    | 3    | 69                                                                                |

| Major/Minor          | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 178    | 103    | 0      |
| Stage 1              | 103    | -      | -      |
| Stage 2              | 75     | -      | -      |
| Critical Hdwy        | 6.52   | 6.32   | -      |
| Critical Hdwy Stg 1  | 5.52   | -      | -      |
| Critical Hdwy Stg 2  | 5.52   | -      | -      |
| Follow-up Hdwy       | 3.608  | 3.408  | -      |
| Pot Cap-1 Maneuver   | 789    | 925    | -      |
| Stage 1              | 897    | -      | -      |
| Stage 2              | 923    | -      | -      |
| Platoon blocked, %   |        | -      | -      |
| Mov Cap-1 Maneuver   | 787    | 925    | -      |
| Mov Cap-2 Maneuver   | 787    | -      | -      |
| Stage 1              | 897    | -      | -      |
| Stage 2              | 921    | -      | -      |

| Approach             | WB  | NB | SB  |
|----------------------|-----|----|-----|
| HCM Control Delay, s | 9.3 | 0  | 0.3 |
| HCM LOS              | A   |    |     |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL   | SBT   |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h)      | -   | -        | 863   | 1500  |
| HCM Lane V/C Ratio    | -   | -        | 0.023 | 0.002 |
| HCM Control Delay (s) | -   | -        | 9.3   | 7.4   |
| HCM Lane LOS          | -   | -        | A     | A     |
| HCM 95th %tile Q(veh) | -   | -        | 0.1   | 0     |

**Intersection**

Int Delay, s/veh 1.1

| Movement                 | WBL                                                                               | WBR  | NBT                                                                               | NBR  | SBL  | SBT                                                                               |
|--------------------------|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------|------|------|-----------------------------------------------------------------------------------|
| Lane Configurations      |  |      |  |      |      |  |
| Traffic Vol, veh/h       | 7                                                                                 | 11   | 96                                                                                | 2    | 3    | 65                                                                                |
| Future Vol, veh/h        | 7                                                                                 | 11   | 96                                                                                | 2    | 3    | 65                                                                                |
| Conflicting Peds, #/hr   | 0                                                                                 | 0    | 0                                                                                 | 0    | 0    | 0                                                                                 |
| Sign Control             | Stop                                                                              | Stop | Free                                                                              | Free | Free | Free                                                                              |
| RT Channelized           | -                                                                                 | None | -                                                                                 | None | -    | None                                                                              |
| Storage Length           | 0                                                                                 | -    | -                                                                                 | -    | -    | -                                                                                 |
| Veh in Median Storage, # | 0                                                                                 | -    | 0                                                                                 | -    | -    | 0                                                                                 |
| Grade, %                 | 0                                                                                 | -    | 0                                                                                 | -    | -    | 0                                                                                 |
| Peak Hour Factor         | 85                                                                                | 85   | 88                                                                                | 88   | 89   | 89                                                                                |
| Heavy Vehicles, %        | 12                                                                                | 12   | 0                                                                                 | 0    | 0    | 0                                                                                 |
| Mvmt Flow                | 8                                                                                 | 13   | 109                                                                               | 2    | 3    | 73                                                                                |

| Major/Minor          | Minor1 | Major1 | Major2 |   |      |
|----------------------|--------|--------|--------|---|------|
| Conflicting Flow All | 189    | 110    | 0      | 0 | 111  |
| Stage 1              | 110    | -      | -      | - | -    |
| Stage 2              | 79     | -      | -      | - | -    |
| Critical Hdwy        | 6.52   | 6.32   | -      | - | 4.1  |
| Critical Hdwy Stg 1  | 5.52   | -      | -      | - | -    |
| Critical Hdwy Stg 2  | 5.52   | -      | -      | - | -    |
| Follow-up Hdwy       | 3.608  | 3.408  | -      | - | 2.2  |
| Pot Cap-1 Maneuver   | 778    | 917    | -      | - | 1492 |
| Stage 1              | 890    | -      | -      | - | -    |
| Stage 2              | 919    | -      | -      | - | -    |
| Platoon blocked, %   |        |        | -      | - | -    |
| Mov Cap-1 Maneuver   | 776    | 917    | -      | - | 1492 |
| Mov Cap-2 Maneuver   | 776    | -      | -      | - | -    |
| Stage 1              | 890    | -      | -      | - | -    |
| Stage 2              | 917    | -      | -      | - | -    |

| Approach             | WB  | NB | SB  |
|----------------------|-----|----|-----|
| HCM Control Delay, s | 9.3 | 0  | 0.3 |
| HCM LOS              | A   |    |     |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL   | SBT   |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h)      | -   | -        | 856   | 1492  |
| HCM Lane V/C Ratio    | -   | -        | 0.025 | 0.002 |
| HCM Control Delay (s) | -   | -        | 9.3   | 7.4   |
| HCM Lane LOS          | -   | -        | A     | A     |
| HCM 95th %tile Q(veh) | -   | -        | 0.1   | 0     |



**Intersection**

Int Delay, s/veh 1.1

| Movement                 | WBL                                                                               | WBR  | NBT                                                                               | NBR  | SBL  | SBT                                                                               |
|--------------------------|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------|------|------|-----------------------------------------------------------------------------------|
| Lane Configurations      |  |      |  |      |      |  |
| Traffic Vol, veh/h       | 7                                                                                 | 12   | 100                                                                               | 2    | 3    | 66                                                                                |
| Future Vol, veh/h        | 7                                                                                 | 12   | 100                                                                               | 2    | 3    | 66                                                                                |
| Conflicting Peds, #/hr   | 0                                                                                 | 0    | 0                                                                                 | 0    | 0    | 0                                                                                 |
| Sign Control             | Stop                                                                              | Stop | Free                                                                              | Free | Free | Free                                                                              |
| RT Channelized           | -                                                                                 | None | -                                                                                 | None | -    | None                                                                              |
| Storage Length           | 0                                                                                 | -    | -                                                                                 | -    | -    | -                                                                                 |
| Veh in Median Storage, # | 0                                                                                 | -    | 0                                                                                 | -    | -    | 0                                                                                 |
| Grade, %                 | 0                                                                                 | -    | 0                                                                                 | -    | -    | 0                                                                                 |
| Peak Hour Factor         | 85                                                                                | 85   | 88                                                                                | 88   | 89   | 89                                                                                |
| Heavy Vehicles, %        | 12                                                                                | 12   | 0                                                                                 | 0    | 0    | 0                                                                                 |
| Mvmt Flow                | 8                                                                                 | 14   | 114                                                                               | 2    | 3    | 74                                                                                |

| Major/Minor          | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 195    | 115    | 0      |
| Stage 1              | 115    | -      | -      |
| Stage 2              | 80     | -      | -      |
| Critical Hdwy        | 6.52   | 6.32   | -      |
| Critical Hdwy Stg 1  | 5.52   | -      | -      |
| Critical Hdwy Stg 2  | 5.52   | -      | -      |
| Follow-up Hdwy       | 3.608  | 3.408  | -      |
| Pot Cap-1 Maneuver   | 772    | 911    | -      |
| Stage 1              | 886    | -      | -      |
| Stage 2              | 918    | -      | -      |
| Platoon blocked, %   |        | -      | -      |
| Mov Cap-1 Maneuver   | 770    | 911    | -      |
| Mov Cap-2 Maneuver   | 770    | -      | -      |
| Stage 1              | 886    | -      | -      |
| Stage 2              | 916    | -      | -      |

| Approach             | WB  | NB | SB  |
|----------------------|-----|----|-----|
| HCM Control Delay, s | 9.3 | 0  | 0.3 |
| HCM LOS              | A   |    |     |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL   | SBT   |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h)      | -   | -        | 853   | 1485  |
| HCM Lane V/C Ratio    | -   | -        | 0.026 | 0.002 |
| HCM Control Delay (s) | -   | -        | 9.3   | 7.4   |
| HCM Lane LOS          | -   | -        | A     | A     |
| HCM 95th %tile Q(veh) | -   | -        | 0.1   | 0     |

HCM 6th TWSC  
113: Anacopper Mine Rd (Existing) & Copper Pond (PM)

02/28/2020

Intersection

Int Delay, s/veh 1.5

| Movement                 | WBL                                                                               | WBR  | NBT                                                                               | NBR  | SBL  | SBT                                                                               |
|--------------------------|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------|------|------|-----------------------------------------------------------------------------------|
| Lane Configurations      |  |      |  |      |      |  |
| Traffic Vol, veh/h       | 7                                                                                 | 8    | 64                                                                                | 13   | 19   | 102                                                                               |
| Future Vol, veh/h        | 7                                                                                 | 8    | 64                                                                                | 13   | 19   | 102                                                                               |
| Conflicting Peds, #/hr   | 0                                                                                 | 0    | 0                                                                                 | 0    | 0    | 0                                                                                 |
| Sign Control             | Stop                                                                              | Stop | Free                                                                              | Free | Free | Free                                                                              |
| RT Channelized           | -                                                                                 | None | -                                                                                 | None | -    | None                                                                              |
| Storage Length           | 0                                                                                 | -    | -                                                                                 | -    | -    | -                                                                                 |
| Veh in Median Storage, # | 0                                                                                 | -    | 0                                                                                 | -    | -    | 0                                                                                 |
| Grade, %                 | 0                                                                                 | -    | 0                                                                                 | -    | -    | 0                                                                                 |
| Peak Hour Factor         | 54                                                                                | 54   | 64                                                                                | 64   | 74   | 74                                                                                |
| Heavy Vehicles, %        | 0                                                                                 | 0    | 1                                                                                 | 1    | 1    | 1                                                                                 |
| Mvmt Flow                | 13                                                                                | 15   | 100                                                                               | 20   | 26   | 138                                                                               |

| Major/Minor          | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 300    | 110    | 0      |
| Stage 1              | 110    | -      | -      |
| Stage 2              | 190    | -      | -      |
| Critical Hdwy        | 6.4    | 6.2    | -      |
| Critical Hdwy Stg 1  | 5.4    | -      | -      |
| Critical Hdwy Stg 2  | 5.4    | -      | -      |
| Follow-up Hdwy       | 3.5    | 3.3    | -      |
| Pot Cap-1 Maneuver   | 696    | 949    | -      |
| Stage 1              | 920    | -      | -      |
| Stage 2              | 847    | -      | -      |
| Platoon blocked, %   |        | -      | -      |
| Mov Cap-1 Maneuver   | 683    | 949    | -      |
| Mov Cap-2 Maneuver   | 683    | -      | -      |
| Stage 1              | 920    | -      | -      |
| Stage 2              | 831    | -      | -      |

| Approach             | WB  | NB | SB  |
|----------------------|-----|----|-----|
| HCM Control Delay, s | 9.6 | 0  | 1.2 |
| HCM LOS              | A   |    |     |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL   | SBT   |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h)      | -   | -        | 803   | 1474  |
| HCM Lane V/C Ratio    | -   | -        | 0.035 | 0.017 |
| HCM Control Delay (s) | -   | -        | 9.6   | 7.5   |
| HCM Lane LOS          | -   | -        | A     | A     |
| HCM 95th %tile Q(veh) | -   | -        | 0.1   | 0.1   |



**Intersection**

Int Delay, s/veh 1.5

**Movement** WBL WBR NBT NBR SBL SBTLane Configurations 

Traffic Vol, veh/h 7 8 68 14 20 108

Future Vol, veh/h 7 8 68 14 20 108

Conflicting Peds, #/hr 0 0 0 0 0 0

Sign Control Stop Stop Free Free Free Free

RT Channelized - None - None - None

Storage Length 0 - - - - -

Veh in Median Storage, # 0 - 0 - - 0

Grade, % 0 - 0 - - 0

Peak Hour Factor 54 54 64 64 74 74

Heavy Vehicles, % 0 0 1 1 1 1

Mvmt Flow 13 15 106 22 27 146

**Major/Minor** Minor1 Major1 Major2

Conflicting Flow All 317 117 0 0 128 0

Stage 1 117 - - - - -

Stage 2 200 - - - - -

Critical Hdwy 6.4 6.2 - - 4.11 -

Critical Hdwy Stg 1 5.4 - - - - -

Critical Hdwy Stg 2 5.4 - - - - -

Follow-up Hdwy 3.5 3.3 - - 2.209 -

Pot Cap-1 Maneuver 680 941 - - 1464 -

Stage 1 913 - - - - -

Stage 2 838 - - - - -

Platoon blocked, % - - - - -

Mov Cap-1 Maneuver 666 941 - - 1464 -

Mov Cap-2 Maneuver 666 - - - - -

Stage 1 913 - - - - -

Stage 2 821 - - - - -

**Approach** WB NB SB

HCM Control Delay, s 9.7 0 1.2

HCM LOS A

**Minor Lane/Major Mvmt** NBT NBRWBLn1 SBL SBT

Capacity (veh/h) - - 789 1464 -

HCM Lane V/C Ratio - - 0.035 0.018 -

HCM Control Delay (s) - - 9.7 7.5 0

HCM Lane LOS - - A A A

HCM 95th %tile Q(veh) - - 0.1 0.1 -

**Intersection**

Int Delay, s/veh 1.5

| Movement                 | WBL                                                                               | WBR  | NBT                                                                               | NBR  | SBL  | SBT                                                                               |
|--------------------------|-----------------------------------------------------------------------------------|------|-----------------------------------------------------------------------------------|------|------|-----------------------------------------------------------------------------------|
| Lane Configurations      |  |      |  |      |      |  |
| Traffic Vol, veh/h       | 7                                                                                 | 9    | 71                                                                                | 14   | 22   | 113                                                                               |
| Future Vol, veh/h        | 7                                                                                 | 9    | 71                                                                                | 14   | 22   | 113                                                                               |
| Conflicting Peds, #/hr   | 0                                                                                 | 0    | 0                                                                                 | 0    | 0    | 0                                                                                 |
| Sign Control             | Stop                                                                              | Stop | Free                                                                              | Free | Free | Free                                                                              |
| RT Channelized           | -                                                                                 | None | -                                                                                 | None | -    | None                                                                              |
| Storage Length           | 0                                                                                 | -    | -                                                                                 | -    | -    | -                                                                                 |
| Veh in Median Storage, # | 0                                                                                 | -    | 0                                                                                 | -    | -    | 0                                                                                 |
| Grade, %                 | 0                                                                                 | -    | 0                                                                                 | -    | -    | 0                                                                                 |
| Peak Hour Factor         | 54                                                                                | 54   | 64                                                                                | 64   | 74   | 74                                                                                |
| Heavy Vehicles, %        | 0                                                                                 | 0    | 1                                                                                 | 1    | 1    | 1                                                                                 |
| Mvmt Flow                | 13                                                                                | 17   | 111                                                                               | 22   | 30   | 153                                                                               |

| Major/Minor          | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | 335    | 122    | 0      |
| Stage 1              | 122    | -      | -      |
| Stage 2              | 213    | -      | -      |
| Critical Hdwy        | 6.4    | 6.2    | -      |
| Critical Hdwy Stg 1  | 5.4    | -      | -      |
| Critical Hdwy Stg 2  | 5.4    | -      | -      |
| Follow-up Hdwy       | 3.5    | 3.3    | -      |
| Pot Cap-1 Maneuver   | 664    | 935    | -      |
| Stage 1              | 908    | -      | -      |
| Stage 2              | 827    | -      | -      |
| Platoon blocked, %   |        | -      | -      |
| Mov Cap-1 Maneuver   | 649    | 935    | -      |
| Mov Cap-2 Maneuver   | 649    | -      | -      |
| Stage 1              | 908    | -      | -      |
| Stage 2              | 809    | -      | -      |

| Approach             | WB  | NB | SB  |
|----------------------|-----|----|-----|
| HCM Control Delay, s | 9.8 | 0  | 1.2 |
| HCM LOS              | A   |    |     |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL   | SBT  |
|-----------------------|-----|----------|-------|------|
| Capacity (veh/h)      | -   | -        | 784   | 1458 |
| HCM Lane V/C Ratio    | -   | -        | 0.038 | 0.02 |
| HCM Control Delay (s) | -   | -        | 9.8   | 7.5  |
| HCM Lane LOS          | -   | -        | A     | A    |
| HCM 95th %tile Q(veh) | -   | -        | 0.1   | 0.1  |



# MOVEMENT SUMMARY

 Site: [2019 Pennsylvania Ave & W 12th St.]

60' ICD

Site Category: 2019 PM  
Roundabout

| Movement Performance - Vehicles |      |                       |               |                  |                      |                  |                                      |                |              |                     |                  |                      |
|---------------------------------|------|-----------------------|---------------|------------------|----------------------|------------------|--------------------------------------|----------------|--------------|---------------------|------------------|----------------------|
| Mov ID                          | Turn | Demand Total<br>veh/h | Flows HV<br>% | Deg. Satn<br>v/c | Average Delay<br>sec | Level of Service | 95% Back of Queue<br>Vehicles<br>veh | Distance<br>ft | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed<br>mph |
| South: Pennsylvania Ave (NB)    |      |                       |               |                  |                      |                  |                                      |                |              |                     |                  |                      |
| 8                               | T1   | 54                    | 3.0           | 0.055            | 5.4                  | LOS A            | 0.2                                  | 5.6            | 0.09         | 0.53                | 0.09             | 35.1                 |
| 18                              | R2   | 13                    | 3.0           | 0.055            | 5.8                  | LOS A            | 0.2                                  | 5.6            | 0.09         | 0.53                | 0.09             | 34.6                 |
| Approach                        |      | 67                    | 3.0           | 0.055            | 5.5                  | LOS A            | 0.2                                  | 5.6            | 0.09         | 0.53                | 0.09             | 35.0                 |
| East: W 12th St (WB)            |      |                       |               |                  |                      |                  |                                      |                |              |                     |                  |                      |
| 1                               | L2   | 1                     | 4.0           | 0.021            | 8.1                  | LOS A            | 0.1                                  | 2.1            | 0.15         | 0.57                | 0.15             | 34.5                 |
| 16                              | R2   | 25                    | 0.0           | 0.021            | 5.9                  | LOS A            | 0.1                                  | 2.1            | 0.15         | 0.57                | 0.15             | 34.4                 |
| Approach                        |      | 26                    | 0.2           | 0.021            | 6.0                  | LOS A            | 0.1                                  | 2.1            | 0.15         | 0.57                | 0.15             | 34.4                 |
| North: Pennsylvania Ave (SB)    |      |                       |               |                  |                      |                  |                                      |                |              |                     |                  |                      |
| 7                               | L2   | 23                    | 0.0           | 0.071            | 7.8                  | LOS A            | 0.3                                  | 7.6            | 0.02         | 0.58                | 0.02             | 34.8                 |
| 4                               | T1   | 68                    | 0.0           | 0.071            | 5.3                  | LOS A            | 0.3                                  | 7.6            | 0.02         | 0.58                | 0.02             | 35.1                 |
| Approach                        |      | 91                    | 0.0           | 0.071            | 5.9                  | LOS A            | 0.3                                  | 7.6            | 0.02         | 0.58                | 0.02             | 35.1                 |
| All Vehicles                    |      | 185                   | 1.1           | 0.071            | 5.8                  | LOS A            | 0.3                                  | 7.6            | 0.06         | 0.56                | 0.06             | 35.0                 |

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Signalised Intersections.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

Intersection and Approach LOS values are based on average delay for all movements (v/c not used).

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Organisation: TRANSPORTATION SOLUTIONS INC | Processed: Friday, February 28, 2020 8:24:52 AM

Project: D:\Users\TSI\Dropbox (TSI)\TSI Projects\2019\219086 The Crossing\SIDRA\12th & Pennsylvania.sip8

# MOVEMENT SUMMARY

 Site: [2025 Pennsylvania Ave & W 12th St. Background]

60' ICD

Site Category: 2019 PM  
Roundabout

| Movement Performance - Vehicles |      |                       |               |                  |                      |                  |                                      |                |              |                     |                  |                      |
|---------------------------------|------|-----------------------|---------------|------------------|----------------------|------------------|--------------------------------------|----------------|--------------|---------------------|------------------|----------------------|
| Mov ID                          | Turn | Demand Total<br>veh/h | Flows HV<br>% | Deg. Satn<br>v/c | Average Delay<br>sec | Level of Service | 95% Back of Queue<br>Vehicles<br>veh | Distance<br>ft | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed<br>mph |
| South: Pennsylvania Ave (NB)    |      |                       |               |                  |                      |                  |                                      |                |              |                     |                  |                      |
| 8                               | T1   | 58                    | 3.0           | 0.059            | 5.4                  | LOS A            | 0.2                                  | 6.0            | 0.10         | 0.53                | 0.10             | 35.1                 |
| 18                              | R2   | 14                    | 3.0           | 0.059            | 5.8                  | LOS A            | 0.2                                  | 6.0            | 0.10         | 0.53                | 0.10             | 34.6                 |
| Approach                        |      | 72                    | 3.0           | 0.059            | 5.5                  | LOS A            | 0.2                                  | 6.0            | 0.10         | 0.53                | 0.10             | 35.0                 |
| East: W 12th St (WB)            |      |                       |               |                  |                      |                  |                                      |                |              |                     |                  |                      |
| 1                               | L2   | 1                     | 4.0           | 0.022            | 8.2                  | LOS A            | 0.1                                  | 2.2            | 0.16         | 0.57                | 0.16             | 34.4                 |
| 16                              | R2   | 26                    | 0.0           | 0.022            | 5.9                  | LOS A            | 0.1                                  | 2.2            | 0.16         | 0.57                | 0.16             | 34.4                 |
| Approach                        |      | 27                    | 0.2           | 0.022            | 6.0                  | LOS A            | 0.1                                  | 2.2            | 0.16         | 0.57                | 0.16             | 34.4                 |
| North: Pennsylvania Ave (SB)    |      |                       |               |                  |                      |                  |                                      |                |              |                     |                  |                      |
| 7                               | L2   | 24                    | 0.0           | 0.075            | 7.8                  | LOS A            | 0.3                                  | 8.1            | 0.02         | 0.58                | 0.02             | 34.8                 |
| 4                               | T1   | 73                    | 0.0           | 0.075            | 5.3                  | LOS A            | 0.3                                  | 8.1            | 0.02         | 0.58                | 0.02             | 35.1                 |
| Approach                        |      | 97                    | 0.0           | 0.075            | 5.9                  | LOS A            | 0.3                                  | 8.1            | 0.02         | 0.58                | 0.02             | 35.1                 |
| All Vehicles                    |      | 196                   | 1.1           | 0.075            | 5.7                  | LOS A            | 0.3                                  | 8.1            | 0.07         | 0.56                | 0.07             | 35.0                 |

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Signalised Intersections.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

Intersection and Approach LOS values are based on average delay for all movements (v/c not used).

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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# MOVEMENT SUMMARY

 Site: [2025 Pennsylvania Ave & W 12th St. W Project]

60' ICD

Site Category: 2019 PM  
Roundabout

| Movement Performance - Vehicles |      |                       |               |                  |                      |                  |                                   |                |              |                     |                  |                      |
|---------------------------------|------|-----------------------|---------------|------------------|----------------------|------------------|-----------------------------------|----------------|--------------|---------------------|------------------|----------------------|
| Mov ID                          | Turn | Demand Total<br>veh/h | Flows HV<br>% | Deg. Satn<br>v/c | Average Delay<br>sec | Level of Service | 95% Back of Queue<br>Vehicles veh | Distance<br>ft | Prop. Queued | Effective Stop Rate | Aver. No. Cycles | Average Speed<br>mph |
| South: Pennsylvania Ave (NB)    |      |                       |               |                  |                      |                  |                                   |                |              |                     |                  |                      |
| 8                               | T1   | 58                    | 3.0           | 0.061            | 5.4                  | LOS A            | 0.2                               | 6.3            | 0.11         | 0.53                | 0.11             | 35.1                 |
| 18                              | R2   | 16                    | 3.0           | 0.061            | 5.8                  | LOS A            | 0.2                               | 6.3            | 0.11         | 0.53                | 0.11             | 34.5                 |
| Approach                        |      | 74                    | 3.0           | 0.061            | 5.5                  | LOS A            | 0.2                               | 6.3            | 0.11         | 0.53                | 0.11             | 35.0                 |
| East: W 12th St (WB)            |      |                       |               |                  |                      |                  |                                   |                |              |                     |                  |                      |
| 1                               | L2   | 2                     | 4.0           | 0.026            | 8.2                  | LOS A            | 0.1                               | 2.6            | 0.16         | 0.57                | 0.16             | 34.4                 |
| 16                              | R2   | 29                    | 0.0           | 0.026            | 5.9                  | LOS A            | 0.1                               | 2.6            | 0.16         | 0.57                | 0.16             | 34.3                 |
| Approach                        |      | 32                    | 0.3           | 0.026            | 6.0                  | LOS A            | 0.1                               | 2.6            | 0.16         | 0.57                | 0.16             | 34.3                 |
| North: Pennsylvania Ave (SB)    |      |                       |               |                  |                      |                  |                                   |                |              |                     |                  |                      |
| 7                               | L2   | 29                    | 0.0           | 0.079            | 7.9                  | LOS A            | 0.3                               | 8.6            | 0.02         | 0.59                | 0.02             | 34.8                 |
| 4                               | T1   | 73                    | 0.0           | 0.079            | 5.3                  | LOS A            | 0.3                               | 8.6            | 0.02         | 0.59                | 0.02             | 35.1                 |
| Approach                        |      | 102                   | 0.0           | 0.079            | 6.0                  | LOS A            | 0.3                               | 8.6            | 0.02         | 0.59                | 0.02             | 35.0                 |
| All Vehicles                    |      | 208                   | 1.1           | 0.079            | 5.8                  | LOS A            | 0.3                               | 8.6            | 0.08         | 0.56                | 0.08             | 34.9                 |

Site Level of Service (LOS) Method: Delay & Degree of Saturation (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Signalised Intersections.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

Intersection and Approach LOS values are based on average delay for all movements (v/c not used).

Roundabout Capacity Model: SIDRA Standard.

SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.

Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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## Section 2B.06 STOP Sign Applications

### Guidance:

01 *At intersections where a full stop is not necessary at all times, consideration should first be given to using less restrictive measures such as YIELD signs (see [Sections 2B.08](#) and [2B.09](#)).*

02 *The use of STOP signs on the minor-street approaches should be considered if engineering judgment indicates that a stop is always required because of one or more of the following conditions:*

- A. The vehicular traffic volumes on the through street or highway exceed 6,000 vehicles per day;*
- B. A restricted view exists that requires road users to stop in order to adequately observe conflicting traffic on the through street or highway; and/or*
- C. Crash records indicate that three or more crashes that are susceptible to correction by the installation of a STOP sign have been reported within a 12-month period, or that five or more such crashes have been reported within a 2-year period. Such crashes include right-angle collisions involving road users on the minor-street approach failing to yield the right-of-way to traffic on the through street or highway.*

### Support:

03 The use of STOP signs at grade crossings is described in [Sections 8B.04](#) and [8B.05](#).

## Section 2B.07 Multi-Way Stop Applications

### Support:

01 Multi-way stop control can be useful as a safety measure at intersections if certain traffic conditions exist. Safety concerns associated with multi-way stops include pedestrians, bicyclists, and all road users expecting other road users to stop. Multi-way stop control is used where the volume of traffic on the intersecting roads is approximately equal.

02 The restrictions on the use of STOP signs described in [Section 2B.04](#) also apply to multi-way stop applications.

### Guidance:

03 *The decision to install multi-way stop control should be based on an engineering study.*

04 *The following criteria should be considered in the engineering study for a multi-way STOP sign installation:*

- A. Where traffic control signals are justified, the multi-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.*
- B. Five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation. Such crashes include right-turn and left-turn collisions as well as right-angle collisions.*
- C. Minimum volumes:*
  - 1. The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day; and*
  - 2. The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least*



## MUTCD

*200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour; but*

- 3. If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the values provided in Items 1 and 2.*

*D. Where no single criterion is satisfied, but where Criteria B, C.1, and C.2 are all satisfied to 80 percent of the minimum values. Criterion C.3 is excluded from this condition.*

Option:

05 Other criteria that may be considered in an engineering study include:

- A. The need to control left-turn conflicts;
- B. The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes;
- C. Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop; and
- D. An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where multi-way stop control would improve traffic operational characteristics of the intersection.



# Urban Forestry Services

## BARTLETT CONSULTING

Divisions of The F.A. Bartlett Tree Expert Company

Title: **Strandberg Custom Homes and Design –  
The Crossings Cottage Development  
Tree Preservation Plan, and Tree Assessment  
Anacortes, Washington 98221**

**City of Anacortes**  
**Received by PCED**  
**Date: February 21, 2020**

Prepared for: Strandberg Custom Homes and Design  
Attn: Mr. Nels Strandberg  
2018 R Avenue.  
Anacortes, WA 98221

Prepared by: Urban Forestry Services | Bartlett Consulting  
Mr. James M. Barborinas  
ASCA Registered Consulting Arborist® #356  
ISA Certified Arborist® #PN-0135  
ISA Tree Risk Assessment Qualified

Date: January 27, 2020

CONTENTS: **Summary**  
**Introduction**  
**Findings and Recommendations**  
**Method of Assessment**  
**Tree Assessment / Preservation Site Plan**  
**Tree Assessment / Tree Unit Credit Calculation Matrix and Definitions**  
**General Tree Protection Guidelines**  
**Critical Root Zone Explanation**  
**Assumptions and Limiting Conditions**

### Summary

Seventy-eight (78) trees are to be retained within the wetland and wetland setback boundary area of a 21-lot subdivision development on a 5.2-acre (gross area) site at 1905 Anacopper Mine Road, Anacortes, Washington (The Crossings Cottage Development.) As proposed, the Crossings Cottage Development exceeds the City of Anacortes *16.50 Tree Preservation* requirements by 26 Tree Unit Credits.

General Tree Protection Guidelines for protecting the retained trees during construction are included with this report and Tree Preservation Plan.

*Note: The tree assessment and documentation for this site started in 2018 under the title, Anacopper Mine Road Project. That project was discontinued. The footprint of this new Crossings Cottages Development is almost the same as the footprint that was proposed for the Anacopper Mine Road Project. Tree retention onsite is actually only 8 Tree Unit Credits less than the original plan, still well above what the city requires. This report has been edited to reflect the changes to the project name and details.*

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## Introduction

As requested by Mr. Nels Strandberg of Strandberg Custom Homes and Design, Paul Thompson was onsite at 1905 Anacopper Mine Road, Anacortes, Washington, on January 19, 2018, for an initial meeting and walkover, and then completed the field work on January 31 and February 1, 2018 to assess 79 trees for their suitability to retain and be counted for Tree Unit



**Photo 1: This is a view west, from the lawn wetland setback across the wetland.**

Credits required by the city of Anacortes. Paul was also to determine tree protection requirements for the 5.2-acre project site. Trees are to be retained in the northwest area of this redevelopment project, surrounding a pond (wetland) and within the wetland setback an average of 110-feet from the wetland boundary. Additional trees on the lots might be retained but are not required to meet the Tree Unit Credit requirement. However, given the small size of the lots, additional tree retention is unlikely.

Paul was asked to provide an assessment of the health and condition for all retained trees documented for Tree Unit Credits and to determine the following:

1. The Tree Unit Credit requirement for the development project as per the City of Anacortes *16.50 Tree Preservation* code.
2. The Tree Unit Credits for all retained trees on this site.
3. Recommendations for tree protection as required by the City of Anacortes *16.50 Tree Preservation* code, and to provide an overall tree preservation plan.

The plants and trees growing on the wetland and wetland setback consist of species typically found in a wetland native treed area. Paul observed the tree species red alder, *Alnus rubra*, Scouler's willow, *Salix scouleriana*, western red cedar, *Thuja plicata*, and other species. Trees range 2 to 24-inches in diameter measured at 4.5-feet height. Tree vigor is fair due to the wet growing environment conditions. Paul observed stunted height growth where root systems were shallow relative to wetland water levels.

To maintain the condition and stability, it will be important to protect edge trees from construction impacts. Details for tree protection are provided in this report.

## Findings and Recommendations

Information on the vigor, structure, defects and Tree Unit Credits of each tree can be found in the enclosed Tree Assessment Matrix. Specific findings and recommendations are:

- **Tree Unit Credit Minimum, 208**

The City of Anacortes development code requires new development or re-development to retain and or plant trees to meet a standard of 1 Tree Credit Unit per 1,000 square feet of property (Chapter 16.50 *Tree Preservation*.) The total Tree Unit Credit requirement is calculated as follows:

- Determine the total public and private right-of-way area on the project property (including critical areas), approximately 19,799 square feet;
- Subtract the total right-of-way area from the gross area of the project (net Project area), gross area 226,512 square feet;
- Divide the net project area by 1,000 to determine the Tree Credit Unit requirement for the project, 208 Tree Unit Credits.

The Anacopper Mine Road Project has a Tree Unit Credit requirement of 208

See the enclosed Tree Assessment Matrix for details of the Tree Unit Credit calculations.

- **Tree Unit Credits Provided, 226**

Retained trees and/or planting new trees qualifies for Tree Unit Credits. The Tree Unit Credit value is calculated using the values provided in table 16.50.070(d) Part 3 of the 16.50 *Tree Preservation* code.

The Anacopper Mine Road Project has a total Tree Unit Credit value for retained trees of 234.

- **Tree Unit Credits Required, 0 (Nil)**

No additional Tree Unit Credits are required through tree planting.

- **Tree Protection Plan, seventy-eight (78) Trees**

Attached is a tree preservation plan for seventy-eight (78) retained trees on this site. Trees requiring specific tree protection are listed in the attached matrix. An ISA Certified Arborist® shall monitor the installation and maintenance of tree protection prior to and during construction.



Tree protection shall follow *16.50.100 Protection of trees before, during, and after development* of the code. Parts 4, 5 (a), (b), 6 (a) through (c) and 7 shall be used in protection of retained trees.

In addition, it is recommended the attached *General Tree Protection Guidelines* be implemented to protect any retained trees, including those not documented for Tree Unit Credit purposes. The attached Tree Preservation Plan and Tree Assessment Matrix show the Critical Root Zone (CRZ) graphic. See the attached *Critical Root Zone Explanation* sheet. This sheet differentiates between the Perimeter and Interior CRZ to define the tolerable limits of disturbance more clearly. The entire CRZ is generally considered to be an ideal area of soil required by a tree to maintain its physiological and structural condition. The entire CRZ is generally considered to be an ideal area of soil required by a tree to maintain its physiological and structural condition.

Avoid work within the CRZ. Work may be allowed with precautions and post disturbance care. Where excavation occurs within the CRZ an ISA Certified Arborist® from Urban Forestry Services, Inc., (UFS) may be retained to monitor and provide advice on ways of avoiding or treating for any impacts.

See the attached *General Tree Protection Guidelines* and *Critical Root Zone Explanation*. The *General Tree Protection Guidelines* do not supersede the City of Anacortes code *16.50 Tree Preservation*. Upon request, the UFS, Inc. ISA Certified Arborist® may provide additional CRZ protection measures as required, based on field findings, including specific trenching techniques, soil protection and post construction maintenance for each tree with an impacted CRZ.

## **Method of Assessment**

The methodology to evaluate these trees follows the criteria provided in the Tree Risk Assessment Qualification (TRAQ) training. TRAQ was developed, and is administered, by the International Society of Arboriculture (ISA) and follows the ISA's *Best Management Practices - Tree Risk Assessment publication*, and American National Standards Institute (ANSI) A300 (Part 9), *Tree, Shrub, and Other Woody Plant Management - Standard Practices (Tree Risk Assessment a. Tree Structure Assessment.)*

An IOS FileMaker Pro and web-based Google based application, called Urban Forest Metrix and Google MyMaps, is used to collect, and analyze data, and to produce a Tree Assessment Matrix report. Scaled site plans are produced using Google Maps. The Tree Assessment Matrix that we provide in this report simplifies the reporting of our findings in laymen terms to increase the understanding of our recommendations.

The Level 2 Basic Tree Assessment is a detailed visual inspection of a tree and its surrounding site, and a synthesis of the information collected. It requires that a tree risk assessor walk completely around the tree, looking at the site, buttress roots, trunk, and branches. This basic assessment may include the use of simple tools to gain additional information about the tree or defects. Defects found in a Level 2 Basic Tree Assessment may require a Level 3 assessment for further testing and analysis.

Tree condition is determined based on visual inspection of the above-ground portions of the trees. Of concern is trunk soundness, tree structure, bud fullness and color, twig length,

crown ratio, density of leaves, evidence of disease-causing bacteria, fungi or virus, deadwood, and dead or broken hanging branches.

While no one can predict with absolute certainty which trees will fail and which trees will remain healthy, by methodical process we can predict those most likely to fail by the conditions observed and take appropriate action to reduce or eliminate the potential hazard.

Each tree in this report is assigned a reference number. The reference numbers are shown on the enclosed site plan and correspond to the information in the enclosed Matrix.

Let us know if you have any questions regarding this Level 2, Basic Tree Assessment.

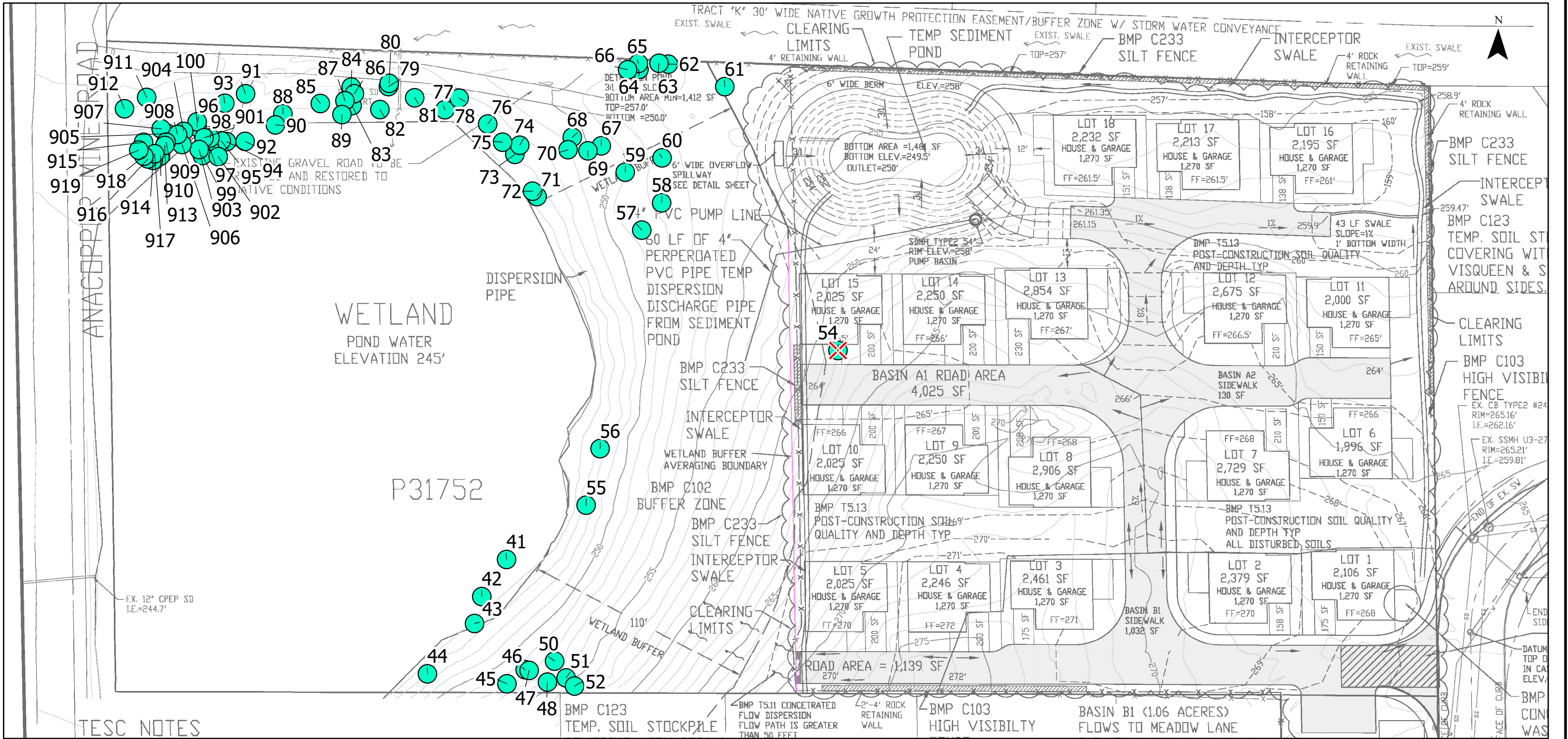
### **Literature Cited**

**ISA Tree Risk Assessment Manual**, Dunster, L., Smiley, T., Matheny, N., and Lilly, S. 2013 International Society of Arboriculture.

**ISA Best Management Practice, Tree Risk Assessment**, Smiley, T., Matheny, N., and Lilly, S. 2011 International Society of Arboriculture.

**Tree Risk Assessment in Urban Areas and Urban /Rural Interface**, Dunster, J. 2009 Pacific Northwest Chapter, International Society of Arboriculture.







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## Tree Assessment Matrix

### Strandberg - Anacopper Mine Road Project, Anacortes, WA

Inspector: Thompson  
ISA Certified Arborist  
ISA Tree Risk Assessment Qualified

| Tree                 | Species                                      | DBH (in)                                                                                                                                                                                                                                                                     | Dripline (ft) | CRZ (ft) | Vigor        | Structure | Risk   | Pres. Value | Recommendations |
|----------------------|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------|--------------|-----------|--------|-------------|-----------------|
| 41                   | Scouler's willow<br><i>Salix scouleriana</i> | 7.8, 6.5,<br>2.3, 3.2,<br>3.7, 5.3,                                                                                                                                                                                                                                          | 22.5          | 23.3     | Fair to Good | Fair      | Medium | High        |                 |
| Protected Category   |                                              | Notes and Defects                                                                                                                                                                                                                                                            |               |          |              |           |        |             |                 |
| Government Protected |                                              | This tree is growing on the bank of the existing pond. This tree consists of a cluster of trunks, all grouped together and originating from a single tree. The base of the tree is slightly under, ones by wave action, with the tree leaning slightly toward the northwest. |               |          |              |           |        |             |                 |



| Tree                 | Species                         | DBH (in)                                                                                                                                                                                            | Dripline (ft) | CRZ (ft) | Vigor        | Structure | Risk   | Pres. Value | Recommendations |
|----------------------|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------|--------------|-----------|--------|-------------|-----------------|
| 42                   | Red alder<br><i>Alnus rubra</i> | 11.7,<br>(11.7)                                                                                                                                                                                     | 12.2          | 11.7     | Fair to Good | Fair      | Medium | Medium      |                 |
| Protected Category   |                                 | Notes and Defects                                                                                                                                                                                   |               |          |              |           |        |             |                 |
| Government Protected |                                 | This tree leans toward the northeast. This tree currently appears stable, with surface roots visible up on the bank above the pond. Pond wave actions has slightly eroded the soil under this tree. |               |          |              |           |        |             |                 |







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## Tree Assessment Matrix

### Strandberg - Anacopper Mine Road Project, Anacortes, WA

Inspector: Thompson  
ISA Certified Arborist  
ISA Tree Risk Assessment Qualified

| Tree                 | Species                         | DBH (in)                                                                                                                                                                                                                                            | Dripline (ft) | CRZ (ft) | Vigor        | Structure | Risk   | Pres. Value | Recommendations |
|----------------------|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------|--------------|-----------|--------|-------------|-----------------|
| 43                   | Red alder<br><i>Alnus rubra</i> | 24, 13.6,<br>9, 10<br>(30.69)                                                                                                                                                                                                                       | 20.0          | 30.7     | Fair to Good | Fair      | Medium | Medium      |                 |
| Protected Category   |                                 | Notes and Defects                                                                                                                                                                                                                                   |               |          |              |           |        |             |                 |
| Government Protected |                                 | This tree is relatively large for the species. This tree has four primary codominant trunks, with included bark between the trunk. Currently this tree appears stable. The roots are visible on the surface above the pond area and along its bank. |               |          |              |           |        |             |                 |



| Tree                 | Species                        | DBH (in)                                                                                                                                                                                                                   | Dripline (ft) | CRZ (ft) | Vigor | Structure | Risk | Pres. Value | Recommendations |
|----------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------|-------|-----------|------|-------------|-----------------|
| 44                   | Willow<br><i>Salix species</i> | 3, 2, 2.3,<br>2.5, 2.1,<br>3.2, 4.5,                                                                                                                                                                                       | 11.0          | 12.6     | Fair  | Fair      | Low  | Medium      |                 |
| Protected Category   |                                | Notes and Defects                                                                                                                                                                                                          |               |          |       |           |      |             |                 |
| Government Protected |                                | This tree has a form that is typical of the species on the edge of riparian pond. This tree has multiple trunks that have partially failed to form an open and spread crown. This tree is located on the edge of the pond. |               |          |       |           |      |             |                 |





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## Tree Assessment Matrix

Strandberg - Anacopper Mine Road Project, Anacortes, WA

Inspector: Thompson  
ISA Certified Arborist  
ISA Tree Risk Assessment Qualified

| Tree                 | Species                         | DBH (in)                                                                                                                                            | Dripline (ft) | CRZ (ft) | Vigor | Structure | Risk   | Pres. Value | Recommendations |
|----------------------|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------|-------|-----------|--------|-------------|-----------------|
| 45                   | Red alder<br><i>Alnus rubra</i> | 9.9, 10.8<br>(14.65)                                                                                                                                | 14.1          | 14.7     | Fair  | Fair      | Medium | Medium      |                 |
| Protected Category   |                                 | Notes and Defects                                                                                                                                   |               |          |       |           |        |             |                 |
| Government Protected |                                 | This tree consists of two codominant trunks which are currently stable. I noticed the movement of both trunks is causing injury between the trunks. |               |          |       |           |        |             |                 |



| Tree                 | Species                         | DBH (in)                                                                        | Dripline (ft) | CRZ (ft) | Vigor        | Structure | Risk   | Pres. Value | Recommendations |
|----------------------|---------------------------------|---------------------------------------------------------------------------------|---------------|----------|--------------|-----------|--------|-------------|-----------------|
| 46                   | Red alder<br><i>Alnus rubra</i> | 8.5,<br>(8.5)                                                                   | 11.5          | 8.5      | Fair to Good | Fair      | Medium | Medium      |                 |
| Protected Category   |                                 | Notes and Defects                                                               |               |          |              |           |        |             |                 |
| Government Protected |                                 | This tree leans toward the north-northwest. Currently this lean appears stable. |               |          |              |           |        |             |                 |







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## Tree Assessment Matrix

Strandberg - Anacopper Mine Road Project, Anacortes, WA

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ISA Tree Risk Assessment Qualified

| Tree                      | Species                         | DBH (in)                 | Dripline (ft) | CRZ (ft) | Vigor | Structure | Risk | Pres. Value | Recommendations |
|---------------------------|---------------------------------|--------------------------|---------------|----------|-------|-----------|------|-------------|-----------------|
| 47                        | Red alder<br><i>Alnus rubra</i> | 2.8,<br>(2.8)            | 2.1           | 2.8      | Poor  | Fair      | Low  | Low         |                 |
| <b>Protected Category</b> |                                 | <b>Notes and Defects</b> |               |          |       |           |      |             |                 |
| Government Protected      |                                 | This tree is suppressed. |               |          |       |           |      |             |                 |



| Tree                      | Species                         | DBH (in)                 | Dripline (ft) | CRZ (ft) | Vigor | Structure    | Risk | Pres. Value | Recommendations |
|---------------------------|---------------------------------|--------------------------|---------------|----------|-------|--------------|------|-------------|-----------------|
| 48                        | Red alder<br><i>Alnus rubra</i> | 9.5,<br>(9.5)            | 9.8           | 9.5      | Fair  | Fair to Good | Low  | Medium      |                 |
| <b>Protected Category</b> |                                 | <b>Notes and Defects</b> |               |          |       |              |      |             |                 |
| Government Protected      |                                 |                          |               |          |       |              |      |             |                 |





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## Tree Assessment Matrix

Strandberg - Anacopper Mine Road Project, Anacortes, WA

Inspector: Thompson  
ISA Certified Arborist  
ISA Tree Risk Assessment Qualified

| Tree                      | Species                         | DBH (in)                 | Dripline (ft) | CRZ (ft) | Vigor        | Structure    | Risk | Pres. Value | Recommendations |
|---------------------------|---------------------------------|--------------------------|---------------|----------|--------------|--------------|------|-------------|-----------------|
| 49                        | Red alder<br><i>Alnus rubra</i> | 12.3,<br>(12.3)          | 14.7          | 12.3     | Fair to Good | Fair to Good | Low  | Medium      |                 |
| <b>Protected Category</b> |                                 | <b>Notes and Defects</b> |               |          |              |              |      |             |                 |
| Government Protected      |                                 |                          |               |          |              |              |      |             |                 |



| Tree                      | Species                         | DBH (in)                 | Dripline (ft) | CRZ (ft) | Vigor | Structure    | Risk | Pres. Value | Recommendations |
|---------------------------|---------------------------------|--------------------------|---------------|----------|-------|--------------|------|-------------|-----------------|
| 50                        | Red alder<br><i>Alnus rubra</i> | 10.5, 8.4<br>(13.45)     | 11.0          | 13.4     | Fair  | Fair to Good | Low  | Medium      |                 |
| <b>Protected Category</b> |                                 | <b>Notes and Defects</b> |               |          |       |              |      |             |                 |
| Government Protected      |                                 |                          |               |          |       |              |      |             |                 |







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## Tree Assessment Matrix

**Strandberg - Anacopper Mine Road Project, Anacortes, WA**

Inspector: Thompson  
ISA Certified Arborist  
ISA Tree Risk Assessment Qualified

| Tree                      | Species                         | DBH (in)                                     | Dripline (ft) | CRZ (ft) | Vigor | Structure | Risk   | Pres. Value | Recommendations |
|---------------------------|---------------------------------|----------------------------------------------|---------------|----------|-------|-----------|--------|-------------|-----------------|
| 51                        | Red alder<br><i>Alnus rubra</i> | 6.7,<br>(6.7)                                | 8.0           | 6.7      | Fair  | Fair      | Medium | Low         |                 |
| <b>Protected Category</b> |                                 | <b>Notes and Defects</b>                     |               |          |       |           |        |             |                 |
| Government Protected      |                                 | This tree has a stable lean toward the east. |               |          |       |           |        |             |                 |



| Tree                      | Species                         | DBH (in)                              | Dripline (ft) | CRZ (ft) | Vigor | Structure | Risk | Pres. Value | Recommendations |
|---------------------------|---------------------------------|---------------------------------------|---------------|----------|-------|-----------|------|-------------|-----------------|
| 52                        | Red alder<br><i>Alnus rubra</i> | 8.6,<br>(8.6)                         | 8.7           | 8.6      | Fair  | Fair      | Low  | Medium      |                 |
| <b>Protected Category</b> |                                 | <b>Notes and Defects</b>              |               |          |       |           |      |             |                 |
| Government Protected      |                                 | This tree leans toward the southeast. |               |          |       |           |      |             |                 |





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## Tree Assessment Matrix

**Strandberg - Anacopper Mine Road Project, Anacortes, WA**

Inspector: Thompson  
ISA Certified Arborist  
ISA Tree Risk Assessment Qualified

| Tree                      | Species                     | DBH (in)                 | Dripline (ft) | CRZ (ft) | Vigor        | Structure | Risk | Pres. Value | Recommendations |
|---------------------------|-----------------------------|--------------------------|---------------|----------|--------------|-----------|------|-------------|-----------------|
| 53                        | Cypress<br><i>Cupressus</i> | 32,<br>(32)              | 13.0          | 32.0     | Fair to Good | Fair      | Low  | Medium      |                 |
| <b>Protected Category</b> |                             | <b>Notes and Defects</b> |               |          |              |           |      |             |                 |
| Government Protected      |                             |                          |               |          |              |           |      |             |                 |



| Tree                      | Species                             | DBH (in)                                                                                              | Dripline (ft) | CRZ (ft) | Vigor        | Structure | Risk   | Pres. Value | Recommendations |
|---------------------------|-------------------------------------|-------------------------------------------------------------------------------------------------------|---------------|----------|--------------|-----------|--------|-------------|-----------------|
| 54                        | White poplar<br><i>Populus alba</i> | 13.2,<br>14.3,<br>12.4,                                                                               |               | 26.1     | Fair to Good | Fair      | Medium | Medium      |                 |
| <b>Protected Category</b> |                                     | <b>Notes and Defects</b>                                                                              |               |          |              |           |        |             |                 |
|                           |                                     | This tree has staining and a seam at the bifurcation point from grade level up to a height of 3-feet. |               |          |              |           |        |             |                 |





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Inspector: Thompson  
ISA Certified Arborist  
ISA Tree Risk Assessment Qualified

| Tree               | Species                         | DBH (in)                                                                                                                                                                | Dripline (ft) | CRZ (ft) | Vigor | Structure    | Risk   | Pres. Value | Recommendations |
|--------------------|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------|-------|--------------|--------|-------------|-----------------|
| 55                 | Red alder<br><i>Alnus rubra</i> | 12.2,<br>11.8<br>(16.97)                                                                                                                                                |               | 17.0     | Fair  | Poor to Fair | Medium | Low         |                 |
| Protected Category |                                 | Notes and Defects                                                                                                                                                       |               |          |       |              |        |             |                 |
|                    |                                 | This tree has trunk decay at mid height, with a longitudinal cavity and multiple cavities with decay on the trunk. Codominant trunk at the base also contains a cavity. |               |          |       |              |        |             |                 |

| Tree               | Species                         | DBH (in)          | Dripline (ft) | CRZ (ft) | Vigor | Structure    | Risk | Pres. Value | Recommendations |
|--------------------|---------------------------------|-------------------|---------------|----------|-------|--------------|------|-------------|-----------------|
| 56                 | Red alder<br><i>Alnus rubra</i> | 12.5,<br>(12.5)   |               | 12.5     | Fair  | Fair to Good | Low  | Medium      |                 |
| Protected Category |                                 | Notes and Defects |               |          |       |              |      |             |                 |
|                    |                                 |                   |               |          |       |              |      |             |                 |



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| Tree               | Species                                | DBH (in)          | Dripline (ft) | CRZ (ft) | Vigor        | Structure | Risk | Pres. Value | Recommendations |
|--------------------|----------------------------------------|-------------------|---------------|----------|--------------|-----------|------|-------------|-----------------|
| 57                 | Flowering crab<br><i>Malus species</i> | 4.7, 3.4<br>(5.8) |               | 5.8      | Fair to Good | Fair      | Low  | Medium      |                 |
| Protected Category |                                        | Notes and Defects |               |          |              |           |      |             |                 |
|                    |                                        |                   |               |          |              |           |      |             |                 |

| Tree               | Species                            | DBH (in)                                                                                                                                                                            | Dripline (ft) | CRZ (ft) | Vigor        | Structure | Risk | Pres. Value | Recommendations |
|--------------------|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------|--------------|-----------|------|-------------|-----------------|
| 58                 | White fir<br><i>Abies concolor</i> | 12.1,<br>(12.1)                                                                                                                                                                     |               | 12.1     | Poor to Fair | Fair      | Low  | Low         |                 |
| Protected Category |                                    | Notes and Defects                                                                                                                                                                   |               |          |              |           |      |             |                 |
|                    |                                    | This tree has a crack in the bark from ground level up to a height of 7-feet. I noticed a minor amount of sap flow at the base of this crack. The foliage density is slightly thin. |               |          |              |           |      |             |                 |





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| Tree               | Species                             | DBH (in)          | Dripline (ft) | CRZ (ft) | Vigor        | Structure    | Risk | Pres. Value | Recommendations |
|--------------------|-------------------------------------|-------------------|---------------|----------|--------------|--------------|------|-------------|-----------------|
| 59                 | Austrian pine<br><i>Pinus nigra</i> | 24.7,<br>(24.7)   |               | 24.7     | Fair to Good | Fair to Good | Low  | Medium      |                 |
| Protected Category |                                     | Notes and Defects |               |          |              |              |      |             |                 |
|                    |                                     |                   |               |          |              |              |      |             |                 |

| Tree               | Species                                                   | DBH (in)                                                                                                                             | Dripline (ft) | CRZ (ft) | Vigor        | Structure    | Risk | Pres. Value | Recommendations |
|--------------------|-----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|---------------|----------|--------------|--------------|------|-------------|-----------------|
| 60                 | Flowering plum<br><i>Prunus cerisifera</i><br><i>form</i> | 3.7,<br>(3.7)                                                                                                                        |               | 3.7      | Fair to Good | Poor to Fair | Low  | Low         |                 |
| Protected Category |                                                           | Notes and Defects                                                                                                                    |               |          |              |              |      |             |                 |
|                    |                                                           | This tree has copious basal shoots, likely resulting from a response to lawn maintenance injuries. Crown has poor to fair structure. |               |          |              |              |      |             |                 |



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| Tree                      | Species                                | DBH (in)                                                                       | Dripline (ft) | CRZ (ft) | Vigor        | Structure | Risk | Pres. Value | Recommendations |
|---------------------------|----------------------------------------|--------------------------------------------------------------------------------|---------------|----------|--------------|-----------|------|-------------|-----------------|
| 61                        | Flowering crab<br><i>Malus species</i> | 7.3,<br>(7.3)                                                                  |               | 7.3      | Fair to Good | Fair      | Low  | Medium      |                 |
| <b>Protected Category</b> |                                        | <b>Notes and Defects</b>                                                       |               |          |              |           |      |             |                 |
|                           |                                        | This tree has a dramatic lean toward the north. Currently this tree is stable. |               |          |              |           |      |             |                 |

| Tree                      | Species                                     | DBH (in)                 | Dripline (ft) | CRZ (ft) | Vigor | Structure    | Risk | Pres. Value | Recommendations |
|---------------------------|---------------------------------------------|--------------------------|---------------|----------|-------|--------------|------|-------------|-----------------|
| 62                        | Douglas fir<br><i>Pseudotsuga menziesii</i> | 17.2,<br>(17.2)          |               | 17.2     | Fair  | Fair to Good | Low  | Medium      |                 |
| <b>Protected Category</b> |                                             | <b>Notes and Defects</b> |               |          |       |              |      |             |                 |
|                           |                                             |                          |               |          |       |              |      |             |                 |





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| Tree               | Species                                   | DBH (in)           | Dripline (ft) | CRZ (ft) | Vigor | Structure    | Risk | Pres. Value | Recommendations |
|--------------------|-------------------------------------------|--------------------|---------------|----------|-------|--------------|------|-------------|-----------------|
| 63                 | Western red cedar<br><i>Thuja plicata</i> | 6.5, 7.4<br>(9.85) |               | 9.8      | Fair  | Fair to Good | Low  | Medium      |                 |
| Protected Category |                                           | Notes and Defects  |               |          |       |              |      |             |                 |
|                    |                                           |                    |               |          |       |              |      |             |                 |

| Tree               | Species                                   | DBH (in)          | Dripline (ft) | CRZ (ft) | Vigor | Structure    | Risk | Pres. Value | Recommendations |
|--------------------|-------------------------------------------|-------------------|---------------|----------|-------|--------------|------|-------------|-----------------|
| 64                 | Western red cedar<br><i>Thuja plicata</i> | 7.4,<br>(7.4)     |               | 7.4      | Fair  | Fair to Good | Low  | Medium      |                 |
| Protected Category |                                           | Notes and Defects |               |          |       |              |      |             |                 |
|                    |                                           |                   |               |          |       |              |      |             |                 |



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| Tree               | Species                                   | DBH (in)          | Dripline (ft) | CRZ (ft) | Vigor | Structure    | Risk | Pres. Value | Recommendations |
|--------------------|-------------------------------------------|-------------------|---------------|----------|-------|--------------|------|-------------|-----------------|
| 65                 | Western red cedar<br><i>Thuja plicata</i> | 9.3,<br>(9.3)     |               | 9.3      | Fair  | Fair to Good | Low  | Medium      |                 |
| Protected Category |                                           | Notes and Defects |               |          |       |              |      |             |                 |
|                    |                                           |                   |               |          |       |              |      |             |                 |

| Tree               | Species                                   | DBH (in)          | Dripline (ft) | CRZ (ft) | Vigor | Structure    | Risk | Pres. Value | Recommendations |
|--------------------|-------------------------------------------|-------------------|---------------|----------|-------|--------------|------|-------------|-----------------|
| 66                 | Western red cedar<br><i>Thuja plicata</i> | 11.3,<br>(11.3)   |               | 11.3     | Fair  | Fair to Good | Low  | Medium      |                 |
| Protected Category |                                           | Notes and Defects |               |          |       |              |      |             |                 |
|                    |                                           |                   |               |          |       |              |      |             |                 |





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| Tree               | Species                                 | DBH (in)                                                                                                                                                            | Dripline (ft) | CRZ (ft) | Vigor | Structure    | Risk | Pres. Value | Recommendations |
|--------------------|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------|-------|--------------|------|-------------|-----------------|
| 67                 | European white<br><i>Betula pendula</i> | 2.6,<br>(2.6)                                                                                                                                                       |               | 2.6      | Fair  | Poor to Fair | Low  | Low         |                 |
| Protected Category |                                         | Notes and Defects                                                                                                                                                   |               |          |       |              |      |             |                 |
|                    |                                         | This tree leans toward the north. I noticed that this tree is moderately suppressed, with a low rate of trunk taper making it susceptible to failure in high winds. |               |          |       |              |      |             |                 |

| Tree               | Species                                 | DBH (in)                                                                                                                                                            | Dripline (ft) | CRZ (ft) | Vigor | Structure    | Risk | Pres. Value | Recommendations |
|--------------------|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------|-------|--------------|------|-------------|-----------------|
| 68                 | European white<br><i>Betula pendula</i> | 6.5,<br>(6.5)                                                                                                                                                       |               | 6.5      | Fair  | Poor to Fair | Low  | Low         |                 |
| Protected Category |                                         | Notes and Defects                                                                                                                                                   |               |          |       |              |      |             |                 |
|                    |                                         | This tree leans toward the north. I noticed that this tree is moderately suppressed, with a low rate of trunk taper making it susceptible to failure in high winds. |               |          |       |              |      |             |                 |



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| Tree               | Species                                 | DBH (in)          | Dripline (ft) | CRZ (ft) | Vigor        | Structure | Risk   | Pres. Value | Recommendations |
|--------------------|-----------------------------------------|-------------------|---------------|----------|--------------|-----------|--------|-------------|-----------------|
| 69                 | European white<br><i>Betula pendula</i> | 13.7,<br>(13.7)   |               | 13.7     | Fair to Good | Fair      | Medium | Medium      |                 |
| Protected Category |                                         | Notes and Defects |               |          |              |           |        |             |                 |
|                    |                                         |                   |               |          |              |           |        |             |                 |

| Tree               | Species                                     | DBH (in)          | Dripline (ft) | CRZ (ft) | Vigor        | Structure    | Risk | Pres. Value | Recommendations |
|--------------------|---------------------------------------------|-------------------|---------------|----------|--------------|--------------|------|-------------|-----------------|
| 70                 | Douglas fir<br><i>Pseudotsuga menziesii</i> | 23.5,<br>(23.5)   |               | 23.5     | Fair to Good | Fair to Good | Low  | Medium      |                 |
| Protected Category |                                             | Notes and Defects |               |          |              |              |      |             |                 |
|                    |                                             |                   |               |          |              |              |      |             |                 |





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## Tree Assessment Matrix

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| Tree                      | Species                        | DBH (in)                                                                                                        | Dripline (ft) | CRZ (ft) | Vigor        | Structure    | Risk | Pres. Value | Recommendations |
|---------------------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------|---------------|----------|--------------|--------------|------|-------------|-----------------|
| 71                        | Willow<br><i>Salix species</i> | 3.2,<br>(3.2)                                                                                                   |               | 3.2      | Fair to Good | Poor to Fair | Low  | Medium      |                 |
| <b>Protected Category</b> |                                | <b>Notes and Defects</b>                                                                                        |               |          |              |              |      |             |                 |
|                           |                                | Tree is regenerated from a failed willow. Tree leans toward the east-southeast, with a scar on the lower trunk. |               |          |              |              |      |             |                 |

| Tree                      | Species                         | DBH (in)                 | Dripline (ft) | CRZ (ft) | Vigor        | Structure    | Risk | Pres. Value | Recommendations |
|---------------------------|---------------------------------|--------------------------|---------------|----------|--------------|--------------|------|-------------|-----------------|
| 72                        | Red alder<br><i>Alnus rubra</i> | 11.8,<br>(11.8)          |               | 11.8     | Fair to Good | Fair to Good | Low  | Medium      |                 |
| <b>Protected Category</b> |                                 | <b>Notes and Defects</b> |               |          |              |              |      |             |                 |
|                           |                                 |                          |               |          |              |              |      |             |                 |



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## Tree Assessment Matrix

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| Tree               | Species                                      | DBH (in)                                                    | Dripline (ft) | CRZ (ft) | Vigor | Structure | Risk   | Pres. Value | Recommendations |
|--------------------|----------------------------------------------|-------------------------------------------------------------|---------------|----------|-------|-----------|--------|-------------|-----------------|
| 73                 | Scouler's willow<br><i>Salix scouleriana</i> | 5.8, 5.3,<br>4.7, 2.7,<br>2.3                               |               | 9.8      | Fair  | Fair      | Medium | Medium      |                 |
| Protected Category |                                              | Notes and Defects                                           |               |          |       |           |        |             |                 |
|                    |                                              | Located on the shoreline of the pond. Multi-trunked willow. |               |          |       |           |        |             |                 |

| Tree               | Species                         | DBH (in)                                                                           | Dripline (ft) | CRZ (ft) | Vigor | Structure | Risk   | Pres. Value | Recommendations |
|--------------------|---------------------------------|------------------------------------------------------------------------------------|---------------|----------|-------|-----------|--------|-------------|-----------------|
| 74                 | Red alder<br><i>Alnus rubra</i> | 6.4,<br>(6.4)                                                                      |               | 6.4      | Fair  | Fair      | Medium | Low         |                 |
| Protected Category |                                 | Notes and Defects                                                                  |               |          |       |           |        |             |                 |
|                    |                                 | This tree is moderately suppressed by the crown of the adjacent multi-trunks tree. |               |          |       |           |        |             |                 |





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| Tree               | Species                         | DBH (in)                   | Dripline (ft) | CRZ (ft) | Vigor        | Structure    | Risk | Pres. Value | Recommendations |
|--------------------|---------------------------------|----------------------------|---------------|----------|--------------|--------------|------|-------------|-----------------|
| 75                 | Red alder<br><i>Alnus rubra</i> | 8.7,<br>10.6,<br>7.7, 2.7, |               | 16.3     | Fair to Good | Fair to Good | Low  | Medium      |                 |
| Protected Category |                                 | Notes and Defects          |               |          |              |              |      |             |                 |
|                    |                                 |                            |               |          |              |              |      |             |                 |

| Tree               | Species                         | DBH (in)                 | Dripline (ft) | CRZ (ft) | Vigor        | Structure | Risk   | Pres. Value | Recommendations |
|--------------------|---------------------------------|--------------------------|---------------|----------|--------------|-----------|--------|-------------|-----------------|
| 76                 | Red alder<br><i>Alnus rubra</i> | 10.3,<br>10.4<br>(14.64) |               | 14.6     | Fair to Good | Fair      | Medium | Medium      |                 |
| Protected Category |                                 | Notes and Defects        |               |          |              |           |        |             |                 |
|                    |                                 |                          |               |          |              |           |        |             |                 |



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## Tree Assessment Matrix

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| Tree               | Species                         | DBH (in)          | Dripline (ft) | CRZ (ft) | Vigor        | Structure | Risk   | Pres. Value | Recommendations |
|--------------------|---------------------------------|-------------------|---------------|----------|--------------|-----------|--------|-------------|-----------------|
| 77                 | Red alder<br><i>Alnus rubra</i> | 9.2,<br>(9.2)     |               | 9.2      | Fair to Good | Fair      | Medium | Medium      |                 |
| Protected Category |                                 | Notes and Defects |               |          |              |           |        |             |                 |
|                    |                                 |                   |               |          |              |           |        |             |                 |

| Tree               | Species                         | DBH (in)          | Dripline (ft) | CRZ (ft) | Vigor        | Structure | Risk   | Pres. Value | Recommendations |
|--------------------|---------------------------------|-------------------|---------------|----------|--------------|-----------|--------|-------------|-----------------|
| 78                 | Red alder<br><i>Alnus rubra</i> | 13.6,<br>(13.6)   |               | 13.6     | Fair to Good | Fair      | Medium | Medium      |                 |
| Protected Category |                                 | Notes and Defects |               |          |              |           |        |             |                 |
|                    |                                 |                   |               |          |              |           |        |             |                 |





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| Tree               | Species                         | DBH (in)                                                                                                                                                                                             | Dripline (ft) | CRZ (ft) | Vigor | Structure | Risk   | Pres. Value | Recommendations |
|--------------------|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------|-------|-----------|--------|-------------|-----------------|
| 79                 | Red alder<br><i>Alnus rubra</i> | 7.6,<br>14.3,<br>9.7, 4.8                                                                                                                                                                            |               | 19.5     | Fair  | Fair      | Medium | Medium      |                 |
| Protected Category |                                 | Notes and Defects                                                                                                                                                                                    |               |          |       |           |        |             |                 |
|                    |                                 | This tree has multiple trunks originating from the same point, with included bark between the trunk. Also, the lower trunk has had a large branch removed leading to the development of basal decay. |               |          |       |           |        |             |                 |

| Tree               | Species                         | DBH (in)          | Dripline (ft) | CRZ (ft) | Vigor        | Structure    | Risk | Pres. Value | Recommendations |
|--------------------|---------------------------------|-------------------|---------------|----------|--------------|--------------|------|-------------|-----------------|
| 80                 | Red alder<br><i>Alnus rubra</i> | 9.8,<br>(9.8)     |               | 9.8      | Fair to Good | Fair to Good | Low  | Medium      |                 |
| Protected Category |                                 | Notes and Defects |               |          |              |              |      |             |                 |
|                    |                                 |                   |               |          |              |              |      |             |                 |



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| Tree               | Species                         | DBH (in)          | Dripline (ft) | CRZ (ft) | Vigor        | Structure    | Risk | Pres. Value | Recommendations |
|--------------------|---------------------------------|-------------------|---------------|----------|--------------|--------------|------|-------------|-----------------|
| 81                 | Red alder<br><i>Alnus rubra</i> | 9.3,<br>(9.3)     |               | 9.3      | Fair to Good | Fair to Good | Low  | Medium      |                 |
| Protected Category |                                 | Notes and Defects |               |          |              |              |      |             |                 |
|                    |                                 |                   |               |          |              |              |      |             |                 |

| Tree               | Species                         | DBH (in)                                             | Dripline (ft) | CRZ (ft) | Vigor | Structure | Risk | Pres. Value | Recommendations |
|--------------------|---------------------------------|------------------------------------------------------|---------------|----------|-------|-----------|------|-------------|-----------------|
| 82                 | Red alder<br><i>Alnus rubra</i> | 8.1, 7.9<br>(11.31)                                  |               | 11.3     | Fair  | Fair      | Low  | Medium      |                 |
| Protected Category |                                 | Notes and Defects                                    |               |          |       |           |      |             |                 |
|                    |                                 | South trunk and associated crown bows over the pond. |               |          |       |           |      |             |                 |





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| Tree               | Species                        | DBH (in)          | Dripline (ft) | CRZ (ft) | Vigor | Structure | Risk | Pres. Value | Recommendations |
|--------------------|--------------------------------|-------------------|---------------|----------|-------|-----------|------|-------------|-----------------|
| 83                 | Willow<br><i>Salix species</i> | 3.3,<br>(3.3)     |               | 3.3      | Fair  | Fair      | Low  | Medium      |                 |
| Protected Category |                                | Notes and Defects |               |          |       |           |      |             |                 |
|                    |                                |                   |               |          |       |           |      |             |                 |

| Tree               | Species                         | DBH (in)          | Dripline (ft) | CRZ (ft) | Vigor        | Structure | Risk | Pres. Value | Recommendations |
|--------------------|---------------------------------|-------------------|---------------|----------|--------------|-----------|------|-------------|-----------------|
| 84                 | Red alder<br><i>Alnus rubra</i> | 10.1,<br>(10.1)   |               | 10.1     | Fair to Good | Fair      | Low  | Medium      |                 |
| Protected Category |                                 | Notes and Defects |               |          |              |           |      |             |                 |
|                    |                                 |                   |               |          |              |           |      |             |                 |



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## Tree Assessment Matrix

**Strandberg - Anacopper Mine Road Project, Anacortes, WA**

Inspector: Thompson  
ISA Certified Arborist  
ISA Tree Risk Assessment Qualified

| Tree               | Species                         | DBH (in)          | Dripline (ft) | CRZ (ft) | Vigor | Structure | Risk | Pres. Value | Recommendations |
|--------------------|---------------------------------|-------------------|---------------|----------|-------|-----------|------|-------------|-----------------|
| 85                 | Red alder<br><i>Alnus rubra</i> | 4.9,<br>(4.9)     |               | 4.9      | Fair  | Fair      | Low  | Medium      |                 |
| Protected Category |                                 | Notes and Defects |               |          |       |           |      |             |                 |
|                    |                                 |                   |               |          |       |           |      |             |                 |

| Tree               | Species                        | DBH (in)                                                                                 | Dripline (ft) | CRZ (ft) | Vigor        | Structure | Risk   | Pres. Value | Recommendations |
|--------------------|--------------------------------|------------------------------------------------------------------------------------------|---------------|----------|--------------|-----------|--------|-------------|-----------------|
| 86                 | Willow<br><i>Salix species</i> | 11.8,<br>(11.8)                                                                          |               | 11.8     | Fair to Good | Fair      | Medium | Medium      |                 |
| Protected Category |                                | Notes and Defects                                                                        |               |          |              |           |        |             |                 |
|                    |                                | This tree leans toward the southwest, over the pond. Currently this tree appears stable. |               |          |              |           |        |             |                 |





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## Tree Assessment Matrix

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Inspector: Thompson  
ISA Certified Arborist  
ISA Tree Risk Assessment Qualified

| Tree               | Species                         | DBH (in)                    | Dripline (ft) | CRZ (ft) | Vigor | Structure | Risk   | Pres. Value | Recommendations |
|--------------------|---------------------------------|-----------------------------|---------------|----------|-------|-----------|--------|-------------|-----------------|
| 87                 | Red alder<br><i>Alnus rubra</i> | 9.3, 6.8,<br>8.4<br>(14.26) |               | 14.3     | Fair  | Fair      | Medium | Medium      |                 |
| Protected Category |                                 | Notes and Defects           |               |          |       |           |        |             |                 |
|                    |                                 |                             |               |          |       |           |        |             |                 |

| Tree               | Species                         | DBH (in)          | Dripline (ft) | CRZ (ft) | Vigor        | Structure    | Risk | Pres. Value | Recommendations |
|--------------------|---------------------------------|-------------------|---------------|----------|--------------|--------------|------|-------------|-----------------|
| 88                 | Red alder<br><i>Alnus rubra</i> | 11.4,<br>(11.4)   |               | 11.4     | Fair to Good | Fair to Good | Low  | Medium      |                 |
| Protected Category |                                 | Notes and Defects |               |          |              |              |      |             |                 |
|                    |                                 |                   |               |          |              |              |      |             |                 |



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## Tree Assessment Matrix

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Inspector: Thompson  
ISA Certified Arborist  
ISA Tree Risk Assessment Qualified

| Tree               | Species                        | DBH (in)                                                | Dripline (ft) | CRZ (ft) | Vigor | Structure | Risk | Pres. Value | Recommendations |
|--------------------|--------------------------------|---------------------------------------------------------|---------------|----------|-------|-----------|------|-------------|-----------------|
| 89                 | Willow<br><i>Salix species</i> | 2.7, 2.5,<br>2.2, 3.1,<br>3.5                           |               | 6.3      | Fair  | Fair      | Low  | Medium      |                 |
| Protected Category |                                | Notes and Defects                                       |               |          |       |           |      |             |                 |
|                    |                                | Located on the pond edge, with a lean toward the south. |               |          |       |           |      |             |                 |

| Tree               | Species                         | DBH (in)                                                                                                                                                                                                    | Dripline (ft) | CRZ (ft) | Vigor | Structure    | Risk   | Pres. Value | Recommendations |
|--------------------|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------|-------|--------------|--------|-------------|-----------------|
| 90                 | Red alder<br><i>Alnus rubra</i> | 12.7,<br>8.8, 10.3<br>(18.57)                                                                                                                                                                               |               | 18.6     | Fair  | Poor to Fair | Medium | Low         |                 |
| Protected Category |                                 | Notes and Defects                                                                                                                                                                                           |               |          |       |              |        |             |                 |
|                    |                                 | This tree has had the upper trunk and fail out of one of the leaders in the past. The remaining two leaders have fair structure. In the lower trunk, I noticed seams between the leaders and included bark. |               |          |       |              |        |             |                 |





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## Tree Assessment Matrix

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ISA Tree Risk Assessment Qualified

| Tree                      | Species                         | DBH (in)                                                             | Dripline (ft) | CRZ (ft) | Vigor        | Structure | Risk   | Pres. Value | Recommendations |
|---------------------------|---------------------------------|----------------------------------------------------------------------|---------------|----------|--------------|-----------|--------|-------------|-----------------|
| 91                        | Red alder<br><i>Alnus rubra</i> | 6.8,<br>(6.8)                                                        |               | 6.8      | Fair to Good | Fair      | Medium | Medium      |                 |
| <b>Protected Category</b> |                                 | <b>Notes and Defects</b>                                             |               |          |              |           |        |             |                 |
|                           |                                 | This tree leans toward the northwest. Currently this lean is stable. |               |          |              |           |        |             |                 |

| Tree                      | Species                         | DBH (in)                                                                                                                              | Dripline (ft) | CRZ (ft) | Vigor | Structure    | Risk | Pres. Value | Recommendations |
|---------------------------|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|---------------|----------|-------|--------------|------|-------------|-----------------|
| 92                        | Red alder<br><i>Alnus rubra</i> | 4.7,<br>(4.7)                                                                                                                         |               | 4.7      | Fair  | Poor to Fair | Low  | Low         |                 |
| <b>Protected Category</b> |                                 | <b>Notes and Defects</b>                                                                                                              |               |          |       |              |      |             |                 |
|                           |                                 | Remaining leader following the removal of two larger leaders. Poor to fair structure, with malformed trunk lack strong single leader. |               |          |       |              |      |             |                 |



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## Tree Assessment Matrix

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ISA Tree Risk Assessment Qualified

| Tree                      | Species                        | DBH (in)                                                                                                     | Dripline (ft) | CRZ (ft) | Vigor | Structure    | Risk   | Pres. Value | Recommendations |
|---------------------------|--------------------------------|--------------------------------------------------------------------------------------------------------------|---------------|----------|-------|--------------|--------|-------------|-----------------|
| 93                        | Willow<br><i>Salix species</i> | 7.4,<br>(7.4)                                                                                                |               | 7.4      | Fair  | Poor to Fair | Medium | Low         |                 |
| <b>Protected Category</b> |                                | <b>Notes and Defects</b>                                                                                     |               |          |       |              |        |             |                 |
|                           |                                | Strong offset crown toward the northwest, with a sharply bent and bowed trunk aligned in the same direction. |               |          |       |              |        |             |                 |

| Tree                      | Species                         | DBH (in)                                                                                           | Dripline (ft) | CRZ (ft) | Vigor | Structure | Risk | Pres. Value | Recommendations |
|---------------------------|---------------------------------|----------------------------------------------------------------------------------------------------|---------------|----------|-------|-----------|------|-------------|-----------------|
| 94                        | Red alder<br><i>Alnus rubra</i> | 9.7,<br>(9.7)                                                                                      |               | 9.7      | Fair  | Poor      | Low  | Low         |                 |
| <b>Protected Category</b> |                                 | <b>Notes and Defects</b>                                                                           |               |          |       |           |      |             |                 |
|                           |                                 | This tree has been topped, with the remaining branching and crown offset toward and over the pond. |               |          |       |           |      |             |                 |





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Inspector: Thompson  
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ISA Tree Risk Assessment Qualified

| Tree               | Species                         | DBH (in)                                    | Dripline (ft) | CRZ (ft) | Vigor        | Structure | Risk | Pres. Value | Recommendations |
|--------------------|---------------------------------|---------------------------------------------|---------------|----------|--------------|-----------|------|-------------|-----------------|
| 95                 | Red alder<br><i>Alnus rubra</i> | 3.7,<br>(3.7)                               |               | 3.7      | Poor to Fair | Poor      | Low  | Low         |                 |
| Protected Category |                                 | Notes and Defects                           |               |          |              |           |      |             |                 |
|                    |                                 | This tree has a dramatic bow over the pond. |               |          |              |           |      |             |                 |

| Tree               | Species                         | DBH (in)          | Dripline (ft) | CRZ (ft) | Vigor | Structure | Risk | Pres. Value | Recommendations |
|--------------------|---------------------------------|-------------------|---------------|----------|-------|-----------|------|-------------|-----------------|
| 96                 | Red alder<br><i>Alnus rubra</i> | 7.1,<br>(7.1)     |               | 7.1      | Fair  | Fair      | Low  | Medium      |                 |
| Protected Category |                                 | Notes and Defects |               |          |       |           |      |             |                 |
|                    |                                 |                   |               |          |       |           |      |             |                 |



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## Tree Assessment Matrix

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ISA Tree Risk Assessment Qualified

| Tree               | Species                         | DBH (in)          | Dripline (ft) | CRZ (ft) | Vigor | Structure | Risk | Pres. Value | Recommendations |
|--------------------|---------------------------------|-------------------|---------------|----------|-------|-----------|------|-------------|-----------------|
| 97                 | Red alder<br><i>Alnus rubra</i> | 6.5,<br>(6.5)     |               | 6.5      | Fair  | Fair      | Low  | Medium      |                 |
| Protected Category |                                 | Notes and Defects |               |          |       |           |      |             |                 |
|                    |                                 |                   |               |          |       |           |      |             |                 |

| Tree               | Species                         | DBH (in)                          | Dripline (ft) | CRZ (ft) | Vigor | Structure    | Risk | Pres. Value | Recommendations |
|--------------------|---------------------------------|-----------------------------------|---------------|----------|-------|--------------|------|-------------|-----------------|
| 98                 | Red alder<br><i>Alnus rubra</i> | 3.1,<br>(3.1)                     |               | 3.1      | Fair  | Poor to Fair | Low  | Medium      |                 |
| Protected Category |                                 | Notes and Defects                 |               |          |       |              |      |             |                 |
|                    |                                 | This tree is slightly suppressed. |               |          |       |              |      |             |                 |





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| Tree               | Species                         | DBH (in)          | Dripline (ft) | CRZ (ft) | Vigor | Structure | Risk | Pres. Value | Recommendations |
|--------------------|---------------------------------|-------------------|---------------|----------|-------|-----------|------|-------------|-----------------|
| 99                 | Red alder<br><i>Alnus rubra</i> | 5.3,<br>(5.3)     |               | 5.3      | Fair  | Fair      | Low  | Medium      |                 |
| Protected Category |                                 | Notes and Defects |               |          |       |           |      |             |                 |
|                    |                                 |                   |               |          |       |           |      |             |                 |

| Tree               | Species                         | DBH (in)          | Dripline (ft) | CRZ (ft) | Vigor | Structure | Risk | Pres. Value | Recommendations |
|--------------------|---------------------------------|-------------------|---------------|----------|-------|-----------|------|-------------|-----------------|
| 100                | Red alder<br><i>Alnus rubra</i> | 9.2, 7.7<br>(12)  |               | 12.0     | Fair  | Fair      | Low  | Medium      |                 |
| Protected Category |                                 | Notes and Defects |               |          |       |           |      |             |                 |
|                    |                                 |                   |               |          |       |           |      |             |                 |



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| Tree               | Species                         | DBH (in)          | Dripline (ft) | CRZ (ft) | Vigor | Structure | Risk | Pres. Value | Recommendations |
|--------------------|---------------------------------|-------------------|---------------|----------|-------|-----------|------|-------------|-----------------|
| 901                | Red alder<br><i>Alnus rubra</i> | 7.3,<br>(7.3)     |               | 7.3      | Fair  | Fair      | Low  | Medium      |                 |
| Protected Category |                                 | Notes and Defects |               |          |       |           |      |             |                 |
|                    |                                 |                   |               |          |       |           |      |             |                 |

| Tree               | Species                         | DBH (in)                                                           | Dripline (ft) | CRZ (ft) | Vigor        | Structure | Risk | Pres. Value | Recommendations |
|--------------------|---------------------------------|--------------------------------------------------------------------|---------------|----------|--------------|-----------|------|-------------|-----------------|
| 902                | Red alder<br><i>Alnus rubra</i> | 3.9,<br>(3.9)                                                      |               | 3.9      | Poor to Fair | Fair      | Low  | Medium      |                 |
| Protected Category |                                 | Notes and Defects                                                  |               |          |              |           |      |             |                 |
|                    |                                 | The tree is slightly suppressed, with a lean toward the southeast. |               |          |              |           |      |             |                 |





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## Tree Assessment Matrix

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Inspector: Thompson  
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ISA Tree Risk Assessment Qualified

| Tree                      | Species                         | DBH (in)                                                            | Dripline (ft) | CRZ (ft) | Vigor        | Structure | Risk | Pres. Value | Recommendations |
|---------------------------|---------------------------------|---------------------------------------------------------------------|---------------|----------|--------------|-----------|------|-------------|-----------------|
| 903                       | Red alder<br><i>Alnus rubra</i> | 3.8,<br>(3.8)                                                       |               | 3.8      | Poor to Fair | Fair      | Low  | Medium      |                 |
| <b>Protected Category</b> |                                 | <b>Notes and Defects</b>                                            |               |          |              |           |      |             |                 |
|                           |                                 | The tree leans toward the southeast. Currently this lean is stable. |               |          |              |           |      |             |                 |

| Tree                      | Species                         | DBH (in)                                                                                     | Dripline (ft) | CRZ (ft) | Vigor        | Structure | Risk | Pres. Value | Recommendations |
|---------------------------|---------------------------------|----------------------------------------------------------------------------------------------|---------------|----------|--------------|-----------|------|-------------|-----------------|
| 904                       | Red alder<br><i>Alnus rubra</i> | 2.5,<br>(2.5)                                                                                |               | 2.5      | Poor to Fair | Fair      | Low  | Medium      |                 |
| <b>Protected Category</b> |                                 | <b>Notes and Defects</b>                                                                     |               |          |              |           |      |             |                 |
|                           |                                 | The tree leans toward the northwest. Currently this lean is stable. This tree is suppressed. |               |          |              |           |      |             |                 |



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## Tree Assessment Matrix

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| Tree               | Species                         | DBH (in)                                                                                                                      | Dripline (ft) | CRZ (ft) | Vigor        | Structure | Risk | Pres. Value | Recommendations |
|--------------------|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------|---------------|----------|--------------|-----------|------|-------------|-----------------|
| 905                | Red alder<br><i>Alnus rubra</i> | 2.7,<br>(2.7)                                                                                                                 |               | 2.7      | Poor to Fair | Fair      | Low  | Medium      |                 |
| Protected Category |                                 | Notes and Defects                                                                                                             |               |          |              |           |      |             |                 |
|                    |                                 | The tree leans toward the northwest. Currently this lean is stable. This tree is suppressed, with dieback in the upper crown. |               |          |              |           |      |             |                 |

| Tree               | Species                         | DBH (in)          | Dripline (ft) | CRZ (ft) | Vigor | Structure | Risk | Pres. Value | Recommendations |
|--------------------|---------------------------------|-------------------|---------------|----------|-------|-----------|------|-------------|-----------------|
| 906                | Red alder<br><i>Alnus rubra</i> | 5.3,<br>(5.3)     |               | 5.3      | Fair  | Fair      | Low  | Medium      |                 |
| Protected Category |                                 | Notes and Defects |               |          |       |           |      |             |                 |
|                    |                                 |                   |               |          |       |           |      |             |                 |





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| Tree                      | Species                         | DBH (in)                              | Dripline (ft) | CRZ (ft) | Vigor | Structure | Risk | Pres. Value | Recommendations |
|---------------------------|---------------------------------|---------------------------------------|---------------|----------|-------|-----------|------|-------------|-----------------|
| 907                       | Red alder<br><i>Alnus rubra</i> | 3.8,<br>(3.8)                         |               | 3.8      | Fair  | Fair      | Low  | Medium      |                 |
| <b>Protected Category</b> |                                 | <b>Notes and Defects</b>              |               |          |       |           |      |             |                 |
|                           |                                 | This tree leans toward the northwest. |               |          |       |           |      |             |                 |

| Tree                      | Species                         | DBH (in)                                                 | Dripline (ft) | CRZ (ft) | Vigor | Structure | Risk | Pres. Value | Recommendations |
|---------------------------|---------------------------------|----------------------------------------------------------|---------------|----------|-------|-----------|------|-------------|-----------------|
| 908                       | Red alder<br><i>Alnus rubra</i> | 3.3,<br>(3.3)                                            |               | 3.3      | Fair  | Fair      | Low  | Medium      |                 |
| <b>Protected Category</b> |                                 | <b>Notes and Defects</b>                                 |               |          |       |           |      |             |                 |
|                           |                                 | This tree leans toward the northwest, and is suppressed. |               |          |       |           |      |             |                 |



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| Tree                      | Species                         | DBH (in)                                                                      | Dripline (ft) | CRZ (ft) | Vigor        | Structure | Risk | Pres. Value | Recommendations |
|---------------------------|---------------------------------|-------------------------------------------------------------------------------|---------------|----------|--------------|-----------|------|-------------|-----------------|
| 909                       | Red alder<br><i>Alnus rubra</i> | 2,<br>(2)                                                                     |               | 2.0      | Poor to Fair | Fair      | Low  | Medium      |                 |
| <b>Protected Category</b> |                                 | <b>Notes and Defects</b>                                                      |               |          |              |           |      |             |                 |
|                           |                                 | This tree leans toward the south over the pond edge. This tree is suppressed. |               |          |              |           |      |             |                 |

| Tree                      | Species                         | DBH (in)                                                                          | Dripline (ft) | CRZ (ft) | Vigor        | Structure | Risk | Pres. Value | Recommendations |
|---------------------------|---------------------------------|-----------------------------------------------------------------------------------|---------------|----------|--------------|-----------|------|-------------|-----------------|
| 910                       | Red alder<br><i>Alnus rubra</i> | 3.3,<br>(3.3)                                                                     |               | 3.3      | Poor to Fair | Fair      | Low  | Medium      |                 |
| <b>Protected Category</b> |                                 | <b>Notes and Defects</b>                                                          |               |          |              |           |      |             |                 |
|                           |                                 | This tree leans toward the southeast over the pond edge. This tree is suppressed. |               |          |              |           |      |             |                 |





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| Tree               | Species                                     | DBH (in)          | Dripline (ft) | CRZ (ft) | Vigor        | Structure | Risk   | Pres. Value | Recommendations |
|--------------------|---------------------------------------------|-------------------|---------------|----------|--------------|-----------|--------|-------------|-----------------|
| 911                | Douglas fir<br><i>Pseudotsuga menziesii</i> | 19.3,<br>(19.3)   |               | 19.3     | Fair to Good | Fair      | Medium | Medium      |                 |
| Protected Category |                                             | Notes and Defects |               |          |              |           |        |             |                 |
|                    |                                             |                   |               |          |              |           |        |             |                 |

| Tree               | Species                             | DBH (in)          | Dripline (ft) | CRZ (ft) | Vigor        | Structure | Risk   | Pres. Value | Recommendations |
|--------------------|-------------------------------------|-------------------|---------------|----------|--------------|-----------|--------|-------------|-----------------|
| 912                | Austrian pine<br><i>Pinus nigra</i> | 17,<br>(17)       |               | 17.0     | Fair to Good | Fair      | Medium | Medium      |                 |
| Protected Category |                                     | Notes and Defects |               |          |              |           |        |             |                 |
|                    |                                     |                   |               |          |              |           |        |             |                 |



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| Tree               | Species                         | DBH (in)           | Dripline (ft) | CRZ (ft) | Vigor        | Structure | Risk | Pres. Value | Recommendations |
|--------------------|---------------------------------|--------------------|---------------|----------|--------------|-----------|------|-------------|-----------------|
| 913                | Red alder<br><i>Alnus rubra</i> | 7.4, 5.7<br>(9.34) |               | 9.3      | Fair to Good | Fair      | Low  | Medium      |                 |
| Protected Category |                                 | Notes and Defects  |               |          |              |           |      |             |                 |
|                    |                                 |                    |               |          |              |           |      |             |                 |

| Tree               | Species                         | DBH (in)                            | Dripline (ft) | CRZ (ft) | Vigor | Structure | Risk | Pres. Value | Recommendations |
|--------------------|---------------------------------|-------------------------------------|---------------|----------|-------|-----------|------|-------------|-----------------|
| 914                | Red alder<br><i>Alnus rubra</i> | 5.3,<br>(5.3)                       |               | 5.3      | Fair  | Fair      | Low  | Medium      |                 |
| Protected Category |                                 | Notes and Defects                   |               |          |       |           |      |             |                 |
|                    |                                 | This tree is moderately suppressed. |               |          |       |           |      |             |                 |





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| Tree               | Species                         | DBH (in)          | Dripline (ft) | CRZ (ft) | Vigor | Structure | Risk | Pres. Value | Recommendations |
|--------------------|---------------------------------|-------------------|---------------|----------|-------|-----------|------|-------------|-----------------|
| 915                | Red alder<br><i>Alnus rubra</i> | 6.4,<br>(6.4)     |               | 6.4      | Fair  | Fair      | Low  | Medium      |                 |
| Protected Category |                                 | Notes and Defects |               |          |       |           |      |             |                 |
|                    |                                 |                   |               |          |       |           |      |             |                 |

| Tree               | Species                         | DBH (in)                            | Dripline (ft) | CRZ (ft) | Vigor        | Structure | Risk | Pres. Value | Recommendations |
|--------------------|---------------------------------|-------------------------------------|---------------|----------|--------------|-----------|------|-------------|-----------------|
| 916                | Red alder<br><i>Alnus rubra</i> | 4.3,<br>(4.3)                       |               | 4.3      | Poor to Fair | Fair      | Low  | Medium      |                 |
| Protected Category |                                 | Notes and Defects                   |               |          |              |           |      |             |                 |
|                    |                                 | This tree is moderately suppressed. |               |          |              |           |      |             |                 |



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| Tree               | Species                         | DBH (in)                                                                                             | Dripline (ft) | CRZ (ft) | Vigor | Structure    | Risk   | Pres. Value | Recommendations |
|--------------------|---------------------------------|------------------------------------------------------------------------------------------------------|---------------|----------|-------|--------------|--------|-------------|-----------------|
| 917                | Red alder<br><i>Alnus rubra</i> | 5.8,<br>(5.8)                                                                                        |               | 5.8      | Fair  | Poor to Fair | Medium | Medium      |                 |
| Protected Category |                                 | Notes and Defects                                                                                    |               |          |       |              |        |             |                 |
|                    |                                 | This tree has multiple scars on the lower trunk, with initial stages of decay development occurring. |               |          |       |              |        |             |                 |

| Tree               | Species                         | DBH (in)           | Dripline (ft) | CRZ (ft) | Vigor | Structure | Risk | Pres. Value | Recommendations |
|--------------------|---------------------------------|--------------------|---------------|----------|-------|-----------|------|-------------|-----------------|
| 918                | Red alder<br><i>Alnus rubra</i> | 2.7, 7.9<br>(8.35) |               | 8.3      | Fair  | Fair      | Low  | Medium      |                 |
| Protected Category |                                 | Notes and Defects  |               |          |       |           |      |             |                 |
|                    |                                 |                    |               |          |       |           |      |             |                 |





Urban Forestry Services, Inc.  
15119 McLean Road  
Mount Vernon, WA 98273  
(360) 428-5810

# Tree Assessment Matrix

Strandberg - Anacopper Mine Road Project, Anacortes, WA

Inspector: Thompson  
ISA Certified Arborist  
ISA Tree Risk Assessment Qualified

| Tree               | Species                         | DBH (in)          | Dripline (ft) | CRZ (ft) | Vigor | Structure | Risk | Pres. Value | Recommendations |
|--------------------|---------------------------------|-------------------|---------------|----------|-------|-----------|------|-------------|-----------------|
| 919                | Red alder<br><i>Alnus rubra</i> | 5.4,<br>(5.4)     |               | 5.4      |       |           |      |             |                 |
| Protected Category |                                 | Notes and Defects |               |          |       |           |      |             |                 |
|                    |                                 |                   |               |          |       |           |      |             |                 |



## General Tree Protection Guidelines With Critical Root Zone Explanation Attachment

1. **Responsibilities:** These Guidelines pertain to any disturbance, use or activity within the Critical Root Zone of any retained tree on this project. See attached **Critical Root Zone Explanation** for reference. The owner's arborist and general contractor shall meet onsite before any site work begins, to review and designate the most appropriate methods to be used to protect the retained trees during construction.

These guidelines apply to work provided by all contractors and sub-contractors on the project.

The project consulting arborist shall be contacted prior to any work that may need to enter the tree protection fencing. At least two days notice shall be provided to the project consulting arborist. A proposed method for work shall be provided to the arborist. This method shall be reviewed by the project consulting arborist and either approval and / or comments provided by the project consulting arborist prior to commencing works within the tree protection area. He or she should be notified within 8 hours should any injury occur to any protected tree or its larger roots (greater than 2-inch diameter) so that appropriate assessment and/or treatment may be made.

2. **Soil Disturbance:** No soil disturbance shall take place before tree protection fences are installed. All evaluated trees to be retained within these areas are clearly illustrated on the Site Plan.
3. **Designated Tree Removals:** The owner's arborist and contractor shall confirm on site which trees are to be removed and those to be retained. Directional felling and removal of trees will be completed with great care to avoid any damage to the trunks, limbs, and critical root zones of the retained trees.
4. **The Tree Protection Site Plan**, when provided, shows the recommended location of the Tree Protection Fence (TPF). Immediately after the clearing limits and grading stakes are set in the field, the owner's arborist, during review and discussion with the contractor, will make a final determination on the tree protection requirements depending on construction limits and estimated impact on major roots and soil condition. The arborist may adjust clearing limits in the field so that, in his/her opinion, tree roots and soils are protected while necessary work can proceed.
5. **The Tree Protection Fence (TPF)** shall be installed along the clearing limits, with special consideration of the Critical Root Zone (CRZ) of trees to be preserved. The CRZ of a tree is generally described as an area equal to 1-foot radius for every 1-inch diameter of tree. For example, a 10-inch diameter tree has a CRZ of 10-foot radius. Work within the CRZ may be limited to hand work or alternate method of construction.

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The Tree Protection Fence (TPF) shall be constructed with steel posts driven into the ground with 6-ft. chain link fence attached. Upon consultation with the contractor, the arborist shall determine the placement of the fence and the extent and method of clearing that may be done near preserved trees. Additional follow-up determinations may be required as work progresses on the project. See attached **Critical Root Zone Explanation**.

No parking, storage, dumping, or burning of materials is allowed beyond the clearing limits or within the Tree Protection Fence.

The TPF shall not be moved without authorization by the owner's arborist or City Arborist. The TPF shall remain in place for the duration of the project.

Work within this area shall be reviewed with and approved by the owner's arborist. Call Urban Forestry Services| Bartlett Consulting at 360-428-5810 with questions.

6. **Silt Fence:** If a silt fence is required to be installed within the Critical Root Zone of a retained tree, the bottom of the silt fence shall not be buried in a trench, but instead, folded over and placed flat on the ground. The flat portion of the silt fence shall be covered with gravel or soil for anchorage.
7. **CRZ over Hardscape:** Where the Critical Root Zone (CRZ) includes an area covered by hardscape, the TPF can be placed along the edge of the hardscape if and until it is removed. After hardscape removal, the available CRZ should be backfilled with topsoil up to 6 inches deep and protected with the TPF. Incorporation of topsoil into the existing sub-grade shall be determined by the consulting arborist. Where applicable a specification for topsoil will be provided or approved by Urban Forestry Services | Bartlett Consulting.
8. **Tree Protection Signs** shall be attached to the fence only and shall be shown as required on the Site Plan. They should read "Protect Critical Root Zone (CRZ) of trees to be retained. No soil disturbance, parking, storage, dumping, or burning of materials is allowed within the Tree Protection Barrier. " Monetary fines, based on the appraised dollar value of the retained trees may also be included on these signs. Telephone contact details for the project consulting arborist should also be included in the sign.
9. **Soil Protection within the Critical Root Zone (CRZ):** Where vehicular access, temporary work pad or storage pad is required within the CRZ of any preserved tree that is not protected with hardscape, the soil shall be protected with 18" of woodchips and/or plywood or metal sheets, or a combination of both, to protect from soil compaction and damage to roots of retained trees. A biodegradable coir mat netting is recommended to be placed on the existing grade before woodchip placement to protect the condition and confirm the location of the existing grade. The netting is a valuable benchmark upon removal of the material within the CRZ.
10. **Landscape Plans, Irrigation Design and Installation Details:** Great care shall be exercised when landscaping within the Critical Root Zone (CRZ) of any tree. Roots of preserved trees and

*General Tree Protection Guidelines*

*By Urban Forestry Services| Bartlett Consulting*

*2019*

*Page 2 of 4*

other vegetation shall not be damaged by planting or installation of irrigation lines. The owner's arborist shall review the Landscape Plan for any potential design and tree preservation conflicts and approve related irrigation and landscape installation activities within the CRZ of retained trees. A proposed method for work shall be provided to and approved by the arborist.

- 11. Backfill and Grade Changes:** The owner's arborist will determine to what extent backfilling may be allowed within the Critical Root Zone of a preserved tree, and if needed, the specific material which may be used. Grade cuts are usually more detrimental than grade filling within the CRZ and shall be reviewed by the arborist well in advance of construction.
- 12. Tree Maintenance and Pruning:** Trees recommended for maintenance and approved by the owner, shall be pruned for deadwood, low hanging limbs, and proper balance, as recommended for safety, clearance or aesthetics. All pruning shall be done by an International Society of Arboriculture Certified Arborist. *ANSI A300 American Standards for Pruning* shall be used. Limbs of retained trees within 10 feet or less, of any power line, depending on power line voltage, may only be pruned by a Utility Certified Arborist. This pruning must be coordinated with the local power company, as they may prefer to provide this pruning.
- 13. Underground Utilities:** Utility installation within the Critical Root Zone (CRZ) of any retained tree shall be reviewed by the Project Consulting Arborist. A less root disturbing route or minimal impact installation method of utility installation may be discussed and recommended i.e. tunneling or trenchless excavation. Trenching through the Interior CRZ of a retained tree is not usually allowed. **See CRZ Explanation to differentiate between the Perimeter and Interior CRZ.** An Air spade and Vac Truck may be required when utility installation is mandatory near a retained tree or other methodology such as trenchless excavation.
- 14. Root Pruning:** Required work may result in the cutting of roots of retained trees. Cutting roots 2" or greater should be avoided. Potential root pruning needs should be reviewed in advance with the Project Consulting Arborist to minimize potential root fracturing and other damage. Severed roots of retained trees shall be cut off cleanly with a sharp saw or pruning shears. Applying pruning paint on trunk or root wounds is not recommended. Severed roots shall be covered immediately after final pruning with moist soil or covered with mulch until covered with soil. Excavation equipment operators shall take extreme care not to hook roots and pull them back towards retained trees. In all cases, the excavator shall sit on ground outside of the CRZ. Soil excavation within the CRZ shall be under the direct supervision of the owner's arborist.
- 15. Supplemental Tree Irrigation:** If clearing is performed during the summer, supplemental watering and/or mulching over the root systems within the Tree Protection Fencing of preserved trees may be required by the owner's arborist. The arborist should be notified of the proposed schedule for clearing and grading work. Supplemental watering and mulching over the root systems of roots impacted or stressed trees are strongly recommended to compensate for root loss and initiate new root growth. Long periods of slow drip irrigation will be most effective. A large coil of soaker hose starting at least 18" from the trunk and covering the Interior Critical Root Zone area is recommended. Water once per week and check soils for at least 12 inches infiltration. This work shall be under the direct supervision of the owner's arborist.



- 16. Additional Measures:** Additional tree protection recommendations may be required and may be specified in Urban Forestry Services| Bartlett Consulting report(s).
- 17. Tree Protection Monitoring:** The owner's arborist may be required to monitor work when disturbance occurs near retained trees and shall make periodic site visits to report to the owner and City if tree protection guidelines are being followed.
- 18. Final Inspection:** The owner's arborist shall make a final site visit to report on retained tree condition following completed work and shall report to the city to release the bond, if necessary for the retained trees.

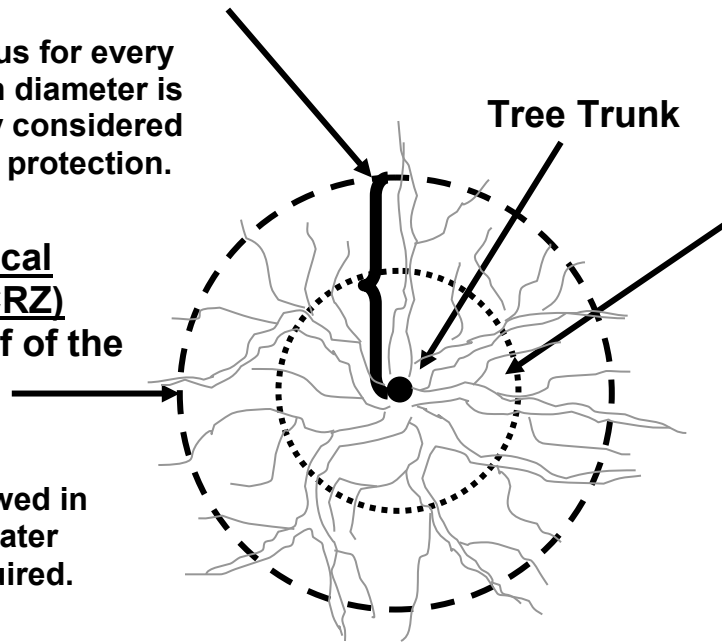
**Critical Root Zone (CRZ) =**

12" Radius for every Tree inch diameter is generally considered optimum protection.

**Perimeter Critical Root Zone (PCRZ)**

= the outer half of the CRZ

The greater the disturbance allowed in this area, the greater Post Care is required.



**Interior Critical Root Zone (ICRZ)**

= the inner half of the CRZ

Protecting only this area would cause significant impact to the tree, potentially life threatening, and would require maximum Post Care Treatment to retain the tree. See Post Care Treatment below.

The Critical Root Zone (CRZ) of a tree is established on the basis of the trunk diameter. The CRZ is a circular area which has a radius of 12 inches for every inch diameter of trunk measured at 4.5 feet above grade. Root systems will vary both in depth and spread depending on size of tree, soils, water table, species and other factors. However, this CRZ description is generally accepted in the tree industry. Protecting this entire root zone area should result in no adverse impact to the tree, except for potentially increased exposure.

The above CRZ drawing has been further differentiated into the 'Perimeter' (PCRZ) and 'Interior' (ICRZ) to help define potential impact and required Post Care.

Generally, the full PCRZ is considered the optimum amount of root protection for a tree. As one encroaches into the "Perimeter CRZ, but not into the "Interior CRZ" the greater Post Care the tree would require to remain alive and stable. The 'Interior CRZ is half the radius of the full PCRZ. Disturbance into the ICRZ could destabilize or cause the tree to decline.

The full ICRZ should never be disturbed if the tree is to have any chance of survival. This 'Interior' CRZ would approximately equal the size of a rootball needed to transplant this tree which in turn would require extensive Post Care and possibly guying.

This Post Care Treatment would include but may not be limited to; regular irrigation, misting, root treatment with special root hormones or growth stimulants, mulching, guying and monitoring for several years. Lack of this treatment would be fatal to the tree.



**Urban Forestry Services**

**BARTLETT CONSULTING**

Divisions of The F.A. Bartlett Tree Expert Company

**15119 McLean Rd.  
Mount Vernon, WA 98273**

**Title: Critical Root Zone (CRZ) Explanation**

**Source: Urban Forestry Services | Bartlett Consulting  
Jim Barborinas, ISA Certified Arborist PN-0135  
ASCA Registered Consulting Arborist #356,  
Tree Risk Assessor Qualified**

**Date: 2019**

**Not to Scale**



# ASSUMPTIONS AND LIMITING CONDITIONS

**Urban Forestry Services | Bartlett Consulting**  
**15119 McLean Rd.**  
**Mount Vernon, Washington 98273**

## 1. **Limitations of this Assessment**

This Assessment is based on the circumstances and observations as they existed at the time of the site inspection of the Client's Property and the trees inspected by Urban Forestry Services | Bartlett Consulting and upon information provided by the Client to Urban Forestry Services | Bartlett Consulting. The opinions in this Assessment are given based on observations made and using generally accepted professional judgment, however, because trees and plants are living organisms and subject to change, damage, and disease, the results, observations, recommendations, and analysis took place and no guarantee, warranty, representation, or opinion is offered or made by Urban Forestry Services | Bartlett Consulting, as to the length of the validity of the results, observations, recommendations, and analysis contained within this Assessment. As a result, the Client shall not rely upon this Assessment, save and except for representing the circumstances and observations, analysis, and recommendations that were made as at the date of such inspections. It is recommended that the trees discussed in this Assessment should be re-assessed periodically.

Urban Forestry Services | Bartlett Consulting shall not be required to give testimony or to attend court by reason of this report unless subsequent contractual arrangements are made, including payment of an additional fee for such services as described in our fee schedule and contract of engagement.

Sketches, diagrams, graphs, and photographs in this report, being intended as visual aids, are not necessarily to scale and should not be construed as engineering or architectural reports or surveys.

## 2. **Reaction of Assessment**

The Assessment carried out was restricted to the Property. No assessment of any other trees or plants has been undertaken by Urban Forestry Services | Bartlett Consulting. Urban Forestry Services | Bartlett Consulting is not legally liable for any other trees or plants on the Property except those expressly discussed herein. The conclusions of this Assessment do not apply to any areas, trees, plants, or any other property not covered or referenced in this Assessment.

## 3. **Professional Responsibility**

In carrying out this Assessment, Urban Forestry Services | Bartlett Consulting and any Assessor appointed for and on behalf of Urban Forestry Services | Bartlett Consulting to perform and carry out the Assessment has exercised a reasonable standard of care, skill, and diligence as would be customarily and normally provided in carrying out this Assessment. The Assessment has been made using accepted arboricultural techniques. These include a visual examination of each tree for structural defects, scars, external indications of decay such as fungal fruiting bodies, evidence of insect attack, discolored foliage, the condition of any visible root structures, the degree and direction of lean (if any), the general condition of the tree(s) and the surrounding site, and the current or planned proximity of property and people. Except where specifically noted in the Assessment, none of the trees examined on the property were dissected, cored, probed, or climbed and detailed root crown examinations involving excavation were not undertaken.

While reasonable efforts have been made to ensure that the trees recommended for retention are healthy, no guarantees are offered, or implied, that these trees, or all parts of them will remain

standing. It is professionally impossible to predict with absolute certainty the behavior of any single tree or group of trees, or all their component parts, in all given circumstances. Inevitably, a standing tree will always pose some risk. Most trees have the potential to fall, lean, or otherwise pose a danger to property and persons in the event of adverse weather conditions, and this risk can only be eliminated if the tree is removed.

Without limiting the foregoing, no liability is assumed by Urban Forestry Services | Bartlett Consulting or its directors, officers, employers, contractors, agents, or Assessors for:

- any legal description provided with respect to the Property;
- issues of title and or ownership respect to the Property;
- the accuracy of the Property line locations or boundaries with respect to the Property; and
- the accuracy of any other information provided to Urban Forestry Services, Inc. by the Client or third parties;
- any consequential loss, injury, or damages suffered by the Client or any third parties, including but not limited to replacement costs, loss of use, earnings, and business interruption; and
- the unauthorized distribution of the Assessment.

The total monetary amount of all claims or causes of action the Client may have as against Urban Forestry Services | Bartlett Consulting including but not limited to claims for negligence, negligent misrepresentation, and breach of contract, shall be strictly limited to solely to the total amount of fees paid by the Client to Urban Forestry Services | Bartlett Consulting pursuant to the Contract for services as dated for which this Assessment was carried out. Further, under no circumstance may any claims be initiated or commenced by the Client against Urban Forestry Services | Bartlett Consulting or any of its directors, officers, employees, contractors, agents, or Assessors, in contract or in tort, more than 12 months after the date of this Assessment.

#### **4. Third Party Liability**

This Assessment was prepared by Urban Forestry Services | Bartlett Consulting exclusively for the Client. The contents reflect Urban Forestry Services | Bartlett Consulting best assessment of the trees and plants on the Property in light of the information available to it at the time of preparation of this Assessment. Any use which a third party makes of this Assessment, or any reliance on or decisions made based upon this Assessment, are made at the sole risk of any such third parties. Urban Forestry Services | Bartlett Consulting accepts no responsibility for any damages or loss suffered by any third party or by the Client as a result of decisions made or actions based upon the use of reliance of this Assessment by any such party.

#### **5. General**

Any plans and/or illustrations in this Assessment are included only to help the Client visualize the issues in this Assessment and shall not be relied upon for any other purpose.

This report and any values expressed herein represent the opinion of Urban Forestry Services | Bartlett Consulting. Our fee is in no way contingent upon any specified value, a result or occurrence of a subsequent event, nor upon any finding reported.

The Assessment report shall be considered as a whole, no sections are severable, and the Assessment shall be considered incomplete if any pages are missing. The right is reserved to adjust tree valuations, if additional relevant information is made available. This Assessment is for the exclusive use of the Client.



## CULTURAL RESOURCES REPORT COVER SHEET

DAHP Project Number: 2020-02-01521

Authors: Garth L. Baldwin and Oliver N. Patsch

Title of Report: Cultural Resources Review of The Crossings Development, 1905 Anacopper Road (Parcel: P31752), Anacortes, Washington

Date of Report: February 25, 2020

County: Skagit Section: 23 Township: T35N Range: 1E  
Quad: Cypress Island, WA (1977) Acres: 5.2

PDF of report submitted (REQUIRED) ☒ Yes

Historic Property Inventory Forms to be Approved Online? ☐ Yes ☒ No

Archaeological Site(s)/Isolate(s) Found or Amended? ☐ Yes ☒ No

TCP(s) found? ☐ Yes ☒ No

Replace a draft? ☐ Yes ☒ No

Satisfy a DAHP Archaeological Excavation Permit requirement? ☐ Yes # ☒ No

Were Human Remains Found? ☐ Yes DAHP Case # ☒ No

DAHP Archaeological Site #:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Submission of PDFs is required.

- Please be sure that any PDF submitted to DAHP has its cover sheet, figures, graphics, appendices, attachments, correspondence, etc., compiled into one single PDF file.
- Please check that the PDF displays correctly when opened.



# DRAYTON ARCHAEOLOGY

## **Cultural Resources Review of The Crossings Development, 1905 Anacopper Road (Parcel: P31752), Anacortes, Washington**



**By:**

**Garth L. Baldwin, M.A., RPA 16248  
and Oliver N. Patsch, B.A.**

**Prepared For:**

**Nels Strandberg-Anacopper LLC  
2018 R Avenue  
Anacortes WA 98221**

**City of Anacortes Plat Application: PW#19-1XX-DEV**

**Drayton Archaeology Report: 0220G**

**February 25, 2020**



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## **Cultural Resources Review of The Crossings Development, 1905 Anacopper Road (Parcel: P31752), Anacortes, Washington**

Authors: Garth L. Baldwin and Oliver N. Patsch  
Date: February 25, 2020  
Location: City of Anacortes, Skagit County, Washington  
USGS Quad: Cypress Island, WA North 7.5-minute USGS Quadrangle (1977)  
Township, Range, Section: T35N, R1E, S23

### **SUMMARY**

Drayton Archaeology (Drayton) was retained by Nels Strandberg-Anacopper LLC to conduct a cultural resources survey for a proposed housing development located in Anacortes, Skagit County, Washington. This review was designed to determine the presence or absence of cultural resources (cultural, historical, or archaeological materials or sites) in the project area. Probability determination was based upon the review and analysis of past environmental and cultural contexts, and previous cultural resources studies and sites recorded within one mile of the project area. Consulted resources included local geologic data to better understand the depositional environment; archaeological, historic and ethnographic records on file on the Washington Information System for Architectural and Archaeological Records Data (WISAARD) database; and selected published local historic records, aerial photography, and historic maps.

Drayton's cultural resources assessment consisted of background review, field investigation, and production of this report. Background review determined the project area to be located in an area of lower probability for precontact cultural resources and moderate for historic era resources. Fieldwork included pedestrian survey, photo documentation and subsurface investigations. As a result of background and field research, no evidence of precontact or historic archaeological deposits was encountered. The project does not appear to have the potential to affect any historic properties. Based on the results of the investigation further archaeological oversight for the project appears unwarranted.

### **REGULATORY CONTEXT**

This project is subject to the State Environmental Policy Act (SEPA). SEPA requires that impacts to cultural resources be considered during the public environmental review process. Under SEPA, the Washington State Department of Archaeology and Historic Preservation (DAHP) is the sole agency with technical expertise regarding cultural resources and provides formal opinions to local governments and other state agencies on a site's significance and the impact of proposed projects upon such sites.

It should also be recognized that Washington State law provides for the protection of all archaeological resources under RCW Chapter 27.53, Archaeological Sites and Resources, which



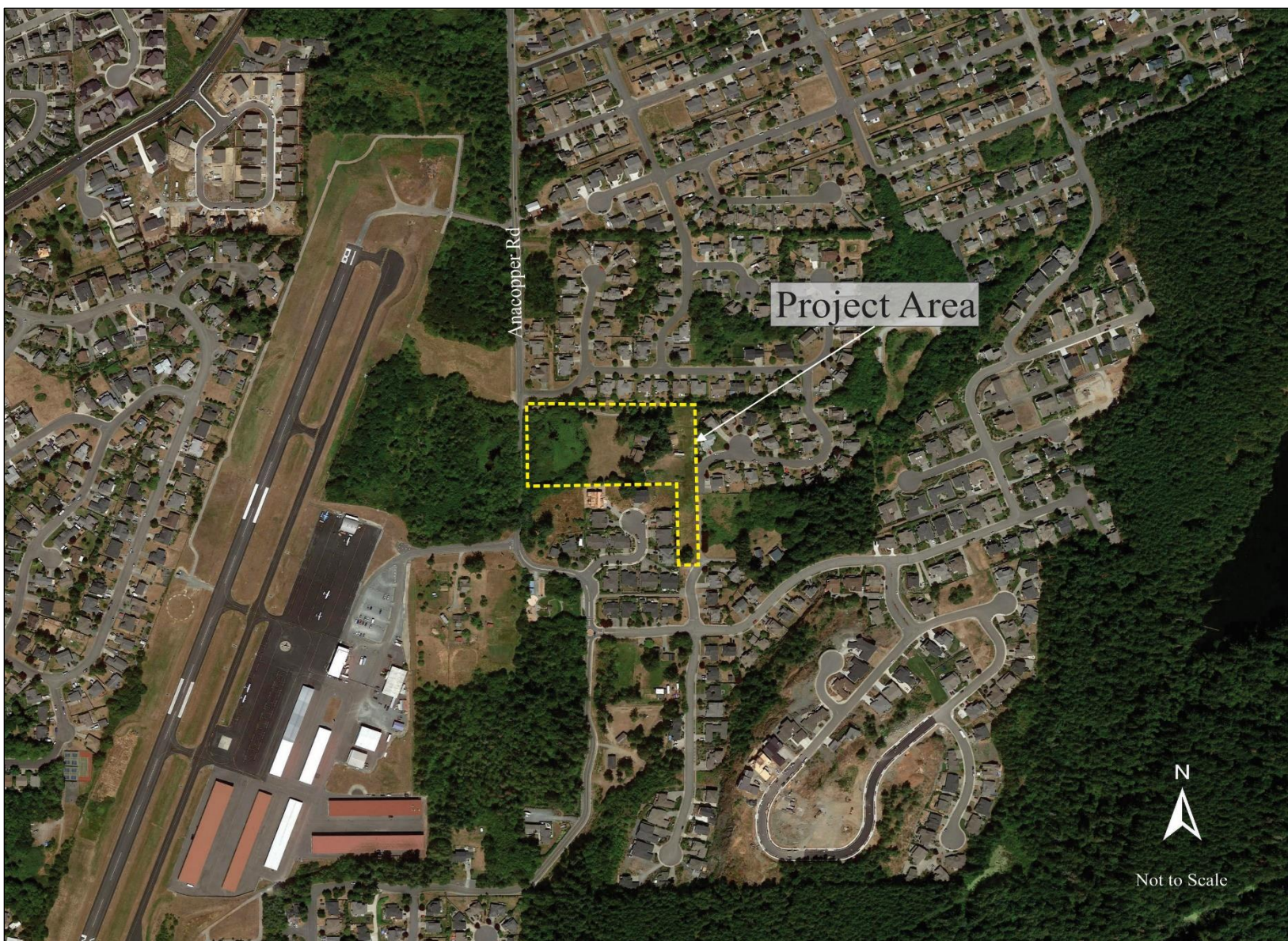
prohibits the unauthorized removal, theft, and/or destruction of archaeological resources and sites. This statute also provides for prosecution and financial penalties covering consultation and the recovery of archaeological resources. Additional legal oversight is provided for Indian burials and grave offerings under RCW Chapter 27.44, Indian Graves and Records. RCW 27.44 states that the willful removal, mutilation, defacing, and/or destruction of Indian burials constitute a Class C felony. A recent addition to Washington legal code, RCW 68.50.645, Notification, provides a strict process for the notification of law enforcement and other interested parties in the event of the discovery of any human remains regardless of perceived patrimony.

## **PROJECT LOCATION AND DESCRIPTION**

The project area is an approximate 5-acre parcel (TPN: P31752) with the legal location of Section 23 Township 35N, Range 1E, of the Willamette Meridian (Figure 1). The property is located at 1905 Anacopper Road which is just east of the Anacortes airstrip (Figure 2). The property currently contains one residence dating to 1984 as well as a detached garage and shop. These structures would be demolished to accommodate 21 proposed single-family homes with all supportive infrastructure (Figure 3).







**Figure 2. Aerial image detailing the project area. Google Earth image adapted by Drayton.**



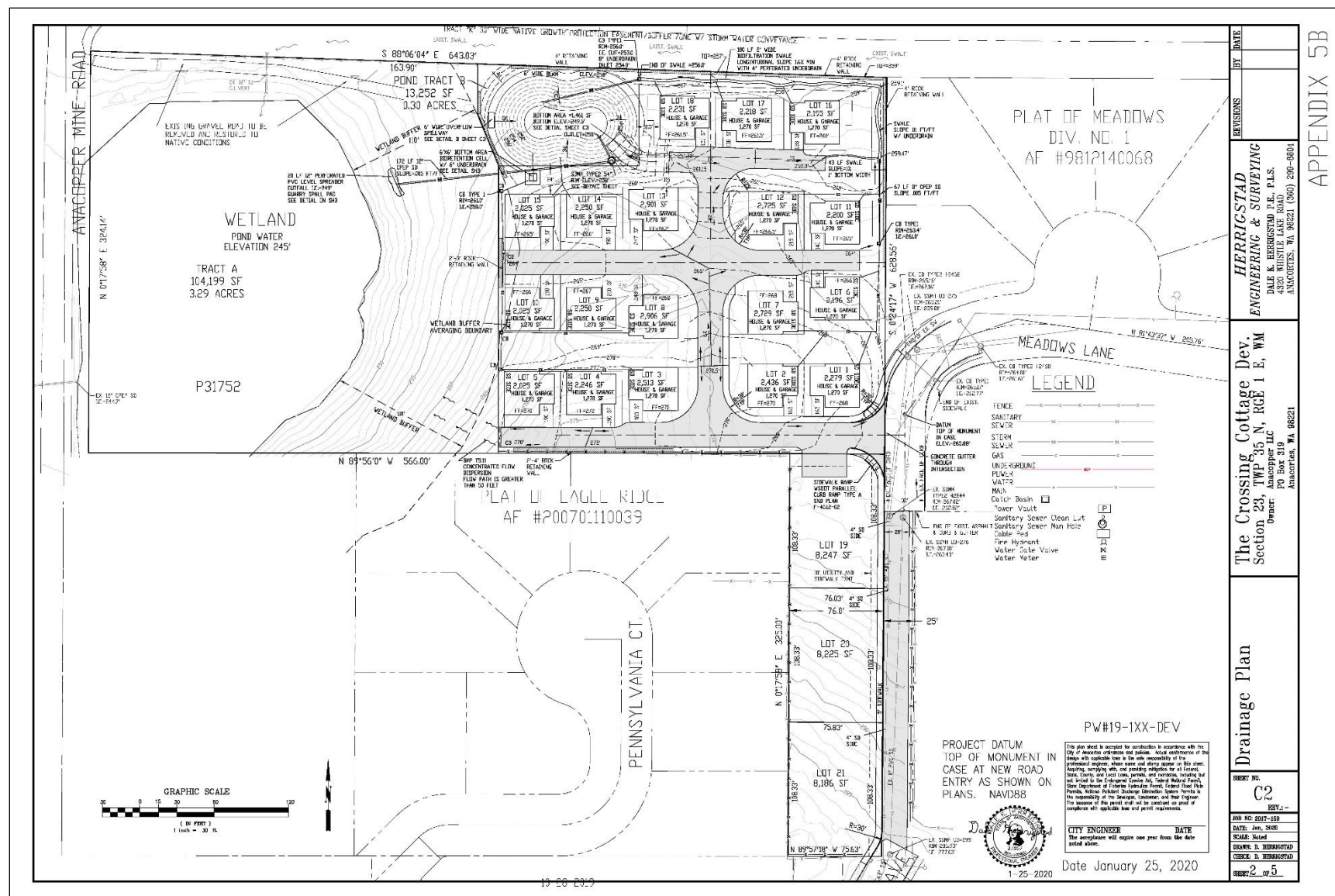


Figure 3. A site plan layout provided by the proponent.



## **BACKGROUND REVIEW**

Determining the probability for archaeological sites and Historic Properties within the project area was based largely upon review and analysis of past environmental and cultural contexts and previous cultural resources studies and sites recorded within about one mile of the project area. Consulted sources included reviewing local geologic data to better understand the depositional environment; archaeological, historic and ethnographic records on file on the Washington Information System for Architectural and Archaeological Records Data (WISAARD) database; and selected published local historic records.

### ***Environmental Context***

#### **Topography and Geology**

The project area is located on Fidalgo Island. Fidalgo Island has a complex geological history. The bedrock consists of an assemblage of Paleozoic through Mesozoic (~540-65 million year ago) sedimentary and volcanic rocks that were accreted to North America as oceanic crust was subducted under the continental crust (Brown and Dragovich 2003).

Fidalgo Island falls within the Puget Lowlands, a geological and physiographic province that was shaped by at least four periods of extensive glaciation during the Pleistocene (Easterbrook 2003; Waitt and Thorson 1983). The bedrock was depressed and deeply scoured by glaciers and sediments were deposited and often reworked as the glaciers advanced and retreated. A thick mantle of glacial till and drift were left on many portions of Fidalgo Island at the end of the last of these glacial periods: the Fraser Glaciation.

The Vashon Stade of the Fraser Glaciation began around 18,000 B.P. with an advance of the Cordilleran ice sheet into the lowlands (Porter and Swanson 1998). As the ice built up one lobe flowed down into the Puget Lowland and another lobe filled the Strait of Juan de Fuca. The ice in the Puget Lobe reached its terminus just south of Olympia between 14,500 and 14,000 BP (Clague and James 2002; Easterbrook 2003; Waitt and Thorson 1983). The Puget Lobe was thicker towards the north and thinned towards its terminus. The depth of the ice over the San Juan Islands is estimated to have been about 1600-1800 meters (Easterbrook 2003).

The Puget Lobe began to retreat shortly after reaching its terminus. Marine waters entered the lowlands that had been carved out by the glacier and filled Puget Sound. The remaining ice was floated and wasted away rapidly. Everson glaciomarine drift deposits dating between 12,500 and 11,500 BP were released from the melting glacial ice and deposited on the sea floor across the northern and central Puget Lowland (Easterbrook 2003). The enormous weight of the ice had depressed the land but as the crust rebounded relative sea levels fell and exposed some of the drift deposits (Clague and James 2002; Easterbrook 2003).

The project area overlies the bedrock of the Fidalgo complex (Brown and Dragovich 2003). The Fidalgo complex consists of peridotite, gabbro, quartz diorite-tonalite, sedimentary breccia, argillite, and volcanic-lithic sandstone. The surficial geology within the project area has been mapped as Vashon Stade glacial till.

## **Soils**

The University of California Davis Agriculture and Natural Resources, in conjunction with the United States Department of Agriculture Natural Resource Conservation District (USDA-NRCS) developed an interactive soil survey application. According to the UCDavis SoilWeb database (n.d.), soils within the project area span two units: Clallum gravelly loam, 8 to 15 percent slopes and Bow gravelly loam, dry, 0 to 3 percent slopes.

The Clallum series soils consists of moderately deep to densic materials, moderately well drained gravelly ashy sandy loam formed in glacial till over very compact glacial till. These soils are on glaciated hills. A typical pedon consists of an Oi horizon from 0 to 3 cm of slightly decomposed plant material consisting of leaves, needles, and twigs, an Oe horizon from 3 to 5 cm of moderately decomposed needles, leaves, and twigs, an A horizon from 5 to 7.6 cm of brown gravelly ashy sandy loam, a Bw1 horizon from 7.6 to 30 cm of brown gravelly ashy sandy loam, a Bw2 layer from 30 to 76cm of very gravelly ashy sandy loam, a Cd1 layer from 76 to 99cm of light brownish gray glacial till crushed to a very gravelly sandy loam, and a Cd2 layer from 99 to 157cm of grayish brown dense glacial till that crushes to a very gravelly loam (UCDavis SoilWeb n.d.).

Bow series soils are deep, somewhat poorly drained and are located on broad glaciated terraces and till plains. A typical pedon consists of an Ap horizon from 0 to 7 inches (0-17cm) of dark brown gravelly loam, a Bw horizon from 7 to 16 inches (17-40cm) of dark brown very gravelly loam, an E horizon from 16 to 17 inches (40-43cm) of grayish brown very gravelly sandy loam, a 2E/B horizon from 17 to 23 inches (43-58cm) of light olive gray silt loam, a 2B/E layer from 23 to 31 inches (58-79cm) of olive gray silty clay, a 2Btg1 layer from 31 to 48 inches (79-122cm) of olive gray silty clay, and a 2Btg2 layer from 48 to 60 inches (122-152cm) of olive gray silty clay.(UCDavis SoilWeb n.d.).

## **Flora**

The Puget Sound basin, as part of the Puget Trough, is part of the *Tsuga heterophylla* zone. Precontact vegetation would have included an overstory of Western Red cedar (*Thuja plicata*), Western Hemlock (*Tsuga heterophylla*), and Douglas fir (*Pseudotsuga menziesii*) (Franklin and Dyrness 1973). Lowland areas would have had a canopy dominated by, but not limited to, red alder (*Alnus rubra*), Oregon maple (*Acer macrophyllum*), and Willow (*Salix sp.*) and a thick understory of stinging nettles (*Urtica dioica*), bracken fern (*Pteridium aquilinum*), sword fern (*Polystichum munitum*), skunk cabbage (*Lysichiton americanus*) and Nootka rose (*Rosa nutkana*). Currently the project area is in a developed residential area. The ground is covered by



lawn, landscape plants, a few mature Douglas fir trees, asphalt and concrete as well as standing structures.

## **Fauna**

A substantial marine invertebrate population in coastal waters near the project area would have included bivalves such as the steamer clam (*Leukoma staminea*), butter clam (*Saxidomus giganteus*), horse clam (*Tresus capax*), and basket cockle (*Clinocardium nuttali*). Univalves would have included frilled dogwinkle (*Nucella lamellosa*). These shellfish were a significant contribution to the precontact diet.

Abundant pink salmon (*Oncorhynchus gorbuscha*) runs go through Deception Pass on their route to the Skagit River. Other anadromous fish species would also be available in the nearshore and offshore environments. Additional harvested marine species in the surrounding waters would have included dogfish (*Squalus acanthias*), Pacific cod (*Gadus macrocephalus*), lincod (*Ophidon elongatus*), herring (*Clupea harengus*), and Eulachon (*Thaleichthys pacificus*).

In addition to a broad range of seasonal and permanent birds, the near shore waters contain various marine mammal species that may have contributed to the precontact diet, Harbor Seal (*Phoca vitulina*) being the most prominent. Terrestrial mammals are rarer and tend to be smaller species. Blacktail deer (*Odocoileus hemionus*) are still found in the area and elk (*Cervus canadensis*) were previously abundant as well.

## **Cultural Context**

### **Ethnographic**

There are number of Coast Salish groups that have traditional claims to the area surrounding the project area. The aboriginal inhabitants of the area were classified by Suttles (1951:6) as Northern Straits Salish, a group of Coast Salish peoples differentiated by dialect and areas of occupation. It is important to note that these names were imposed upon the indigenous population by Europeans who expected them to be static groups and that these labels would logically apply to all descendants. The Samish are recognized as the local Northern Straits Salish group, although the Swinomish and Lummi have made claims to the area because of longtime family connections and traditional cooperative use. Distinguishing the Northern Straits Salish is their language, Lkungen, which differs from its close sister language Klallam (Southern Straits Salish) and is distinct from Lushootseed, spoken by other Coast Salish peoples further to the south and east (Blukis-Onat 1987; Thompson 1978). Straits Salish peoples also differ from other Coast Salish by the subsistence strategies focused primarily on marine resources and reef-netting of sockeye salmon.

Native people of the Northwest coast recognized ancestry, rights to resources, resource locations, settlement areas, songs, dances, rituals and other cultural expressions as dynamic and individually restrictive, not group based as is understood by the European world view of nationalities. Prior to

European contact and influence the Coast Salish peoples were less segmented. They were more of a fluid entity than after the divisive influences brought by Euroamericans and other non-Native influences. Traditional land use rights were determined by marriage and/or inheritance; therefore, intermarriage (for one) between groups frequently created dynamic opportunities for resource acquisition. In addition, the political boundary of the US/Canada border is another artifice of European conquest that further divided indigenous life ways.

According to Ruby and Brown (1992) winter villages were preferentially located on Fidalgo, Samish, and Guemes Islands during the precontact period. According to Suttles (1951), the north and west shores of Fidalgo Island were used exclusively by the antecedents of today's Samish Nation. Resources were taken from specific areas when it was the best time of year to do so, people would have travelled throughout the area occupying particular areas relative to what resource was available and to which they had rights to exploit. In the spring and summer, they utilized the southern and eastern portions of Lopez Island and the surrounding smaller islands as part of their seasonal round to live and gather resources during the year (Suttles 1951). There were not fixed boundaries and that the highly mobile people maintained extensive contact with their neighbors and shared use areas with each other (Blukis-Onat 1987).

## **Historic**

Expansion for colonization along with trade brought Europeans into contact with the Native population of the islands. The navigable trade waters surrounding the San Juan Islands were first visited by Spanish explorers Francisco de Eliza, Juan Pantoja y Arriga, and later British explorers such as Lieutenant William Broughton, sailing under George Vancouver. Fidalgo Island was first sighted by the Spanish on July 5, 1790 by Manuel Quimper while exploring the inland waters of Washington (Blumenthal 2004). He named the island for Lieutenant Salvador Fidalgo who he had previously dispatched to explore the Alaskan coast and determine the extent of Russian migration (Blumenthal 2004).

Early European explorers would have been looking for resources to exploit such as timber, farmland, and furs. The first settlers did not arrive on Fidalgo Island until the 1850's. Its relative isolation and resource potential relegated it to a secondary concern for Euroamerican settlement (Lunsford 2009). Shortly after the arrival of permanent residents to the island, most of the Native population relocated to nearby islands or the Swinomish Reservation once it was established in 1873 (Sampson 1972).

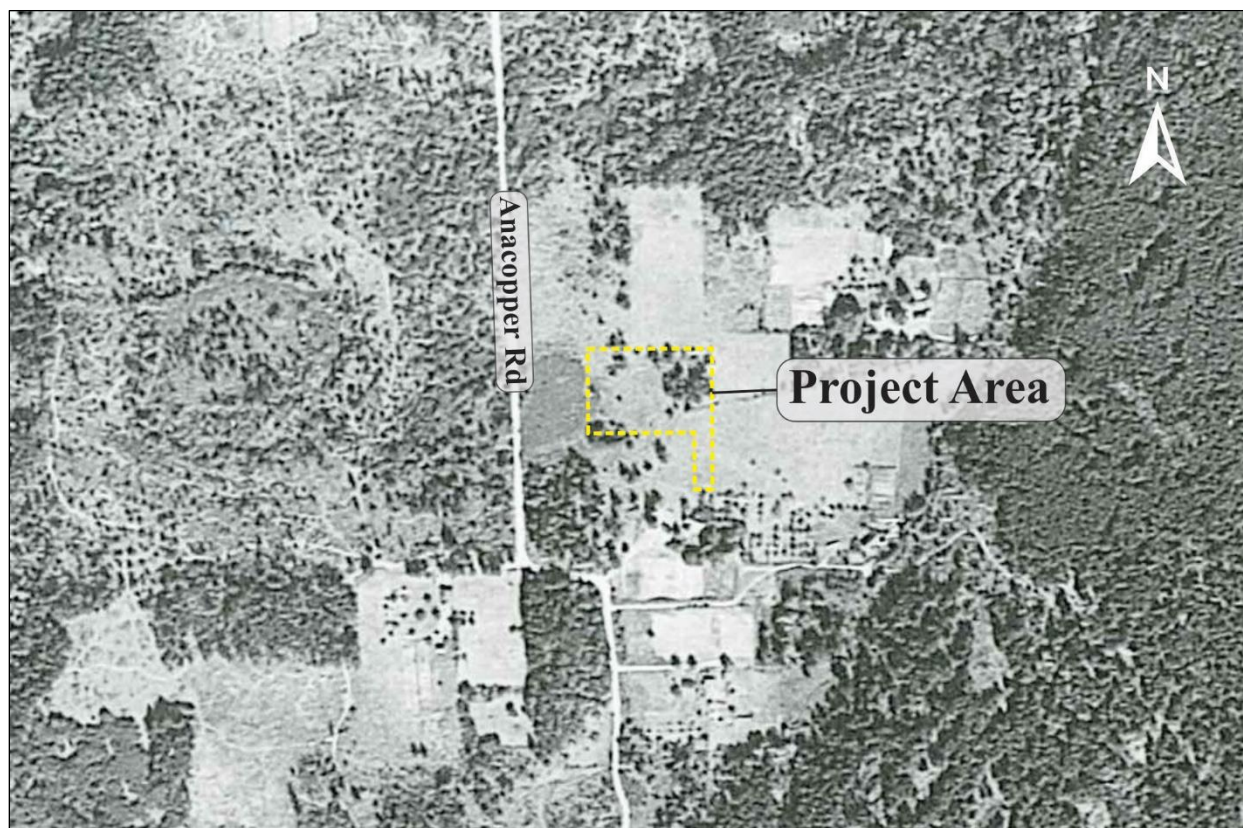
In 1879 the town of Anacortes, originally called Ship Harbor, was founded by railroad surveyor Amos Bowman. Eventually the town was renamed for his wife, Anna Curtis Bowman. In the 1880s Anacortes had a large population boom as a result of the expectation that it would become a railway terminus. Between January and March 1890, the population of the town grew from 40 to 3,000. However, in 1893, Anacortes, along with other towns hoping to be railroad terminals, were suffering from the "Panic of 1893", an economic depression tied to the overbuilding and



questionable financing of the railroad industry that resulted in bank failures. It was the worst economic depression the United States had faced to that date. Anacortes rebounded from this economic crisis with the establishment of fish canneries, fruit canneries, sawmills, shingle mills, and factories by the turn of the century (Lunsford 2009).

The first of these canneries, the Fidalgo Island Packing Company, was opened in 1893. This cannery employed about 350 people including Chinese, Norwegian, and Greek immigrants, as well as a large body of Samish workers, employed for their knowledge of traditional salmon fishing and netting sites located nearby (Waterhouse 1986). The Samish lived in separate quarters, like the Chinese, away from the larger body of Euroamerican employees. The remains of their living area are still observable surrounding Cannery Lake and the Ship Harbor wetlands around the Washington State Ferry Terminal (Gill 2008; Koziarski and Baldwin 2010a, 2010b, 2010c; Waterhouse 1986; Wessen and Waterhouse 1987). Cannery operations continued in Ship Harbor into the 1920's when the cannery and rail were closed, abandoned, and subsequently sold to the Port of Anacortes.

The subject property and surrounding area appear to have been lightly populated by 1943 (Figure 4). The aerial photograph depicts the area as mostly cleared of trees with no discernable residence on the actual property, only south of it.



**Figure 4. A 1943 aerial photograph of the project area.**

### ***Previous Cultural Resource Studies and Archaeological Sites***

The first regional study of indigenous society on the Northwest Coast was conducted by the Jesup North Pacific Expedition in 1897 to 1902 (Smith 1907). The multidiscipline group was led by Franz Boas, and sponsored by the American Museum of Natural History. The expedition accounted for early documentation of many groups throughout Washington State and the northwest coast generally, but little else happened in way of research until after World War II.

According to the WISAARD database (accessed February 17, 2020) there have been 13 cultural resource studies (Table 1) and five archaeological site reviews (Table 2) conducted within approximately one mile of the present project area. None of these sites are located within a half-mile distance of the project area. No register properties resulted from the search.

**Table 1. Cultural resource studies previously conducted within an approximate 1 mile of the project area.**

| <b>Citation</b>              | <b>Report Title</b>                                                                                                                                                | <b>Results</b>                      |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| Baldwin, Garth 2019          | Cultural Resources Review of the Oakes View Lane Project (TPN: P58288), Anacortes, Washington                                                                      | Negative                            |
| Blake, Karry 2016            | Cultural Resources Assessment of the Anacortes Airport – 2016 Airport Fencing Improvements and Obstruction Removal Project, Anacortes, Washington                  | Negative                            |
| Baldwin, Garth 2014          | Cultural Resources Review for the Guemes Channel Trail Project, City of Anacortes                                                                                  | Negative                            |
| Arthur, Ed 2014              | Results of Archaeological Testing and Evaluation of the Proposed Oakes Avenue Six Lot Short Plat, Anacortes                                                        | Negative                            |
| Baldwin, Garth 2013          | A Cultural Resources Assessment for the Proposed Channel Landing 16 Lot Residential Development, Anacortes                                                         | Negative                            |
| Koziarski, and Baldwin 2010a | Archaeological Assessment for the Ship Harbor Trail Project, Anacortes                                                                                             | Negative                            |
| Koziarski, and Baldwin 2010b | Letter to Robert Hoxie Re: Management Summary for Archaeological Monitoring of the Ship Harbor Trail Installation for the City of Anacortes                        | Negative                            |
| Koler, Julie 2010            | Reconnaissance Survey “Old Town” and South to 24 <sup>th</sup> Street, Anacortes                                                                                   | Historic Properties                 |
| Gill, Matthew 2008           | Memo to Ronald J. Hoelscher RE: Addendum to DAR Technical Report 1006B Archaeological Investigations for the Leeward Condominium Project, Anacortes, Parcel P31575 | Negative                            |
| Baldwin, Garth 2007          | Archaeological Investigations for the Leeward Condominium Project, Anacortes, Parcel P31575                                                                        | Positive; 45SK155, 45SK158, 45SK174 |
| Bush et al. 2006             | Archaeological Investigation Report: Sunset Avenue Improvement Project, City of Anacortes, Washington                                                              | Negative                            |
| Trudel et al. 2005           | Draft Anacortes Multimodal Ferry Terminal Project Archaeological and Traditional Cultural Resources. and Historic Buildings Technical Memorandum                   | 45SK299                             |
| Nelson, Margaret 2005        | Archaeological Investigation of the Proposed Ship Harbor Residential Community                                                                                     | Negative                            |



**Table 2. Archaeological sites previously recorded within an approximate 1 mile of the project area.**

| Site Number | Year Recorded | Site Type           | Site Description                                                                                                                              |
|-------------|---------------|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| 45SK14      | 1953          | Precontact/Historic | Shell midden, site was used to house Asian cannery workers                                                                                    |
| 45SK158     | 1983          | Precontact          | Shell midden, FCR, Charcoal                                                                                                                   |
| 45SK155     | 1983          | Precontact          | Shell midden, FCR, Charcoal                                                                                                                   |
| 45SK174     | 1987          | Historic            | Area occupied from early 1890s to 1930s, Historic community composed of several Samish families who worked at the nearby ship harbor cannery. |
| 45SK520     | 2013          | Historic            | Great Northern Railroad to ship harbor, Historic rail line, Ties, Wooden box culvert, 1895-1920, 1.4 km x 4 km                                |

## **CULTURAL RESOURCE EXPECTATIONS**

Based on a review of the previous efforts at identifying cultural resources, past historical, environmental and cultural reviews, the project area was located in an area of lower probability for cultural deposits or isolated items. The expectations were based upon historical images documenting the land usage of the project area, as well as the results of previous surveys done in the vicinity, which have uncovered no significant cultural remains.

If cultural resources were present in the project area, they may represent a variety of precontact and historic-era deposits. Olcott sites, diffuse remains of lithic scatters, trails or similar features representing a range of subsistence and ceremonial activities, as well as structural remains and burials may be present. Historic-era archaeology might include evidence of logging, railroad features, and/or residential occupation.

## **FIELD INVESTIGATIONS**

The physical archaeological assessment of an area is conducted through visual reconnaissance of a project area, examination of existing ground disturbances and subsurface excavation as needed. Surface survey of an area proposed for ground alteration or other impact is employed in an attempt to locate any surficial cultural materials or structures with any historic or archaeological importance or cultural concern. When utilized, shovel probes (SPs or SP, singularly) or mechanical excavation can assist in providing a wider sample of subsurface soil conditions for determining the potential for, or presence/absence of, buried archaeological deposits. The employment of probes or trenches is most often dependent upon considerations of the landform, topography, project proposal and subsurface geologic conditions.

Field investigations were conducted on February 19, 2020 by Drayton archaeologists Oliver Putsch and Megan Dipo. Weather conditions were sunny and cool, warming throughout the day. Investigations began with pedestrian survey of the project area/property. The property is a five-acre lot containing a primary residence, a detached garage and a shop in addition to a pond fronting Anacopper Road (Photos 1 - 2). Most of the landscaping is grass, the lower areas being saturated from recent rains (Photos 3 - 4). Exposed soils were limited to disturbed areas around trees and buildings as well as tire tracks and rodent burrows. No evidence of precontact or historic-era cultural resources were present.



**Photo 1. The partially wooded, developed portion of the property, view east.**



**Photo 2. An overview of the pond area, view west.**





**Photo 3. The grassy, eastern portion of the property, view north.**



**Photo 4. A section of the lower grassy area with saturated soils, view north.**



Twenty-three shovel probes were subsequently dug across the property (Figure 5). Standard shovel probes consist of cylindrical pits measuring about 40 cm in diameter. No predetermined target depth was set for probing since depths are based upon geologic conditions, water table, degree of disturbance, and professional judgement. Ideally shovel probes would be dug to a sterile stratum - usually meaning deposits of glacial drift. Sediment excavated from probes was screened through a shaker screen with quarter-inch hardware cloth. Shovel probes were completely backfilled and the locations marked with a GPS in order to compose a site sketch map.

Sediment profiles varied somewhat from place to place but generally conform to the native soil units mapped for the area. These glacially derived soils are composed primarily of sand and gravel with frequent, rounded to sub-rounded pebbles and cobbles. Colors range from brown topsoil to yellow and reddish-brown subsoil (Photo 5). Many of the shovel probes hit water, particularly along the lower, eastern portion of the project area. An area of standing water was avoided. No cultural material was found in any of the shovel probes. Detailed sediment descriptions of each probe can be found in Appendix A.



**Photo 5. A somewhat typical, dry, shovel probe (OP3).**



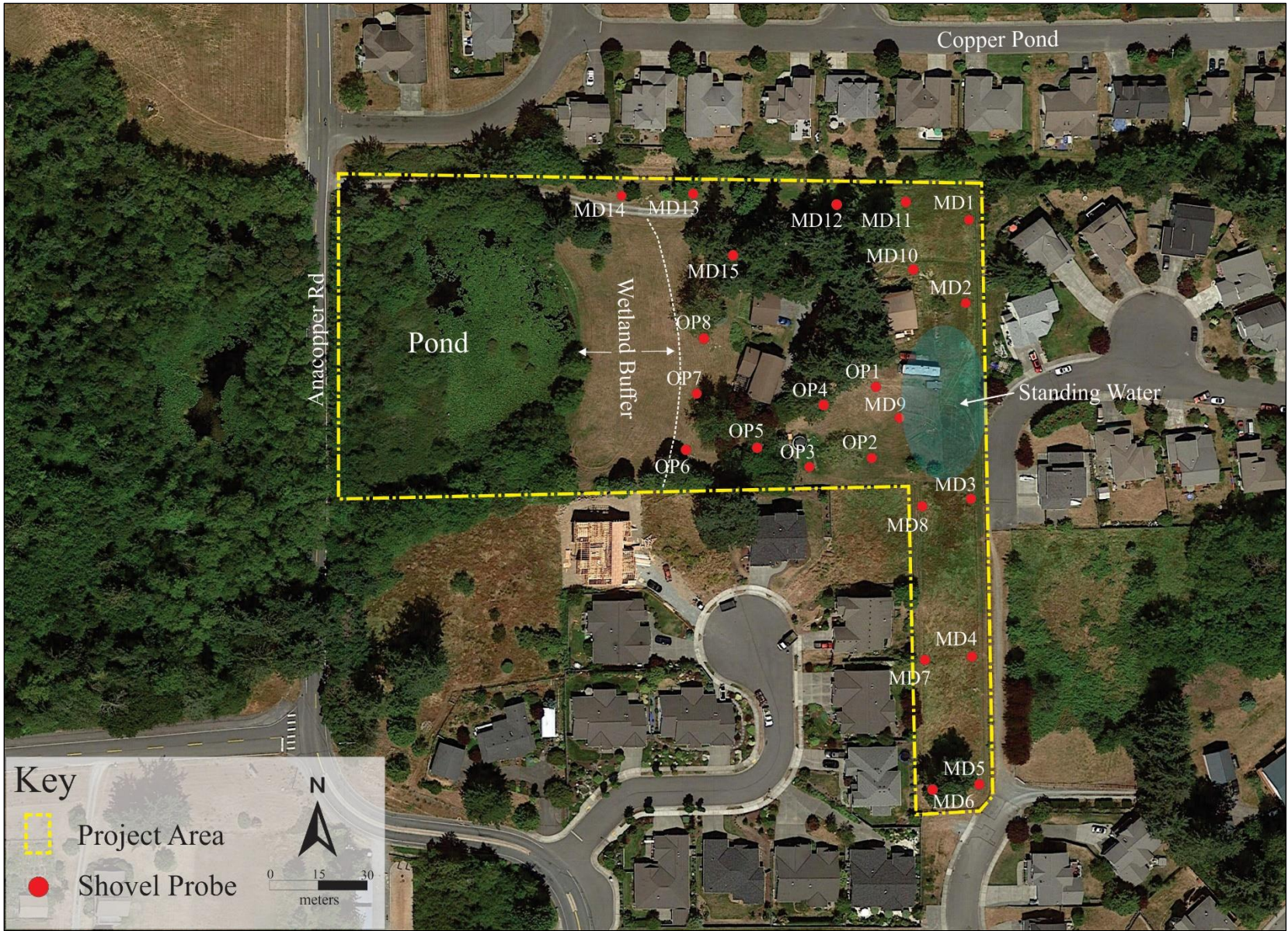


Figure 5. A Drayton adapted Google Earth image illustrating the shovel probe locations.

## RESULTS AND RECOMMENDATIONS

Drayton's cultural resources assessment consisted of background review, field investigation, and production of this report. Background review determined the project area to be located in an area of lower probability for precontact cultural resources and moderate for historic materials. Field investigation included pedestrian survey, visual reconnaissance, and photo documentation. No cultural material was observed on the ground surface or within any of the shovel probes dug across the property. Based on the results of the investigation further archaeological oversight for the project appears unwarranted.

It should be recognized that Washington State law which provides for the protection of all archaeological resources. It is further recommended that proponents become familiar with Washington State laws, particularly Revised Code of Washington (RCW) Chapter 27.53.060, RCW 27.44.040 and RCW 68.50.645. The statute RCW Chapter 27.53, Archaeological Sites and Resources, prohibits the unauthorized removal, theft, and/or destruction of archaeological resources and sites. Additional legal oversight is provided for Indian burials and grave offerings under RCW Chapter 27.44, Indian Graves and Records. RCW 27.44 states that the willful removal, mutilation, defacing, and/or destruction of Indian burials constitute a Class C felony. Further, Washington legal code, RCW 68.50.645, Notification, provides a strict process for the notification of law enforcement and other interested parties in the event of the discovery of any human remains regardless of perceived patrimony. The assessment of the property has been conducted by a professional archaeologist and meets or exceeds the criteria set forth in RCW: 27.53 for professional archaeological reporting and assessment.

The following section, Inadvertent Discovery Protocols, has been included in this document to assist property owners, project managers, construction crews, and others responsible for work, in the necessary and appropriate steps to follow in the event that archaeological materials are encountered during the project.

## INADVERTENT DISCOVERY PROTOCOLS

### ***Archaeological Resources:***

Should archaeological resources (e.g. shell midden, faunal remains (bones), stone tools, historic glass, metal, or other concentrations) be observed during project activities, all work in the immediate vicinity should stop and the area should be secured. The project archaeologist should be contacted immediately to review the find and contact the relevant parties. An assessment of the discovery and consultation with government and tribal cultural resources staff is a requirement of Washington law. Once the situation has been assessed steps to proceed can be determined.



### ***Human Burials, Remains, or Unidentified Bone(s)***

In the event of inadvertently discovered human remains or indeterminate bones, work must stop immediately. The area surrounding the discovery should be secured and of adequate size to protect the discovery from further disturbance until the State provides a notice to proceed. The discovery of any human skeletal remains must be reported to law enforcement immediately. The county medical examiner/coroner will assume jurisdiction over the human skeletal remains to make a determination of whether those remains are forensic or non-forensic. If the county medical examiner/coroner determines the remains are non-forensic, then the State Physical Anthropologist at DAHP assumes the jurisdiction over the remains. The DAHP will notify any appropriate cemeteries and all affected tribes of the find. The State Physical Anthropologist will make a determination of whether the remains are Native or Non-Native origin and report that finding to any appropriate cemeteries and the affected tribes. The DAHP will then handle all consultation with the affected parties as to the future preservation, excavation, and disposition of the remains. DAHP will also authorize when work may proceed.

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## APPENDIX A: SHOVEL PROBE TABLE

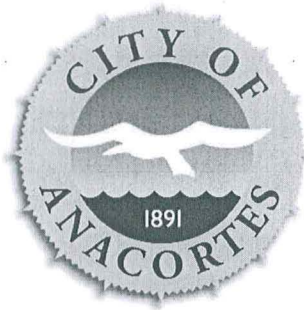
| DEPTH<br>BELOW<br>SURFACE<br>(CM)               | SEDIMENT DESCRIPTION                                                                               | RESULTS  |
|-------------------------------------------------|----------------------------------------------------------------------------------------------------|----------|
| <b>OP1</b>                                      |                                                                                                    |          |
| 0-23                                            | Brown sandy loam with moderate density, rounded, pebbles and cobbles                               | Negative |
| 23-53                                           | Yellowish brown gravelly sand with moderate density, rounded, pebbles and cobbles; charcoal        | Negative |
| 53-60                                           | Grayish brown gravelly sand (glacial till)                                                         | Negative |
| <b>Note:</b> Slow water seepage starting ~ 50cm |                                                                                                    |          |
| <b>OP2</b>                                      |                                                                                                    |          |
| 0-30                                            | Brown sandy loam with moderate density, rounded, pebbles and cobbles                               | Negative |
| 30-45                                           | Reddish brown gravelly sand with moderate density, rounded, pebbles and cobbles and charcoal       | Negative |
| <b>Note:</b> Slow water seepage starting ~ 40cm |                                                                                                    |          |
| <b>OP3</b>                                      |                                                                                                    |          |
| 0-32                                            | Disturbed brown and yellowish brown sandy loam with moderate density, rounded, pebbles and cobbles | Negative |
| 32-70                                           | Yellowish brown sandy loam with moderate density, rounded, pebbles and cobbles                     | Negative |
| <b>Note:</b> Rocky impasse                      |                                                                                                    |          |
| <b>OP4</b>                                      |                                                                                                    |          |
| 0-30                                            | Disturbed brown and yellowish brown sandy loam with moderate density, rounded, pebbles and cobbles | Negative |
| 30-70                                           | Yellowish brown sandy loam with moderate to high density, rounded, pebbles and cobbles             | Negative |
| <b>Note:</b> Rocky impasse                      |                                                                                                    |          |
| <b>OP5</b>                                      |                                                                                                    |          |
| 0-40                                            | Mixed brown and yellowish brown gravelly sand with abundant gravel, pebbles and cobbles            | Negative |
| 40-68                                           | Yellowish brown very gravelly sand                                                                 | Negative |
| <b>Note:</b> Rocky impasse                      |                                                                                                    |          |
| <b>OP6</b>                                      |                                                                                                    |          |
| 0-20                                            | Brown sandy loam with charcoal smears                                                              | Negative |
| 20-40                                           | Reddish brown sandy loam with abundant gravel, pebbles and cobbles                                 | Negative |
| 40-56                                           | Grayish brown sandy gravel (glacial till)                                                          | Negative |
| <b>OP7</b>                                      |                                                                                                    |          |
| 0-22                                            | Brown sandy loam                                                                                   | Negative |
| 22-50                                           | Reddish brown sandy loam with abundant gravel, pebbles and cobbles                                 | Negative |
| 50-62                                           | Grayish brown gravelly sand (glacial till)                                                         | Negative |
| <b>OP8</b>                                      |                                                                                                    |          |
| 0-35                                            | Brown sandy loam                                                                                   | Negative |
| 35-55                                           | Yellowish brown (with orange mottles) silty sand (till) with moderate density cobbles              | Negative |



| DEPTH<br>BELOW<br>SURFACE<br>(CM) | SEDIMENT DESCRIPTION                                                               | RESULTS  |
|-----------------------------------|------------------------------------------------------------------------------------|----------|
| <b>MD1</b>                        |                                                                                    |          |
| 0 – 40                            | Wet, brown sandy loam with high plant and root content, some medium-sized boulders | Negative |
| Note: Ground water at 25cm        |                                                                                    |          |
| <b>MD2</b>                        |                                                                                    |          |
| 0 – 40                            | Wet, brown sandy loam high plant and root content, some medium-sized boulders      | Negative |
| Note: Ground water at 25cm        |                                                                                    |          |
| <b>MD3</b>                        |                                                                                    |          |
| 0 – 35                            | Wet, brown sandy loam high plant and root content, some medium-sized boulders      | Negative |
| Note: Ground water at 20cm        |                                                                                    |          |
| <b>MD4</b>                        |                                                                                    |          |
| 0 – 30                            | Brown sandy loam with abundant cobbles                                             | Negative |
| 30 – 50                           | Grayish clayey silt, possible lens of disturbed glacial till high gravel content   | Negative |
| 30 – 80                           | Brown gravelly sand with high cobble and boulder content                           | Negative |
| <b>MD5</b>                        |                                                                                    |          |
| 0 – 15                            | Light brown fine grain sandy loam, high gravel content                             | Negative |
| 15 – 30                           | Glacial till with oxidized mottling                                                | Negative |
| 30 – 80                           | Dark brown fine grain loam, high cobble and boulder content                        | Negative |
| <b>MD6</b>                        |                                                                                    |          |
| 0 – 50                            | Dark brown fine grain loam, high cobble and boulder content                        | Negative |
| 50 – 80                           | Glacial till with oxidized mottling                                                | Negative |
| <b>MD7</b>                        |                                                                                    |          |
| 0 – 50                            | Dark brown fine grain loam, high cobble and boulder content                        | Negative |
| 50 – 80                           | Reddish brown sandy till with oxidized mottling                                    | Negative |
| <b>MD8</b>                        |                                                                                    |          |
| 0 – 30                            | Dark brown fine grain loam, high cobble and boulder content                        | Negative |
| Note: Ground water at 20 cm       |                                                                                    |          |
| <b>MD9</b>                        |                                                                                    |          |
| 0 – 40                            | Brown sandy loam, high cobble and boulder content                                  | Negative |
| Note: Ground water at 30cm        |                                                                                    |          |
| <b>MD10</b>                       |                                                                                    |          |
| 0 – 40                            | Brown sandy loam with some reddish mottling, high cobble and boulder content       | Negative |
| 40 – 60                           | Glacial till with oxidized mottling                                                | Negative |
| <b>MD11</b>                       |                                                                                    |          |
| 0 – 40                            | Dark brown fine grain loam, high cobble and boulder content                        | Negative |
| Note: Ground water at 20cm        |                                                                                    |          |

| <b>DEPTH<br/>BELOW<br/>SURFACE<br/>(CM)</b> | <b>SEDIMENT DESCRIPTION</b>                                                                | <b>RESULTS</b> |
|---------------------------------------------|--------------------------------------------------------------------------------------------|----------------|
| <b>MD12</b>                                 |                                                                                            |                |
| <b>0 – 60</b>                               | Dark brown fine grain loam with some reddish loam streaks, high cobble and boulder content | Negative       |
| Note: Ground water at 40cm                  |                                                                                            |                |
| <b>MD13</b>                                 |                                                                                            |                |
| <b>0 – 25</b>                               | Brown sandy loam with reddish mottling, high cobble and boulder content                    | Negative       |
| <b>25 – 50</b>                              | Glacial till with oxidized mottling                                                        | Negative       |
| <b>MD14</b>                                 |                                                                                            |                |
| <b>0 – 35</b>                               | Brown sandy loam with reddish mottling, high cobble and boulder content                    | Negative       |
| <b>35 – 55</b>                              | Glacial till with oxidized mottling                                                        | Negative       |
| <b>MD15</b>                                 |                                                                                            |                |
| <b>0 – 30</b>                               | Brown sandy loam with reddish mottling, high cobble and boulder content                    | Negative       |
| <b>30 – 40</b>                              | Glacial till with oxidized mottling                                                        | Negative       |





# Storm Water Drainage Report Minimum Requirement 1 through 9

ENGINEERING DEPARTMENT

904 6<sup>th</sup> Street Anacortes, WA 98221

[www.anacorteswa.gov](http://www.anacorteswa.gov)

Official Use Only: (Information to Inspectors)

Required Storm Water Facility and other related requirements:

City of Anacortes

Received by PCED

Date: February 21, 2020

Project Address: 1905 Anacopper Mine Road

Parcel Number: P31752

Permit Number:

Submittal Date:

Revision Number:

Reviewer:

Acceptance Date (COA):

## FRONT OF REPORT:

### Submittal Checklist: (All items listed below are required for a complete submittal)

- Cover Sheet (Preparer to Provide): Project title, Location, Revision dates, Engineer's Stamp
- TAB 1: Minimum Requirement #1 – Preparation of Stormwater Site Plans
- TAB 2: Minimum Requirement #2 – Construction Stormwater Pollution Prevention (SWPP)
- TAB 3: Minimum Requirement #3 – Source Control of Pollution
- TAB 4: Minimum Requirement #4 – Preservation of Natural Drainage Systems and Outfalls
- TAB 5: Minimum Requirement #5 – On-site Stormwater Managements
- TAB 6: Minimum Requirement #6 – Runoff Treatment
- TAB 7: Minimum Requirement #7 – Flow Control
- TAB 8: Minimum Requirement #8 – Wetland Protection
- TAB 9: Minimum Requirement #9 – Operation and Maintenance
- APPENDIX 1 - Survey performed by a Professional Land Surveyor
- APPENDIX 2 - Soils Analysis (Volume 1, Chapter 3.1.1)
- APPENDIX 3 - Model Soil Management Plan for BMP T5.13
- APPENDIX 4 - Determining Construction Site Sediment Damage Potential (Appendix 7)
- APPENDIX 5 - Site Plan with all applicable information (Minimum Size 11x17 – 30 scale)
- APPENDIX 6 - Documented Site Photos (North, South, East and West)
- APPENDIX 7 - Drainage BMP Facility Maintenance Covenant, if applicable. To be recorded prior to the Temporary Certificate of Occupancy, Certificate of Occupancy or Final Acceptance.

### Stormwater Management Requirements:

- o Refer to the 2012\14 Department of Ecology Manual, as amended in 2014 for further required information.
- o See also, City of Anacortes Municipal Code 19.76 for additional information
- o See also, current Engineering Development Standards, Chapter 2- Storm Drainage for additional information.

**Project Description and Summary:**

Summary Table

|                                                                                                           | Existing                                | Proposed |
|-----------------------------------------------------------------------------------------------------------|-----------------------------------------|----------|
| Development Type                                                                                          | Single family home & out buildings      | Cottages |
| Number of Lots                                                                                            | 1                                       | 19       |
| Lot Acreage in SF                                                                                         | Overall Site is 226,334 sf (5.20 acres) |          |
| Soil Type(s)                                                                                              | Bow Gravely Loam/Clallam Gravely Loam   |          |
| Site Sediment Transport Score (High\Low)                                                                  | 165 High                                |          |
| Depth to Ground Water Table (Feet and Inches)<br>(See completed Soils Analysis (Volume 1, Chapter 3.1.1)) | Average 2'-0"                           |          |
| Infiltration Rate during Rainy Season (Inch\Per Hour)                                                     | 0.09 to 1.68 in/hour                    |          |
| Impervious Surface (on-site)                                                                              |                                         |          |
| Impervious Surface (off-site)                                                                             |                                         |          |
| New and Replaced Hard Surface Total (SF)                                                                  |                                         |          |
| Lot Coverage (Percentage)                                                                                 |                                         |          |
| BMP (Required Minimum Requirement 5)                                                                      | BMP T5.13 Post Construction Soils       |          |
| Water Quality Method (Minimum Requirement 6)                                                              |                                         |          |
| Water Quantity Method (Minimum Requirement 7)                                                             |                                         |          |

**Existing Site Conditions Summary:**

*(Additionally, provide information on previous permits, if any, like Grade and Fill, Clear and Grade, topography, vegetation, drainage, Critical Areas adjacent to the site and how it may affect this project if soils are disturbed, Soils Type (Included in Soils Analysis Report), Erosion Problem Areas, Construction Phasing\Sequence )*

The existing 5.20 acres site has one home with a detached garage and shop building. The gravel access road comes from Anacopper Mine Road around the north side of the pond. The pond/wetland with 110 foot buffer is 1.97 acres in size. The site has a ridge dividing the site into two separate basins the drain completely separately to the Guemes Channel. The larger of the two basins drains to and includes the existing wetland pond. The area outside of the pond is mostly grass with approximately 40 trees scattered over the upland eastern portion of the site.

The maximum slopes of the site reach 16% from the pond east to the away from the pond. The portion of the site the slopes to the north will direct surface water to a swale that runs along the north boundary on the neighboring Copper Pond Plat to the north and directs water west to a culvert that discharges to the pond on this site. The pond/wetland discharges to the west through a culvert under Anacopper Mine Road.

The soils have been investigate by GeoTest Services Inc. and are identified as poorly draining Bow-gravelly loam and Clallam gravel loam, hydrologic soil group C/D where the soils are dense glacial till. The authors of the reports opinion is that the glacial till is a restrictive layer and is not suitable for conventional Stormwater infiltration. (See top paragraph on Page 15.)

Erosion is a concern depending on the time of year for construction. The large 110 foot grass buffer from the site to the wetland pond will allow for significant siltation settlement.



No phasing is proposed at this time.

**Developed Conditions Summary:**

*(Additionally, to be shown on the site plan. Identify cut and fill areas, proposed slopes of all hard surfaces , proposed contours)*

This 5.20 acres site is located at 1905 Anacopper Mine Road just south of the Copper Pond PUD Development. The proposal for this site is to construct 18 Cottage style homes and 3 standard single family homes. The access to the site will be from the east from Meadows Lane. The wetland pond is located between the proposed development and Anacopper Mine Road. The proposal will be to improve a gravel road within an existing 25 foot wide right-of-way between Meadows Lane and Oregon Avenue on the east side of this property, with a paved 20 foot road with curb, gutter and sidewalk. This road will amount to approximately 7,200 square feet of hard surface. The interior road to the project will account for 19,378 square feet of hard surfacing. Driveways will make 3,343 sf with homes at 31,860 square feet of hard surfacing. Total hard surfacing over the 5.20 acres will be approximately 61,800 square feet or 1.41 acres.

A significant amount of grading will occur across the site including lowering the high point of the site and place fill on the northern portion of the site to level the site somewhat.

As a developed site the drainage will be conveyed to two separate basins. 1.06 acres of the southeastern portion of the site flows to the east to the Meadows drainage system. Prior to this report this 1.06 acre portion of the site was accounted for in a modification to the detention pond that was originally designed for Rockridge as well as the Meadows development east of the Meadows development. The existing detention pond was expanded to account for runoff from this site as well as development with the Rockridge development.

The 4.14 acre remainder of the site will discharge to the west through the onside pond/wetland and west under Anacopper Mine Road. Of this 4.14 acre basin 1.97 acres is the wetland. Two additional basins have been identified with the northeast 1.20 acre portion of the site sloping and flowing to the north and will be collected and discharge to a proposed detention pond.

The second basin of 0.60 acres will be directed towards the west and the 110 foot buffer with a dispersion trench located at the top of the slope to disperse all storm water over and through the 110 buffer to the pond/wetland. This will allow the hard surfaces included in this basin to be modeled as grassed surfaces (landscaping).

The remaining 0.33 acres not accounted for in the 4.14 acres is the detention pond.

**Drainage Basin (2007 Storm Comp Plan – City website\publicworks\engineering\comprehensive plans):**  
What Drainage Basin are you in? **G3 and G8** \_ Identify any downstream drainage issues (Storm Comp Plan: \_\_\_\_\_ If so, describe:

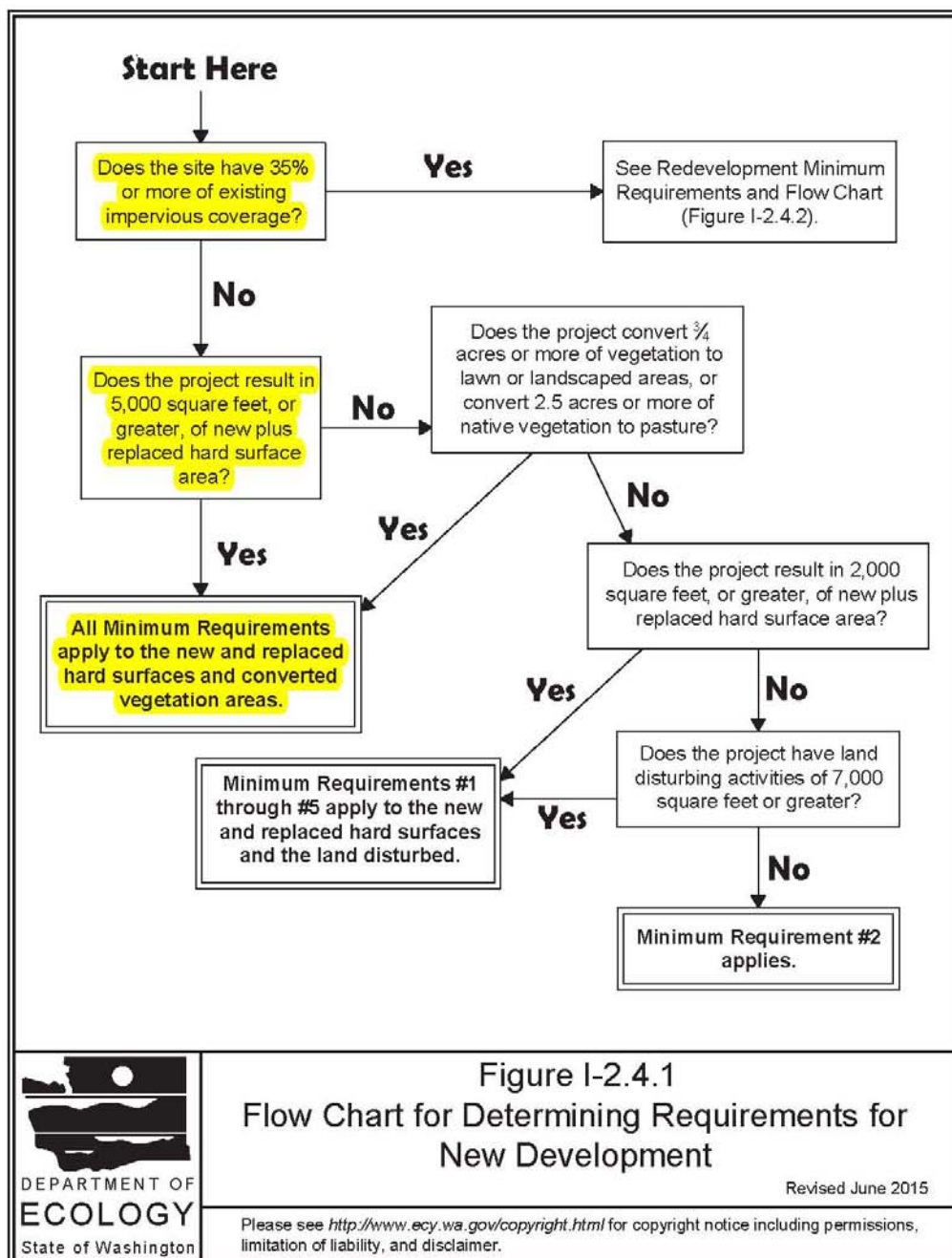
The 2007 City Stormwater Management Plan identifies the western basin as G6 but I believe it should be identified as G5 due to the pond/wetland discharging through a culvert to the west below Anacopper Mine Road to the wetland west of the site on the Port of Anacortes Airport site. This basin flows to the west below the airport runway and combines with the Clearidge drainage system that discharge north across Oakes Avenue and through the San Juan Passage development to Edwards Way and discharging to Guemes Channel at the bottom of Edwards Way. Total distance from the site to Guemes Channel is 4,591 lineal feet.

The eastern basin is G8 that includes Rockridge and Little Cranberry Lake. The portion of this site will discharge to the enclosed public storm system in Meadows Lane flowing east to the Rockridge Detention Pond. The detention pond discharges to the north through a wetland area and into a closed

drainage system at West 7<sup>th</sup> Street and mostly east and west until it discharges to Guemes Channel just west of the Luvric boat yard. Total distance from the site to Guemes Channel is 6,352 lineal feet. The drainage paths map is provided in Appendix 5a.

Complete the Applicability Requirements – Flow Chart (Figure I-2.4.1 Attached, Figure I-2.4.2 Attached and Figure I-2.5.1 Attached)

**Figure I-2.4.1 Flow Chart for Determining Requirements for New Development**





## **TAB 1 (MINIMUM REQUIREMENT #1)**

- **1-2.5.1 Minimum Requirement #1 – Prepare a Stormwater Site Plan**

- 1.3 – Preparation of a Stormwater Site Plan
  - 1.3.1 – Stormwater Site Plans: Step-by-Step

*Note: The level of detail needed for each step depends upon the project size. Provide a narrative description of each step.*

### **1-3.1.1 Step 1 - Site Analysis: Collect and Analyze Information on Existing Conditions**

Site analysis shall be submitted as part of the Existing Conditions Summary above. Part of the information in this step should be used to help prepare the Construction Stormwater Pollution Prevention Plan. Purpose of the Site Analysis is to provide for a Low Impact Development site design that is intended to compliment the predeveloped conditions of the site.

**The Existing site conditions are described in detail above under existing site conditions.**

### **1-3.1.2 Step 2 - Prepare Preliminary Development Layout**

Based upon the analysis of existing site conditions, locate the buildings, roads, parking lots, landscaping features, on-site stormwater management BMP's, and preliminary location of stormwater treatment and retention/detention facilities for the proposed development. The proposed site plan in Appendix A5 shows house, roads, sidewalk and detention pond locations in addition to water quality swale on the north side of the site.

### **1-3.1.3 Step 3 - Perform Off-site Analysis (at Local Agency's Option): Use additional Sheets, if necessary,**

Ecology recommends that local governments require an off-site analysis for projects that add 5,000 SF or more of new hard surfaces, or convert  $\frac{3}{4}$  acres of vegetation to lawn or landscape areas, or convert 2.5 acres of forested area to pasture.

Off-site analysis extends to  $\frac{1}{4}$  mile downstream of the project site.

The downstream drainage from the site is described in the Basin analysis above under Developed site conditions. Each of the two basins discharge to downstream wetlands with  $\frac{1}{4}$  mile of this site.

The eastern discharge to Meadows Lane travels 1,066 lineal feet of enclosed storm pipe before discharging to the existing Rockridge Detention pond. This pond intern discharges to a wetland prior to discharging to West 7<sup>th</sup> Street enclosed drainage system over  $\frac{1}{4}$  mile downstream. No known issues in this stretch of drianage.

The western drainage discharges from the onsite wetland pond under Anacopper Mine Road to the west to another wetland that after 500 feet discharges to a closed drainage system that continues west under the airport runway another 820 feet to discharge to the Glasgow Way enclosed drainage system over  $\frac{1}{4}$  mile downstream of this site. No known issues in this stretch of drianage.

### **1-3.1.4 - Determine Applicable Minimum Requirements**

Establish project size thresholds for the application of Minimum Requirements to new development and redevelopment projects. Figures 2.4.1 (*Attached*) and 2.4.2 (*Attached*) provide the same thresholds in a flow chart format. Based on the preliminary layout, determine whether Minimum Requirements #1 through #5 apply to the project; or, whether Minimum Requirements #1 through #9 apply.

All 9 minimum requirements are applicable due to the large amount of new and replaced hard surfacing exceeding 5,000 square feet.

1-3.1.5 Step 5 - Prepare a Permanent Stormwater Control Plan  
(*Refer to this section of the Ecology Manual for requirements.*)

**A storm water plan is provided in the developed site plan in Appendix 5a.**

1-3.1.6 Step 6 - Prepare a Construction Stormwater Pollution Prevention Plan (**MR#2 – 13 Elements**)

*Refer to Chapter II-3 – Planning for a detailed description of each element. See also attached Tables 4.1.1 (Source Control BMP's by SWPPP Element) and Table 4.2.1 (Runoff Conveyance and Treatment BMP's by SWPPP Element).*

**See attached 13 Elements of a SWPPP, please complete and attached**

1-3.1.7 Step 7 - Complete the stormwater site plan

The Stormwater Site Plan encompasses the entire submittal to the Local Agency with drainage review authority. Refer to this section of the Manual for further clarification of each item and what is required. See below:

- Project Overview
- Existing Conditions Summary
- Off-site Analysis Report
- Permanent Stormwater Control Plan
- Construction Stormwater Pollution Prevention Plan
- Special Reports and Studies
- Other Permits
- Operation and Maintenance Manual
- Declaration of Covenant for Privately Maintained Flow Control and Treatment Facilities. (*See attached Drainage BMP Maintenance Covenant BMP Agreement*)
- Declaration of Covenant for Privately Maintained On-site Stormwater BMP's (*See attached Drainage BMP Maintenance Covenant BMP Agreement*)
- Bond Quantities Worksheet, if applicable

**The project overview has been provided at the beginning of this report along with an existing conditions description. Maps are included in the attachments.**

1-3.1.8 Step 8 - Check Compliance with all Applicable Minimum Requirements

A Stormwater Site Plan as designed and implemented should specifically fulfill all Minimum Requirements applicable to the project. The Stormwater Site Plan should be reviewed to check that these requirements are satisfied.

**To take place during review and during and after construction.**



## **TAB 2 (MINIMUM REQUIREMENT #2)**

- **1-2.5.2 Minimum Requirement #2 – Construction Stormwater Pollution Prevention Plan (SWPP)**
  - All projects are required to complete Minimum Requirement 2.
  - Refer to the 13 Elements of the SWPP (See document below, complete and attach)
  - See attached Table 4.1.1, Table 4.2.1 and Table
  - Provide Engineering Calculations as an attachment for Sediment Ponds\Traps, Diversions, Waterways and Runoff/Stormwater Detention Calculations.

Table 4.1.1 Source Control BMP's by SWPPP Element

| BMP or Element Name                                     | Element #1<br>Preserve<br>Vegetation/Mark<br>Clearing Limits | Element #2<br>Establish<br>Construction<br>Access | Element #5<br>Stabilize<br>Soils | Element #6<br>Protect<br>Slopes | Element #9<br>Control<br>Pollutants | Element #11<br>Maintain<br>BMPs | Element #12<br>Manage the<br>Project | Element #13<br>Protect Low<br>Impact<br>Development |
|---------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------|----------------------------------|---------------------------------|-------------------------------------|---------------------------------|--------------------------------------|-----------------------------------------------------|
| BMP C101: Preserving Natural Vegetation                 | ✓                                                            |                                                   |                                  |                                 |                                     |                                 |                                      |                                                     |
| BMP C102: Buffer Zones                                  | ✓                                                            |                                                   |                                  |                                 |                                     |                                 |                                      | ✓                                                   |
| BMP C103: High Visibility Plastic or Metal Fence        | ✓                                                            |                                                   |                                  |                                 |                                     |                                 |                                      | ✓                                                   |
| BMP C105: Stabilized Construction Entrance / Exit       |                                                              | ✓                                                 |                                  |                                 |                                     |                                 |                                      |                                                     |
| BMP C106: Wheel Wash                                    |                                                              | ✓                                                 |                                  |                                 |                                     |                                 |                                      |                                                     |
| BMP C107: Construction Road/Parking Area Stabilization  |                                                              | ✓                                                 |                                  |                                 |                                     |                                 |                                      |                                                     |
| BMP C120: Temporary and Permanent Seeding               |                                                              |                                                   | ✓                                | ✓                               |                                     |                                 |                                      |                                                     |
| BMP C121: Mulching                                      |                                                              |                                                   | ✓                                | ✓                               |                                     |                                 |                                      |                                                     |
| BMP C122: Nets and Blankets                             |                                                              |                                                   | ✓                                | ✓                               |                                     |                                 |                                      |                                                     |
| BMP C123: Plastic Covering                              |                                                              |                                                   | ✓                                |                                 |                                     |                                 |                                      |                                                     |
| BMP C124: Sodding                                       |                                                              |                                                   | ✓                                |                                 |                                     |                                 |                                      |                                                     |
| BMP C125: Topsoiling / Composting                       |                                                              |                                                   | ✓                                |                                 |                                     |                                 |                                      |                                                     |
| BMP C126: Polyacrylamide for Soil Erosion Protection    |                                                              |                                                   | ✓                                |                                 |                                     |                                 |                                      |                                                     |
| BMP C130: Surface Roughening                            |                                                              |                                                   | ✓                                | ✓                               |                                     |                                 |                                      |                                                     |
| BMP C131: Gradient Terraces                             |                                                              |                                                   | ✓                                | ✓                               |                                     |                                 |                                      |                                                     |
| BMP C140: Dust Control                                  |                                                              |                                                   | ✓                                |                                 |                                     |                                 |                                      |                                                     |
| BMP C150: Materials On Hand                             |                                                              |                                                   |                                  |                                 |                                     | ✓                               | ✓                                    |                                                     |
| BMP C151: Concrete Handling                             |                                                              |                                                   |                                  |                                 | ✓                                   |                                 |                                      |                                                     |
| BMP C152: Sawcutting and Surfacing Pollution Prevention |                                                              |                                                   |                                  |                                 | ✓                                   |                                 |                                      |                                                     |
| BMP C153: Material Delivery, Storage and Containment    |                                                              |                                                   |                                  |                                 | ✓                                   |                                 |                                      |                                                     |
| BMP C154: Concrete Washout Area                         |                                                              |                                                   |                                  |                                 | ✓                                   |                                 |                                      |                                                     |
| BMP C160: Certified Erosion and Sediment Control Lead   |                                                              |                                                   |                                  |                                 |                                     | ✓                               | ✓                                    |                                                     |
| BMP C162: Scheduling                                    |                                                              |                                                   |                                  |                                 |                                     |                                 | ✓                                    |                                                     |



Table 4.2.1 Runoff Conveyance and Treatment BMP's by SWPPP Element

| BMP or Element Name                                           | Element #3<br>Control<br>Flow Rates | Element #4<br>Install<br>Sediment<br>Controls | Element #5<br>Protect<br>Slopes | Element #7<br>Protect<br>Drain Inlets | Element #8<br>Stabilize<br>Channels<br>and Outlets | Element #9<br>Control<br>Pollutants | Element #10<br>Control De-<br>Watering | Element #13<br>Protect Low<br>Impact<br>Development |
|---------------------------------------------------------------|-------------------------------------|-----------------------------------------------|---------------------------------|---------------------------------------|----------------------------------------------------|-------------------------------------|----------------------------------------|-----------------------------------------------------|
| BMP C200: Interceptor Dike and Swale                          |                                     |                                               | ✓                               |                                       |                                                    |                                     |                                        | ✓                                                   |
| BMP C201: Grass-Lined Channels                                |                                     |                                               | ✓                               |                                       |                                                    |                                     |                                        |                                                     |
| BMP C202: Channel Lining                                      |                                     |                                               |                                 |                                       | ✓                                                  |                                     |                                        |                                                     |
| BMP C203: Water Bars                                          | ✓                                   |                                               | ✓                               |                                       |                                                    |                                     |                                        |                                                     |
| BMP C204: Pipe Slope Drains                                   |                                     |                                               | ✓                               |                                       |                                                    |                                     |                                        |                                                     |
| BMP C205: Subsurface Drains                                   |                                     |                                               | ✓                               |                                       |                                                    |                                     |                                        |                                                     |
| BMP C206: Level Spreader                                      |                                     |                                               | ✓                               |                                       |                                                    |                                     |                                        |                                                     |
| BMP C207: Check Dams                                          |                                     |                                               | ✓                               |                                       |                                                    |                                     |                                        | ✓                                                   |
| BMP C208: Triangular Silt Dike (Geotextile Encased Check Dam) |                                     |                                               | ✓                               |                                       |                                                    |                                     |                                        | ✓                                                   |
| BMP C209: Outlet Protection                                   |                                     |                                               |                                 |                                       | ✓                                                  |                                     |                                        |                                                     |
| BMP C220: Storm Drain Inlet Protection                        |                                     |                                               |                                 | ✓                                     |                                                    |                                     |                                        |                                                     |
| BMP C231: Brush Barrier                                       |                                     | ✓                                             |                                 |                                       |                                                    |                                     |                                        | ✓                                                   |
| BMP C232: Gravel Filter Berm                                  |                                     | ✓                                             |                                 |                                       |                                                    |                                     |                                        |                                                     |
| BMP C233: Silt Fence                                          |                                     | ✓                                             |                                 |                                       |                                                    |                                     |                                        | ✓                                                   |
| BMP C234: Vegetated Strip                                     |                                     | ✓                                             |                                 |                                       |                                                    |                                     |                                        | ✓                                                   |
| BMP C235: Wattles                                             |                                     | ✓                                             |                                 |                                       |                                                    |                                     |                                        |                                                     |
| BMP C236: Vegetative Filtration                               |                                     |                                               |                                 |                                       |                                                    |                                     | ✓                                      |                                                     |
| BMP C240: Sediment Trap                                       | ✓                                   | ✓                                             |                                 |                                       |                                                    |                                     |                                        |                                                     |
| BMP C241: Temporary Sediment Pond                             | ✓                                   | ✓                                             |                                 |                                       |                                                    |                                     |                                        |                                                     |
| BMP C250: Construction Stormwater Chemical Treatment          |                                     |                                               |                                 |                                       |                                                    | ✓                                   |                                        |                                                     |
| BMP C251: Construction Stormwater Filtration                  |                                     |                                               |                                 |                                       |                                                    | ✓                                   |                                        |                                                     |
| BMP C252: High pH Neutralization Using CO <sub>2</sub>        |                                     |                                               |                                 |                                       |                                                    | ✓                                   |                                        |                                                     |
| BMP C253: pH Control for High pH Water                        |                                     |                                               |                                 |                                       |                                                    | ✓                                   |                                        |                                                     |

### **13 Elements of SWPPP (Construction Stormwater Pollution Prevention Plan)**

Please check off boxes to show that each element has been read and understood. Provide details where applicable and if certain aspects are unnecessary or exempt, clearly justify. Details of the 13 Elements and the correlating BMPs are listed **Above from** the 2014 Stormwater Management Manual for Western Washington (SWMMWW). A link is provided on the City of Anacortes website, under Planning, Community, & Economic Development Department, as well as under Stormwater on the Engineering Division of Public Work's page.

Owner Name: \_\_Strandberg Construction LLC

Site Address: \_\_1905 Anacopper Mine Road \_\_

Prepared By: \_\_Dale Herrigstad PE\_\_

The Stormwater checklist or building permit determined that:

- |                                                                                                                                       |                                                                                                                                                                                                                             |
|---------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> The 13 elements must be addressed for construction activity adding under 2,000 sq. ft. of hard surface area. | <input type="checkbox"/> These elements must be addressed for construction activity adding 2,000 sq. ft. or more of hard surface area. This means that an attached narrative and site plan are required with this document. |
|---------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Under each element, provide the BMP's that will be applicable to your project. Use the attached Tables provided.**

#### **ELEMENT 1: Preserve Vegetation/Mark Clearing Limits**

- X Before beginning land disturbing activities, including clearing and grading, clearly mark all clearing limits, sensitive areas and their buffers, and trees that are to be preserved within the construction area.
- X Retain the duff layer, native top soil, and natural vegetation in an undisturbed state to the maximum degree practical.

A high visibility construction fence BMP C103 will be installed at the perimeter of the construction site except if and existing fence already exists. BMP will be installed as first step of construction.

BMP C233, Silt Fence will also be used to mark the perimeter of the construction site along the 110 foot wetland buffer and all downslope areas along the north and east boundaries. Also along the east side of Oregon Avenue extension.

BMP to be monitored daily and repaired as needed.

#### **ELEMENT 2: Establish Construction Access**

- X Limit construction vehicle access and exit to one route, if possible.
- X Stabilize access points with a pad of quarry spalls, crushed rock, or other equivalent BMPs, to minimize tracking onto roads.
- X Locate wheel wash or tire baths on site, if the stabilized construction entrance is not effective in preventing tracking sediment onto roads.
- X If sediment is tracked off site, clean the affected roadway thoroughly at the end of each day, or more frequently as necessary (ex: wet weather). Remove sediment from roads by shoveling, sweeping, or pick up and transport the sediment to a controlled sediment disposal area.
- X Conduct street washing only after sediment is removed in accordance with the above bullet.
- X Control street wash wastewater by pumping back on site or otherwise preventing it from discharging into systems tributary to waters of the State.



**The construction entrance will be limited to one location at Meadows Lane with BMP C105 or C107 (Construction Entrance.)**

**Any dirt or mud that is tracked onto the roadway will be clean immediately.**

**To be installed prior to construction. BMP to be monitored daily and repaired as needed.**

**Oregon Avenue is currently gravel but due to potential overuse will also require a construction at the south entrance with BMP C105. A wheel wash, BMP C106, may also need to be considered as weather and conditions require.**

#### **ELEMENT 3: Control Flow Rates**

X Protect properties and waterways downstream of development sites from erosion and the associated discharge of turbid waters due to increases in the velocity and peak volumetric flow rate of stormwater runoff from the project site.

X Where necessary to comply with the bullet above, construct stormwater retention or detention facilities as one of the first steps in grading. Assure that detention facilities function properly before constructing site improvement (e.g. impervious surfaces).

☐ If permanent infiltration ponds are used for flow control during construction, protect these facilities from siltation during the construction phase.

**All onsite drainage will be directed to Temporary Sediment traps prior to discharging from the site to control flow rates as well as on site erosion control silt fencing and temporary swales. The on site detention pond will be utilized as a temporary sediment trap and settling basin during construction and until the site is fully landscaped and foundations are all installed. A pump will be utilized to pump Stormwater to a perforated discharge pipe along the 110 foot buffer to allow filtration of silty water prior to reaching the downstream wetlands.**

#### **ELEMENT 4: Install Sediment Controls**

X Design, install, and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants.

X Construct sediment control BMPs (sediment ponds, traps, filters, etc.) as one of the first steps in grading. These BMPs shall be functional before other land disturbing activities take place.

X Minimize sediment discharges from the site. The design, installation and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting stormwater runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site.

X Direct stormwater runoff from disturbed areas through a sediment pond or other appropriate sediment removal BMP, before the runoff leaves a construction site or before discharge to an infiltration facility. Runoff from fully stabilized areas may be discharged without a sediment removal BMP, but must meet the flow control performance standard in Element #3, bullet #1.

X Locate BMPs intended to trap sediment on-site in a manner to avoid interference with the movement of juvenile salmonids attempting to enter off-channel areas or drainages.

X Provide and maintain natural buffers around surface waters, direct stormwater to vegetated areas to increase sediment removal, and maximize stormwater infiltration.

X Where feasible, design outlet structures that withdraw impounded stormwater from the surface to avoid discharging sediment that is still suspended lower in the water column.

**As described above under flow control, silt fencing BMP C233 will be utilized along the 110 foot buffer, north boundary with an existing swale and the northeast boundary that has a down slope onto neighboring properties. A temporary interceptor swale will be also utilized along the north and east boundaries and along the 110 foot buffer where feasible to direct storm water to the detention and temporary sedimentation pond BMP C240.**

## **ELEMENT 5: Stabilize Soils**

- X Stabilize exposed and unworked soils by application of effective BMPs that prevent erosion. Applicable BMPs include, but are not limited to: temporary and permanent seeding, sodding, mulching, plastic covering, erosion control fabrics and matting, soil application of polyacrylamide (PAM), the early application of gravel base early on areas to be paved, and dust control.
- X Control stormwater volume and velocity within the site to minimize soil erosion.
- X Control stormwater discharges, including both peak flow rates and total stormwater volume, to minimize erosion at outlets and to minimize downstream channel and stream bank erosion.
- X Soils must not remain exposed and unworked for more than the time periods set forth below to prevent erosion.
  - o During the dry season (May 1 – Sept 30): 7 days
  - o During the wet season (Oct 1 – Apr 30): 2 days
- X Stabilize soils at the end of the shift before a holiday or weekend if needed based on the weather forecast.
- X Stabilize soil stockpiles from erosion, protect with sediment trapping measures, and where possible, be located away from storm drain inlets, waterways, and drainage channels.
- X Minimize the amount of soil exposed during construction activity.
- X Minimize the disturbance of steep slopes.
- X Minimize soil compaction and, unless infeasible, preserve topsoil.

**Stabilize exposed and unworked soils by application of effective BMPs that prevent erosion. Applicable BMPs include, but are not limited to: temporary and permanent seeding, sodding, mulching, plastic covering, erosion control fabrics and matting, soil application of polyacrylamide (PAM). Install plastic covering per BMP C123 on Soils Stockpiles. BMP to be monitored daily and repaired as needed.**

## **ELEMENT 6: Protect Slopes**

- X Design and construct cut-and-fill slopes in a manner to minimize erosion. Applicable practices include, but are not limited to, reducing continuous length of slope with terracing and diversions, reducing slope steepness, and roughening slope surfaces (Ex: track walking).
- X Divert off-site stormwater (run-on) or ground water away from slopes and disturbed areas with interceptor dikes, pipes, and/or swales. Off-site stormwater should be managed separately from stormwater generated on the site.
- X At the top of slopes, collect drainage in pipe slope drains or protected channels to prevent erosion.
  - o \*Temporary pipe slope drains must handle the peak volumetric flow rate calculated using a 10-minute time step from a Type 1A, 10-year, 24-hour frequency storm for the developed condition. Alternatively, the 10-year, 1-hour flow rate predicted/indicated by an approved continuous runoff model, increased by a factor of 1.6, may be used. The hydrologic analysis must use the existing land cover condition for predicting flow rates from tributary areas outside the project limits. For tributary areas on the project site, the analysis must use the temporary or permanent project land cover condition, whichever will produce the highest flow rates. If using the Western Washington Hydrology Model (WWHM) to predict flows, bare soil areas should be modeled as “landscaped” area.
  - o Where 15-minute time steps are available in an approved continuous runoff model, they may be used directly without a correction factor.
- X Place excavated material on the uphill side of trenches, consistent with safety and space considerations.
- X Place check dams at regular intervals within constructed channels that are cut down a slope.
- X Consider soil types and its potential for erosion.
- X Stabilize soils on slopes, as specified in Element 5.
- X BMP combinations are the most effective method of protecting slopes with disturbed soils. Ex: Use both mulching and straw erosion control blankets.



**Slopes will be stabilized using BMP C122, Nets our Blankets, BMP C121 Mulching and BMP C120 Temporary and permanent Seeding. BMP C130 (Surface Roughening) and possibly BMP C313 Gradient Terraces on temporary slopes. Temporary Interceptor swale will by utilized to direct surface water to the detention pond that will act as a temporary sediment pond.**

#### **ELEMENT 7: Protect Drain Inlets**

- ☐ Protect all storm drain inlets made operable during construction so that stormwater runoff does not enter the conveyance system without first being filtered or treated to remove sediment.
- ☐ Clean or remove and replace inlet protection devices when sediment has filled one-third of the available storage (unless a different standard is specified by the product manufacturer).
- ☐ Where possible, protect all existing storm drain inlets so that stormwater runoff does not enter the conveyance system without first being filtered or treated to remove sediment.
- ☐ Keep all approach roads clean. Do not allow sediment and street wash water to enter storm drains without prior and adequate treatment unless treatment is provided before the storm drain discharges to waters of the State.
- ☐ Inlets should be inspected weekly at a minimum and daily during storm events.

**Off site drain inlets will be protected with WSDOT I-40.20-00 Storm Drain Inlet protection devices at existing catch basins in the immediate vicinity of the project in Meadows Lane.**

**To be installed prior to the start of any construction.**

**BMP to be monitored daily and repaired as needed.**

**Also utilize BMP C220 storm inlet protection where appropriate.**

#### **ELEMENT 8: Stabilize Channels and Outlets**

- X Design, construct, and stabilize all on-site conveyance channels to prevent erosion from the following expected peak flows:
  - o \*Channels must handle same peak volumetric flow rate as temporary pipe slope drains listed in Element 6, above.
- X Provide stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent streambanks, slopes, and downstream reaches at the outlets of all conveyance systems.
- X The best method for stabilizing channels is to completely line the channel with a blanket product first, then add check dams as necessary to function as an anchor and to slow the flow of water.

**Temporary Interceptor Swales will be utilized along the western wetland buffer, northern boundary and eastern boundary to direct storm water to the Temporary sedimentation pond as shown on the plans. The swale will need to be installed early in the grading process and stabilized with BMP C122, Nets our Blankets or sod.**

#### **ELEMENT 9: Control Pollutants**

- ☐ Design, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants.
- ☐ Handle and dispose of all pollutants, including waste materials and demolition debris that occur on-site in a manner that does not cause contamination of stormwater.
- ☐ Provide cover, containment, and protection from vandalism for all chemicals, liquid products, petroleum products, and other materials that have the potential to pose a threat to human health or the environment. On-site fueling tanks must include secondary containment. Secondary containment means placing tanks or containers within an impervious structure capable of containing 110% of the volume contained in the largest tank within the containment structure. Double-walled tanks do not require additional secondary containment.
- ☐ Conduct maintenance, fueling, and repair of heavy equipment and vehicles using spill prevention and control measures. Clean contaminated surfaces immediately following any spill incident.
- ☐ Discharge wheel wash or tire bath wastewater to a separate on-site treatment system that prevents

discharge to surface water, such as closed-loop recirculation or upland land application, or to the sanitary sewer, with local sewer district approval. Wheel wash or tire bath wastewater should not include wastewater from concrete washout areas.

- Apply fertilizers and pesticides in a manner and at application rates that will not result in loss of chemical to stormwater runoff. Follow manufacturers' label requirements for application rates and procedures.
- Use BMPs to prevent contamination of stormwater runoff by pH-modifying sources. The sources for this contamination include, but are not limited to: bulk cement, cement kiln dust, fly ash, new concrete washing and curing waters, waste streams generated from concrete grinding and sawing, exposed aggregate processes, dewatering concrete vaults, concrete pumping, and mixer washout waters. Adjust the pH of stormwater if necessary to prevent violations of the water quality standards.
- Assure that washout of concrete trucks is performed off-site or in designated concrete washout areas only. Do not wash out concrete trucks onto the ground, or into storm drains, open ditches, streets, or streams. Do not dump excess concrete on site, except in designated concrete washout areas. Concrete spillage or concrete discharge to surface waters of the State is prohibited. Do not use upland land applications for discharging wastewater from concrete washout areas.
- Obtain written approval from Ecology and provide to the City before using chemical treatment other than CO<sub>2</sub> or dry ice to adjust pH.
- Woody debris may be chopped and spread on site.
- Conduct oil changes, hydraulic system drain down, solvent and de-greasing cleaning operations, fuel tank drain down and removal, and other activities which may result in discharge or spillage of pollutants to the ground or into stormwater runoff using spill prevention measures, such as drip pans.
- Clean contaminated surfaces immediately following any discharge or spill incident. Emergency repairs may be performed on-site using temporary plastic placed beneath and, if raining, over the vehicle.

**BMP C154 a Concrete Washout Area is to be installed onsite to capture contaminated water from concrete washouts.**

**To be installed prior to sidewalk & foundation / concrete installation and maintained throughout the construction of the buildings.**

**Provide spill prevention kits for excavation and concrete crews.**

#### **ELEMENT 10: Control De-Watering**

- Discharge foundation, vault, and trench dewatering water, which have characteristics similar to stormwater runoff at the site, into a controlled conveyance system before discharge to a sediment trap or sediment pond.
- Discharge clean, non-turbid de-watering water, such as well-point ground water, to systems tributary to, or directly into surface waters of the State, as specified in Element 8, provided the de-watering flow does not cause erosion or flooding of receiving waters or interfere with the operation of the system. Do not route clean dewatering water through stormwater sediment ponds. Note that "surface waters of the State" may exist on a construction site as well as off site; for example, a creek running through a site.
- Handle highly turbid or contaminated dewatering water separately from stormwater.
- Other treatment or disposal options may include:
  1. Infiltration
  2. Transport off-site in a vehicle, such as a vacuum flush truck, for legal disposal in a manner that does not pollute state waters.
  3. Ecology-approved on-site chemical treatment or other suitable treatment technologies.
  4. Sanitary or combined sewer discharge with local sewer district approval, if there is no other option.
  5. Use of a sedimentation bag with outfall to a ditch or swale for small volumes of localized dewatering.
- Construction equipment operation, clamshell digging, concrete tremie pour, or work inside a cofferdam can create highly turbid or contaminated dewatering water.
- Discharging sediment-laden (muddy) water into waters of the State likely constitutes a violation of water quality standards for turbidity. The easiest way to avoid discharging muddy water is through infiltration



and preserving vegetation.

**If dewatering is needed all discharge will be directed to a temporary sediment pond or trap BMP C240 prior to discharge to the city storm drainage system.**

**The eastern sediment trap located at the entrance at Meadows Lane will be designed for 13,000 sf impervious area or 0.30 acres where the developed 2 year flow is 0.24 cfs X 2080 sf/cfs flow = 499 sf surface area plan or 22'x22' square surface pond area minimum.**

#### **ELEMENT 11: Maintain BMPs**

- ☐ Maintain and repair all temporary and permanent erosion and sediment control BMPs as needed to assure continued performance of their intended function in accordance with BMP specifications.
- ☐ Remove all temporary erosion and sediment control BMPs within 30 days after achieving final site stabilization or after the temporary BMPs are no longer needed. Some temporary erosion and sediment control BMPs are bio-degradable and designed to remain in place following construction such as compost socks.
- ☐ Provide protection to all BMPs installed for the permanent control of stormwater from sediment and compaction. All BMPs that are to remain in place following completion of construction shall be examined and placed in full operating conditions. If sediment enters the BMPs during construction, it shall be removed and the facility shall be returned to the conditions specified in the construction documents.
- ☐ Remove or stabilize trapped sediment on site. Permanently stabilize disturbed soil resulting from removal of BMPs or vegetation.
- ☐

BMP to be monitored daily and repaired as needed and or as required by the City of Anacortes.

Contractor/owner will be required to submit erosion and sedimentation reports to the building department.

**ELEMENT 12: Manage the Project – Projects subject to Minimum Requirements 1-9 must have a Certified Erosion and Sediment Control Lead (CESCL) for site inspections. Projects subject to Minimum Requirements 1-5 do not require the inspector to be certified. By the initiation of construction, the SWPPP must identify the CESCL or inspector, who shall be present on-site or on-call at all times.**

- ☐ Phase development projects to the maximum degree practicable and take into account seasonal work limits to prevent soil erosion and prevent transporting sediment from the site during construction.
- ☐ Inspection and monitoring – Inspect, maintain, and repair all BMPs as needed to assure continued performance of their intended function.
- ☐ Maintain, update, and implement the SWPPP.
- ☐ Clearing and grading activities for developments shall be permitted only if conducted using an approved site development plan (e.g., subdivision approval).
- ☐ From Oct 1 through Apr 30, clearing, grading, and other soil disturbing activities is permitted only if shown that the site operator will prevent silt-laden runoff from leaving the site through a combination of the following:
  1. Site conditions including existing vegetative coverage, slope, soil type, and proximity to receiving waters.
  2. Limit activities and the extent of disturbed areas.
  3. Proposed erosion and sediment control measures.

Weather conditions can influence the seasonal limitation on site disturbance. The City of Anacortes has the authority to take enforcement action per AMC 19.76 Stormwater.

- ☐ The following activities are exempt from the seasonal clearing and grading limitations:
  1. Routine maintenance and necessary repair of erosion and sediment control BMPs;
  2. Routine maintenance of public facilities or existing utility structures that do not expose the soil or result in the removal of the vegetative cover to soil
  3. Activities where there is 100% infiltration of surface water runoff within the site in approved and installed erosion and sediment control facilities.

**This site will require Certified Erosion and Sediment Control Lead (CESCL) for site inspections as noted above and required to submit weekly reports to the city of Anacortes.**

**ELEMENT 13: Protect Low Impact Development BMPS**

- ☐ If implementing any bioretention facilities or rain gardens, refer to the applicable BMP sections of the Manual for requirements.

**No LID BMPS are proposed for this project due to Low soil permeability.**

|                     |                   |
|---------------------|-------------------|
| <hr/>               | November 30, 2019 |
| Applicant Signature | Date              |



### **TAB 3 (MINIMUM REQUIREMENT #3)**

- **1-2.5.3 Minimum Requirement #3 – Source Control of Pollution**

All known, available and reasonable source control BMP's must be applied to all projects. Source control BMP's must be selected, designed, maintained according to the reference Ecology Manual.

The intent of source control BMP's is to prevent stormwater from coming in contact with pollutants. They are a cost-effective means of reducing pollutants in stormwater, and, therefore, should be considered in all projects.

**Single Family Residential Construction Projects and Residential Subdivisions are Exempt from this Minimum Requirement**

All Commercial Properties, Industrial Properties, and Multi-Family Properties, Boatyards, Sand and Gravel Mining Operations are required to comply with this Minimum Requirement.

Refer to Chapter IV-2.1 Applicable (Mandatory) Operationsal Source Control BMP's

#### **TAB 4 (MINIMUM REQUIREMENT #4)**

- **Minimum Requirement #4 – Preservation of Natural Drainage Systems and Outfalls**

Natural drainage patterns shall be maintained and discharges from the project shall occur at the natural location, to maximum extent practicable. The manner by which runoff is discharged from the project site must not cause a significant adverse impact to downstream receiving waters and down gradient properties. All outfalls require energy dissipation.

The objective is to preserve and utilize drainage systems to the fullest extent because of the multiple stormwater benefits these systems provide; and to prevent erosion at the downstream of the discharge location.

Refer to the reference manual for supplemental guidelines and additional information under this section.

**Will this project disturb the Natural Drainage System or Outfall of the project Site?** Yes\No. If yes, refer to section I.2.5.4 for Supplemental Guidelines for additional information.

**This project will not change the natural drainage system or outfall from this site. Discharge will continue to discharge to the downstream wetlands.**



## TAB 5 (MINIMUM REQUIREMENT #5)

- **Minimum Requirement #5 – On-site Stormwater Management**

Project thresholds that trigger Minimum Requirements #1 through #5, shall utilize the On-site Stormwater Management BMP's from List #1 for all surfaces within each type of surface in List #1; or, Demonstrate compliance with the LID Performance Standard. Projects selecting this option cannot use Rain Gardens. They may choose to use Bioretention BMP's as described in Chapter V-7 – Infiltration and Bioretention Treatment Facilities to achieve the LID Performance Standard.

**Refer to this section of the reference Manual for all Feasibility or Infeasibility Criteria for List #1 and List #2.**

**Is this project Flow Control Exempt? NO** (Yes\No) (See Appendix I-E: Flow Control-Exempt Surface Water). If yes, provide reasoning from the applicability section of 1-2.5.7 Minimum Requirement #7: Flow Control). If No, then the project triggers Minimum Requirement #7 (1-2.5.7) and possibly Minimum Requirement #8 (1-2.5.8).

**This project discharges to downstream wetlands and flow control is required.**

**Projects triggering Minimum Requirements 1 through 9, must meet the requirements in 1-2.5.5 Minimum Requirement 5 – On-site Stormwater Management.**

- o Refer to Table I-2.5.1 On-site Stormwater Management Requirements for Projects Triggering Minimum Requirements 1 through 9 in the Department of Ecology Manual.

**All sites are required to utilize BMP T5.13 – Post Construction Soil Quality and Depth.**

For each surface, consider the BMP's in the order listed for that type of surface. Use the first BMP that is considered feasible. No other on-site Stormwater Management BMP is necessary for that surface. Feasibility shall be determined by evaluation against:

1. Design criteria, limitations and infeasibility criteria identified for each BMP in this manual, and;
2. Competing needs criteria listed in Chapter V-5 – On-site Stormwater Management.

### **Lawn and Landscaped Area:**

- **BMP T5.13: Post-Construction Soil Quality and Depth.** (*Attach Detail in Report*)  
Refer to this site for requirements and specifications. All projects are required to utilize this BMP.

[http://www.soilsforsalmon.org/pdf/Soil\\_BMP\\_Manual.pdf](http://www.soilsforsalmon.org/pdf/Soil_BMP_Manual.pdf)

See **Appendix 3** for the "Model Soil Management Plan for BMP T5.13" to be submitted with Drainage Report and Application Material.

An alternate document acceptable to the City of Anacortes is a Test Report provided by the Soils Supplier that identifies the soils to be used meet the specifications outlined under Minimum Requirement 5. The specifications are in both WSDOT and CSI Formats. For specifications, refer to the above referenced PDF.

This submittal can be a deferred submittal since most projects are not sure who the supplier will be at the time of building permit application. For projects that trigger Minimum Requirements 1 through

5, the Test Report will be provided to the Building Department. Projects triggering Minimum Requirements 1 through 9, the Test Report will be provided to the Engineering Department.

### **List #2 – Project Triggering Minimum Requirement 1 through 9**

For each surface, consider the BMPs in the order listed for that type of surface. Use the first BMP that is considered feasible. No other On-site Stormwater Management BMP is necessary for that surface.

Provide feasible detail under each BMP with maintenance and operations specifications in Minimum Requirement 5.

#### **Roofs: List #2**

☐ **BMP T5.30: Full Dispersion is Infeasible**

If infeasible, explain the criteria:

**No native vegetation meeting the requirement is present on the site.**

**Or, T5.10A: Downspout Full Infiltration is Infeasible**

If infeasible, explain the criteria:

**The soils report identifies dense glacial till just below the topsoil at depths of 1 to 2 feet and represent a “restrictive layer that is not suitable for conventional Stormwater infiltration.”**

**1. BMP T7.30: Bioretention Cells, Swales and Planter Boxes Is Infeasible**

If infeasible, explain the criteria:

**The soils report identifies dense glacial till just below the topsoil at depths of 1 to 2 feet and represent a “restrictive layer that is not suitable for conventional Stormwater infiltration.”**

**2. BMP T5.10B: Downspout Dispersion Systems Feasible\Infeasible**

If infeasible, explain the criteria:

**Dispersion for individual lots are not feasible due to lack of separation due to the character of Cottage development and the closeness of adjoining houses.**

**2. BMP T5.10C: Perforated Stub-out Connections is Infeasible**

If infeasible, explain the criteria:

**The soils report identifies dense glacial till just below the topsoil at depths of 1 to 2 feet and represent a “restrictive layer that is not suitable for conventional Stormwater infiltration.” Perforated stub-outs trenches are installed to a depth of 18 inches and require a separation of 12 inches to the seasonal water table. Location of the trenches not likely be feasible after final grading.**

#### **Other Hard Surfaces: List #2**



1. **BMP T.5.30 Full Dispersion is Infeasible**

If infeasible, explain the criteria:

**No native vegetation meeting the requirement is present on the site.**

2. **BMP T5.15: Permeable Pavements is Infeasible**

If infeasible, explain the criteria:

**The soils report identifies dense glacial till just below the topsoil at depths of 1 to 2 feet and represent a “restrictive layer that is not suitable for conventional Stormwater infiltration.”**

3. **BMP T7.30: Bio retention Cells, Swales and Planter Boxes is Infeasible**

If infeasible, explain the criteria:

**The soils report identifies dense glacial till just below the topsoil at depths of 1 to 2 feet and represent a “restrictive layer that is not suitable for conventional Stormwater infiltration.”**

4. **BMP T5.11: Concentrated Flow Dispersion Feasible\Infeasible**

If infeasible, explain the criteria:

**Basins A2 and Basin B1: Dispersion is not feasible adjacent to the proposed road ways due to the proximity to homes or property lines parallel with the road ways. Dispersion is possible in Basin A1 at the end of the roads ending above the 110 foot wetland buffer. The requirement is a 10-foot wide vegetated buffer for up to 20 feet of width of pavement width.**

**The southern most driveway discharging above the 110 foot buffer has a length of 71 feet and a width of 20 feet with a road area of 1,139 square feet. The road will be crowned so that ½ of the 1,139 square feet or 570 square feet to each dispersion point as shown on the site plan.**

**The second road to the north has a depth of 164 feet in is not feasible for dispersion.**

## **BMP T5.11: Concentrated Flow Dispersion**

**Purpose and Definition** Dispersion of concentrated flows from driveways or other pavement through a vegetated pervious area attenuates peak flows by slowing entry of the runoff into the conveyance system, allowing for some infiltration, and providing some water quality benefits. See [Figure 5.3.1](#).

**Applications and Limitations** • Use this BMP in any situation where concentrated flow can be dispersed through vegetation.  
• [Figure 5.3.1](#) shows two possible ways of spreading flows from steep driveways.

**Design Guidelines**

- Maintain a vegetated flowpath of at least 50 feet between the discharge point and any property line, structure, steep slope, stream, lake, wetland, lake, or other impervious surface.
- A maximum of 700 square feet of impervious area may drain to each concentrated flow dispersion BMP.
- Provide a pad of crushed rock (a minimum of 2 feet wide by 3 feet long by 6 inches deep) at each discharge point.
- No erosion or flooding of downstream properties may result.

- Runoff discharged towards landslide hazard areas must be evaluated by a geotechnical engineer or qualified geologist. Do not place the discharge point on or above slopes greater than 20%, or above erosion hazard areas, without evaluation by a geotechnical engineer or qualified geologist and approval by the Local Plan Approval Authority.
- For sites with septic systems, the discharge point must be ten feet downgradient of the drainfield primary and reserve areas ([WAC 246-272A-0210](#)). A Local Plan Approval Authority may waive this requirement if site topography clearly prohibits flows from intersecting the drainfield.

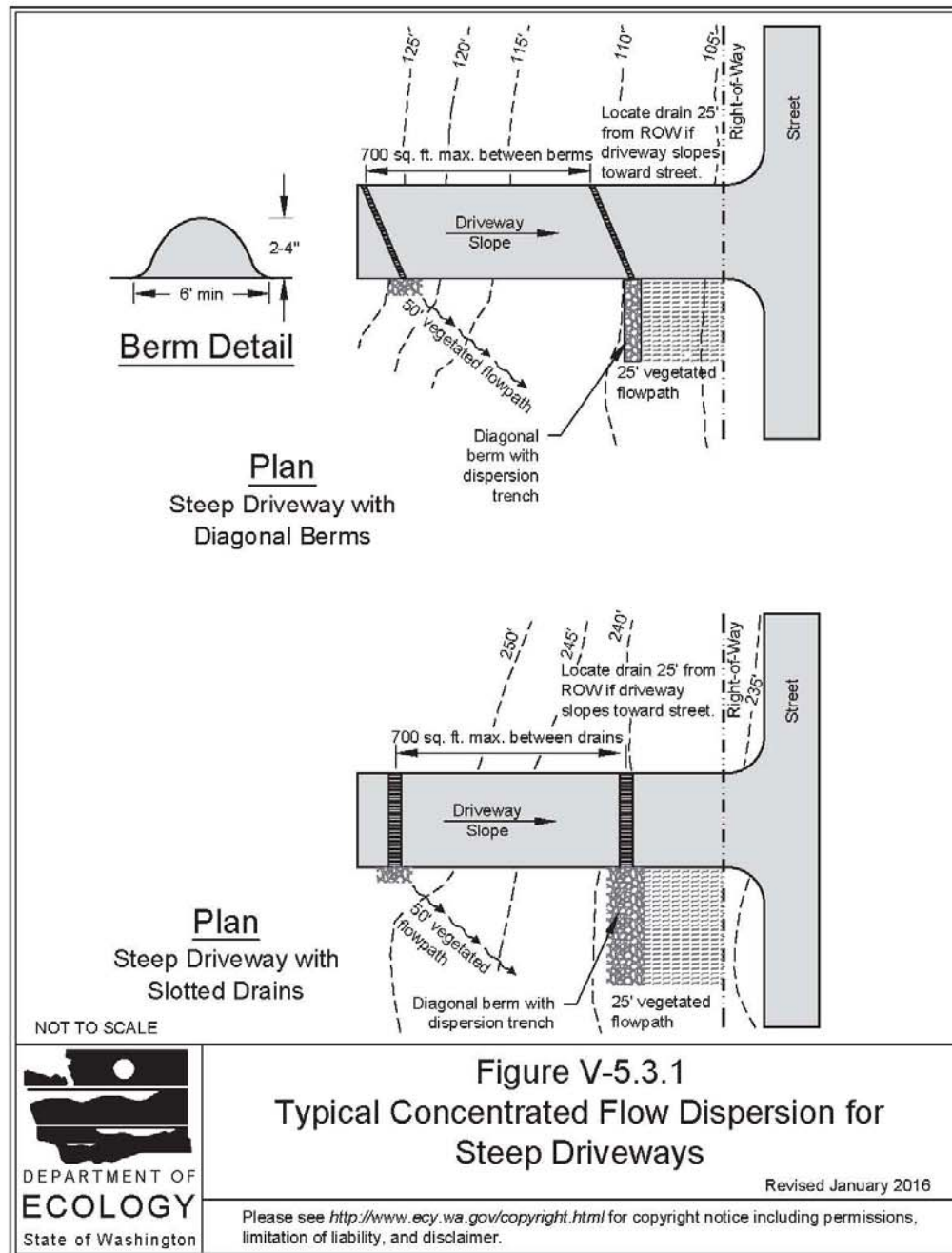
***Runoff Modeling*** Where BMP T5.11 is used to disperse runoff into an undisturbed native landscape area or an area that meets [BMP T5.13](#), and the vegetated flow path is at least 50 feet, the impervious area may be modeled as landscaped area. Where the vegetated flowpath is 25 – 50 feet, using a dispersion trench (see BMP T5.10B) allows modeling the impervious area as 50% impervious/50% landscape. This is done in the WWHM 3 on the Mitigated Scenario screen by entering the dispersed impervious area into one of the entry options for dispersal of impervious area runoff. For procedures in WWHM 2012, see Appendix III-C.

\_\_\_\_\_  
Applicant Signature

\_\_\_\_\_  
Date



**Figure V-5.3.1 Typical Concentrated Flow Dispersion for Steep Driveways**



## **TAB 6 – (MINIMUM REQUIREMENT 6 - RUNOFF TREATMENT)**

Refer to 1.2.5.6 and provide the required information for this Minimum Requirement.

Threshold requirements for determining the applicability of runoff treatment.

**Projects in which the total of pollution-generating hard surface (PGHS) is 5,000 square feet or more in a threshold discharge area of the project, or**

**Projects in which the total of pollution-generative pervious surfaces (PGPS)-not including permeable pavements-is three-quarters (3/4) of an acre or more in a threshold discharge area, and from which there will be a surface discharge in a natural or man-made conveyance system from the site.**

**The site is broken into 3 separate basin flows with each basin exceeding 5,000 square feet of PGHS area.**

### **BASIN B1**

Basin B1 flows to the existing Rockridge detention pond that was designed with a permanent Wet Pool for water quality treatment. The new impervious pollution generating surface area contributing to the Rockridge detention pond will come from Oregon Avenue at 5,374 square feet of paved surface and the entry road to the Crossings at 5,461 square feet of paved surface area and additional driveways at 1,608 square feet for a total of 12,443 square feet (0.29 acres) of pollution generating surfacing. The surface area of the Rockridge detention pond permanent pool pond is approximately 10,000 square feet. The volume of the pond assuming a depth of 4 feet and 3:1 side slopes is approximately 31,500 cubic feet. The volume of the 6-month, 24-hour storm event for the 1.06 acre developed basin B1 is .03 acre-feet or 1,307 cubic feet. The additional wet pool volume requirement of 1,307 cubic feet in a 31,500 cubic foot pond is about 4% of the total volume and will have a negligible impact on the water quality treatment capability of the pond.

### **BASIN A1**

Basin A1 is in the southwest corner of the site. The southern paved road of 1,139 square feet and one 200 square foot driveway of will discharge to a dispersion trench as described in Minimum Requirement #5 above and treatment will be provided through the dispersion through vegetation of approximately 100 feet before reaching the wetland pond.

The northern road of Basin A1 is 4,025 square feet and will discharge to a proposed Bioretention cell prior to discharging to the detention pond. The road area will be combined with the roof area of 5 homes (1,270 sf each) and 6 driveways (1,288 sf total) for a total impervious area of 11,663 square feet and an additional 6,822 square feet of pervious area. Two of the most northern homes will bypass the Bioretention cell.

#### **Bioretention Cell Design**

**Total basin = 24,966 sf (0.57 acres)**

**Impervious = 11,663 sf (0.27 acres)**

**Pervious = 13,303 sf (0.30 acres)**

**WWM2012  
PROJECT REPORT**

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**Project Name:** The Crossings

**Site Name:** Basin A1

**Site Address:**

**City** : Anacortes

**Report Date:** 1/2/2020

**Gage** : Burlington

**Data Start** : 1948/10/01

Version Date: October 7, 2019 Previous Version Date: February 20, 2019



Data End : 2009/09/30  
Precip Scale: 0.80  
Version Date: 2016/02/25  
Version : 4.2.12

---

**PREDEVELOPED LAND USE**

Name : Basin 1

| <u>Pervious Land Use</u> | <u>acre</u> |
|--------------------------|-------------|
| C, Forest, Flat          | .57         |
| Pervious Total           | 0.57        |

| <u>Impervious Land Use</u> | <u>acre</u> |
|----------------------------|-------------|
| Impervious Total           | 0           |
| Basin Total                | 0.57        |

---

**MITIGATED LAND USE**

Name : Basin 1

| <u>Pervious Land Use</u> | <u>acre</u> |
|--------------------------|-------------|
| C, Lawn, Flat            | .3          |
| Pervious Total           | 0.3         |

| <u>Impervious Land Use</u> | <u>acre</u> |
|----------------------------|-------------|
| ROADS FLAT                 | 0.09        |
| ROOF TOPS FLAT             | 0.15        |
| DRIVEWAYS FLAT             | 0.03        |
| Impervious Total           | 0.27        |
| Basin Total                | 0.57        |

---

**Element Flows To:**

| Surface             | Interflow           | Groundwater |
|---------------------|---------------------|-------------|
| Surface retention 1 | Surface retention 1 |             |

---

Name : Bioretention 1

Bottom Length: 6.00 ft.

Bottom Width: 6.00 ft.

Material thickness of first layer: 1.5

Material type for first layer: SMMWW 12 in/hr

Material thickness of second layer: 0

Material type for second layer: Sand

Material thickness of third layer: 0

Material type for third layer: GRAVEL

Underdrain used

Underdrain Diameter (feet): .5

Orifice Diameter (in.): 6

Offset (in.): 0

Flow Through Underdrain (ac-ft.): 35.879

Total Outflow (ac-ft.): 39.017

Percent Through Underdrain: 91.96

Discharge Structure

Riser Height: 0.5 ft.

Riser Diameter: 6 in.

Bioretention pond size will be 6 feet square or 36 square foot bottom area with 3:1 side slopes and a freeboard of 1 foot with the 6" overflow pipe set at 6" above the bottom of the Bioretention Pond will provide 92% treatment.

## **BASIN A2**

The Basin A2 road surfaces, driveways and roof areas in the northeast corner of the site will discharge to a Bioswale in the northeast corner of the site.

### **PREDEVELOPED LAND USE**

Name : Basin A1

|                          |             |
|--------------------------|-------------|
| <u>Pervious Land Use</u> | <u>acre</u> |
| C, Forest, Flat          | 1.2         |
| Pervious Total           | 1.2         |

|                            |             |
|----------------------------|-------------|
| <u>Impervious Land Use</u> | <u>acre</u> |
| Impervious Total           | 0           |
| Basin Total                | 1.2         |

---

### **MITIGATED LAND USE**

|                          |             |
|--------------------------|-------------|
| <u>Pervious Land Use</u> | <u>acre</u> |
| C, Lawn, Mod             | .59         |
| Pervious Total           | 0.59        |

|                            |             |
|----------------------------|-------------|
| <u>Impervious Land Use</u> | <u>acre</u> |
| ROADS MOD                  | 0.16        |
| ROOF TOPS FLAT             | 0.23        |
| DRIVEWAYS FLAT             | 0.03        |
| SIDEWALKS MOD              | 0.01        |
| POND                       | 0.18        |
| Impervious Total           | 0.61        |

|             |     |
|-------------|-----|
| Basin Total | 1.2 |
|-------------|-----|

---

### **ANALYSIS RESULTS**

---

#### **Flow Frequency Return Periods for Predeveloped. POC #1**

|                      |                  |
|----------------------|------------------|
| <u>Return Period</u> | <u>Flow(cfs)</u> |
| 2 year               | 0.011409         |
| 5 year               | 0.022488         |
| 10 year              | 0.03108          |
| 25 year              | 0.042901         |
| 50 year              | 0.052194         |
| 100 year             | 0.061767         |

#### **Flow Frequency Return Periods for Mitigated. POC #1**

|                      |                  |
|----------------------|------------------|
| <u>Return Period</u> | <u>Flow(cfs)</u> |
| 2 year               | 0.244541         |
| 5 year               | 0.355154         |
| 10 year              | 0.438792         |
| 25 year              | 0.556839         |
| 50 year              | 0.654118         |
| 100 year             | 0.759711         |

---

#### **Water Quality BMP Flow and Volume for POC #1**

On-line facility volume: 0.0333 acre-feet  
On-line facility target flow: 0.0176 cfs.  
Adjusted for 15 min: 0.0176 cfs.  
Off-line facility target flow: 0.0092 cfs.  
Adjusted for 15 min: 0.0092 cfs.

---

The online treatment flow target is 0.02 cfs.



The following spread sheet checks for Stability and retention time. The design swale length will be 180 lineal feet with a bottom width of 2 feet and a longitudinal minimum slope of 1.5% to avoid an underdrain. The residence time is 12.1 minutes and greater than the 9 minute minimum. The peak flow rate for the 100 year storm event is 0.75 cfs with a depth of flow of 0.5 feet. Total depth of swale is 1.5 feet, allowing 1 foot of freeboard with side slopes of 3:1 for a total width of 11 feet at the top of the berm.

### The Crossing

#### WATER QUALITY CALCULATIONS

##### PROJECT DATA:

|                       |     |       |      |
|-----------------------|-----|-------|------|
| 2-Year Devel Flow:    | cfs | 0.24  | cfs  |
| WQ Design Flow:       | Qd  | 0.15  | cfs  |
| Swale Length:         | L   | 185   | feet |
| Bottom width:         | b   | 2     | feet |
| Longitudinal slope:   | s   | 1.5%  |      |
| Total Elevation drop: |     | 2.775 |      |

##### TYPICAL DESIGN CONSTRAINTS

|                |      |     |      |
|----------------|------|-----|------|
| Manning's n:   | n    | 0.2 |      |
|                | m or |     |      |
| Sideslope:     | Z    | 3   | :1   |
| Depth of flow: | y    | 0.3 | feet |
| Freeboard:     | H    | 1   | feet |

##### CALCULATED DATA

|                       |    |         |        |
|-----------------------|----|---------|--------|
| Top Width:            | T  | 3.80    | feet   |
| Wetted Perimeter      | P  | 3.80    | feet   |
| X-sectional area:     | A  | 0.87    | sq.ft. |
| Equilibrium Flow:     | Qe | 0.30    | cfs    |
| Design Flow:          | Qd | 0.20    | cfs    |
| Equilibrium Velocity: | Ve | 0.34    | fps    |
| Design Velocity:      | Vd | 0.23    |        |
| Residence Time:       | t  | 9.07    | min.   |
| Minimum Swale Length: |    | 101.94  | feet   |
| Wetted Footprint:     | W  | 333.00  | sq.ft. |
| Total Area with       |    |         |        |
| Freeboard:            | At | 1443.00 | sq.ft. |

Note: Gray cells contain formulas.

|                          |   |          |  |
|--------------------------|---|----------|--|
| Hydraulic Radius of trap | R | 0.223228 |  |
|--------------------------|---|----------|--|

##### Peak flow depth of flow

|                      |      |          |      |
|----------------------|------|----------|------|
| 100-Year Devel Flow: | cfs  | 0.78     | cfs  |
| Bottom width:        | b    | 2        | feet |
| Longitudinal slope:  | s    | 1.5%     |      |
| Manning's n:         | n    | 0.1      |      |
| Depth of flow:       | y    | 0.5      | feet |
|                      | m or |          |      |
| Sideslope:           | Z    | 3        | :1   |
| Actual Bottom width  | b    | 1.900344 |      |

## **TAB 7 – (MINIMUM REQUIREMENT 7 – FLOW CONTROL)**

Refer to 1.2.5.7 and provide the required information for this Minimum Requirement.

Threshold requirements for determining the applicability of flow control.

- **Projects in which the total of effective impervious surfaces is 10,000 square feet or more in a threshold discharge area, or**
- **Projects that convert  $\frac{3}{4}$  acres or more of vegetation to lawn or landscape, or convert 2.5 acres or more of native vegetation to pasture in a threshold discharge area, and from which there is a surface discharge in a natural or man-made conveyance system from the site, or**
- **Projects that through a combination of effective hard surfaces and converted vegetation areas cause a 0.10 cubic feet per second increase in the 100-year flow frequency from a threshold discharge area as estimated using the Western Washington Hydrology Model or other approved model and one-hour time steps (or a 0.15 cfs increase using 15-minute time steps).**

**Flow control is required due to the effective impervious surface exceeding the 10,000 square feet of impervious area and the direct discharge to a wetland.**

**Basin B1 flows to the existing Rockridge detention pond that was designed with a permanent Wet Pool for water quality treatment. See attached drainage report for the Rockridge Detention Pond completed in April 2018. At the time of the report a different design was considered for the Crossings but the basin area is roughly the same. The 2018 report accounted for 1.00 acre basin and the current basin is 1.06 acres. The 2018 report impervious area was 0.37 acres and current impervious is 0.65 acres or an increase of 0.28 acres impervious. The entire 2018 report allowed for 2.89 acres of impervious area increase to an existing large pond with the increase accounting for less than 10% of the total impervious area increase and could be considered negligible.**

**The detention pond will be designed to account for 1.80 acres including Basins A1 (1.20 acres) and A2 (0.60 acres).**

### **Basin A1 Summary (0.60 acres)**

**15,542 square feet (0.36 acres) of impervious area**

**Roads - 5,154 square feet (0.12 acres)**

**Roofs - 8,890 square feet (7 houses) (0.20 acres)**

**Driveways - 1,488 square feet (8 driveways) (0.03 acres)**

**10,763 square feet (0.24 acres) of landscaping**

### **Basin A2 Summary (1.20 acres)**

**26,298 square feet (0.61 acres) of impervious area**

**Roads – 7,100 square feet (0.16 acres)**

**Roofs – 10,160 square feet (0.23 acres)**

**Driveways – 1,147 square feet (0.03 acres)**

**Sidewalks – 130 square feet (0.10 acres)**

**Pond – 7,761 square feet (0.18 acres)**

**26,178 square feet (0.60 acres) of landscaping**



**Total impervious (1.80 acres)**

**Roads – 0.28 acres**

**Roofs – 0.43 acres**

**Driveways – 0.06 acres**

**Sidewalks = 0.01 acres**

**Pond – 0.18 acres**

**Total pervious - 0.84 acres**

**The pre-developed condition will be modeled as Forested, Moderate slope, hydrologic C and a total area of 1.80 acres.**

**The pond will be designed for a depth of storage of 7 feet with 1 foot freeboard.**

**3:1 sideslopes**

**3 orifice on 18" diameter riser**

**WVHM2012  
PROJECT REPORT**

---

**Project Name:** wvhm2012-the Crossings pond7 10-28-2019  
**Site Name:** The Crossings  
**Site Address:** 1905 Anacopper Rd  
**City** : Anacortes  
**Report Date:** 10/28/2019  
**Gage** : Burlington  
**Data Start** : 1948/10/01  
**Data End** : 2009/09/30  
**Precip Scale:** 0.80  
**Version Date:** 2016/02/25  
**Version** : 4.2.12

---

**Low Flow Threshold for POC 1** : 50 Percent of the 2 Year

---

**High Flow Threshold for POC 1:** 50 year

---

**PREDEVELOPED LAND USE**

**Name** : Basin 1

| <u>Pervious Land Use</u> | <u>acre</u> |
|--------------------------|-------------|
| C, Forest, Mod           | 1.8         |
| <b>Pervious Total</b>    | <b>1.8</b>  |

| <u>Impervious Land Use</u> | <u>acre</u> |
|----------------------------|-------------|
| <b>Impervious Total</b>    | <b>0</b>    |
| <b>Basin Total</b>         | <b>1.8</b>  |

---

**MITIGATED LAND USE**

**Name** : Basin 1

| <u>Pervious Land Use</u> | <u>acre</u> |
|--------------------------|-------------|
| C, Lawn, Mod             | .84         |
| <b>Pervious Total</b>    | <b>0.84</b> |

| <u>Impervious Land Use</u> | <u>acre</u> |
|----------------------------|-------------|
| ROADS MOD                  | 0.28        |
| ROOF TOPS FLAT             | 0.43        |
| DRIVEWAYS MOD              | 0.06        |
| SIDEWALKS MOD              | 0.01        |
| POND                       | 0.18        |

**Impervious Total**                      **0.96**

**Basin Total**                              **1.8**

---

**Name** : Trapezoidal Pond 1

**Bottom Length:** 38.05 ft.

**Bottom Width:** 38.05 ft.

**Total Bottom area = 1,448 sf**

**Depth:** 8 ft.

**Volume at riser head:** 0.5873 acre-feet.

**Side slope 1:** 3 To 1

**Side slope 2:** 3 To 1

**Side slope 3:** 3 To 1

**Side slope 4:** 3 To 1

Version Date: October 7, 2019 Previous Version Date: February 20, 2019

**Discharge Structure****Riser Height:** 7 ft.**Riser Diameter:** 18 in.**Orifice 1 Diameter:** 0.39 in. **Elevation:** 0 ft.**Orifice 2 Diameter:** 0.9 in. **Elevation:** 5.699 ft.**Orifice 3 Diameter:** 0.55 in. **Elevation:** 6.28 ft.**ANALYSIS RESULTS**  
**Stream Protection Duration****Predeveloped Landuse Totals for POC #1****Total Pervious Area:**1.8**Total Impervious Area:**0

---

**Mitigated Landuse Totals for POC #1****Total Pervious Area:**0.84**Total Impervious Area:**0.96

---

**Flow Frequency Return Periods for Predeveloped. POC #1**

| <u>Return Period</u> | <u>Flow(cfs)</u> |
|----------------------|------------------|
| 2 year               | 0.019469         |
| 5 year               | 0.039507         |
| 10 year              | 0.055827         |
| 25 year              | 0.079293         |
| 50 year              | 0.098517         |
| 100 year             | 0.119003         |

**Flow Frequency Return Periods for Mitigated. POC #1**

| <u>Return Period</u> | <u>Flow(cfs)</u> |
|----------------------|------------------|
| 2 year               | 0.010507         |
| 5 year               | 0.02136          |
| 10 year              | 0.032935         |
| 25 year              | 0.054899         |
| 50 year              | 0.078517         |
| 100 year             | 0.110403         |

---

**Stream Protection Duration****POC #1****The Facility PASSED****Facility **PASSED** duration standard for 1+ flows.****Flow(cfs) Predev Mit Percentage Pass/Fail**

|        |       |       |     |      |
|--------|-------|-------|-----|------|
| 0.0097 | 19524 | 18700 | 95  | Pass |
| 0.0106 | 16857 | 11490 | 68  | Pass |
| 0.0115 | 14692 | 10754 | 73  | Pass |
| 0.0124 | 12808 | 10138 | 79  | Pass |
| 0.0133 | 11116 | 9548  | 85  | Pass |
| 0.0142 | 9843  | 9131  | 92  | Pass |
| 0.0151 | 8795  | 8776  | 99  | Pass |
| 0.0160 | 7912  | 8354  | 105 | Fail |
| 0.0169 | 7090  | 7516  | 106 | Fail |
| 0.0178 | 6355  | 6731  | 105 | Fail |
| 0.0187 | 5801  | 6083  | 104 | Fail |
| 0.0196 | 5270  | 5260  | 99  | Pass |
| 0.0205 | 4759  | 4731  | 99  | Pass |
| 0.0214 | 4286  | 4310  | 100 | Pass |
| 0.0223 | 3906  | 3871  | 99  | Pass |
| 0.0232 | 3529  | 3559  | 100 | Pass |
| 0.0241 | 3230  | 3155  | 97  | Pass |
| 0.0250 | 2971  | 2693  | 90  | Pass |
| 0.0259 | 2716  | 2306  | 84  | Pass |



|        |      |      |     |      |
|--------|------|------|-----|------|
| 0.0268 | 2488 | 2045 | 82  | Pass |
| 0.0277 | 2280 | 1895 | 83  | Pass |
| 0.0286 | 2075 | 1796 | 86  | Pass |
| 0.0295 | 1911 | 1665 | 87  | Pass |
| 0.0304 | 1750 | 1510 | 86  | Pass |
| 0.0313 | 1614 | 1438 | 89  | Pass |
| 0.0322 | 1490 | 1363 | 91  | Pass |
| 0.0331 | 1386 | 1197 | 86  | Pass |
| 0.0339 | 1267 | 1040 | 82  | Pass |
| 0.0348 | 1162 | 891  | 76  | Pass |
| 0.0357 | 1057 | 763  | 72  | Pass |
| 0.0366 | 956  | 661  | 69  | Pass |
| 0.0375 | 846  | 572  | 67  | Pass |
| 0.0384 | 753  | 499  | 66  | Pass |
| 0.0393 | 674  | 430  | 63  | Pass |
| 0.0402 | 617  | 390  | 63  | Pass |
| 0.0411 | 564  | 343  | 60  | Pass |
| 0.0420 | 527  | 247  | 46  | Pass |
| 0.0429 | 490  | 240  | 48  | Pass |
| 0.0438 | 459  | 236  | 51  | Pass |
| 0.0447 | 435  | 230  | 52  | Pass |
| 0.0456 | 408  | 225  | 55  | Pass |
| 0.0465 | 390  | 219  | 56  | Pass |
| 0.0474 | 368  | 216  | 58  | Pass |
| 0.0483 | 347  | 215  | 61  | Pass |
| 0.0492 | 334  | 211  | 63  | Pass |
| 0.0501 | 323  | 209  | 64  | Pass |
| 0.0510 | 308  | 207  | 67  | Pass |
| 0.0519 | 298  | 204  | 68  | Pass |
| 0.0528 | 280  | 201  | 71  | Pass |
| 0.0537 | 272  | 200  | 73  | Pass |
| 0.0546 | 264  | 197  | 74  | Pass |
| 0.0555 | 252  | 196  | 77  | Pass |
| 0.0564 | 236  | 193  | 81  | Pass |
| 0.0573 | 225  | 193  | 85  | Pass |
| 0.0582 | 220  | 190  | 86  | Pass |
| 0.0591 | 214  | 188  | 87  | Pass |
| 0.0600 | 209  | 185  | 88  | Pass |
| 0.0609 | 198  | 183  | 92  | Pass |
| 0.0617 | 190  | 182  | 95  | Pass |
| 0.0626 | 183  | 177  | 96  | Pass |
| 0.0635 | 179  | 177  | 98  | Pass |
| 0.0644 | 172  | 175  | 101 | Pass |
| 0.0653 | 165  | 175  | 106 | Pass |
| 0.0662 | 160  | 171  | 106 | Pass |
| 0.0671 | 158  | 167  | 105 | Pass |
| 0.0680 | 156  | 165  | 105 | Pass |
| 0.0689 | 153  | 163  | 106 | Pass |
| 0.0698 | 151  | 161  | 106 | Pass |
| 0.0707 | 150  | 161  | 107 | Pass |
| 0.0716 | 147  | 160  | 108 | Pass |
| 0.0725 | 144  | 158  | 109 | Pass |
| 0.0734 | 142  | 153  | 107 | Pass |
| 0.0743 | 140  | 150  | 107 | Pass |
| 0.0752 | 138  | 147  | 106 | Pass |
| 0.0761 | 137  | 144  | 105 | Pass |
| 0.0770 | 134  | 140  | 104 | Pass |
| 0.0779 | 130  | 132  | 101 | Pass |
| 0.0788 | 125  | 129  | 103 | Pass |
| 0.0797 | 122  | 125  | 102 | Pass |
| 0.0806 | 120  | 121  | 100 | Pass |
| 0.0815 | 118  | 115  | 97  | Pass |

|        |     |     |     |      |
|--------|-----|-----|-----|------|
| 0.0824 | 116 | 114 | 98  | Pass |
| 0.0833 | 111 | 110 | 99  | Pass |
| 0.0842 | 107 | 109 | 101 | Pass |
| 0.0851 | 104 | 106 | 101 | Pass |
| 0.0860 | 103 | 103 | 100 | Pass |
| 0.0869 | 101 | 98  | 97  | Pass |
| 0.0878 | 100 | 95  | 95  | Pass |
| 0.0887 | 97  | 94  | 96  | Pass |
| 0.0895 | 93  | 90  | 96  | Pass |
| 0.0904 | 92  | 87  | 94  | Pass |
| 0.0913 | 90  | 85  | 94  | Pass |
| 0.0922 | 89  | 78  | 87  | Pass |
| 0.0931 | 88  | 74  | 84  | Pass |
| 0.0940 | 86  | 70  | 81  | Pass |
| 0.0949 | 84  | 60  | 71  | Pass |
| 0.0958 | 80  | 57  | 71  | Pass |
| 0.0967 | 76  | 57  | 75  | Pass |
| 0.0976 | 73  | 56  | 76  | Pass |
| 0.0985 | 70  | 52  | 74  | Pass |

---

**Water Quality BMP Flow and Volume for POC #1**

On-line facility volume: 0.0602 acre-feet

On-line facility target flow: 0.0319 cfs.

Adjusted for 15 min: 0.0319 cfs.

Off-line facility target flow: 0.0167 cfs.

Adjusted for 15 min: 0.0167 cfs.

---

**Orifice 1 Diameter:** 0.39 in. **Elevation:** 0 ft.

**Orifice 2 Diameter:** 0.90 in. **Elevation:** 5.70 ft.

**Orifice 3 Diameter:** 0.55 in. **Elevation:** 6.28 ft.

**CONTROL MAHHOLE**

The existing control riser is as follows and shown in **ATTACHMENT L** below.

Riser diameter = 18"

Bottom orifice diameter = 0.4 inches Minimum allowable orifice is ½ inch of 0.5 inches.

Top of riser height = 7.0 feet above the invert with the bottom orifice 2 feet below the invert.

Second orifice at 5.70 feet and 0.90 in (7/8") diameter.

Third orifice at 6.28 feet and 0.56 in (9/16") diameter.



ATTACHMENT L



**EMERGENCY OVERFLOW SPILLWAY DESIGN FOR THE DETENTION POND:**

The overflow spillway is designed to pass the 100-year storm event peak runoff of 1.13 cfs.

$$L = (Q^{100} / (3.21 H^{3/2})) - (2.4 H^2)$$

L = width of spillway

$$Q^{100} = 100 \text{ year storm flow} = 1.13 \text{ cfs}$$

$$H = \text{Depth of flow over spillway} = .25' (3")$$

$$L = (Q^{100} / (0.4013)) - (.60) \text{ for } 0.25' \text{ depth}$$

L = 2.22. Min spillway width is 6 feet. Spillway elevation 9" below berm.

Jail house grate design will use an overflow depth of 0.25 feet.

$$L = (Q^{100} / (3.21 H^{3/2})) - 2.4 H = 1.13 \text{ CFS} / (3.21 \times .25^{3/2}) - 2.4 \times .25 = 2.22 \text{ feet}$$

A "Jail House" grate will be located within the control manhole to provide overflow spillway.

6" tall and 2.25' wide.

The outlet pipe from the control manhole is a 12" cpep pipe at a 1% slope. The gravity capacity of the pipe is 3.6 cfs > than the 100 year storm flow of 1.13 cfs.

**ACCESS:**

If the pond bottom area is less than 1,500 square feet the ramp may end at an elevation of 4 feet above the pond bottom. As for this pond the detention depth is 7 feet with a berm at 8 feet.

## **TAB 8 – (MINIMUM REQUIREMENT 8 – WETLAND PROTECTION)**

Refer to 1.2.5.8 and provide the required information for this Minimum Requirement.

There are wetlands on this site as well as downstream of this site that the detention pond will discharge too. Projects shall comply with Guide Sheets #1 through #3 in Appendix I-D.

**Guide Sheet 1: Criteria that excludes wetlands from serving as a treatment of flow control BMP/facility.** Treatment and flow control to pre-developed forested conditions will be provided on site.

**Guide Sheet 2: Criteria for including wetlands as a treatment of flow control BMP/facility.** Treatment and flow control to pre-developed forested conditions will be provided on site.

**Guide Sheet 3A: General guidelines for protecting functions and values of wetlands:** A 110 foot buffer is provided to the onsite wetland. Approximately 1,300 square feet of road surface and driveways will discharge near the top of the 110 foot buffer with concentrated flow dispersion allowing water to reach the pond as it did in the predevelopment condition of the property over a wide area. No physical impact will occur to the wetlands from this development.

**Guide Sheet 3B: Protecting wetlands from impacts of changes in water flows.** This project will be limited to the pre-developed forested conditions discharge. The majority of the site will pass through a water quality treatment swale or Bioretention Cell before discharging to a detention pond. The detention pond will discharge to a dispersion pipe prior to discharging to the wetland. No concentrated flow is proposed to enter the wetland from this site.

Guide Sheet 3C: Guidelines for protecting wetlands from pollutants:

1. Erosion control BMPs will be addressed at the construction site as stated in the SWPPP above.
2. The site will consist of single family homes.
3. Water quality treatment for driveways will be provided with a water quality swales and filter strip by use of the 110 foot sheet flow.

# **TAB 9A**

## **THE CROSSINGS COTTAGES OPERATIONS AND MAINTENANCE REQUIREMENTS**

### **DETENTION, BIORETENTION CELL & BIOFILTRATION SWALE**

#### **TAB 9 – (MINIMUM REQUIREMENT 9 – OPERATION AND MAINTENANCE)**

Refer to 1.2.5.9 and provide the required information for this Minimum Requirement.

**The attached maintenance schedule comes from the 2014 Department of Ecology Stormwater Management Manual for Western Washington.**



## V-4.6 Maintenance Standards for Drainage Facilities

The facility-specific maintenance standards contained in this section are intended to be conditions for determining if maintenance actions are required as identified through inspection. They are not intended to be measures of the facility's required condition at all times between inspections. In other words, exceedence of these conditions at any time between inspections and/or maintenance does not automatically constitute a violation of these standards. However, based upon inspection observations, the inspection and maintenance schedules shall be adjusted to minimize the length of time that a facility is in a condition that requires a maintenance action.

**Table V-4.5.2(1) Maintenance Standards - Detention Ponds**

| Maintenance Component | Defect                                 | Conditions When Maintenance Is Needed                                                                                                                                                                                                                                    | Results Expected When Maintenance Is Performed                                                                                                                                                                                                                             |
|-----------------------|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| General               | Trash & Debris                         | Any trash and debris which exceed 1 cubic feet per 1,000 square feet. In general, there should be no visual evidence of dumping.<br><br>If less than threshold all trash and debris will be removed as part of next scheduled maintenance.                               | Trash and debris cleared from site                                                                                                                                                                                                                                         |
|                       | Poisonous Vegetation and noxious weeds | Any poisonous or nuisance vegetation which may constitute a hazard to maintenance personnel or the public.<br><br>Any evidence of noxious weeds as defined by State or local regulations.<br><br>(Apply requirements of adopted IPM policies for the use of herbicides). | No danger of poisonous vegetation where maintenance personnel or the public might normally be.<br>(Coordinate with local health department)<br><br>Complete eradication of noxious weeds may not be possible. Compliance with State or local eradication policies required |
|                       | Contaminants                           | Any evidence of oil,                                                                                                                                                                                                                                                     | No contaminants or pol-                                                                                                                                                                                                                                                    |

**Table V-4.5.2(1) Maintenance Standards - Detention Ponds (continued)**

| Maintenance Component | Defect                       | Conditions When Maintenance Is Needed                                                                                                                                                                                               | Results Expected When Maintenance Is Performed                                                                                                                             |
|-----------------------|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                       | and Pollution                | gasoline, contaminants or other pollutants<br><br>(Coordinate removal/cleanup with local water quality response agency).                                                                                                            | lutants present.                                                                                                                                                           |
|                       | Rodent Holes                 | Any evidence of rodent holes if facility is acting as a dam or berm, or any evidence of water piping through dam or berm via rodent holes.                                                                                          | Rodents destroyed and dam or berm repaired.<br>(Coordinate with local health department; coordinate with Ecology Dam Safety Office if pond exceeds 10 acre-feet.)          |
|                       | Beaver Dams                  | Dam results in change or function of the facility.                                                                                                                                                                                  | Facility is returned to design function.<br><br>(Coordinate trapping of beavers and removal of dams with appropriate permitting agencies)                                  |
|                       | Insects                      | When insects such as wasps and hornets interfere with maintenance activities.                                                                                                                                                       | Insects destroyed or removed from site.<br><br>Apply insecticides in compliance with adopted IPM policies                                                                  |
|                       | Tree Growth and Hazard Trees | Tree growth does not allow maintenance access or interferes with maintenance activity (i.e., slope mowing, silt removal, vactoring, or equipment movements). If trees are not interfering with access or maintenance, do not remove | Trees do not hinder maintenance activities. Harvested trees should be recycled into mulch or other beneficial uses (e.g., alders for firewood).<br><br>Remove hazard Trees |

**Table V-4.5.2(1) Maintenance Standards - Detention Ponds (continued)**

| Maintenance Component | Defect                | Conditions When Maintenance Is Needed                                                                                                                                                  | Results Expected When Maintenance Is Performed                                                                                                                                                                                                                    |
|-----------------------|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                       |                       | If dead, diseased, or dying trees are identified<br><br>(Use a certified Arborist to determine health of tree or removal requirements)                                                 |                                                                                                                                                                                                                                                                   |
| Side Slopes of Pond   | Erosion               | Eroded damage over 2 inches deep where cause of damage is still present or where there is potential for continued erosion.<br><br>Any erosion observed on a compacted berm embankment. | Slopes should be stabilized using appropriate erosion control measure (s); e.g., rock reinforcement, planting of grass, compaction.<br><br>If erosion is occurring on compacted berms a licensed civil engineer should be consulted to resolve source of erosion. |
| Storage Area          | Sediment              | Accumulated sediment that exceeds 10% of the designed pond depth unless otherwise specified or affects inletting or outletting condition of the facility.                              | Sediment cleaned out to designed pond shape and depth; pond reseeded if necessary to control erosion.                                                                                                                                                             |
|                       | Liner (if Applicable) | Liner is visible and has more than three 1/4-inch holes in it.                                                                                                                         | Liner repaired or replaced. Liner is fully covered.                                                                                                                                                                                                               |
| Ponds Berms (Dikes)   | Settlements           | Any part of berm which has settled 4 inches lower than the design elevation<br><br>If settlement is apparent, measure berm to determine amount of settlement                           | Dike is built back to the design elevation.                                                                                                                                                                                                                       |



**Table V-4.5.2(1) Maintenance Standards - Detention Ponds (continued)**

| Maintenance Component                                        | Defect      | Conditions When Maintenance Is Needed                                                                                                                                                                                                                          | Results Expected When Maintenance Is Performed                                                                                                                                                                                                                    |
|--------------------------------------------------------------|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                              |             | Settling can be an indication of more severe problems with the berm or outlet works. A licensed civil engineer should be consulted to determine the source of the settlement.                                                                                  |                                                                                                                                                                                                                                                                   |
|                                                              | Piping      | Discernable water flow through pond berm.<br>Ongoing erosion with potential for erosion to continue.<br><br>(Recommend a Goeth-technical engineer be called in to inspect and evaluate condition and recommend repair of condition.                            | Piping eliminated. Erosion potential resolved.                                                                                                                                                                                                                    |
| Emergency Overflow/ Spillway and Berms over 4 feet in height | Tree Growth | Tree growth on emergency spillways creates blockage problems and may cause failure of the berm due to uncontrolled overtopping.<br><br>Tree growth on berms over 4 feet in height may lead to piping through the berm which could lead to failure of the berm. | Trees should be removed. If root system is small (base less than 4 inches) the root system may be left in place. Otherwise the roots should be removed and the berm restored. A licensed civil engineer should be consulted for proper berm/spillway restoration. |
|                                                              | Piping      | Discernable water flow through pond berm.<br>Ongoing erosion with                                                                                                                                                                                              | Piping eliminated. Erosion potential resolved.                                                                                                                                                                                                                    |

**Table V-4.5.2(1) Maintenance Standards - Detention Ponds (continued)**

| Maintenance Component       | Defect                      | Conditions When Maintenance Is Needed                                                                                                                                                                               | Results Expected When Maintenance Is Performed        |
|-----------------------------|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|
|                             |                             | potential for erosion to continue.<br><br>(Recommend a Geotechnical engineer be called in to inspect and evaluate condition and recommend repair of condition.                                                      |                                                       |
| Emergency Overflow/Spillway | Emergency Overflow/Spillway | Only one layer of rock exists above native soil in area five square feet or larger, or any exposure of native soil at the top of out flow path of spillway.<br><br>(Rip-rap on inside slopes need not be replaced.) | Rocks and pad depth are restored to design standards. |
|                             | Erosion                     | See "Side Slopes of Pond"                                                                                                                                                                                           |                                                       |

**Table V-4.5.2(2) Maintenance Standards - Infiltration**

| Maintenance Component | Defect                       | Conditions When Maintenance Is Needed                                    | Results Expected When Maintenance Is Performed |
|-----------------------|------------------------------|--------------------------------------------------------------------------|------------------------------------------------|
| General               | Trash & Debris               | See "Detention Ponds" (No. 1).                                           | See "Detention Ponds" (No. 1).                 |
|                       | Poisonous/Noxious Vegetation | See "Detention Ponds" (No. 1).                                           | See "Detention Ponds" (No. 1).                 |
|                       | Contaminants and Pollution   | See "Detention Ponds" (No. 1).                                           | See "Detention Ponds" (No. 1).                 |
|                       | Rodent Holes                 | See "Detention Ponds" (No. 1).                                           | See "Detention Ponds" (No. 1).                 |
| Storage Area          | Sediment                     | Water ponding in infiltration pond after rainfall ceases and appropriate | Sediment is removed                            |

## **BMP T7.30: Bioretention Cells, Swales, and Planter Boxes**

### ***Purpose***

To provide effective removal of many stormwater pollutants, and provide reductions in stormwater runoff quantity and surface runoff flow rates. Where the surrounding native soils have adequate infiltration rates, bioretention can help comply with flow control and treatment requirements. Where the native soils have low infiltration rates, underdrain systems can be installed and the facility used to filter pollutants and detain flows that exceed infiltration capacity of the surrounding soil. However, designs utilizing underdrains provide less flow control benefits.

### ***Description***

Bioretention areas are shallow landscaped depressions, with a designed soil mix and plants adapted to the local climate and soil moisture conditions, that receive stormwater from a contributing area.

The term, bioretention, is used to describe various designs using soil and plant complexes to manage stormwater. The following terminology is used in this manual:

- *Bioretention cells*: Shallow depressions with a designed planting soil mix and a variety of plant material, including trees, shrubs, grasses, and/or other herbaceous plants. Bioretention cells may or may not have an underdrain and are not designed as a conveyance system. (See [Figure V-7.4.1a Typical Bioretention \(p.961\)](#), [Figure V-7.4.1b Typical Bioretention w/Underdrain \(p.962\)](#), and [Figure V-7.4.1c Typical Bioretention w/Liner \(Not LID\) \(p.963\)](#))
- *Bioretention swales*: Incorporate the same design features as bioretention cells; however, bioretention swales are designed as part of a system that can convey stormwater when maximum ponding depth is exceeded. Bioretention swales have relatively gentle side slopes and ponding depths that are typically 6 to 12 inches. (See [Figure V-7.4.1a Typical Bioretention \(p.961\)](#), [Figure V-7.4.1b Typical Bioretention w/Underdrain \(p.962\)](#), and [Figure V-7.4.1c Typical Bioretention w/Liner \(Not LID\) \(p.963\)](#))



## **Maintenance**

Bioretention areas require annual plant, soil, and mulch layer maintenance to ensure optimum infiltration, storage, and pollutant removal capabilities. In general, bioretention maintenance requirements are typical landscape care procedures and include:

- **Watering:** Plants should be selected to be drought tolerant and not require watering after establishment (2 to 3 years). Watering may be required during prolonged dry periods after plants are established.
- **Erosion control:** Inspect flow entrances, ponding area, and surface overflow areas periodically, and replace soil, plant material, and/or mulch layer in areas if erosion has occurred. Properly designed facilities with appropriate flow velocities should not have erosion problems except perhaps in extreme events. If erosion problems occur the following should be reassessed: (1) flow volumes from contributing areas and bioretention cell sizing; (2) flow velocities and gradients within the cell; and (3) flow dissipation and erosion protection strategies in the pretreatment area and flow entrance. If sediment is deposited in the bioretention area, immediately determine the source within the contributing area, stabilize, and remove excess surface deposits.
- **Sediment removal:** Follow the maintenance plan schedule for visual inspection and remove sediment if the volume of the ponding area has been compromised.
- **Plant material:** Depending on aesthetic requirements, occasional pruning and removing dead plant material may be necessary. Replace all dead plants and if specific plants have a high mortality rate, assess the cause and replace with appropriate species. Periodic weeding is necessary until plants are established.
- **Weeding:** Invasive or nuisance plants should be removed regularly and not allowed to accumulate and exclude planted species. At a minimum, schedule weeding with inspections to coincide with important horticultural cycles (e.g., prior to major weed varieties dispersing seeds). Weeding should be done manually and without herbicide applications. The weeding schedule should become less frequent if the appropriate plant species and planting density are used and the selected plants grow to capture the site and exclude undesirable weeds.
- **Nutrient and pesticides:** The soil mix and plants are selected for optimum fertility, plant establishment, and growth. Nutrient and pesticide inputs should not be required and may degrade the pollutant processing capability of the bioretention area, as well as contribute pollutant loads to receiving waters. By design, bioretention facilities are located in areas where phosphorous and nitrogen levels may be elevated and these should not be limiting nutrients. If in question, have soil analyzed for fertility.
- **Mulch:** Replace mulch annually in bioretention facilities where heavy metal

deposition is high (e.g., contributing areas that include gas stations, ports and roads with high traffic loads). In residential settings or other areas where metals or other pollutant loads are not anticipated to be high, replace or add mulch as needed (likely 3 to 5 years) to maintain a 2 to 3 inch depth.

- Soil: Soil mixes for bioretention facilities are designed to maintain long-term fertility and pollutant processing capability. Estimates from metal attenuation research suggest that metal accumulation should not present an environmental concern for at least 20 years in bioretention systems, but this will vary according to pollutant load. Replacing mulch media in bioretention facilities where heavy metal deposition is likely provides an additional level of protection for prolonged performance. If in question, have soil analyzed for fertility and pollutant levels.

c vegetated filter strip that adds soil amendments to the roadside embankment (See [Figure V-7.4.3 Example of a Compost Amended Vegetated Filter Strip \(CAVFS\) \(p.987\)](#)). The soil amendments improve infiltration characteristics, increase surface roughness, and improve plant sustainability. Once permanent vegetation is established, the advantages of the CAVFS are higher surface roughness; greater retention and infiltration capacity; improved removal of soluble cationic contaminants through sorption; improved overall vegetative health; and a reduction of invasive weeds. Compost-amended systems have somewhat higher construction costs due to more expensive materials, but require less land area for runoff treatment, which can reduce overall costs.

# MAINTENANCE PLAN SCHEDULE

## *Construction Criteria*

The biofiltration swale should not be put into operation until areas of exposed soil in the contributing drainage catchment have been sufficiently stabilized. Deposition of eroded soils can impede the growth of grass in the swale and reduce swale treatment effectiveness. Thus, effective erosion and sediment control measures should remain in place until the swale vegetation is established (see Volume II for erosion and sediment control BMPs). Avoid compaction during construction. Grade biofilters to attain uniform longitudinal and lateral slopes

## *Maintenance Criteria*

- Inspect biofilters at least once every 6 months, preferably during storm events, and also after storm events of > 0.5 inch rainfall/ 24 hours. Maintain adequate grass growth and eliminate bare spots.
- Mow grasses, if needed for good growth {typically maintain at 4 – 9 inches and not below design flow level (King County, 1998)}.
- Remove sediment as needed at head of the swale if grass growth is inhibited in greater than 10 percent of the swale, or if the sediment is blocking the distribution and entry of the water (King County, 1998).
- Remove leaves, litter, and oily materials, and re-seed or resod, and regrade, as needed. Clean curb cuts and level spreaders as needed.

Prevent scouring and soil erosion in the biofilter. If flow channeling occurs, regrade and reseed the biofilter, as necessary.

Maintain access to biofilter inlet, outlet, and to mowing (Figure 9.8)

- If a swale is equipped with underdrains, vehicular traffic on the swale bottom (other than grass mowing equipment) should be avoided to prevent damage to the drainpipes.



|                    |                                    |
|--------------------|------------------------------------|
| red fescue*        | <i>Festuca rubra</i>               |
| tall fescue grass* | <i>Festuca arundinacea</i>         |
| blue oatgrass      | <i>Helictotrichon sempervirens</i> |

### ***Construction Criteria***

The biofiltration swale should not be put into operation until areas of exposed soil in the contributing drainage catchment have been sufficiently stabilized. Deposition of eroded soils can impede the growth of grass in the swale and reduce swale treatment effectiveness. Thus, effective erosion and sediment control measures should remain in place until the swale vegetation is established (see Volume II for erosion and sediment control BMPs). Avoid compaction during construction. Grade biofilters to attain uniform longitudinal and lateral slopes.

### ***Maintenance Criteria***

- Inspect biofilters at least once every 6 months, preferably during storm events, and also after storm events of > 0.5 inch rainfall/ 24 hours. Maintain adequate grass growth and eliminate bare spots.
- Mow grasses, if needed for good growth {typically maintain at 4 – 9 inches and not below design flow level (King County, 1998)}.
- Remove sediment as needed at head of the swale if grass growth is inhibited in greater than 10 percent of the swale, or if the sediment is blocking the distribution and entry of the water (King County, 1998).
- Remove leaves, litter, and oily materials, and re-seed or resod, and regrade, as needed. Clean curb cuts and level spreaders as needed.

Prevent scouring and soil erosion in the biofilter. If flow channeling occurs, regrade and reseed the biofilter, as necessary.

Maintain access to biofilter inlet, outlet, and to mowing ([Figure 9.4.8](#))

- If a swale is equipped with underdrains, vehicular traffic on the swale bottom (other than grass mowing equipment) should be avoided to prevent damage to the drainpipes.

## No. 8 – Typical Biofiltration Swale

| Maintenance Component | Defect or Problem              | Condition When Maintenance is Needed                                                                                                                                 | Recommended Maintenance to Correct Problem                                                                                                                                                                                                                                                                                                                                         |
|-----------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| General               | Sediment Accumulation on Grass | Sediment depth exceeds 2 inches.                                                                                                                                     | Remove sediment deposits on grass treatment area of the bio-swale. When finished, swale should be level from side to side and drain freely toward outlet. There should be no areas of standing water once inflow has ceased.                                                                                                                                                       |
|                       | Standing Water                 | When water stands in the swale between storms and does not drain freely.                                                                                             | Any of the following may apply: remove sediment or trash blockages, improve grade from head to foot of swale, remove clogged check dams, add underdrains or convert to a wet biofiltration swale.                                                                                                                                                                                  |
|                       | Flow spreader                  | Flow spreader uneven or clogged so that flows are not uniformly distributed through entire swale width.                                                              | Level the spreader and clean so that flows are spread evenly over entire swale width.                                                                                                                                                                                                                                                                                              |
|                       | Constant Baseflow              | When small quantities of water continually flow through the swale, even when it has been dry for weeks, and an eroded, muddy channel has formed in the swale bottom. | Add a low-flow pea-gravel drain the length of the swale or by-pass the baseflow around the swale.                                                                                                                                                                                                                                                                                  |
|                       | Poor Vegetation Coverage       | When grass is sparse or bare or eroded patches occur in more than 10% of the swale bottom.                                                                           | Determine why grass growth is poor and correct that condition. Re-plant with plugs of grass from the upper slope: plant in the swale bottom at 8-inch intervals. Or re-seed into loosened, fertile soil.                                                                                                                                                                           |
|                       | Vegetation                     | When the grass becomes excessively tall (greater than 10-inches); when nuisance weeds and other vegetation starts to take over.                                      | Mow vegetation or remove nuisance vegetation so that flow not impeded. Grass should be mowed to a height of 3 to 4 inches. Remove grass clippings.                                                                                                                                                                                                                                 |
|                       | Excessive Shading              | Grass growth is poor because sunlight does not reach swale.                                                                                                          | If possible, trim back over-hanging limbs and remove brushy vegetation on adjacent slopes.                                                                                                                                                                                                                                                                                         |
|                       | Inlet/Outlet                   | Inlet/outlet areas clogged with sediment and/or debris.                                                                                                              | Remove material so that there is no clogging or blockage in the inlet and outlet area.                                                                                                                                                                                                                                                                                             |
|                       | Trash and Debris Accumulation  | Trash and debris accumulated in the bio-swale.                                                                                                                       | Remove trash and debris from bioswale.                                                                                                                                                                                                                                                                                                                                             |
|                       | Erosion/Scouring               | Eroded or scoured swale bottom due to flow channelization, or higher flows.                                                                                          | For ruts or bare areas less than 12 inches wide, repair the damaged area by filling with crushed gravel. If bare areas are large, generally greater than 12 inches wide, the swale should be re-graded and re-seeded. For smaller bare areas, overseed when bare spots are evident, or take plugs of grass from the upper slope and plant in the swale bottom at 8-inch intervals. |

## **APPENDIX 1 – Survey performed by a Professional Land Surveyor**

The object of this appendix is to ensure that the property has a minimum of 3 out of 5 property corners visible to ensure that the structures are placed within the required setbacks.

**Differed submittal with preliminary plat submittal.**



# APPENDIX 2 SOILS ANALYSIS



**GEOTEST**

741 Marine Drive  
Bellingham, WA 98225

20611-67<sup>th</sup> Avenue NE  
Arlington, WA 98223

PHONE  
360 733\_7318

TOLL FREE  
888 251\_5276

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April 12, 2018  
Job No. 18-0119

Strandberg Construction  
1905 Anacopper LLC  
Anacortes, Washington 98221

Attn: Nels Strandberg

**Re: Geotechnical Evaluation  
Proposed Residential Development of 11 Lots  
1905 Anacopper Mine Road  
Anacortes, Washington**

Dear Mr. Strandberg,

As requested, GeoTest Services, Inc. (GTS) is pleased to submit this report summarizing the results of our geotechnical evaluation for the proposed 11 lot development to be located at 1905 Anacopper Mine Road in Anacortes, Washington, as shown on the Vicinity Map (Figure 1). The purpose of this evaluation is to establish general subsurface conditions beneath the site from which geotechnical and geological recommendations for the proposed development could be formulated. Specifically, our scope of services includes the following tasks:

- Exploration of soil and groundwater conditions underlying the subject property by excavating 11 test pits with a rubber-tired backhoe, provided by the client, to evaluate subsurface conditions.
- Laboratory testing on representative samples in order to classify and evaluate the engineering characteristics of the soils encountered.
- An evaluation of the geologically hazardous areas per current City of Anacortes Code.
- Provide this written report containing a description of the general geologic conditions, subsurface soils and groundwater conditions. Also presented in this report are our findings and recommendations pertaining to site preparation and earthwork, fill and compaction, wet weather construction and seismic design considerations. Included in these recommendations are discussions pertaining to foundation support, post-construction settlement, slab-on-grade construction, drainage, resistance to lateral loads, temporary and permanent slopes, utilities, stormwater infiltration and geotechnical consultation and construction monitoring.

## **PROJECT DESCRIPTION**

GTS understands that there are plans to construct a 11 lot residential development on the subject property. Although no specific residential construction plans were available at the

time of this report, GTS expects that the proposed residences will be wood-framed and utilize shallow conventional foundations and slab-on-grade floors, similar to other residential structures that have previously are currently being constructed in the vicinity of the subject property.

## **SITE CONDITIONS**

This section discusses the general surface and subsurface conditions observed at the project site at the time of our field investigation. Interpretations of the site conditions are based on the results of our review of available information, site reconnaissance, subsurface explorations, laboratory testing, and our experience in the project vicinity.

### **General Geologic Conditions**

Geologic information for the project site was obtained from the online interactive *Geologic Map of Washington State*, published by the Washington State Department of Natural Resources (DNR). According to the online DNR map, subsurface conditions within the vicinity of the project site is composed of Pleistocene aged glacial till deposited during the Fraser Glaciation (Qgt).

### **Surface Conditions**

The project is currently the site of one existing residential structure and two associated out buildings. Generally, the subject property is bordered to the north, east and south by previously developed single-family residences. Anacopper Mine Road borders the site to the west.

The project site slopes gently from south to north with approximately 30 feet of elevation differential across the property. Additionally, the central portion of the project site is dominated by a local topographic high that transects the subject property from north to south in the vicinity of the existing residence. The topographic high gently slopes towards the east and west, away from the north / south trending ridgeline that dissects the subject project. At the time of our site visit in February of 2018, standing / frozen surface water was observed along the eastern extent of the project (Image 1) as well as within the mapped wetland area on the western extent of the property.



Image 1: Approximate vicinity of standing / frozen surface water on February 21, 2018. Surface water location shown in blue.

### **Subsurface Soil Conditions**

Subsurface conditions were explored by excavating and sampling 11 test pits (TP-1 through TP-11) on February 21, 2018. Test pits were advanced, with a rubber-tired backhoe provided by the client, to depths up to 8 feet below ground surface (BGS). Test pits were terminated due to rapid groundwater seepage or because contact with firm, native soils was encountered. After the test pit explorations were completed, the pits were backfilled with the excavated soils and compacted with the bucket of the excavator. Approximate locations of the explorations have been plotted on the Site and Exploration Plan (Figure 2).

Subsurface soils encountered on-site generally consisted of approximately 7 to 15 inches of loose to medium dense, very silty sand with abundant organics (Topsoil). Overlying the Topsoil was 8 inches to 2 feet of a medium dense, silty, gravelly sand interpreted to be representative of weathered glacial till. Native, un-weathered glacial till, which consisted of dense to very dense, very silty, gravelly sand and very stiff to hard very sandy, silt/clay underlies the weathered glacial till and extended to the full extent of our field explorations. In some locations, approximately 10 to 12 inches of medium dense to dense, reddish brown, damp to wet, very silty, gravelly sand (Weathered Continental Glacial Till / B Horizon) was observed at the base of the topsoil unit.

Please refer to the Test Pit Logs, Figures 6 through 11, for more detail of subsurface soil conditions.

### **Groundwater Seepage and Seasonal Groundwater**

At the time of our subsurface explorations on February 21, 2018, shallow, perched groundwater was encountered in all test pits (except TP-10) due to the dense nature and elevated fines content of the near surface native deposits. No groundwater was observed in TP-10. The near surface perched groundwater is indicative of normally occurring



interflow that is able to pass through topsoil but is somewhat impeded by the underlying, relatively dense and fine-grained soil. It should be expected that perched groundwater conditions are unlikely to persist during extended periods of dry weather. A distinctly mottled horizon was observed in the upper ~2 feet of Continental Glacial Till soils. A distinct mottled horizon or “rust line, may be indicative of the seasonal high of a regional groundwater table or aquifer. Gleyed horizons are indicative of poorly drained and potentially restrictive soils.

## GEOLOGIC HAZARDS AND RECOMMENDED MITIGATION

The following discussion of potential geologic hazards is based on a review of the Anacortes Municipal Code (AMC) *Chapter 17.70 Critical Area Regulations*, and upon the conditions exposed during our site explorations. According to the AMC, geologically hazardous areas include areas susceptible to erosion, landslide, rock fall, subsidence, earthquake, or other geological events that pose a threat to the health and safety of citizens when incompatible development is sited in areas of significant hazard. Based on conditions present on the subject property and nearby vicinity, it is our opinion that there are no slopes within 200 feet of the subject property that would qualify as geologically hazardous areas as defined by AMC 17.17.190. The nearest slopes that would qualify as a geological hazardous area is located approximately 350 feet to the southeast of the site.

### Soil Survey

According to the United States Department of Agriculture (USDA) Natural Resource Conservation Service Soil Survey website, soils at subject property consist of Bow gravelly loam, dry, 3 to 8 percent slopes and Clallam gravelly loam. Please refer to the following Table 1 for a summary of the soil parameters found on the Soil Survey website.

| <b>Table 1</b><br>USDA Web Soil Survey Soil Classifications |                                                            |                                                            |
|-------------------------------------------------------------|------------------------------------------------------------|------------------------------------------------------------|
| Map Unit Symbol                                             | 19                                                         | 47                                                         |
| Map Unit Name                                               | Bow gravelly loam, dry, 0 to 3 percent slopes              | Clallam gravelly loam, 8 to 15 percent slopes              |
| Soil Description                                            | Gravelly ashy loam over clay loam over silty clay          | Gravelly ashy loam over very gravelly loam over sandy loam |
| Landform                                                    | Hillslopes and terraces                                    | Hillslopes                                                 |
| Parent Material                                             | Volcanic ash, glaciolacustrine deposits, and glacial drift | Colluvium from serpentine and glacial drift                |
| Land Capability Classification                              | 4w                                                         | 4s                                                         |
| Erosion K Factor, Whole Soil                                | 0.37                                                       | 0.20                                                       |

According to the Soil Survey, the Bow gravelly loam and Clallam gravelly loam have a land capability classification of 4w and 7s respectively. Soils with the subclass of “e” have been determined to be potentially prone to erosion. Subclasses “s” and “w” signify land use limitations related to problems in the rooting zone (s) and excess wetness (w).

The Soil Survey also classifies the site soils as having an erosion K factor, whole soil, of 0.37 for Bow gravelly loam and 0.20 for Dystric Xerochrepts, which generally correlate to a moderate to low susceptibility of site soil to sheet and rill erosion by water. Potential values of the K factor range from 0.02 to 0.69, and, other factors being equal the higher the value, the more susceptible the soil is to water erosion. The erosion K factor, whole soil, only accounts for the erosion potential of the soil and does not account for other factors promoting soil loss such as water sources and site topography.

Native soils observed at the project site appeared to be generally consistent with the Soil Survey descriptions.

### **Limited Aerial Photo Review**

We reviewed historical images of the subject property from 1977, 1994, 1998, 2001, 2005, 2006, 2009, 2011, 2014, 2015, 2016 and 2017 to determine if there has been any recent significant slide activity within the vicinity of the project site.

Based on our review, it appears that the slopes to the southeast of the subject property are relatively stable and had not exhibited any indications of large scale movement.

It appears that the vegetation pattern and general appearance of the subject slopes within and adjacent to the subject property have not changed significantly within the past approximately 40 years, not counting development to the area.

It should be noted that aerial photos may not truly depict actual surface conditions due to vegetation possibly obscuring the ground surface. Aerial photos were obtained from Washington State's Department of Ecology's Coastal Zone Atlas and Google Earth.

### **Bare Earth Imagery Review**

We reviewed bare earth imagery of the subject property and slopes in the near vicinity of the property. Based on our review, it does not appear that there is global slope instability near the subject property, as observed by tension cracks, hummocky and/or slumped terrain (Figure 4).

The reviewed bare earth imagery did not contain resolution high enough to identify small scale erosional processes that may be present on sloped topography. As such, the presence of erosional processes was not identified using bare earth imagery. No indications of instability were identified on the bare earth imagery.

### **Landslide Hazards and Slope Stability**

As discussed above, GTS also evaluated historical and bare earth imagery of the subject property. No obvious signs of recent instability or evidence of severe soil creep was observed on the subject property or on the bedrock slopes southeast of the site.

Large scale global instability, consisting of deep-seated rotational failures, can extend down into the subsurface to substantial depths. These failures typically leave geomorphic evidence of their existence on the slope. Typical indicators are recessional head scarps, tension cracks, sag ponds, seepage zones, hummocky ground surface and slump blocks. Obvious visual indications of large scale global slope instability, such as those referenced

above, were not observed on or adjacent to the subject property. Due to the observed globally stable condition of the subject slope on the property and vicinity, it is our opinion that there is a low risk of a large scale landslide occurring and affecting the site of the proposed construction.

Please keep in mind that the Pacific Northwest is seismically active and it is difficult to predict how the slope(s) at the subject site may behave during a large earthquake.

### **Erosion Hazards**

We recommend the following mitigations to reduce the risk of erosion occurring during construction:

- All clearing and grading activities for proposed residence construction will need to incorporate Best Management Practices (BMPs) for erosion control in compliance with current City of Anacortes codes and standards.
- We recommend that appropriate silt fencing be incorporated into the construction plan for erosion control.
- We recommend that onsite BMP's be implemented during construction. Areas of native vegetation left in place, could also be enhanced by adding additional native plant species and/or other vegetation enhancements.
- Removal of vegetation and trees without proper mitigation may increase the risk of failure for the surficial soils during periods of wet weather. Planting additional brush and vegetation within the subject site and in areas disturbed by excavation activities will help maintain near surface slope stability by providing a stable root base within the near surface soils.
- Yard waste should not be dumped onto the top or face of the slope. Yard waste can retain water and cause slope instability.
- Proper drainage controls have a significant effect on erosion. All surface water and any collected drainage water should not be allowed to be concentrated and discharged down the face of slope.
- All areas disturbed by construction practices should be vegetated or otherwise protected to limit the potential for erosion as soon as practical during and after construction. Areas requiring immediate protection from the effects of erosion should be covered with either plastic, mulch or erosion control netting/blankets. Areas requiring permanent stabilization should be seeded with an approved grass seed mixture, hydroseeded with an approved seed-mulch-fertilizer mixture or landscaped with a suitable planting design.

### **CONCLUSIONS AND RECOMMENDATIONS**

Based upon an evaluation of the data collected during this investigation, it is our opinion that subsurface conditions at the site are suitable for the proposed development, provided the recommendations contained herein are incorporated into the project design.



We recommend that all topsoil and soft portions of the native soil be removed from all structural areas and that the footings are placed on the suitably prepared native glacial till. We anticipate 1 to 2 feet of topsoil and weathered glacial drift may need to be removed to reach suitably firm soil for foundation support.

### **Site Preparation and Earthwork**

The portions of the site to be occupied by proposed foundation, floor slabs, pavements, and/or sidewalks should be prepared by removing any existing topsoil, fill soils, soft portions of the native soil, deleterious material and significant accumulations of organics from the area to be developed. Based on our explorations, GTS expects that between approximately 1 and 2 feet of topsoil and weathered glacial till will be removed during site stripping.

Additionally, GTS expects that the proposed development will require minor site grading due to the variable topography present at the project site. At the time of this report no preliminary grading plans are available.

### **Fill and Compaction**

Structural fill used to obtain final elevations for footings and soil-supported floor slabs must be properly placed and compacted. In general, any suitable, non-organic, predominantly granular soil may be used for fill material provided the material is properly moisture conditioned prior to placement and compaction, and the specified degree of compaction is obtained. Material containing topsoil, wood, trash, organic material, or construction debris will not be suitable for reuse as structural fill and should be properly disposed of offsite or placed in nonstructural areas.

#### *Reuse of Onsite Soil*

Reuse of the weathered and unweathered glacial drift as structural fill may prove difficult, especially during wet weather, due to the variable fines content, ranging from approximately 5 to 95 percent, observed within the near surface soils. We recommend if native site soils are to be reused in structural fill applications, they contain no organics and only be used during periods of extended dry weather.

Soils containing more than approximately 5 percent fines (the portion that passes the #200 sieve) are considered moisture sensitive. These soils are very difficult to compact to a firm and unyielding condition when over the optimum moisture content by more than approximately 2 percent. The optimum moisture content is that which allows the greatest dry density to be achieved at a given level of compactive effort.

#### *Imported Structural Fill*

We recommend that imported structural fill consist of clean, well-graded sandy gravel, gravelly sand, or other approved naturally occurring granular material (pit run) or a well-graded crushed rock. We recommend structural fill for dry weather construction meet Washington State Department of Transportation (WSDOT) Standard Specification 9-03.14(2) for "Select Borrow" with the added requirement that 100 percent pass a 4-inch-square sieve. Soil containing more than about 5 percent fines (that portion passing the

U.S. No. 200 sieve) cannot consistently be compacted to a dense, non-yielding condition when the water content is greater than optimum.

Accordingly, we recommend that imported structural fill for wet weather construction meet WSDOT Standard Specification 9-03.14(1) for "Gravel Borrow" with the added requirement that no more than 5 percent pass the U.S. No. 200 sieve. Due to wet weather or wet site conditions, soil moisture contents could be high enough that it may be difficult to compact even "clean" imported select granular fill to a firm and unyielding condition. Soils with over-optimum moisture contents should be scarified and dried back to more suitable moisture contents during periods of dry weather or removed and replaced with fill soils at a more suitable range of moisture contents.

### *Backfill and Compaction*

Structural fill should be placed in horizontal lifts 8 to 10 inches in loose thickness and thoroughly compacted. All structural fill placed under load bearing areas should be compacted to at least 95 percent of the maximum dry density, as determined using test method ASTM D1557. The top of the compacted structural fill should extend outside all foundations and other structural improvements a minimum distance equal to the thickness of the fill. We recommend that compaction be tested periodically throughout the fill placement.

### **Wet Weather Earthwork**

It is our experience that soils with elevated silt contents, such as the near surface site soils, are particularly susceptible to degradation during wet weather. As a result, it may be difficult to control the moisture content of the site soils during the wet season. If construction is accomplished during wet weather, we recommend that structural fill consist of imported, clean, well-graded sand or sand and gravel as described above. If fill is to be placed or earthwork is to be performed in wet weather or under wet conditions, the contractor may reduce soil disturbance by:

- Limiting the size of areas that are stripped of topsoil and left exposed
- Accomplishing earthwork in small sections
- Limiting construction traffic over unprotected soil
- Sloping excavated surfaces to promote runoff
- Limiting the size and type of construction equipment used
- Providing gravel "working mats" over areas of prepared subgrade
- Removing wet surficial soil prior to commencing fill placement each day
- Sealing the exposed ground surface by rolling with a smooth drum compactor or rubber-tired roller at the end of each working day
- Providing upgradient perimeter ditches or low earthen berms and using temporary sumps to collect runoff and prevent water from ponding and damaging exposed subgrades.

### **Seismic Design Considerations**

The Pacific Northwest is seismically active, and the site could be subject to ground shaking from a moderate to major earthquake. Consequently, moderate levels of earthquake shaking should be anticipated during the design life of the project, and the proposed

structure should be designed to resist earthquake loading using appropriate design methodology.

For structures designed using the seismic design provisions of the 2015 International Building Code, the dense to very dense continental glacial till classifies as Site Class D, according to 2010 ASCE-7 Standard – Table 20.3-1, Site Class Definitions. The corresponding values for calculating a design response spectrum for the assumed soil profile type is considered appropriate for the site.

Please reference the following values for seismic structural design purposes:

Conterminous 48 States – 2015 International Building Code  
Zip Code 98221  
Central Latitude = 48.5001, Central Longitude = -122.6577

#### Short Period (0.2 sec) Spectral Acceleration

Maximum Considered Earthquake (MCE) Value of  $S_s = 1.102$  (g)  
Site Response Coefficient,  $F_a = 1.059$  (Site Class D)  
Adjusted spectral response acceleration for Site Class D,  $S_{MS} = S_s \times F_a = 1.167$  (g)  
Design spectral response acceleration for Site Class D,  $S_{DS} = 2/3 \times S_{MS} = 0.778$  (g)

#### One Second Period (1 sec) Spectral Acceleration

Maximum Considered Earthquake (MCE) Value of  $S_1 = 0.437$  (g)  
Site Response Coefficient,  $F_v = 1.563$  (Site Class D)  
Adjusted spectral response acceleration for Site Class D,  $S_{M1} = S_1 \times F_v = 0.684$  (g)  
Design spectral response acceleration for Site Class D,  $S_{D1} = 2/3 \times S_{M1} = 0.456$  (g)

### **Foundation Support and Settlement**

GTS recommends that new foundations be placed on firm and unyielding native glacial till or properly placed and compacted import structural fill, as defined in the *Structural Fill and Compaction* section of this report, placed over firm and unyielding native glacial till. Any overexcavation should be backfilled to the design footing elevation with compacted structural fill.

*Note: For lateral and bearing support, base fill shall extend a distance past each edge of the base of the footing equal to the depth of structural fill placed below the footing. For example, for a 2-foot wide perimeter footing, a 1.0 foot thick base pad will require a total width of 4.0 feet (1 foot each side plus 2 foot width of footing). Overexcavation areas of greater fill depth will also increase backfill width.*

The area bounded by lines extending downward at 1H:1V from any footing must not intersect another footing or retaining wall unless the lower elevation footing/retaining wall is designed to resist that load. A review of the proposed site layout is recommended to verify that new foundations don't surcharge any proposed below-grade tanks or other structural elements.

All continuous and isolated spread footings should be founded a minimum of 18 inches below the lowest adjacent final grade for freeze/thaw protection. The footings should be



sized in accordance with the civil or structural engineer's prescribed design criteria and seismic considerations.

### *Allowable Bearing Capacity*

Assuming the above foundation support criteria are satisfied, continuous or isolated spread footings founded directly on firm and unyielding glacial drift, or on compacted structural fill placed directly over glacial till, may be proportioned using a maximum net allowable soil bearing pressure of 2,500 pounds per square foot (psf).

The term "net allowable bearing pressure" refers to the pressure that can be imposed on the soil at foundation level resulting from the total of all dead plus live loads, exclusive of the weight of the footing or any backfill placed above the footing. The net allowable bearing pressure may be increased by one-third for transient wind or seismic loads.

### *Foundation Settlement*

Settlement of shallow foundations depends on foundation size and bearing pressure, as well as the strength and compressibility characteristics of the underlying soil. Assuming construction is accomplished as previously recommended and for the maximum allowable soil bearing pressure recommended above, we estimate the total settlement of building foundations should be less than about one inch and differential settlement between two adjacent load-bearing components supported on competent soil should be less than about one half the total settlement. The soil response to applied stresses caused by building and other loads is expected to be predominantly elastic in nature, with most of the settlement occurring during construction as loads are applied.

### **Floor Support**

Conventional slab-on-grade floor construction is considered feasible for the planned site improvements. Floor slabs may be supported on properly prepared, firm and unyielding native glacial till or on structural fill placed over properly prepared native soil. New floor slabs should not be founded on existing topsoil, uncontrolled fill, or loose native soils.

We recommend that interior concrete slab-on-grade floors be underlain by a minimum of 6 inches of compacted, clean, crushed free-draining gravel with less than 3 percent passing the U.S. Standard No. 200 sieve (based on a wet sieve analysis of that portion passing the U.S. Standard No. 4 sieve). The purpose of this layer is to provide uniform support for the slab, provide a capillary break, and act as a drainage layer. GTS recommends that material conforming to Washington State Department of Transportation Standard Specification 9-03.12(4), "Gravel Backfill for Drains", with the added requirement that the material consist of a crushed, angular aggregate material be used as capillary break material.

To help reduce the potential for water vapor migration through floor slabs, at a minimum a continuous impermeable membrane of 10- to 15-mil polyethylene sheeting with tape-sealed joints should be installed below the slab. The American Concrete Institute (ACI) guidelines suggest that the slab may either be poured directly on the vapor retarding membrane or on a granular curing layer placed over the vapor retarding membrane depending on conditions anticipated during construction. We recommend that the architect or structural engineer specify if a curing layer should be used. If moisture control

within the building is critical, we recommend an inspection of the vapor retarding membrane to verify that all openings have been properly sealed.

Exterior concrete slabs-on-grade, such as sidewalks, may be supported directly on undisturbed native or on properly placed and compacted structural fill; however, long-term performance will be enhanced if exterior slabs are placed on a layer of clean, durable, well-draining granular material.

### **Foundation and Site Drainage**

To reduce the potential for groundwater and surface water to seep into interior spaces we recommend that an exterior footing drain system be constructed around the perimeter of new building foundations as shown in the Typical Footing and Wall Drain Section, Figure 3. The drain should consist of a minimum 4-inch diameter perforated PVC pipe, surrounded by a minimum 12 inches of filtering media with the discharge sloped to carry water to a suitable collection system.

The filtering media may consist of open-graded drain rock wrapped by a nonwoven geotextile fabric (such as Mirafi 140N or equivalent). The invert of the footing drain pipe should be placed at approximately the same elevation as the bottom of the footing or 12 inches below the adjacent floor slab grade, whichever is deeper, to prevent water seepage into the building. The footing drain should discharge to an approved drain system and include cleanouts to allow periodic maintenance and inspection. Typical drain systems used consist of a PVC pipe, anchored to the slope, that runs to the base of the slope.

Positive surface gradients should be provided adjacent to the proposed building to direct surface water away from the foundation and toward suitable drainage facilities. Roof drainage should not be introduced into the perimeter footing drains, but should be separately discharged directly to the stormwater collection system or other appropriate outlet, typically a PVC pipe running to the base of the slope as referenced above. Pavement and sidewalk areas should be sloped and drainage gradients should be maintained to carry all surface water away from the building towards the local stormwater collection system. Surface water should not be allowed to pond and soak into the ground surface near buildings or paved areas during or after construction. Construction excavations should be sloped to drain to sumps where water from seepage, rainfall, and runoff can be collected and pumped to a suitable discharge facility.

### **Temporary and Permanent Slopes**

Actual construction slope configurations and maintenance of safe working conditions, including temporary excavation stability, must be the responsibility of the contractor, who is able to monitor the construction activities and has direct control over the means and methods of construction. All applicable local, state, and federal safety codes should be followed. All open cuts should be monitored during and after excavation for any evidence of instability. If instability is detected, the contractor should flatten the side slopes or install temporary shoring.

Temporary excavations in excess of 4 ft. should be shored or sloped in accordance with Safety Standards for Construction Work Part N, WAC 296-155-66403. Temporary unsupported excavations in the medium dense to dense native glacial drift are classified as a Type B soil and may be sloped as steep as 1H:1V. All soils encountered are classified

as Type C soil in the presence of groundwater seepage. Flatter slopes or temporary shoring may be required in areas where groundwater flow is present and unstable conditions develop. The contractor should be prepared to address difficult excavation conditions for deep excavations including, but not limited to, utility excavations and excavations associated with below-grade tanks.

We recommend that permanent cut or fill slopes be designed for inclinations of 2H:1V or flatter. Permanent cuts or fills used in detention ponds, retention ponds, or earth slopes intended to hold water should be 3H:1V or flatter. All permanent cut slopes should be vegetated or otherwise protected to limit the potential for erosion as soon as practical after construction. Permanent slopes requiring immediate protection from the effects of erosion should be covered with either mulch or erosion control netting/blankets. Areas requiring permanent stabilization should be seeded with an approved grass seed mixture, or hydroseeded with an approved seed-mulch-fertilizer mixture.

### **Utilities**

It is important that utility trenches be properly backfilled and compacted to reduce the risk of cracking or localized loss of foundation, slab, or pavement support. It is anticipated that excavations for new underground utilities will be in the medium dense to dense native glacial drift.

Trench backfill in improved areas (beneath structures, pavements, sidewalks, etc.) should consist of structural fill as defined earlier in this report. Depending on the quantities of structural fill generated from other site excavations, supplemental use of imported, granular soil may be warranted in improved areas. Outside of improved areas, trench backfill may consist of onsite soils which are otherwise unsuitable for use as structural fill. Trench backfill should be placed and compacted in accordance with the report section

Surcharge loads on trench support systems due to construction equipment, stockpiled material, and vehicle traffic should be included in the design of any anticipated shoring system. The contractor should implement measures to prevent surface water runoff from entering trenches and excavations. The trench In addition, vibration as a result of construction activities and traffic may cause caving of the trench walls.

Actual trench configurations should be the responsibility of the contractor. All applicable local, state, and federal safety codes should be followed. All open cuts should be monitored by the contractor during excavation for evidence of instability. If instability is detected, the contractor should flatten the side slopes or install temporary shoring. If groundwater or groundwater seepage is present, and the trench is not properly dewatered, the soil within the trench zone may be prone to caving, channeling, and running. Trench widths may be substantially wider than under dewatered conditions.

### **Pavement Subgrade Preparation**

Selection of a pavement section is typically a compromise between higher initial cost and lower maintenance on one side, and lower initial cost with more frequent maintenance on the other. For this reason, we recommend that the owner participate in the selection of proposed pavement improvements planned for the site. Site grading plans should include provisions for sloping of the subgrade soils in proposed pavement areas, so that passive



drainage of the pavement section(s) can proceed uninterrupted during the life of the project.

We anticipate that asphalt pavement will be used for new access drives and parking areas. It is assumed that topsoil, uncontrolled fill, loose portions of the glacial drift soils and any soils with significant organic content will have been removed prior to paving activities. We recommend all pavements be founded on firm and unyielding native glacial till or on properly placed and compacted structural fill placed directly on firm and unyielding native soils. Due to the moisture sensitivity of the native deposits, compaction during wet grade or wet weather conditions is not recommended. Overexcavation of subgrade soils or reinforcement of subgrades with geotextile fabrics may be warranted during wet conditions.

Structural fill placed to establish subgrade elevation should be compacted to a minimum of 95 percent of its maximum dry density, as determined using test method ASTM D1557. Prior to the placement of base-course and paving materials, the exposed subgrade under all areas to be occupied by asphalt pavement should be proof rolled. Proof rolling should be accomplished with a loaded dump truck, large self-propelled vibrating roller, or equivalent piece of equipment. The purpose of this effort is to identify possible loose or soft soil and recompact disturbed areas of subgrade.

GTS should be allowed to review a grading plan prior to the start of construction as the amount of on-site grading has the potential to influence the pavement subgrade recommendations that we have presented below.

#### *Flexible Pavement Sections*

We recommend that a minimum pavement section, consist of 3 inches of Class ½-inch HMA asphalt above 2 inches of WSDOT Standard Specification 9-03.9[3] Crushed Surfacing Top Course (CSTC), overlying 4 inches of crushed surfacing base course (CSBC) meeting criteria of the WSDOT Standard Specification 9-03.9[3]. Asphalt, CSTC and CSBC sections should be founded on existing firm and unyielding native glacial drift or on properly placed and compacted structural fill overlying firm and unyielding native deposits.

#### **Preliminary Stormwater Infiltration Potential**

From the explorations excavated across the site, seven representative soil samples were selected and mechanically tested for grain size distribution and interpretation according to the ASTM soil size distribution test procedure (ASTM D422). Calculated long-term infiltration rates were generated based on the simplified approach outlined in the 2012 Washington State Department of Ecology *Stormwater Management Manual for Western Washington* (DOE SMMWW). Calculated infiltration rates are shown in Table 2 below.

| <b>TABLE 2</b><br><b>Calculated Test Pit Soil Sample Infiltration Rates</b><br><b>Based on the 2012 DOE Stormwater Management Manual Section 3.3.6</b>                                                                                              |                    |                       |                                                 |                                                                             |                   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-----------------------|-------------------------------------------------|-----------------------------------------------------------------------------|-------------------|
| Test Pit Number                                                                                                                                                                                                                                     | Sample Depth (ft.) | Classification (USCS) | K <sub>sat</sub> Uncorrected Rate (Inches/Hour) | Calculated Infiltration Rate Per ASTM D422 Detailed Approach (Inches/Hour)* | Fines Content (%) |
| TP-1                                                                                                                                                                                                                                                | 4.0                | SM                    | 9.34                                            | 1.68                                                                        | 31.9              |
| TP-4                                                                                                                                                                                                                                                | 4.0                | ML                    | 0.99                                            | 0.17                                                                        | 71.2              |
| TP-6                                                                                                                                                                                                                                                | 3.0                | SM                    | 7.19                                            | 1.29                                                                        | 32.3              |
| TP-7                                                                                                                                                                                                                                                | 4.0                | SM                    | 3.06                                            | 0.55                                                                        | 24.8              |
| TP-8                                                                                                                                                                                                                                                | 3.5                | ML                    | 0.93                                            | 0.16                                                                        | 77.5              |
| TP-9                                                                                                                                                                                                                                                | 5.0                | ML                    | 0.51                                            | 0.09                                                                        | 89.7              |
| Notes:<br>-* Per ASTM D422 Simplified Approach<br>- K <sub>sat</sub> = Initial Saturated Hydraulic Conductivity<br>- Correction Factors Used: CF <sub>v</sub> = 0.5, CF <sub>t</sub> = 0.4, CF <sub>m</sub> = 0.9; Overall Correction Factor = 0.18 |                    |                       |                                                 |                                                                             |                   |

In the simplified approach (Section 3.3.6); the infiltration rate is derived by applying appropriate correction factors to the measured saturated hydraulic conductivity (K<sub>sat</sub>) from the ASTM 422 grain size analysis.

Saturated hydraulic conductivity is a quantitative measure of a saturated soil's ability to transmit water when subjected to a hydraulic gradient. It can be thought of as the ease with which pores of a saturated soil permit water movement.

Saturated Hydraulic Conductivity is expressed as follows:

$$\text{Log}_{10} (K_{\text{sat}}) = -1.57 + 1.90D_{10} + 0.015D_{60} - 0.013D_{90} - 2.08f_{\text{fines}}$$

Where D<sub>10</sub>, D<sub>60</sub>, and D<sub>90</sub> are the grain sizes in mm for which 10 percent, 60 percent, and 90 percent is finer and f<sub>fines</sub> is the fraction of the soil (by weight) that passes the U.S. No. 200 sieve. K<sub>sat</sub> is measured in cm/sec.

With this equation, we can determine the saturated hydraulic conductivity for our representative samples. See example below:

Test Pit TP-7 at 4.0 feet BGS: K<sub>sat</sub> = 0.0021 cm/sec or approximately 3.06 inches/hour

Correction factors for site variability (0.5), test method (0.4) and degree of influent control to prevent siltation and bio-buildup (0.9) were applied. Combining the correction factors yields an overall correction factor of 0.18. Applying the overall correction factor gives a corrected long-term infiltration rate of 0.55 inches/hour for the example above.

As displayed in Table 2, the native, glacial till deposits encountered underlying the topsoil have a calculated long-term infiltration rate ranging between 0.09 to 1.68 inches per hour based on the simplified approach as outlined by the 2012 DOE manual. **However, the simplified approach as outlined in the 2012 DOE SMMWW, does not consider the relative density of a given soil deposit and is generally only suitable for soils that**

**have not been glacially consolidated. As the native site soils are glacially consolidated we anticipate that the actual infiltration rates for the glacial till deposits will be lower than the rate produced by the simplified approach. As such, the glacial till is, in our opinion, a restrictive layer and is not suitable for conventional stormwater infiltration.**

Alternative means of stormwater management utilizing LID (low impact development) concepts, such as pervious pavements and/or rain gardens, may be feasible at the project site but should be further evaluated as part of a more comprehensive infiltration study once the construction plan is more fully developed. It is anticipated that such facilities would likely require overflow protection or a pipe at the bottom of the facility to direct treated water toward an approved discharge facility or location. We are available to assist with the design of these alternative systems upon request.

### **Geotechnical Consultation and Construction Monitoring**

We recommend that periodic field density testing be performed to verify that the appropriate degree of compaction is obtained. The purpose of these services would be to observe compliance with the design concepts, specifications, and recommendations of this report, and in the event subsurface conditions differ from those anticipated before the start of construction, provide revised recommendations appropriate to the conditions revealed during construction. GeoTest Services would be pleased to provide these services for you.

GeoTest Services is also available to provide a full range of materials testing and special inspection during building construction as required by the local building department and the International Building Code. This may include specific construction inspections on materials such as reinforced concrete, reinforced masonry, wood framing and structural steel. These services are supported by our fully accredited materials testing laboratory.

### **USE OF THIS REPORT**

GeoTest Services has prepared this report for the exclusive use of Nels Strandberg for specific application to the design of the proposed 11 lot residential development to be located at 1905 Anacopper Mine Road in Anacortes, Washington. Use of this report by others or for another project is at the user's sole risk. Within the limitations of scope, schedule, and budget, our services have been conducted in accordance with generally accepted practices of the geotechnical engineering profession; no other warranty, either expressed or implied, is made as to the professional advice included in this report.

Our site explorations indicate subsurface conditions at the dates and locations indicated. It is not warranted that they are representative of subsurface conditions at other locations and times. The analyses, conclusions, and recommendations contained in this report are based on site conditions to the limited depth of our explorations at the time of our exploration program, a brief geological reconnaissance of the area, and review of published geological information for the site. We assume that the explorations are representative of the subsurface conditions throughout the site during the preparation of our recommendations. If variations in subsurface conditions are encountered during construction, we should be notified for review of the recommendations of this report, and revision of such if necessary. If there is a substantial lapse of time between submission of this report and the start of construction, or if conditions change due to construction

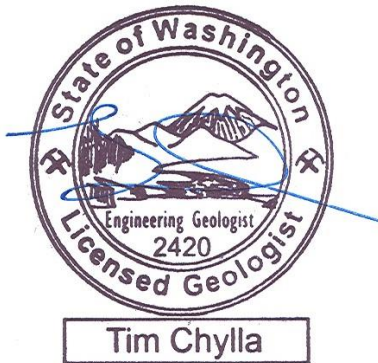


operations at or adjacent to the project site, we recommend that we review this report to determine the applicability of the conclusions and recommendations contained herein.

The earthwork contractor is responsible to perform all work in conformance with all applicable WISHA/OSHA regulations. GeoTest Services, Inc. should not be assumed to be responsible for job site safety on this project, and this responsibility is specifically disclaimed.

We appreciate the opportunity to provide geotechnical services on this project and look forward to assisting you during the construction phase. If you have any questions regarding the information contained in this report, or if we may be of further service, please contact the undersigned.

Respectfully Submitted,  
**GeoTest Services, Inc.**



Tim Chylla, L.E.G.  
Licensed Engineering Geologist



Dave Rauch, P.E.  
Engineering Project Manager

|              |                 |                                             |
|--------------|-----------------|---------------------------------------------|
| Attachments: | Figure 1        | Vicinity Map                                |
|              | Figure 2        | Site and Exploration Plan                   |
|              | Figure 3        | Typical Footing and Wall Drain Section      |
|              | Figure 4        | Bare Earth Imagery                          |
|              | Figure 5        | Soil Classification System and Key          |
|              | Figures 6 – 11  | Test Pit Logs                               |
|              | Figures 12 - 13 | Grain Size Distribution                     |
|              | Attached        | Report Limitations and Guidelines (3 pages) |

## REFERENCES

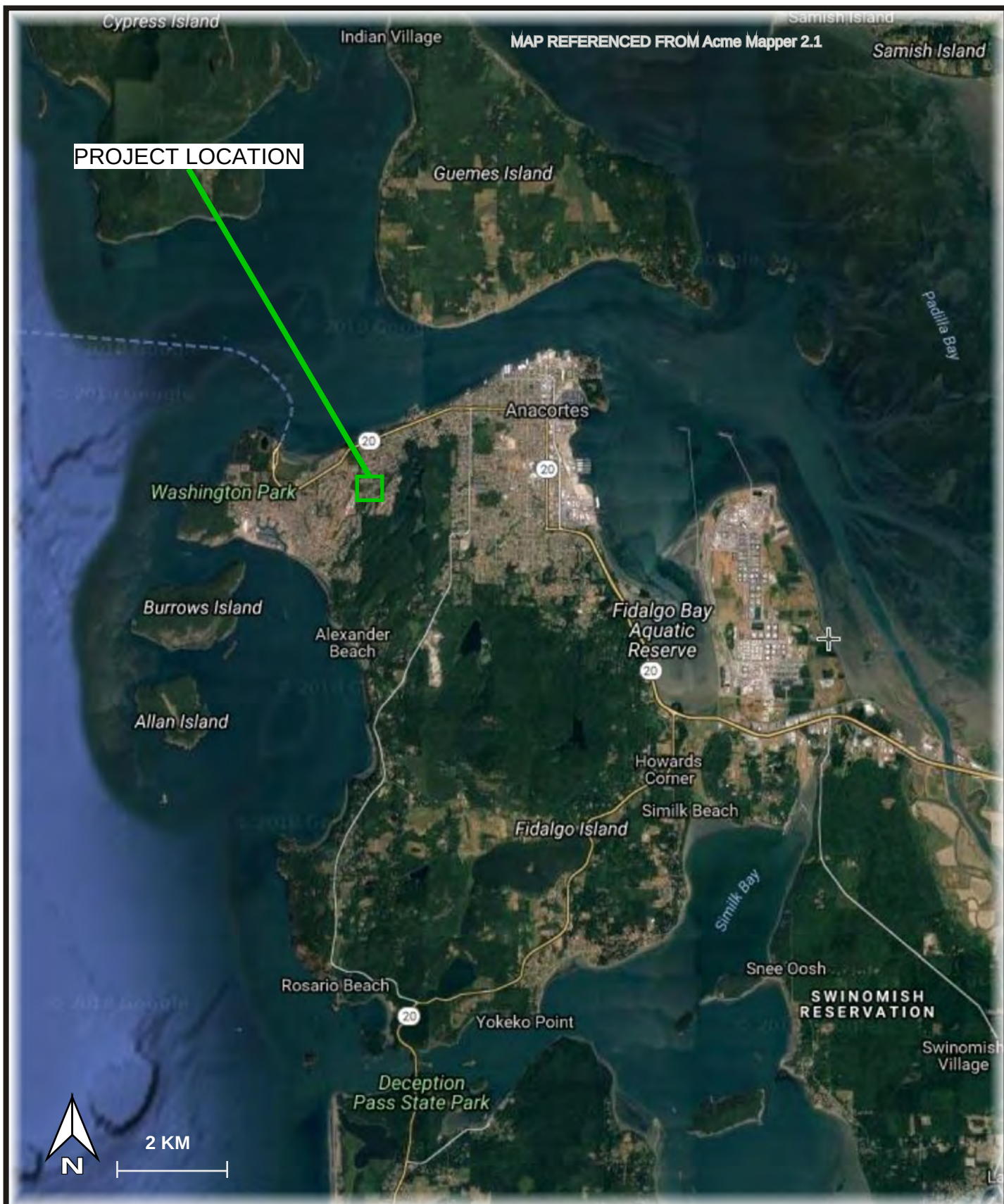
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**GEOTEST SERVICES, INC.**

741 Marine Drive  
Bellingham, WA 98225

phone: (360) 733-7318  
fax: (360) 733-7418

Date: 2-23-18

By: HS

Scale: As Shown

Project

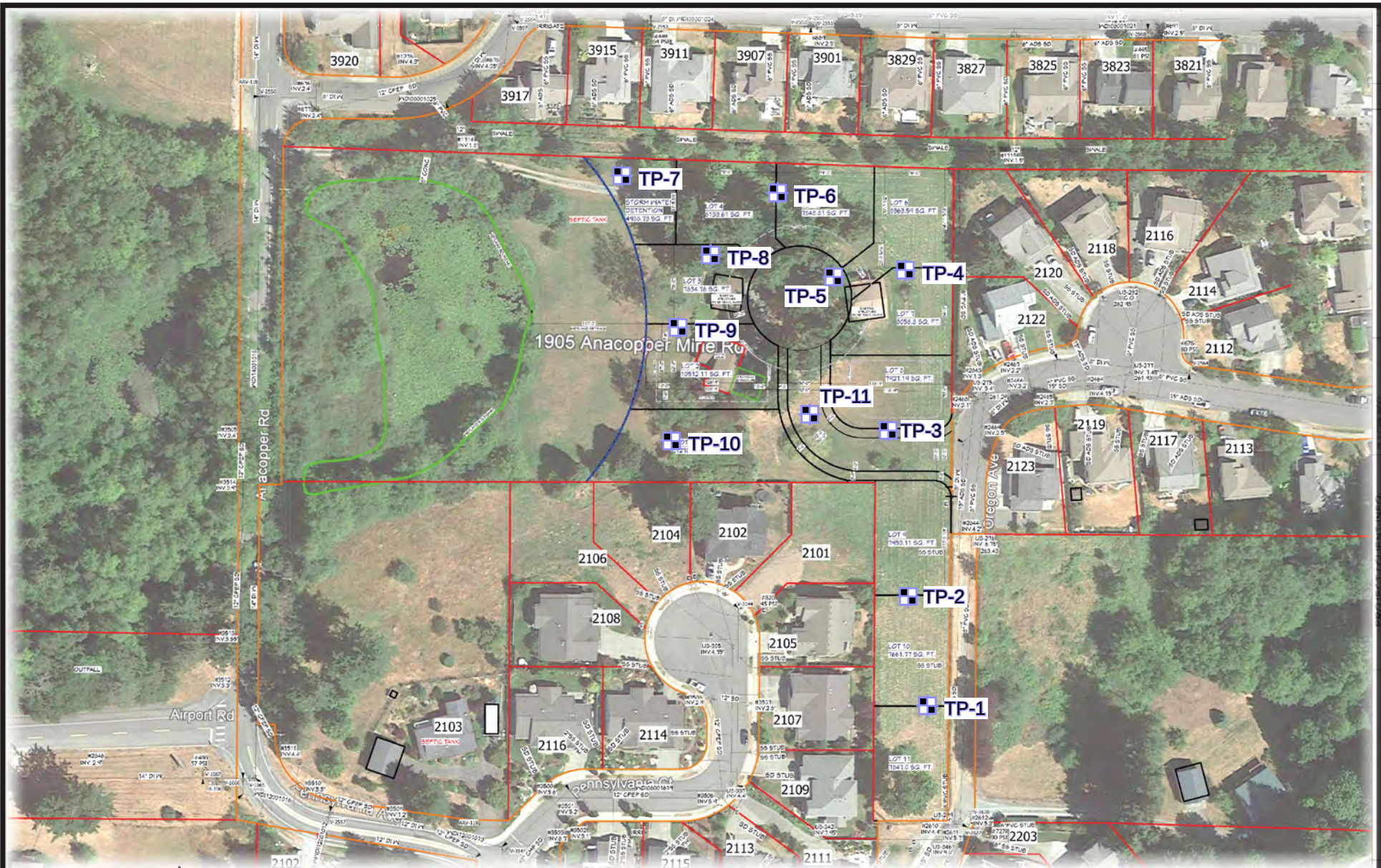
**SITE VICINITY MAP**  
**ANACOPPER LLC**  
**1905 ANACOPPER ROAD**  
**ANACORTES, WASHINGTON**

**18-0119**

Figure

**1**





■ TP-# = Approximate Test Pit Location  
Site plan provided by Strandberg Construction

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Date: 2-23-18

By: HS

Scale: Not to Scale

Project

18-0119

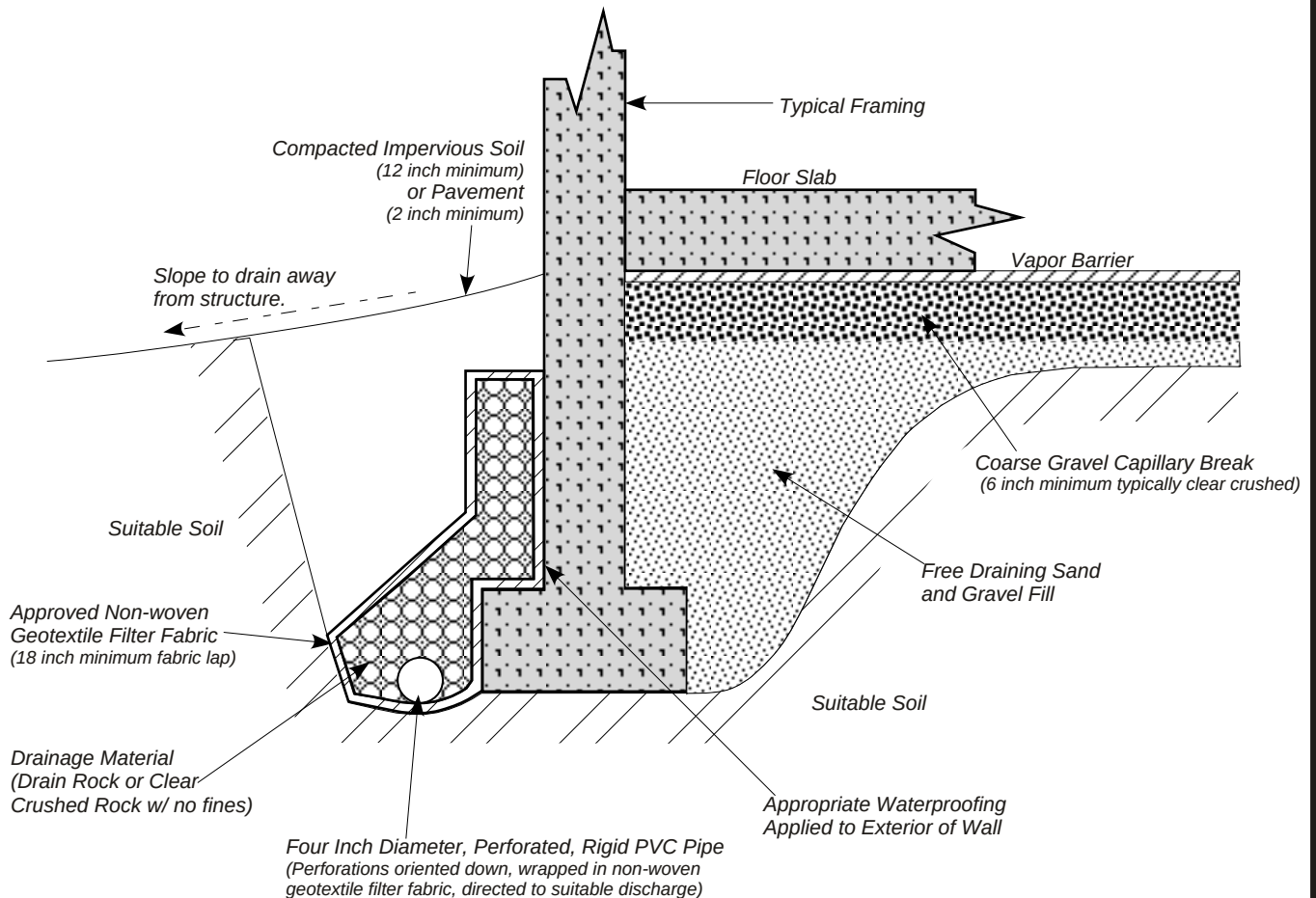
Figure

2

**SITE AND EXPLORATION PLAN**  
**ANACOPPER LLC**  
**1905 ANACOPPER ROAD**  
**ANACORTES, WASHINGTON**



## SHALLOW FOOTINGS WITH INTERIOR SLAB-ON-GRADE



### Notes:

Footings Should be properly buried for frost protection in accordance with International Building Code or local building codes  
(Typically 18 inches below exterior finished grades)

The footing drain will need to be modified from this typical drawing to fit the dimensions of the planned monolithic footing and slab configuration

### GEOTEST SERVICES, INC.

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Date: 2-28-18

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Scale: None

Project

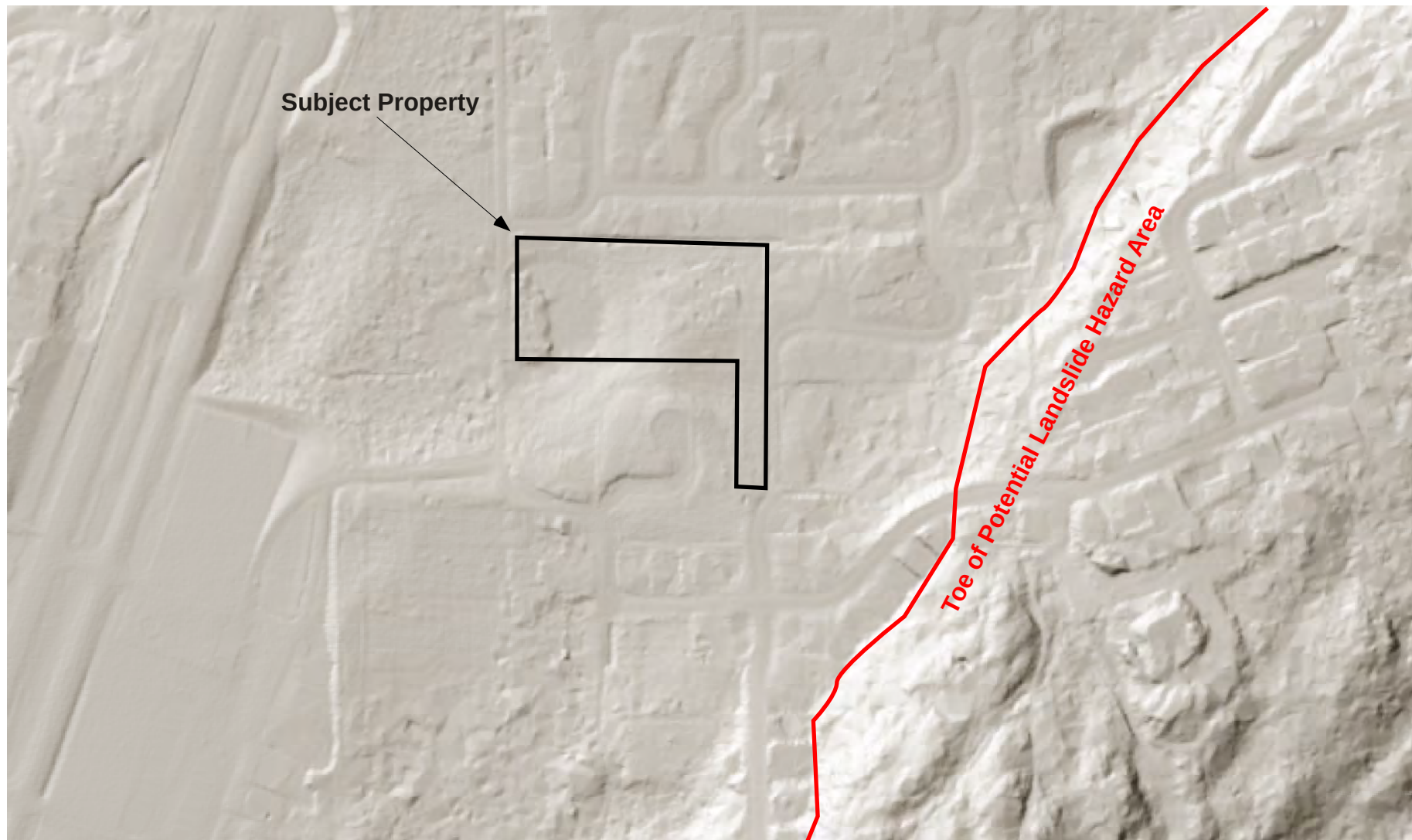
### TYPICAL FOOTING & WALL DRAIN SECTION

18-0119

ANACOPPER LLC  
1905 ANACOPPER MINE ROAD  
ANACORTES, WASHINGTON

Figure

3



Subject Property

Toe of Potential Landslide Hazard Area

0' 250' 500'



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By: HS

Scale: Shown

**BARE EARTH IMAGERY**  
**ANACOPPER LLC**  
**1905 ANACOPPER ROAD**  
**ANACORTES, WASHINGTON**

Project

**18-0119**

Figure

**4**

## Soil Classification System

|                                                                                      | MAJOR DIVISIONS                                            |                                                    | GRAPHIC SYMBOL | USCS LETTER SYMBOL | TYPICAL DESCRIPTIONS <sup>(1)(2)</sup>                                                                         |
|--------------------------------------------------------------------------------------|------------------------------------------------------------|----------------------------------------------------|----------------|--------------------|----------------------------------------------------------------------------------------------------------------|
| COARSE-GRAINED SOIL<br>(More than 50% of material is larger than No. 200 sieve size) | GRAVEL AND GRAVELLY SOIL                                   | CLEAN GRAVEL<br>(Little or no fines)               |                | <b>GW</b>          | Well-graded gravel; gravel/sand mixture(s); little or no fines                                                 |
|                                                                                      |                                                            |                                                    |                | <b>GP</b>          | Poorly graded gravel; gravel/sand mixture(s); little or no fines                                               |
|                                                                                      | (More than 50% of coarse fraction retained on No. 4 sieve) | GRAVEL WITH FINES<br>(Appreciable amount of fines) |                | <b>GM</b>          | Silty gravel; gravel/sand/silt mixture(s)                                                                      |
|                                                                                      |                                                            |                                                    |                | <b>GC</b>          | Clayey gravel; gravel/sand/clay mixture(s)                                                                     |
|                                                                                      | SAND AND SANDY SOIL                                        | CLEAN SAND<br>(Little or no fines)                 |                | <b>SW</b>          | Well-graded sand; gravelly sand; little or no fines                                                            |
|                                                                                      |                                                            |                                                    |                | <b>SP</b>          | Poorly graded sand; gravelly sand; little or no fines                                                          |
| FINE-GRAINED SOIL<br>(More than 50% of material is smaller than No. 200 sieve size)  | SILT AND CLAY<br>(Liquid limit less than 50)               |                                                    |                | <b>SM</b>          | Silty sand; sand/silt mixture(s)                                                                               |
|                                                                                      |                                                            |                                                    |                | <b>SC</b>          | Clayey sand; sand/clay mixture(s)                                                                              |
|                                                                                      |                                                            |                                                    |                | <b>ML</b>          | Inorganic silt and very fine sand; rock flour; silty or clayey fine sand or clayey silt with slight plasticity |
|                                                                                      | SILT AND CLAY<br>(Liquid limit greater than 50)            |                                                    |                | <b>CL</b>          | Inorganic clay of low to medium plasticity; gravelly clay; sandy clay; silty clay; lean clay                   |
|                                                                                      |                                                            |                                                    |                | <b>OL</b>          | Organic silt; organic, silty clay of low plasticity                                                            |
|                                                                                      |                                                            |                                                    |                | <b>MH</b>          | Inorganic silt; micaceous or diatomaceous fine sand                                                            |
| HIGHLY ORGANIC SOIL                                                                  |                                                            |                                                    |                | <b>CH</b>          | Inorganic clay of high plasticity; fat clay                                                                    |
|                                                                                      |                                                            |                                                    |                | <b>OH</b>          | Organic clay of medium to high plasticity; organic silt                                                        |
|                                                                                      |                                                            |                                                    |                | <b>PT</b>          | Peat; humus; swamp soil with high organic content                                                              |

| OTHER MATERIALS | GRAPHIC SYMBOL | LETTER SYMBOL   | TYPICAL DESCRIPTIONS                                  |
|-----------------|----------------|-----------------|-------------------------------------------------------|
| PAVEMENT        |                | <b>AC or PC</b> | Asphalt concrete pavement or Portland cement pavement |
| ROCK            |                | <b>RK</b>       | Rock (See Rock Classification)                        |
| WOOD            |                | <b>WD</b>       | Wood, lumber, wood chips                              |
| DEBRIS          |                | <b>DB</b>       | Construction debris, garbage                          |

Notes: 1. Soil descriptions are based on the general approach presented in the *Standard Practice for Description and Identification of Soils (Visual-Manual Procedure)*, as outlined in ASTM D 2488. Where laboratory index testing has been conducted, soil classifications are based on the *Standard Test Method for Classification of Soils for Engineering Purposes*, as outlined in ASTM D 2487.

2. Soil description terminology is based on visual estimates (in the absence of laboratory test data) of the percentages of each soil type and is defined as follows:

Primary Constituent: > 50% - "GRAVEL," "SAND," "SILT," "CLAY," etc.

Secondary Constituents: > 30% and ≤ 50% - "very gravelly," "very sandy," "very silty," etc.  
> 12% and ≤ 30% - "gravelly," "sandy," "silty," etc.

Additional Constituents: > 5% and ≤ 12% - "slightly gravelly," "slightly sandy," "slightly silty," etc.  
≤ 5% - "trace gravel," "trace sand," "trace silt," etc., or not noted.

| Drilling and Sampling Key                                                                                                                                              |              |                                            | Field and Lab Test Data |                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|--------------------------------------------|-------------------------|-------------------------------------------------|
| SAMPLE NUMBER & INTERVAL                                                                                                                                               | SAMPLER TYPE |                                            | Code                    | Description                                     |
|                                                                                                                                                                        | Code         | Description                                |                         |                                                 |
| Sample Identification Number                                                                                                                                           | a            | 3.25-inch O.D., 2.42-inch I.D. Split Spoon | PP = 1.0                | Pocket Penetrometer, tsf                        |
| Recovery Depth Interval                                                                                                                                                | b            | 2.00-inch O.D., 1.50-inch I.D. Split Spoon | TV = 0.5                | Torvane, tsf                                    |
| Sample Depth Interval                                                                                                                                                  | c            | Shelby Tube                                | PID = 100               | Photoionization Detector VOC screening, ppm     |
| Portion of Sample Retained for Archive or Analysis                                                                                                                     | d            | Grab Sample                                | W = 10                  | Moisture Content, %                             |
|                                                                                                                                                                        | e            | Other - See text if applicable             | D = 120                 | Dry Density, pcf                                |
|                                                                                                                                                                        | 1            | 300-lb Hammer, 30-inch Drop                | -200 = 60               | Material smaller than No. 200 sieve, %          |
|                                                                                                                                                                        | 2            | 140-lb Hammer, 30-inch Drop                | GS                      | Grain Size - See separate figure for data       |
|                                                                                                                                                                        | 3            | Pushed                                     | AL                      | Atterberg Limits - See separate figure for data |
|                                                                                                                                                                        | 4            | Other - See text if applicable             | GT                      | Other Geotechnical Testing                      |
|                                                                                                                                                                        |              |                                            | CA                      | Chemical Analysis                               |
| Groundwater                                                                                                                                                            |              |                                            |                         |                                                 |
| Approximate water elevation at time of drilling (ATD) or on date noted. Groundwater levels can fluctuate due to precipitation, seasonal conditions, and other factors. |              |                                            |                         |                                                 |



## TP-1

| SAMPLE DATA |                          |              | SOIL PROFILE |                |             | GROUNDWATER                                                                                                              |
|-------------|--------------------------|--------------|--------------|----------------|-------------|--------------------------------------------------------------------------------------------------------------------------|
| Depth (ft)  | Sample Number & Interval | Sampler Type | Test Data    | Graphic Symbol | USCS Symbol | Excavation Method: <u>Rubber-tired Backhoe</u><br>Ground Elevation (ft): <u>Undetermined</u>                             |
| 0           |                          |              |              |                |             |                                                                                                                          |
| 01          | 01                       | d            | W = 14       |                | SM/OL       | Loose to medium dense, brown, damp to moist, silty SAND with occasional pebbles and cobbles, contains organics (Topsoil) |
| 02          | 02                       | d            | W = 20       |                | SM          | Medium dense to dense, reddish brown, damp, silty, gravelly SAND (B-Horizon - Weathered Glacial Till)                    |
| 03          | 03                       | d            | W = 14       |                | GM          | Dense, tan, slightly silty, moist, slightly silty, sandy GRAVEL (Weathered Continental Glacial Till)                     |
| 04          | 04                       | d            | W = 13<br>GS |                | SM          | Dense to very dense, tan to orange, mottled, damp very silty SAND (Continental Glacial Till)                             |
| 6           |                          |              |              |                |             | <div> <div></div> Slight groundwater seepage encountered at 3.0 ft. </div>                                               |
| 8           |                          |              |              |                |             | Test Pit Completed 02/21/18<br>Total Depth of Test Pit = 6.0 ft.                                                         |

## TP-2

| SAMPLE DATA |                          |              | SOIL PROFILE |                |             | GROUNDWATER                                                                                                              |
|-------------|--------------------------|--------------|--------------|----------------|-------------|--------------------------------------------------------------------------------------------------------------------------|
| Depth (ft)  | Sample Number & Interval | Sampler Type | Test Data    | Graphic Symbol | USCS Symbol | Excavation Method: <u>Rubber-tired Backhoe</u><br>Ground Elevation (ft): <u>Undetermined</u>                             |
| 0           |                          |              |              |                |             |                                                                                                                          |
| 05          | 05                       | d            |              |                | SM/OL       | Loose to medium dense, brown, damp to moist, silty SAND with occasional pebbles and cobbles, contains organics (Topsoil) |
| 06          | 06                       | d            |              |                | SM          | Medium dense to dense, reddish brown, damp, silty, gravelly SAND (B-Horizon - Weathered Glacial Till)                    |
| 2           |                          |              |              |                |             | <div> <div></div> Rapid groundwater seepage encountered at 1.5 ft. </div>                                                |
| 3           |                          |              |              |                |             | Test Pit Completed 02/21/18<br>Total Depth of Test Pit = 2.0 ft.                                                         |
| 4           |                          |              |              |                |             |                                                                                                                          |

- Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
  2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
  3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

## TP-3

| SAMPLE DATA |                          |              |           | SOIL PROFILE   |             | GROUNDWATER                                                                                                              |
|-------------|--------------------------|--------------|-----------|----------------|-------------|--------------------------------------------------------------------------------------------------------------------------|
| Depth (ft)  | Sample Number & Interval | Sampler Type | Test Data | Graphic Symbol | USCS Symbol |                                                                                                                          |
| 0           |                          |              |           |                |             | Excavation Method: <u>Rubber-tired Backhoe</u><br>Ground Elevation (ft): <u>Undetermined</u>                             |
|             |                          |              |           |                | SM/OL       | Loose to medium dense, brown, damp to moist, silty SAND with occasional pebbles and cobbles, contains organics (Topsoil) |
| 1           |                          |              |           |                | GM          | Dense, tan, slightly silty, moist, slightly silty, sandy GRAVEL (Weathered Continental Glacial Till)                     |
| 2           |                          |              |           |                |             | ▽ Rapid groundwater seepage encountered at 1.0 ft.                                                                       |
| 3           |                          |              |           |                |             |                                                                                                                          |
| 4           |                          |              |           |                |             |                                                                                                                          |

Test Pit Completed 02/21/18  
Total Depth of Test Pit = 2.0 ft.

Test Pit Completed 02/21/18  
Total Depth of Test Pit = 2.0 ft.

## TP-4

| SAMPLE DATA |                          |              |              | SOIL PROFILE   |             | GROUNDWATER                                                                                                                |
|-------------|--------------------------|--------------|--------------|----------------|-------------|----------------------------------------------------------------------------------------------------------------------------|
| Depth (ft)  | Sample Number & Interval | Sampler Type | Test Data    | Graphic Symbol | USCS Symbol |                                                                                                                            |
| 0           |                          |              |              |                |             | Excavation Method: <u>Rubber-tired Backhoe</u><br>Ground Elevation (ft): <u>Undetermined</u>                               |
| 0           |                          |              |              |                | SM/OL       | Loose to medium dense, brown, damp to moist, silty SAND with occasional pebbles and cobbles, contains organics (Topsoil)   |
| 1           |                          |              |              |                | GM          | - Charcoal debris observed at 1.66' BGS.                                                                                   |
| 2           |                          |              |              |                | SM          | Medium dense, tan, slightly silty, moist, slightly silty, sandy GRAVEL (Weathered Continental Glacial Till)                |
| 3           |                          |              |              |                |             | - Material not present in entire test pit sidewall. Contact with Weathered Continental Glacial Till occurred at 8-20" BGS. |
| 4           | 07                       | d            | W = 15<br>GS |                | SM          | Very dense, tan to reddish brown, mottled, damp, silty, gravelly SAND (Continental Glacial Till)                           |
| 5           |                          |              |              |                |             |                                                                                                                            |
| 6           |                          |              |              |                |             |                                                                                                                            |
| 7           |                          |              |              |                |             |                                                                                                                            |
| 8           |                          |              |              |                |             |                                                                                                                            |

Test Pit Completed 02/21/18  
Total Depth of Test Pit = 6.0 ft.

Moderate groundwater seepage encountered at 2.3 ft.

Test Pit Completed 02/21/18  
Total Depth of Test Pit = 6.0 ft.

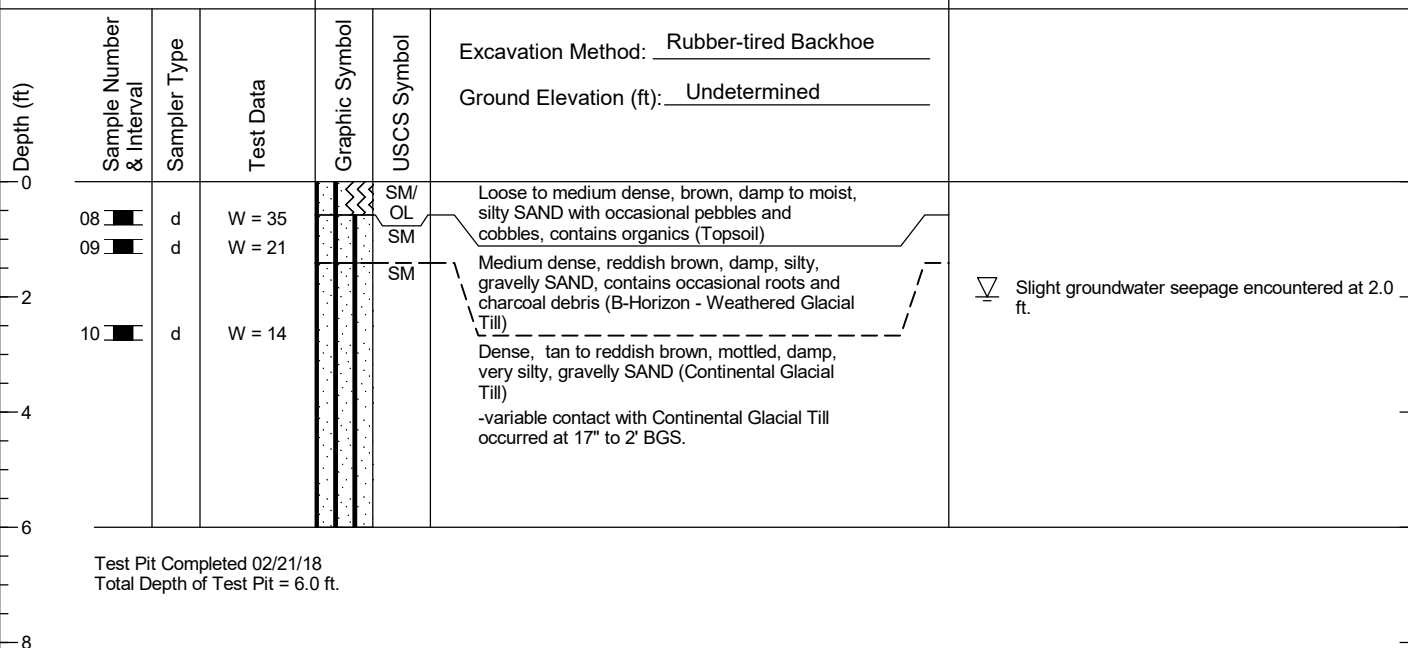
- Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
  2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
  3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

## TP-5

## SAMPLE DATA

## SOIL PROFILE

## GROUNDWATER

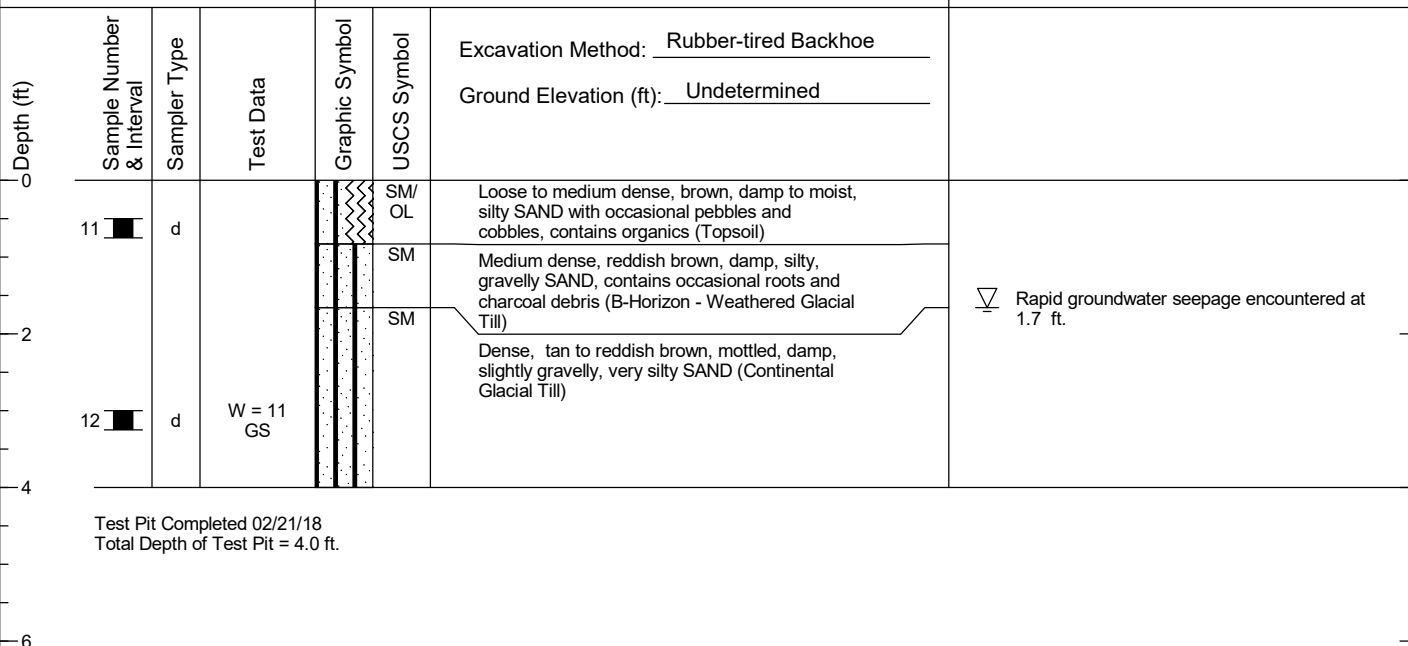


## TP-6

## SAMPLE DATA

## SOIL PROFILE

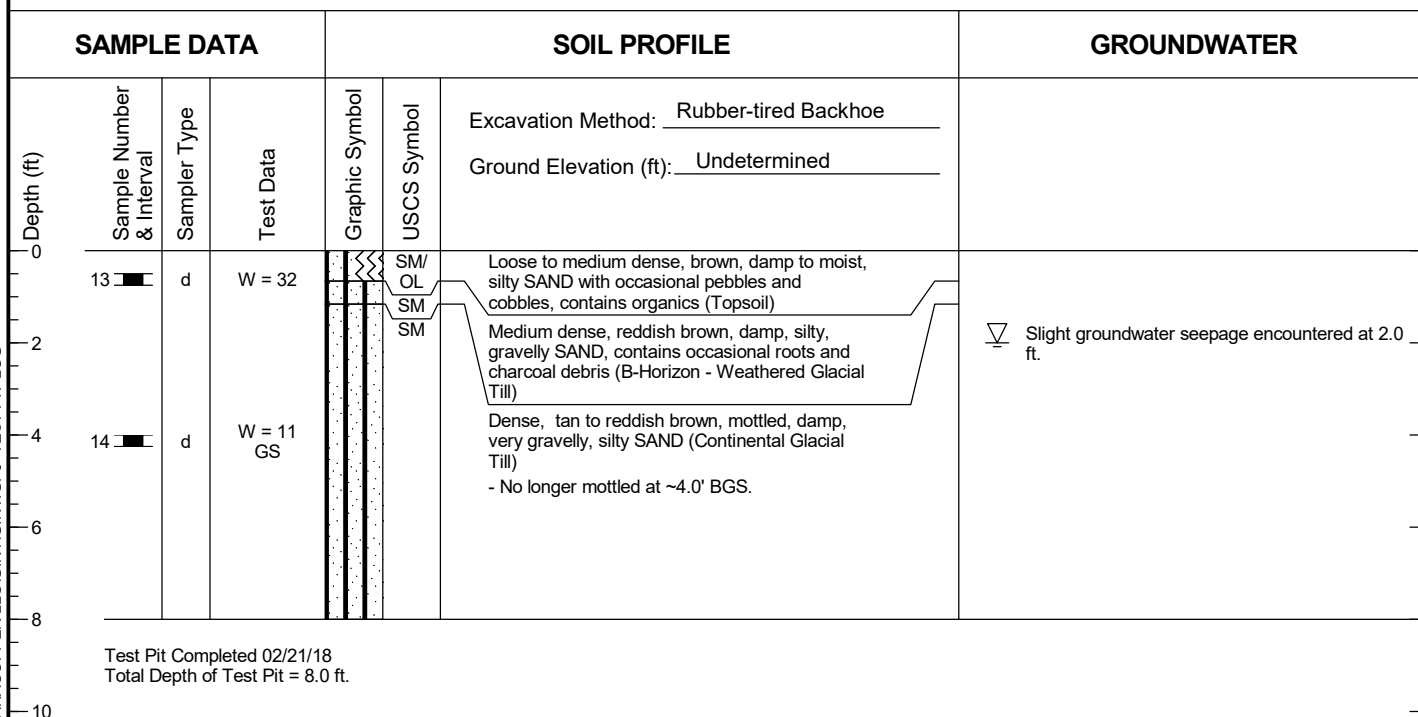
## GROUNDWATER



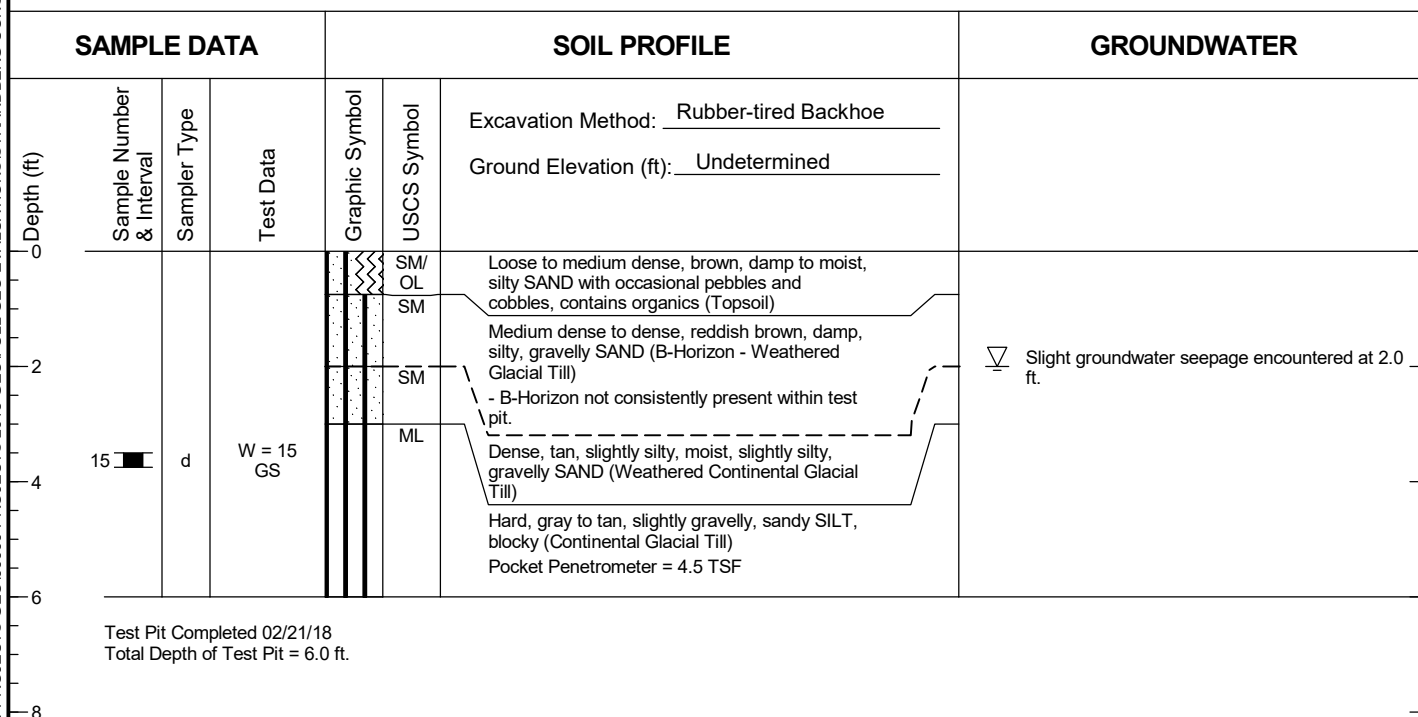
- Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
  2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
  3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.



## TP-7

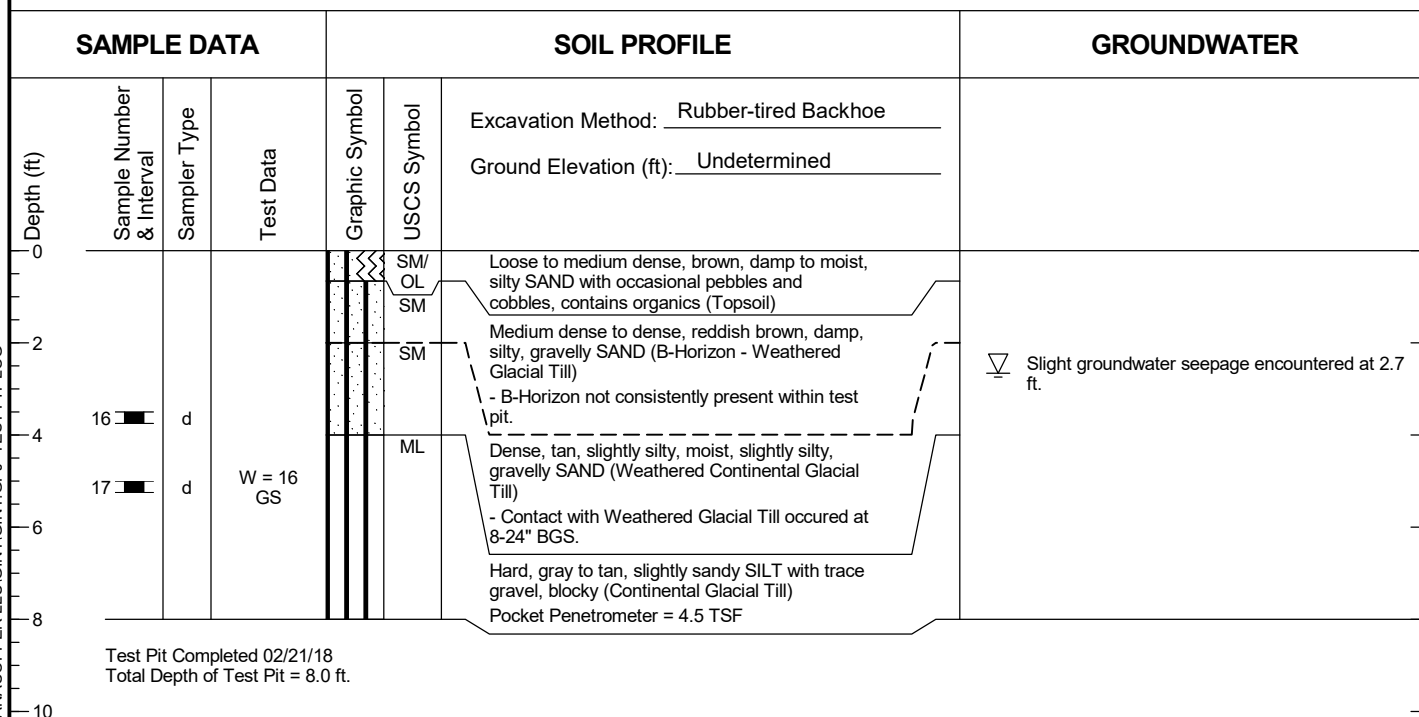


## TP-8

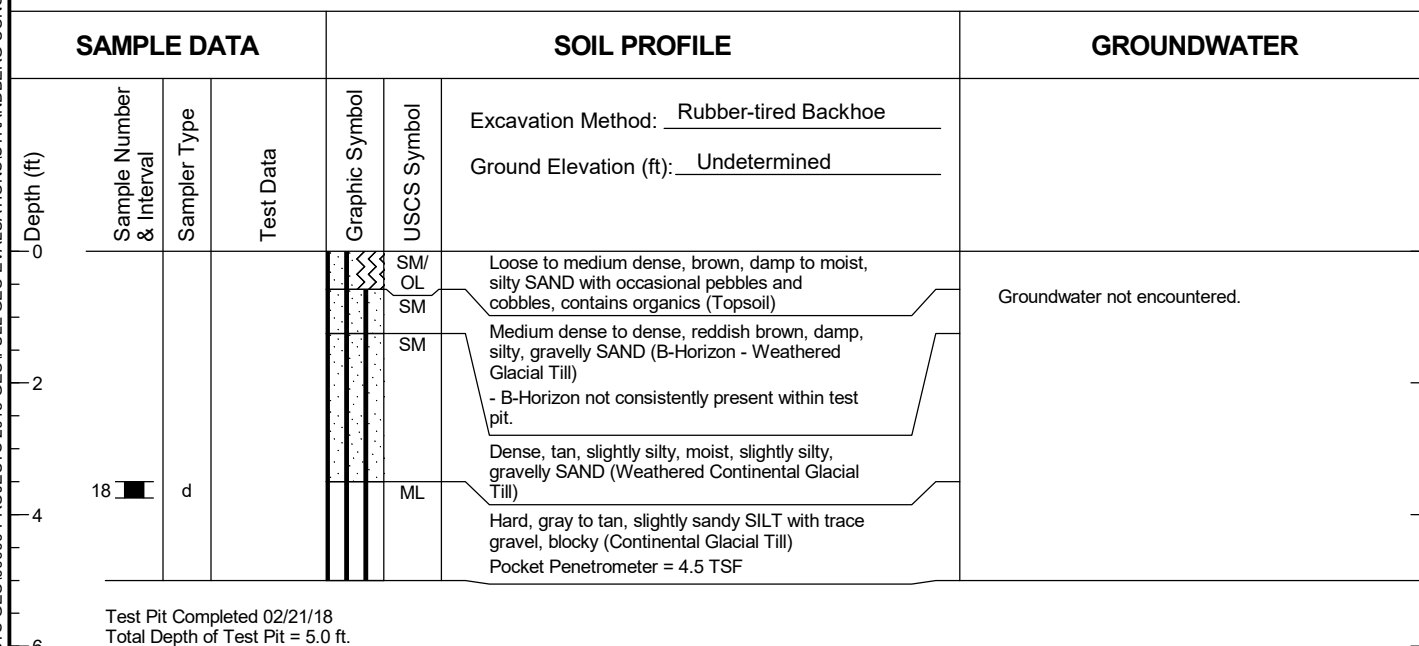


- Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
  2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
  3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

## TP-9



## TP-10

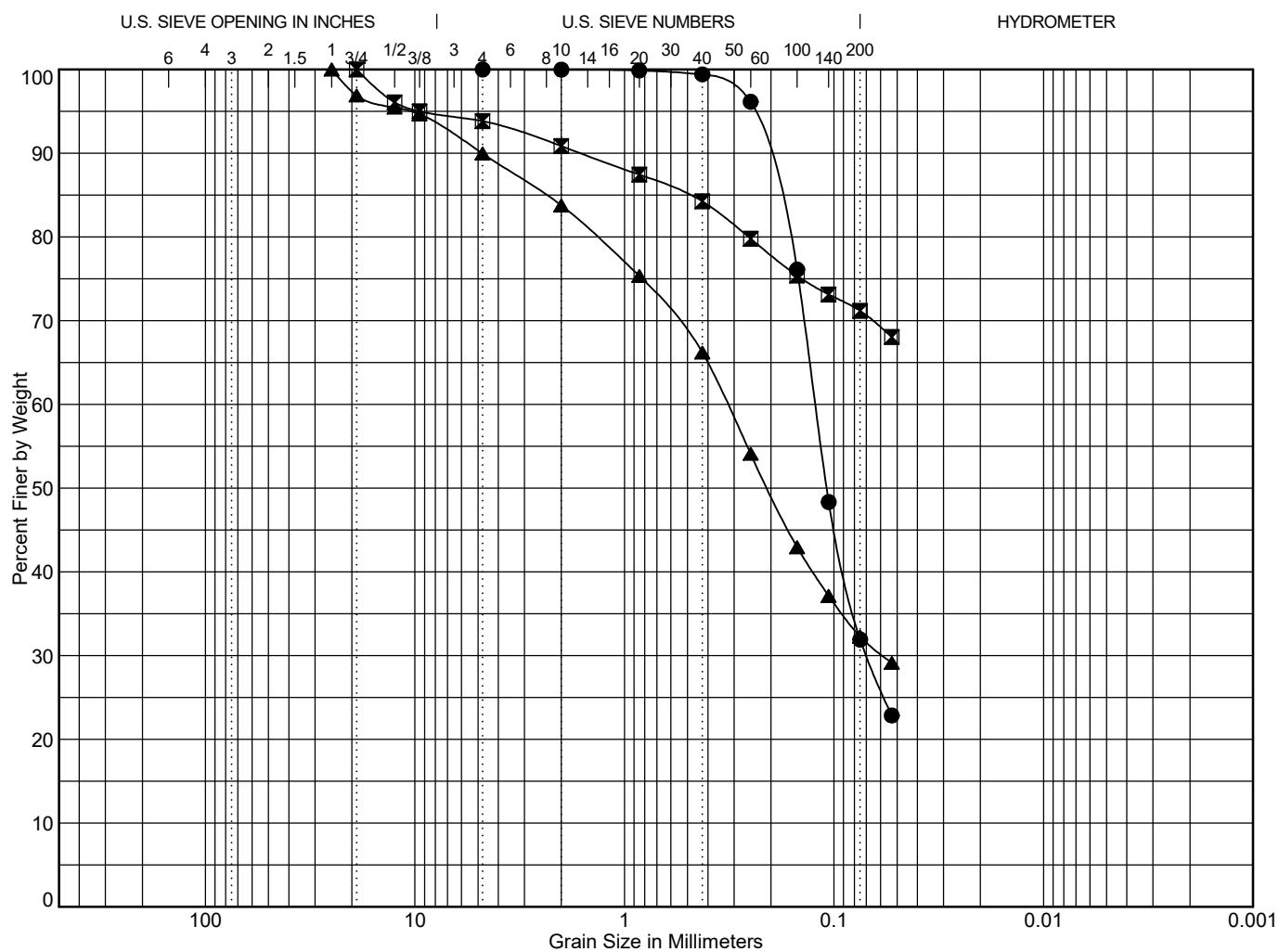


- Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
  2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
  3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

18-0119 2/28/18 X:\0-PROJECTS GEO\00000-PROJECTS 2018-GEO\FULL GEO EVALUATIONS\STRANDBERG CONST. - 18-0119 - ANACOPPER LLC\GINTGINT.GPJ SINGLE TEST PIT LOG

| TP-11                                                                                                                                                                                                                                                                                                     |                          |                                                                    |           |                 |             |                                                                                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------------------------------------------------|-----------|-----------------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| SAMPLE DATA                                                                                                                                                                                                                                                                                               |                          |                                                                    |           | SOIL PROFILE    |             | NOTES/GROUNDWATER                                                                                                                                       |
| Depth (ft)                                                                                                                                                                                                                                                                                                | Sample Number & Interval | Sampler Type                                                       | Test Data | Graphic Symbol  | USCS Symbol | Excavation Method: <u>Rubber-tired Backhoe</u><br>Ground Elevation (ft): <u>Undetermined</u>                                                            |
| 0                                                                                                                                                                                                                                                                                                         |                          |                                                                    |           |                 |             |                                                                                                                                                         |
| 19                                                                                                                                                                                                                                                                                                        |                          | d                                                                  | W = 16    |                 | SM/OL       | Loose to medium dense, brown, damp to moist, silty SAND with occasional pebbles and cobbles, contains organics (Topsoil)                                |
| 20                                                                                                                                                                                                                                                                                                        |                          | d                                                                  | W = 20    |                 | SM          | Medium dense to dense, reddish brown, damp, silty, gravelly SAND (B-Horizon - Weathered Glacial Till)<br>- Charcoal observed at 1.66' BGS.              |
| 21                                                                                                                                                                                                                                                                                                        |                          | d                                                                  | W = 13    |                 | SM          | Loose to medium dense, tan, slightly silty, wet, very silty, gravelly SAND (Continental Glacial Till)<br>-Density up to dense / very dense at 4.5' BGS. |
| Test Pit Completed 02/21/18<br>Total Depth of Test Pit = 6.0 ft.                                                                                                                                                                                                                                          |                          |                                                                    |           |                 |             | Slight groundwater seepage encountered at 2.2 ft.                                                                                                       |
| Notes: 1. Stratigraphic contacts are based on field interpretations and are approximate.<br>2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.<br>3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols. |                          |                                                                    |           |                 |             |                                                                                                                                                         |
| GEOTEST                                                                                                                                                                                                                                                                                                   |                          | Anacopper LLC<br>1905 Anacopper Mine Road<br>Anacortes, Washington |           | Log of Test Pit |             | Figure<br>11                                                                                                                                            |





| Cobbles | Gravel |      | Sand   |        |      | Silt or Clay |
|---------|--------|------|--------|--------|------|--------------|
|         | coarse | fine | coarse | medium | fine |              |

| Point | Depth | Classification   |                                         |                 |                 |                 |                |               |               | LL            | PL          | PI      | C <sub>c</sub> | C <sub>u</sub> |  |
|-------|-------|------------------|-----------------------------------------|-----------------|-----------------|-----------------|----------------|---------------|---------------|---------------|-------------|---------|----------------|----------------|--|
| ●     | TP-1  | 4.0              | Very silty SAND (SM)                    |                 |                 |                 |                |               |               |               |             |         |                |                |  |
| ☒     | TP-4  | 4.0              | Slightly gravelly, sandy SILT (ML)      |                 |                 |                 |                |               |               |               |             |         |                |                |  |
| ▲     | TP-6  | 3.0              | Slightly gravelly, very silty SAND (SM) |                 |                 |                 |                |               |               |               |             |         |                |                |  |
|       |       |                  |                                         |                 |                 |                 |                |               |               |               |             |         |                |                |  |
|       |       |                  |                                         |                 |                 |                 |                |               |               |               |             |         |                |                |  |
| Point | Depth | D <sub>100</sub> | D <sub>60</sub>                         | D <sub>50</sub> | D <sub>30</sub> | D <sub>10</sub> | %Coarse Gravel | % Fine Gravel | % Coarse Sand | % Medium Sand | % Fine Sand | % Fines |                |                |  |
| ●     | TP-1  | 4.0              | 4.75                                    | 0.123           | 0.108           | 0.07            |                | 0.0           | 0.0           | 0.0           | 0.6         | 67.5    | 31.9           |                |  |
| ☒     | TP-4  | 4.0              | 19                                      |                 |                 |                 |                | 0.0           | 6.2           | 3.0           | 6.6         | 13.1    | 71.2           |                |  |
| ▲     | TP-6  | 3.0              | 25                                      | 0.324           | 0.207           | 0.058           |                | 3.1           | 6.9           | 6.2           | 17.6        | 33.9    | 32.3           |                |  |
|       |       |                  |                                         |                 |                 |                 |                |               |               |               |             |         |                |                |  |
|       |       |                  |                                         |                 |                 |                 |                |               |               |               |             |         |                |                |  |

$$C_c = D_{30}^2 / (D_{60} * D_{10})$$

$$C_u = D_{60} / D_{10}$$

To be well graded:  $1 < C_c < 3$  and

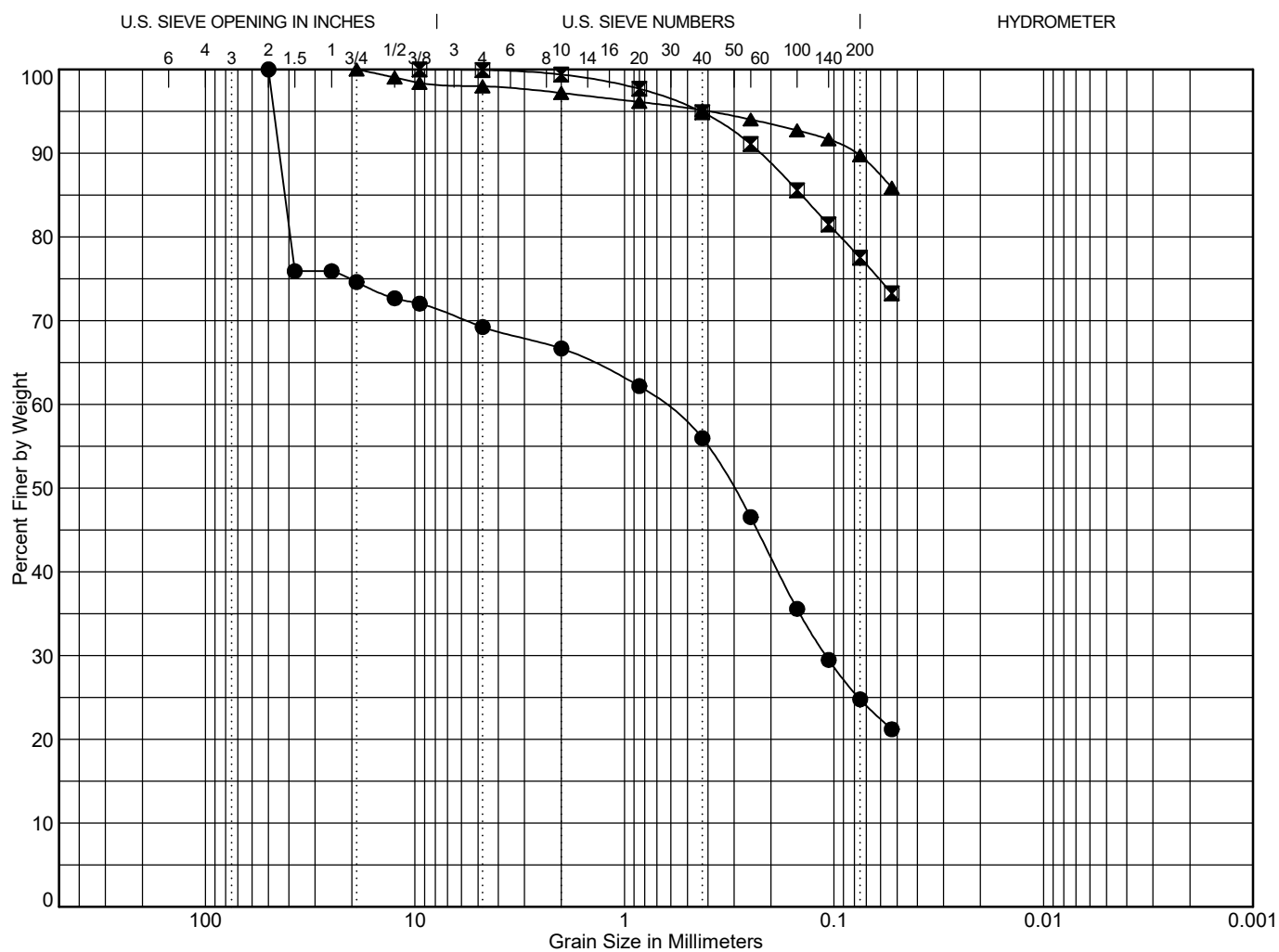
$C_u > 4$  for GW or  $C_u > 6$  for SW

**GEOTEST**

Anacopper LLC  
1905 Anacopper Mine Road  
Anacortes, Washington

Grain Size Test Data

Figure  
**12**



| Cobbles | Gravel |      | Sand   |        |      | Silt or Clay |
|---------|--------|------|--------|--------|------|--------------|
|         | coarse | fine | coarse | medium | fine |              |

| Point | Depth | Classification   |                                |                 |                 |                 |                |               |               | LL            | PL          | PI      | C <sub>c</sub> | C <sub>u</sub> |  |
|-------|-------|------------------|--------------------------------|-----------------|-----------------|-----------------|----------------|---------------|---------------|---------------|-------------|---------|----------------|----------------|--|
| ●     | TP-7  | 4.0              | Very gravelly, silty SAND (SM) |                 |                 |                 |                |               |               |               |             |         |                |                |  |
| ☒     | TP-8  | 3.5              | Sandy SILT (ML)                |                 |                 |                 |                |               |               |               |             |         |                |                |  |
| ▲     | TP-9  | 5.0              | Slightly sandy SILT (ML)       |                 |                 |                 |                |               |               |               |             |         |                |                |  |
|       |       |                  |                                |                 |                 |                 |                |               |               |               |             |         |                |                |  |
|       |       |                  |                                |                 |                 |                 |                |               |               |               |             |         |                |                |  |
| Point | Depth | D <sub>100</sub> | D <sub>60</sub>                | D <sub>50</sub> | D <sub>30</sub> | D <sub>10</sub> | %Coarse Gravel | % Fine Gravel | % Coarse Sand | % Medium Sand | % Fine Sand | % Fines |                |                |  |
| ●     | TP-7  | 4.0              | 50                             | 0.667           | 0.304           | 0.109           |                | 25.4          | 5.4           | 2.6           | 10.7        | 31.2    | 24.8           |                |  |
| ☒     | TP-8  | 3.5              | 9.5                            |                 |                 |                 |                | 0.0           | 0.1           | 0.5           | 4.5         | 17.4    | 77.5           |                |  |
| ▲     | TP-9  | 5.0              | 19                             |                 |                 |                 |                | 0.0           | 2.0           | 0.8           | 2.1         | 5.4     | 89.7           |                |  |
|       |       |                  |                                |                 |                 |                 |                |               |               |               |             |         |                |                |  |
|       |       |                  |                                |                 |                 |                 |                |               |               |               |             |         |                |                |  |

$$C_c = D_{30}^2 / (D_{60} * D_{10})$$

$$C_u = D_{60} / D_{10}$$

To be well graded:  $1 < C_c < 3$  and

$C_u > 4$  for GW or  $C_u > 6$  for SW

**GEOTEST**

Anacopper LLC  
1905 Anacopper Mine Road  
Anacortes, Washington

Grain Size Test Data

Figure  
**13**

## REPORT LIMITATIONS AND GUIDELINES FOR ITS USE<sup>1</sup>

Subsurface issues may cause construction delays, cost overruns, claims, and disputes. While you cannot eliminate all such risks, you can manage them. The following information is provided to help:

### **Geotechnical Services are Performed for Specific Purposes, Persons, and Projects**

At GeoTest our geotechnical engineers and geologists structure their services to meet specific needs of our clients. A geotechnical engineering study conducted for a civil engineer may not fulfill the needs of an owner, a construction contractor or even another civil engineer. Because each geotechnical engineering study is unique, each geotechnical engineering report is unique, prepared solely for the client. No one except you should rely on your geotechnical engineer who prepared it. And no one – not even you – should apply the report for any purpose or project except the one originally contemplated.

### **Read the Full Report**

Serious problems have occurred because those relying on a geotechnical engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only.

### **A Geotechnical Engineering Report is Based on a Unique Set of Project-Specific Factors**

GeoTest's geotechnical engineers consider a number of unique, project-specific factors when establishing the scope of a study. Typical factors include: the clients goals, objectives, and risk management preferences; the general nature of the structure involved its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless GeoTest, who conducted the study specifically states otherwise, do not rely on a geotechnical engineering report that was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical engineering report include those that affect:

- the function of the proposed structure, as when it's changed, for example, from a parking garage to an office building, or from a light industrial plant to a refrigerated warehouse,
- elevation, configuration, location, orientation, or weight of the proposed construction,
- alterations in drainage designs; or
- composition of the design team; the passage of time; man-made alterations and construction whether on or adjacent to the site; or by natural alterations and events, such as floods, earthquakes or groundwater fluctuations; or project ownership.

Always inform GeoTest's geotechnical engineer of project changes – even minor ones – and request an assessment of their impact. *Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.*

<sup>1</sup>Information in this document is based upon material developed by ASFE, Professional Firms Practicing in the Geosciences(asfe.org)



## **Subsurface Conditions Can Change**

This geotechnical or geologic report is based on conditions that existed at the time the study was performed. Do not rely on the findings and conclusions of this report, whose adequacy may have been affected by: the passage of time; by man-made events, such as construction on or adjacent to the site; or by natural events, such as floods, earthquakes, or groundwater fluctuations. Always contact GeoTest before applying the report to determine if it is still relevant. A minor amount of additional testing or analysis will help determine if the report remains applicable.

## **Most Geotechnical and Geologic Findings are Professional Opinions**

Our site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. GeoTest's engineers and geologists review field and laboratory data and then apply their professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ – sometimes significantly – from those indicated in your report. Retaining GeoTest who developed this report to provide construction observation is the most effective method of managing the risks associated with anticipated or unanticipated conditions.

## **A Report's Recommendations are *Not* Final**

Do not over-rely on the construction recommendations included in this report. Those recommendations are not final, because geotechnical engineers or geologists develop them principally from judgment and opinion. GeoTest's geotechnical engineers or geologists can finalize their recommendations only by observing actual subsurface conditions revealed during construction. GeoTest cannot assume responsibility or liability for the report's recommendations if our firm does not perform the construction observation.

## **A Geotechnical Engineering or Geologic Report may be Subject to Misinterpretation**

Misinterpretation of this report by other design team members can result in costly problems. Lower that risk by having GeoTest confer with appropriate members of the design team after submitting the report. Also, we suggest retaining GeoTest to review pertinent elements of the design teams plans and specifications. Contractors can also misinterpret a geotechnical engineering report. Reduce that risk by having GeoTest participate in pre-bid and preconstruction conferences, and by providing construction observation.

## **Do not Redraw the Exploration Logs**

Our geotechnical engineers and geologists prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors of omissions, the logs included in this report should never be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable; but recognizes that separating logs from the report can elevate risk.

## **Give Contractors a Complete Report and Guidance**

Some owners and design professionals mistakenly believe they can make contractors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give contractors the complete geotechnical engineering report, but preface it with a clearly written letter of transmittal. In that letter, consider advising the contractors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the GeoTest and/or to conduct

<sup>1</sup>Information in this document is based upon material developed by ASFE, Professional Firms Practicing in the Geosciences([asfe.org](http://asfe.org))

additional study to obtain the specific types of information they need or prefer. A pre-bid conference can also be valuable. Be sure contractors have sufficient time to perform additional study. Only then might you be in a position to give contractors the best information available, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions. In addition, it is recommended that a contingency for unanticipated conditions be included in your project budget and schedule.

### **Read Responsibility Provisions Closely**

Some clients, design professionals, and contractors do not recognize that geotechnical engineering or geology is far less exact than other engineering disciplines. This lack of understanding can create unrealistic expectations that can lead to disappointments, claims, and disputes. To help reduce risk, GeoTest includes an explanatory limitations section in our reports. Read these provisions closely. Ask questions and we encourage our clients or their representative to contact our office if you are unclear as to how these provisions apply to your project.

### **Environmental Concerns Are Not Covered in this Geotechnical or Geologic Report**

The equipment, techniques, and personnel used to perform an environmental study differ significantly from those used to perform a geotechnical or geologic study. For that reason, a geotechnical engineering or geologic report does not usually relate any environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated containments, etc. If you have not yet obtained your own environmental information, ask your geotechnical consultant for risk management guidance. Do not rely on environmental report prepared for some one else.

### **Obtain Professional Assistance to Deal with Biological Pollutants**

Diverse strategies can be applied during building design, construction, operation, and maintenance to prevent significant amounts biological pollutants from growing on indoor surfaces. Biological pollutants includes but is not limited to molds, fungi, spores, bacteria and viruses. To be effective, all such strategies should be devised for the express purpose of prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional biological pollutant prevention consultant. Because just a small amount of water or moisture can lead to the development of severe biological infestations, a number of prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may have been addressed as part of this study, the geotechnical engineer or geologist in charge of this project is not a biological pollutant prevention consultant; none of the services performed in connection with this geotechnical engineering or geological study were designed or conducted for the purpose of preventing biological infestations.

<sup>1</sup>Information in this document is based upon material developed by ASFE, Professional Firms Practicing in the Geosciences([asfe.org](http://asfe.org))

### **APPENDIX 3 – Model Soil Management Plan for BMP T5.13**

An alternate document acceptable to the City of Anacortes is a Test Report provided by the Soils Supplier that identifies the soils to be used meet the specifications outlined under Minimum Requirement 5. The specifications are in both WSDOT and CSI Formats. For specifications, refer to the above referenced PDF.

This submittal can be a deferred submittal since most projects are not sure who the supplier will be at the time of building permit application. For projects that trigger Minimum Requirements 1 through 5, the Test Report will be provided to the Building Department. Projects triggering Minimum Requirements 1 through 9, the Test Report will be provided to the Engineering Department.



**DEFERRED SUBMITTAL: PROVIDE A TEST REPORT FROM SOILS SUPPLIER TO THE BUILDING DEPT.**

**PROJECT INFORMATION** "Model Soil Management Plan for BMP T5.13" age # \_\_\_\_ of \_\_\_\_ pages  
 Complete all information on page 1; only site address and permit number on additional pages.

|                               |                      |
|-------------------------------|----------------------|
| Site Address / Lot No.: _____ |                      |
| Permit Type: _____            | Permit Number: _____ |
| Permit Holder: _____          | Phone: _____         |
| Mailing Address: _____        |                      |
| Contact Person: _____         | Phone: _____         |
| Plan Prepared By: _____       |                      |

**ATTACHMENTS REQUIRED** (Check off required items that are attached to this plan)

|                                                                                           |                                                                                                                                                                                                                                                       |
|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Site Plan showing, to scale:                                     | <input type="checkbox"/> Areas of undisturbed native vegetation (no amendment required)<br><input type="checkbox"/> New planting beds and turf areas (amendment required)<br><input type="checkbox"/> Type of soil improvement proposed for each area |
| <input type="checkbox"/> Soil test results (required if proposing custom amendment rates) |                                                                                                                                                                                                                                                       |
| <input type="checkbox"/> Product test results for proposed amendments                     |                                                                                                                                                                                                                                                       |

AREA # \_\_\_\_\_ (should match Area # on Site Plan)

|                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                            |                                                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| <b>PLANTING TYPE</b> <input type="checkbox"/> Turf <input type="checkbox"/> Undisturbed native vegetation<br><input type="checkbox"/> Planting Beds <input type="checkbox"/> Other: _____                                           |                                                                                                                                                                                                                                                                                            |                                                |
| <b>SQUARE FOOTAGE OF THIS AREA:</b> _____ square feet                                                                                                                                                                               |                                                                                                                                                                                                                                                                                            |                                                |
| <b>SCARIFICATION</b><br><input type="checkbox"/> Subsoil will be scarified                                                                                                                                                          | _____ inches (depth) of scarification needed to achieve finished total 12" loosened depth.                                                                                                                                                                                                 |                                                |
| <b>PRE-APPROVED AMENDMENT METHOD:</b><br><input type="checkbox"/> Topsoil import<br><input type="checkbox"/> Amend with compost<br><input type="checkbox"/> Stockpile and amend (_____ cu. yds. stockpiled)                         | _____ inches of compost or imported topsoil applied<br>X <u>3.1</u> (conversion factor, inches to cubic yards)<br>_____ = cu. yards per 1,000 sq. ft.<br>X _____,000s sq.ft. in this area<br>_____ = cubic yards of amendment → → → → →<br>(needed to cover this area to designated depth) | PRODUCT: _____<br><br>QUANTITY: _____ CU. YDS. |
| <b>CUSTOM AMENDMENT</b><br><input type="checkbox"/> Topsoil import<br><input type="checkbox"/> Topsoil & compost lift<br><input type="checkbox"/> Amend<br><input type="checkbox"/> Stockpile and amend (_____ cu. yds. stockpiled) | <b>Attach test results and calculations.</b><br>_____ inches organic matter or topsoil import<br>X <u>3.1</u><br>_____ = cu. yards / 1,000 sq. ft.<br>X _____,000s sq.ft. in this area<br>_____ = cubic yards of amendment → → → → →                                                       | PRODUCT: _____<br><br>QUANTITY: _____ CU. YDS. |
| <b>MULCH</b>                                                                                                                                                                                                                        | _____,000 sq.ft.<br>X <u>6.2</u> (conversion, to give 2 inch mulch depth)<br>_____ = cubic yards of mulch → → → → →                                                                                                                                                                        | PRODUCT: _____<br><br>QUANTITY: _____ CU. YDS. |

**TOTAL AMENDMENT/TOPSOIL/MULCH FOR ALL AREAS** (complete on page 1 only, totaling all areas/pages in this Plan)

|                                                                                                                                   |                                                   |
|-----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| <input type="checkbox"/> Product #1: _____                                                                                        | <input type="checkbox"/> Quantity: _____ cu. yds. |
| <input type="checkbox"/> Test Results: _____ % organic matter    _____ C:N ratio <25:1 (except mulch, or <35:1 for native plants) | _____ "stable" (yes/no)                           |
| <input type="checkbox"/> Product #2: _____                                                                                        | <input type="checkbox"/> Quantity: _____ cu. yds. |
| <input type="checkbox"/> Test Results: _____ % organic matter    _____ C:N ratio <25:1 (except mulch, or <35:1 for native plants) | _____ "stable" (yes/no)                           |
| <input type="checkbox"/> Product #3: _____                                                                                        | <input type="checkbox"/> Quantity: _____ cu. yds. |
| <input type="checkbox"/> Test Results: _____ % organic matter    _____ C:N ratio <25:1 (except mulch, or <35:1 for native plants) | _____ "stable" (yes/no)                           |

|       |            |           |                     |
|-------|------------|-----------|---------------------|
| Date: | Inspector: | Approved: | Revisions Required: |
| Date: | Inspector: | Approved: | Revisions Required: |

## **APPENDIX 4 – Determining Construction Site Sediment Damage Potential (Appendix 7 – NPDES Phase II Permit)**

Note: See attached. All projects within the City of Anacortes are required to complete that document under Appendix 4.

### *Western Washington Phase II Stormwater Permit*

## **i. APPENDIX 7 – Determining Construction Site Sediment Damage Potential**

The following rating system allows objective evaluation of a particular development site's potential to discharge sediment. Permittees may use the rating system below or develop alternative process designed to identify site-specific features which indicate that the site must be inspected prior to clearing and construction. Any alternative evaluation process must be documented and provide for equivalent environmental review.

Step one is to determine if there is a sediment/erosion sensitive feature downstream of the development site. If there is such a site downstream complete step two, assessment of hydraulic nearness. If there is a sediment/erosion sensitive feature and it is hydraulically near the site then go to step three to determine the construction site sediment transport potential.

### **ii. STEP 1 – Sediment/Erosion Sensitive Feature Identification**

Sediment/erosion sensitive features are areas subject to significant degradation due to the effect of sediment deposition or erosion. Special protection must be provided to protect them.

Sediment/erosion sensitive features include but are not limited to:

- i. Salmonid bearing fresh water streams and their tributaries or freshwater streams that would be Salmonid bearing if not for anthropogenic barriers;
- ii. Lakes;
- iii. Category I, II, and III wetlands;
- iv. Marine near-shore habitat;
- v. Sites containing contaminated soils where erosion could cause dispersal of contaminants; and
- vi. Steep slopes (25% or greater) associated with one of the above features.

Identify any sediment/erosion sensitive features, and proceed to step two. If there are none the assessment is complete.

### **iii. STEP 2 – Hydraulic Nearness Assessment**

Sites are hydraulically near a feature if the pollutant load and peak quantity of runoff from the site will not be naturally attenuated before entering the feature. The conditions that render a site hydraulically near to a feature include, but are not limited to, the following:

- i. The feature or a buffer to protect the feature is within 200 feet downstream of the site.
- ii. Runoff from the site is tight-lined to the feature or flows to the feature through a channel or ditch.

A site is not hydraulically near a feature if one of the following takes place to provide attenuation before runoff from the site enters the feature:

- iv. Sheet flow through a vegetated area with dense ground cover
- v. Flow through a wetland not included as a sensitive feature
- vi. Flow through a significant shallow or adverse slope, not in a conveyance channel, between the site and the sensitive feature.

Identify any of the sediment/erosion sensitive features from step one that are hydraulically near the site, and proceed to step three. If none of the sediment/erosion sensitive features are hydraulically near the site, the assessment is complete.

vii. **STEP 3 – Construction Site Sediment Transport Potential**

Using the worksheet below, determine the total points for each development site. Assign points based on the most critical condition that affects 10% or more of the site.

If soil testing has been performed on site, the results should be used to determine the predominant soil type on the site. Otherwise, soil information should be obtained from the county soil survey to determine Hydrologic Soil Group (Table of Engineering Index Properties for step 1.D) and Erosion Potential (Table of Water Features for step 1.E)

When using the county soil survey, the dominant soil type may be in question, particularly when the site falls on a boundary between two soil types or when one of two soil types may be present on a site. In this case, the soil type resulting in the most points on the rating system will be assumed unless site soil tests indicate that another soil type dominates the site.

Use the point score from Step 3 to determine whether the development site has a high potential for sediment transport off of the site.

| <u>Total Score</u> | <u>Transport Rating</u> |
|--------------------|-------------------------|
| <100               | Low                     |
| ≥100               | High                    |

A high transport rating indicates a higher risk that the site will generate sediment contaminated runoff.



## Construction Site Sediment Transport Potential Worksheet

|                                                                                           |                            |
|-------------------------------------------------------------------------------------------|----------------------------|
| A. <u>Existing slope of site (average, weighted by aerial extent):</u>                    | Points                     |
| 2% or less ..                                                                             | 0                          |
| >2-5% .....                                                                               | 5                          |
| >5-10% .....                                                                              | 15                         |
| >10-15% .....                                                                             | 30                         |
| >15% .....                                                                                | 50                         |
| B. <u>Site Area to be cleared and/or graded:</u>                                          |                            |
| <5,000 sq. ft .....                                                                       | 0                          |
| 5,000 sq. ft. – 1 acre .....                                                              | 30                         |
| >1 acres .....                                                                            | 50                         |
| C. <u>Quantity of cut and/or fill on site:</u>                                            |                            |
| <500 cubic yards .....                                                                    | 0                          |
| 500 – 5,000 cubic yards .....                                                             | 5                          |
| >5,000 – 10,000 cubic yards .....                                                         | 10                         |
| >10,000 – 20,000 cubic yards .....                                                        | 25                         |
| >20,000 cubic yards .....                                                                 | 40                         |
| D. <u>Runoff potential of predominant soils (Natural Resources Conservation Service):</u> | Hydrologic                 |
| soil group A .....                                                                        | 0                          |
| Hydrologic soil group B .....                                                             | 10                         |
| Hydrologic soil group C .....                                                             | 20                         |
| Hydrologic soil group D .....                                                             | 40                         |
| E. <u>Erosion Potential of predominant soils (Unified Classification System):</u>         | GW, GP, SW, SP soils ..... |
| Dual classifications (GW-GM, GP-GM, GW-GC, GP-GC, SW-SM, SW-SC, SP-SM, SP-SC) .....       | 10                         |
| GM, GC, SM, SC soils .....                                                                | 20                         |
| ML, CL, MH, CH soils .....                                                                | 40                         |
| F. <u>Surface or Groundwater entering site identified and intercepted<sup>1</sup>:</u>    |                            |
| Yes .....                                                                                 | 0                          |
| No .....                                                                                  | 25                         |
| G. <u>Depth of cut or height of fill &gt;10 feet:</u>                                     |                            |
| Yes .....                                                                                 | 25                         |
| No .....                                                                                  | 0                          |
| H. <u>Clearing and grading will occur in the wet season (October 1 – May 1):</u>          | Yes 50                     |
| No .....                                                                                  | 0                          |

---

**TOTAL POINTS**.....165

---

<sup>1</sup> If no surface or groundwater enters site, give 0 points.

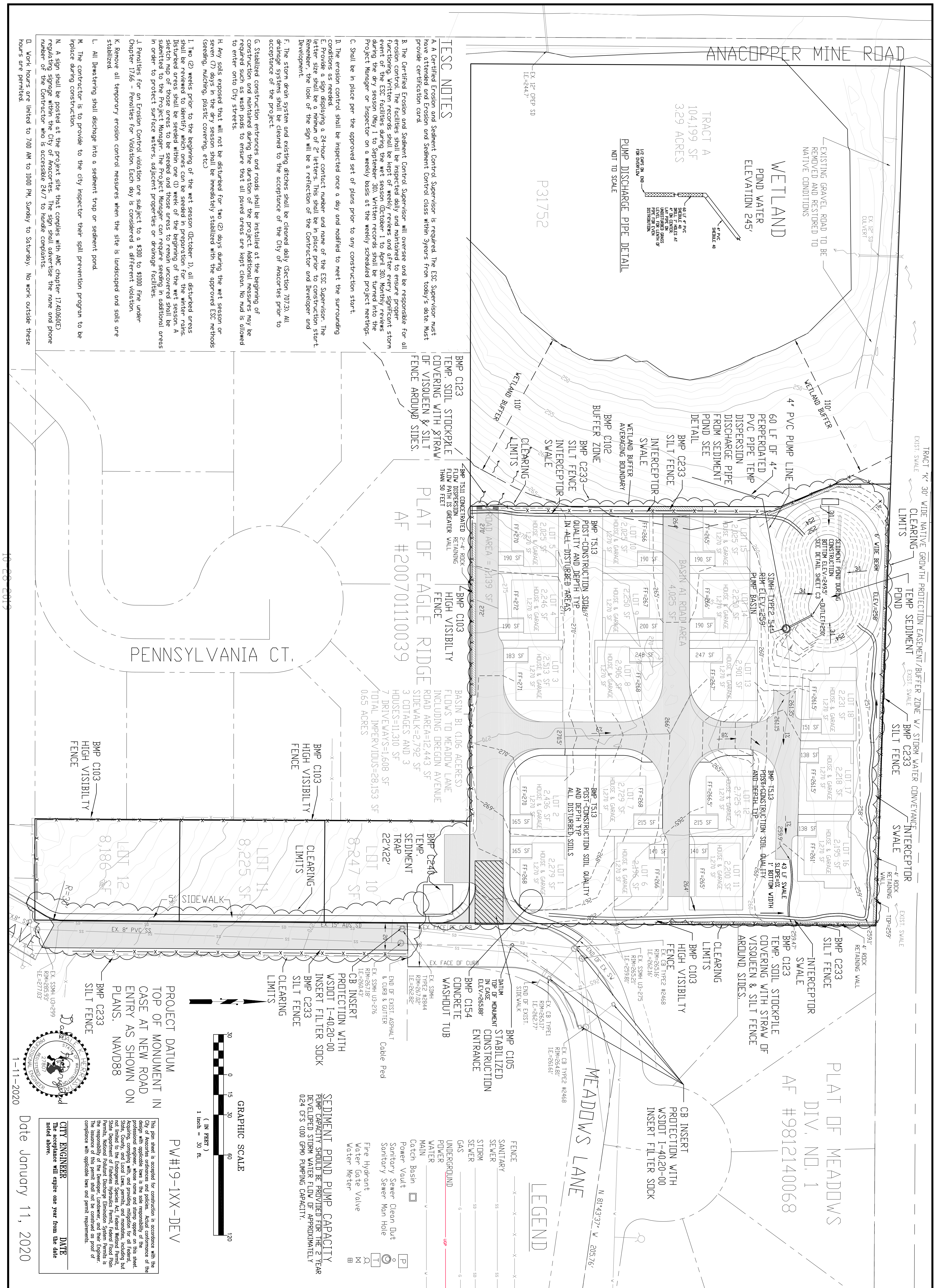


| REVISIONS | BY | DATE |
|-----------|----|------|
|           |    |      |

***HERRIGSTAD***  
***ENGINEERING & SURVEYING***  
DALE K. HERRIGSTAD P.E., P.L.S.  
4320 WHISTLE LAKE ROAD  
ANACORTES, WA 98221 (360) 299-8804

The Crossings Cottage Dev.  
1905 Anacopper Mine Road  
Owner: Strandberg Construction  
PO Box 319  
Anacortes, WA 98221

|                      |    |
|----------------------|----|
| Erosion Control Plan |    |
| SHEET NO.            | C1 |
| REV.:-               |    |
| JOB NO. 2017-150     |    |
| DATE: Jan. 2020      |    |
| SCALE: Noted         |    |
| DRAWN: D. HERRIGSTAD |    |
| CHECK: D. HERRIGSTAD |    |
| SHEET 1 of 5         |    |



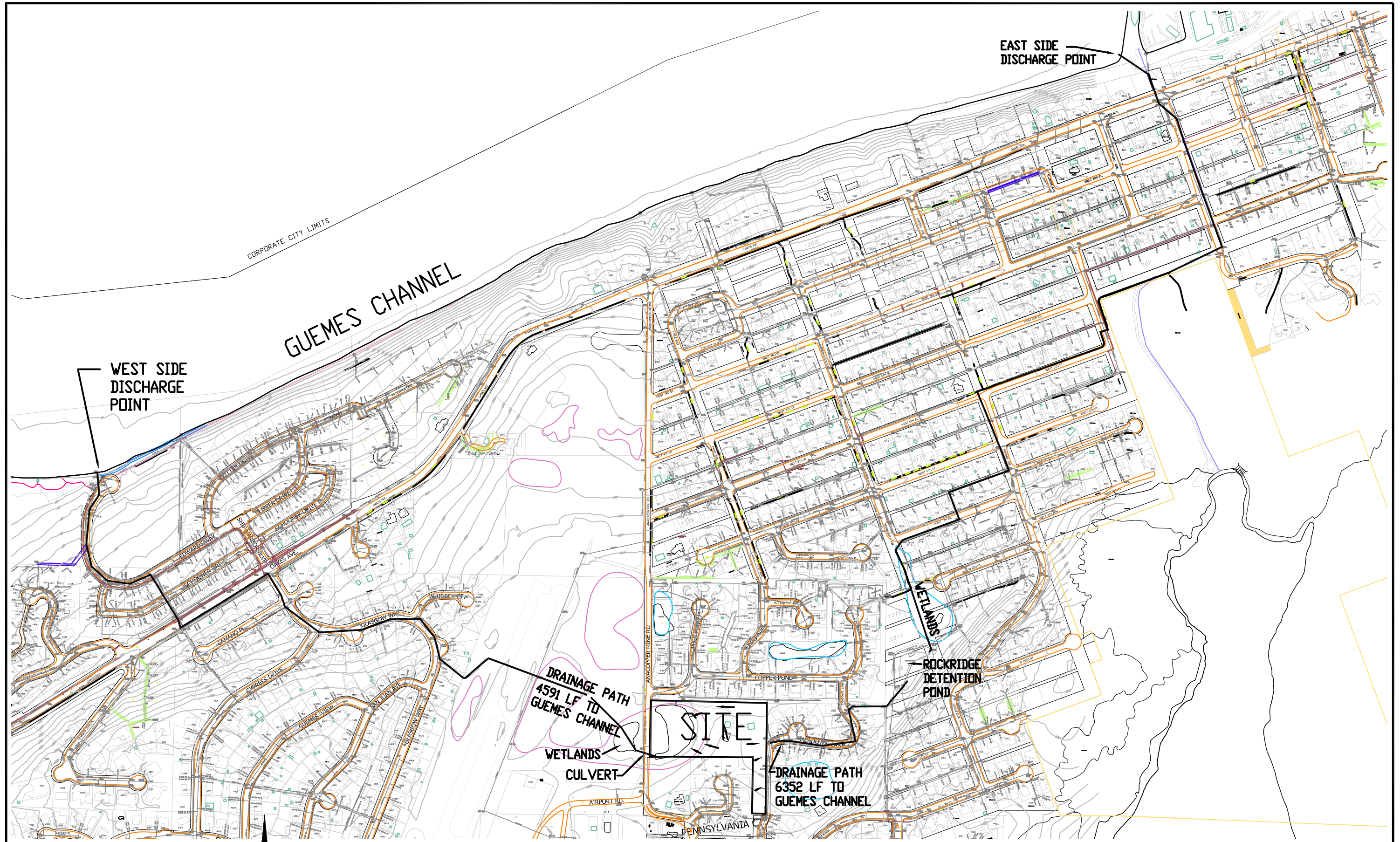












CORPORATE CITY LIMITS

GUEMES CHANNEL

WEST SIDE  
DISCHARGE  
POINT

EAST SIDE  
DISCHARGE POINT

WETLANDS

ROCKRIDGE  
DETENTION  
POND

DRAINAGE PATH  
4591 LF TO  
GUEMES CHANNEL

WETLANDS  
CULVERT

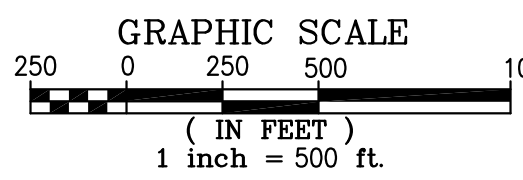
SITE

DRAINAGE PATH  
6352 LF TO  
GUEMES CHANNEL

PENNSYLVANIA

11x17 FULL SCALE

APPENDIX 5D



**HERRIGSTAD ENGINEERING & SURVEYING**  
DALE K. HERRIGSTAD P.E., P.L.S.  
4320 WHISTLE LAKE ROAD  
ANACORTES, WA 98221 (360) 299-8804  
REV.:  
C4

**Anacopper Mine Road Short Plat**  
1905 Anacopper Mine Road]  
Owner/ : Strandberg Construction  
Developer: PO Box 319  
Anacopper, WA 98221

JOB NO: 2017-150  
DATE: Feb. 2018  
SCALE: 1"=  
DRAWN: D. HERRIGSTAD  
CHECK: D. HERRIGSTAD

Site Drainage  
Basin Plan

SHEET  
4 OF 5



TRACT "K" 30' WIDE NATIVE GROWTH PROTECTION EASEMENT/BUFFER ZONE W/ STORM WATER CONVEYANCE  
EXIST. SWALE

S 88°06'04" E 643.03'

163.90'

EXIST. SWALE

EXIST. SWALE

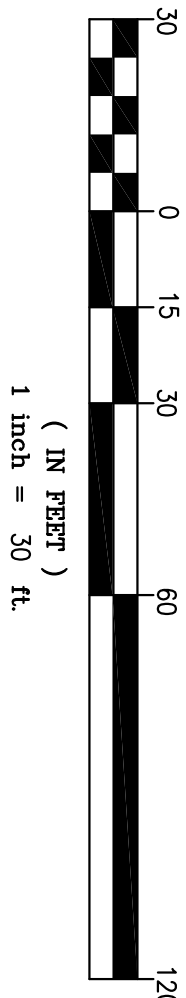
BASIN A1  
TOTAL AREA 26,305 SF 0.60 ACRES  
ROAD 5,164 SF, 0.12 ACRES  
7 HOUSES 8,890 SF 0.20 ACRES  
8 DRIVEWAYS 1,488 SF 0.03 ACRES  
TOTAL IMPERVIDIUS = 15,542 SF, 0.36 ACRES

BASIN A2  
TOTAL AREA 52,476 SF 1.20 ACRES  
ROAD 7,100 SF, 0.16 ACRES  
8 HOUSES 10,160 SF 0.23 ACRES  
7 DRIVEWAYS 1,147 SF 0.03 ACRES  
SIDEWALK 130 SF 0.01 ACRES  
POND 7761 SF, 0.18 ACRES  
TOTAL IMPERVIDIUS = 0.61 ACRES



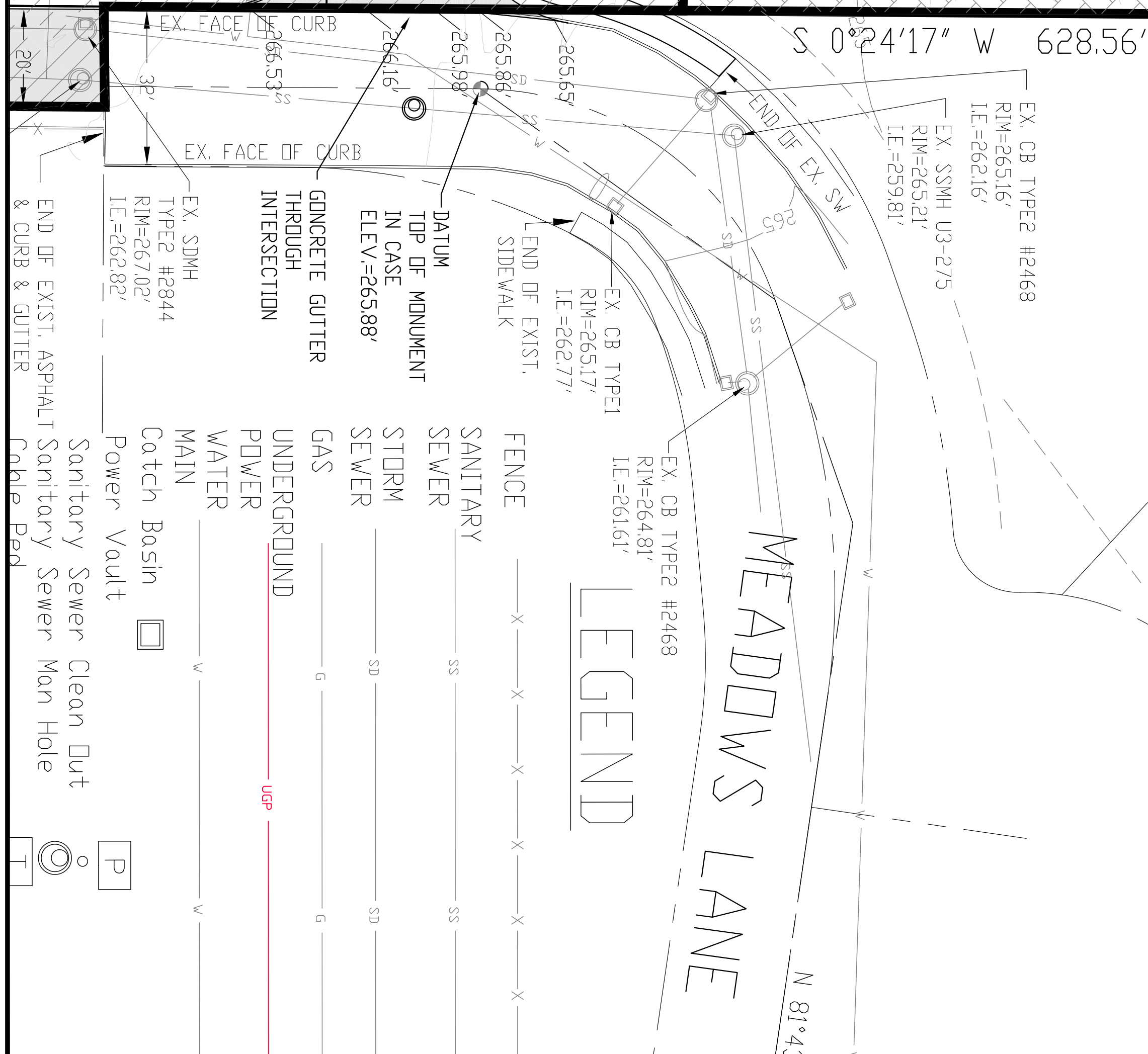
566.00' W 566.00'

GRAPHIC SCALE



BASIN B1 (1.06 ACERES)  
FLOWS TO MEADOW LANE INCLUDING OREGON AVENUE  
ROAD AREA=12,443 SF  
SIDEWALK=2,792 SF  
3 COTAGES AND 3 HOUSES=11,310 SF  
7 DRIVEWAYS=1,608 SF  
TOTAL IMPERVIDIUS=28,153 SF 0.65 ACRES

BASIN B1, 46,431 SF, 1.06 ACRES  
DRAINS TO EAST AND ROCKRIDGE DETENTION POND



Impervious Areas

The Crossings Cottage Dev.  
1905 Anacopper Mine Road  
Owner: Strandberg Construction  
PO Box 319  
Anacortes, WA 98221

HERRIGSTAD  
ENGINEERING & SURVEYING  
DALE K. HERRIGSTAD P.E., P.L.S.  
4320 WHISTLE LAKE ROAD  
ANACORTES, WA 98221 (360) 299-8804

| REVISIONS | BY | DATE |
|-----------|----|------|
|           |    |      |

|                      |                 |
|----------------------|-----------------|
| SHEET NO.            | REV.:-          |
| C5                   |                 |
| JOB NO. 2017-150     | DATE: Jan. 2020 |
| SCALE: Noted         |                 |
| DRAWN: D. HERRIGSTAD |                 |
| CHECK: D. HERRIGSTAD |                 |
| SHEET 4 OF 5         |                 |



**APPENDIX 6 – Documented Site Photos (Show all directions of the site, including frontage)**

**Location: Looking West Entry point to Cottage Development from Meadows Lane or Oregon Avenue**

**All Photos taken by: Dale Herrigstad, December 2, 2019**



**Looking south towards Oregon Avenue from Meadows Lane. New connector road location.**



**Looking East down Existing Driveway from Anacopper Mine Road, Pond to right.**





110' buffer area with pond to the right or west of site.



Existing swale to the north of project.



## **APPENDIX 7 – Drainage BMP Facility Maintenance Covenant**

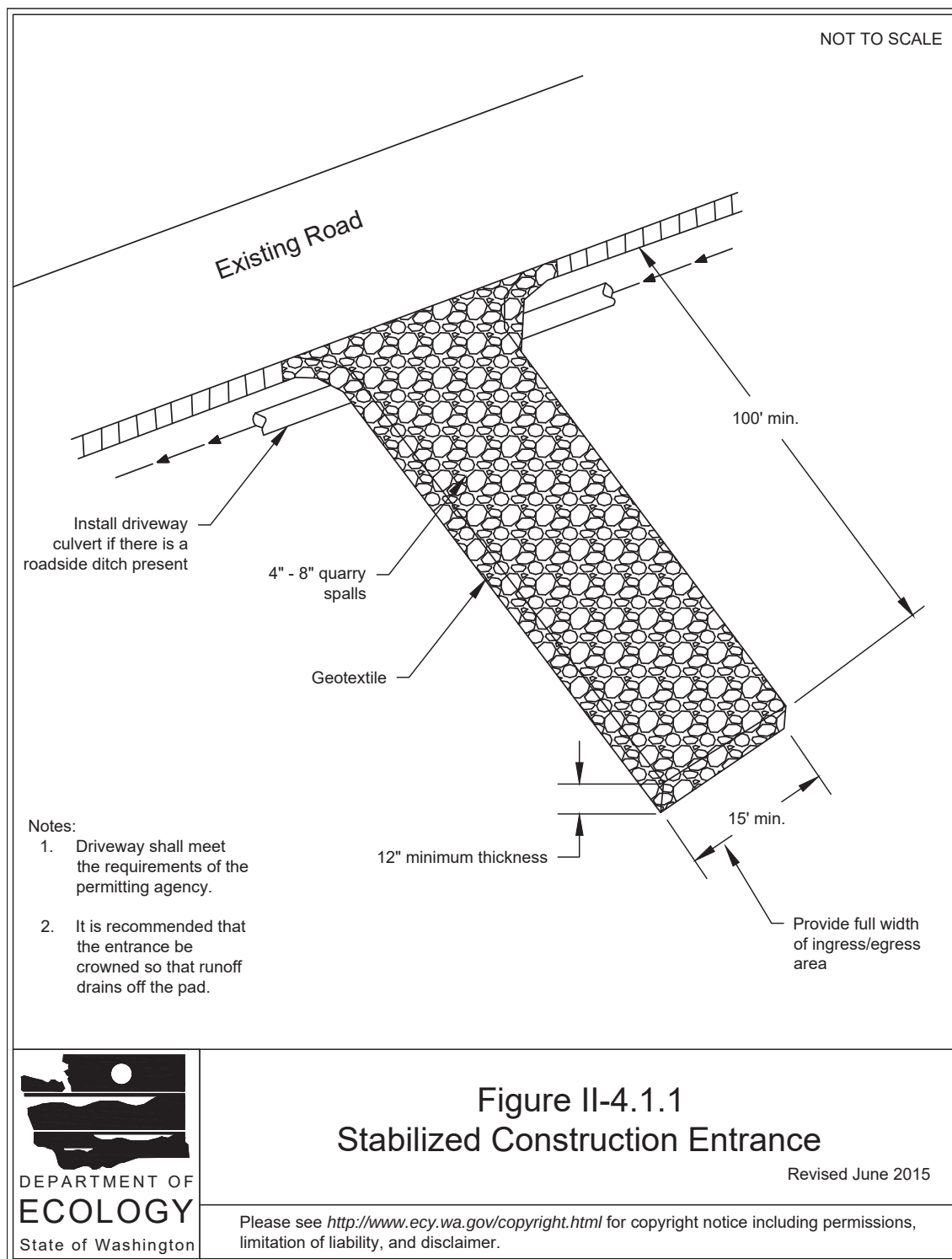
Note: To be recorded prior to: 1) Temporary Certificate of Occupancy; 2) Final Certificate of Occupancy, and or; 3) Final Acceptance of the project.

This is Covenant is required for any Permanent Stormwater Facility constructed on a project site. The applicant should work with the the City of Anacortes Engineering Department on formalizing the document for recording.

### **Differed Submittal with Construction Drawings**



**Figure II-4.1.1 Stabilized Construction Entrance**



## **BMP C107: Construction Road/Parking Area Stabilization**

### ***Purpose***

Stabilizing subdivision roads, parking areas, and other on-site vehicle transportation routes immediately after grading reduces erosion caused by construction traffic or runoff.

### ***Conditions of Use***

Roads or parking areas shall be stabilized wherever they are constructed, whether permanent or temporary, for use by construction traffic.

- High Visibility Fencing (see [BMP C103: High Visibility Fence \(p.269\)](#)) shall be installed, if necessary, to limit the access of vehicles to only those roads and parking areas that are stabilized.

### ***Design and Installation Specifications***

- On areas that will receive asphalt as part of the project, install the first lift as soon as possible.
- A 6-inch depth of 2- to 4-inch crushed rock, gravel base, or crushed surfacing base course shall be applied immediately after grading or utility installation. A 4-inch course of asphalt treated base (ATB) may also be used, or the road/parking area may be paved. It may also be possible to use cement or calcium chloride for soil stabilization. If cement or cement kiln dust is used for roadbase stabilization, pH monitoring and BMPs ([BMP C252: High pH Neutralization Using CO2 \(p.409\)](#) and [BMP C253: pH Control for High pH Water \(p.412\)](#)) are necessary to evaluate and minimize the effects on stormwater. If the area will not be used for permanent roads, parking areas, or structures, a 6-inch depth of hog fuel may also be used, but this is likely to require more maintenance. Whenever possible, construction roads and parking areas shall be placed on a firm, compacted subgrade.
- Temporary road gradients shall not exceed 15 percent. Roadways shall be carefully graded to drain. Drainage ditches shall be provided on each side of the roadway in the case of a crowned section, or on one side in the case of a super-elevated section. Drainage ditches shall be directed to a sediment control BMP.
- Rather than relying on ditches, it may also be possible to grade the road so that runoff sheet-flows into a heavily vegetated area with a well-developed topsoil. Landscaped areas are not adequate. If this area has at least 50 feet of vegetation that water can flow through, then it is generally preferable to use the vegetation to treat runoff, rather than a sediment pond or trap. The 50 feet shall not include wetlands or their buffers. If runoff is allowed to sheetflow through adjacent vegetated areas, it is vital to design the roadways and parking areas so that no concentrated runoff is created.

- Storm drain inlets shall be protected to prevent sediment-laden water entering the storm drain system (see [BMP C220: Storm Drain Inlet Protection \(p.357\)](#)).

### ***Maintenance Standards***

Inspect stabilized areas regularly, especially after large storm events.

Crushed rock, gravel base, etc., shall be added as required to maintain a stable driving surface and to stabilize any areas that have eroded.

Following construction, these areas shall be restored to pre-construction condition or better to prevent future erosion.

Perform street cleaning at the end of each day or more often if necessary.

## **BMP C120: Temporary and Permanent Seeding**

### ***Purpose***

Seeding reduces erosion by stabilizing exposed soils. A well-established vegetative cover is one of the most effective methods of reducing erosion.

### ***Conditions of Use***

Use seeding throughout the project on disturbed areas that have reached final grade or that will remain unworked for more than 30 days.

The optimum seeding windows for western Washington are April 1 through June 30 and September 1 through October 1.

Between July 1 and August 30 seeding requires irrigation until 75 percent grass cover is established.

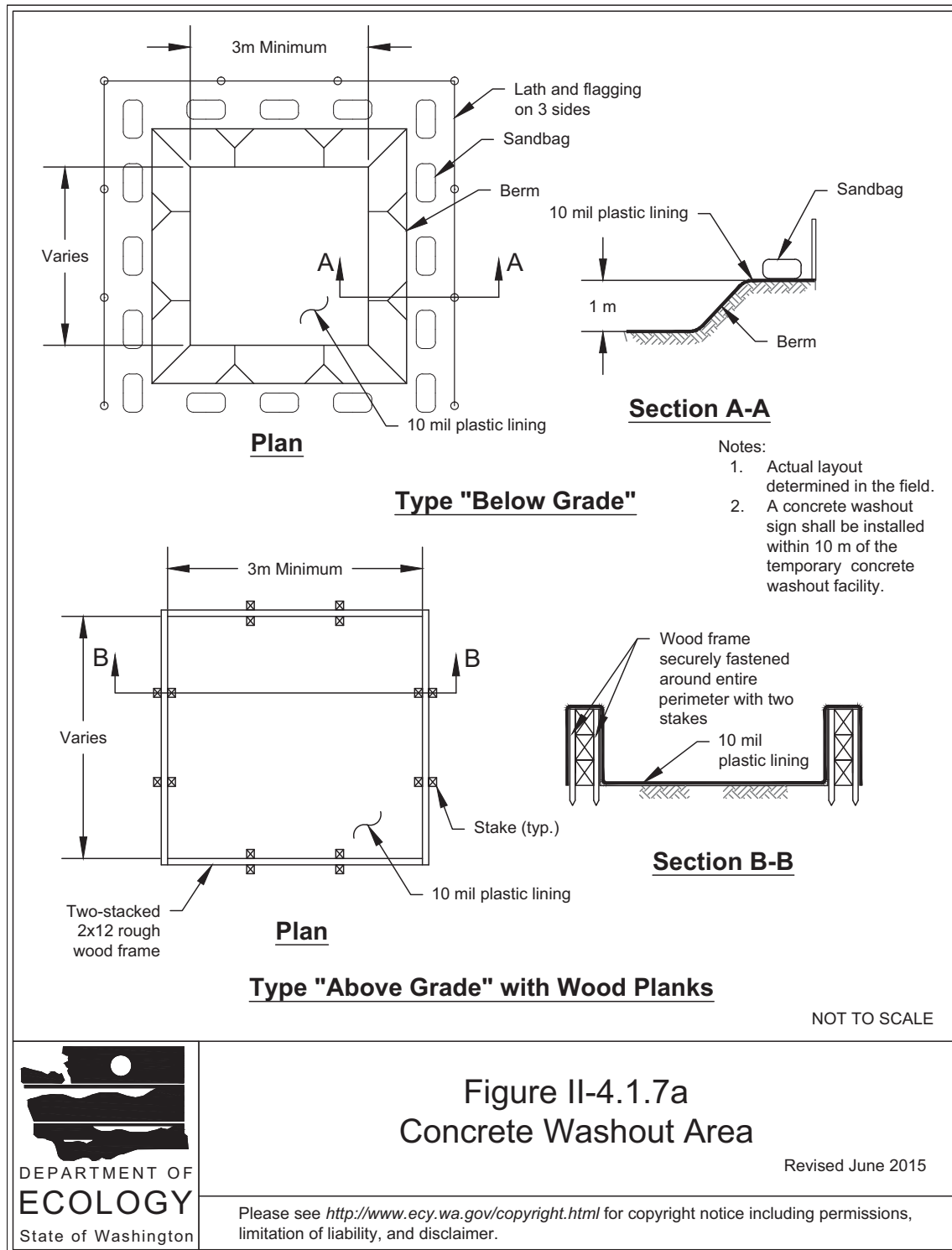
Between October 1 and March 30 seeding requires a cover of mulch with straw or an erosion control blanket until 75 percent grass cover is established.

Review all disturbed areas in late August to early September and complete all seeding by the end of September. Otherwise, vegetation will not establish itself enough to provide more than average protection.

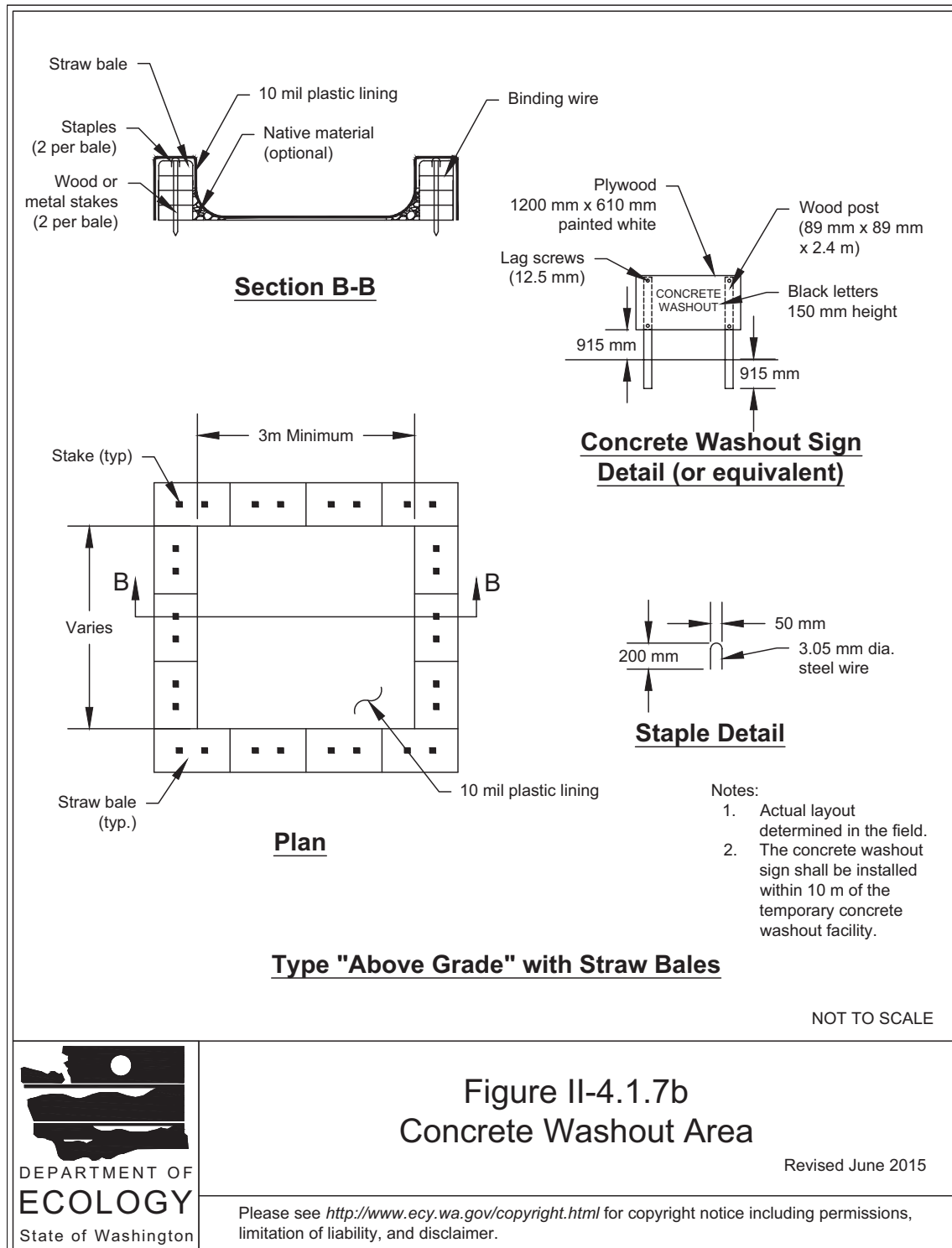
- Mulch is required at all times for seeding because it protects seeds from heat, moisture loss, and transport due to runoff. Mulch can be applied on top of the seed or simultaneously by hydroseeding. See [BMP C121: Mulching \(p.284\)](#) for specifications.
- Seed and mulch, all disturbed areas not otherwise vegetated at final site stabilization. Final stabilization means the completion of all soil disturbing activities at the site and the establishment of a permanent vegetative cover, or equivalent per-



**Figure II-4.1.7a Concrete Washout Area**



**Figure II-4.1.7b Concrete Washout Area**



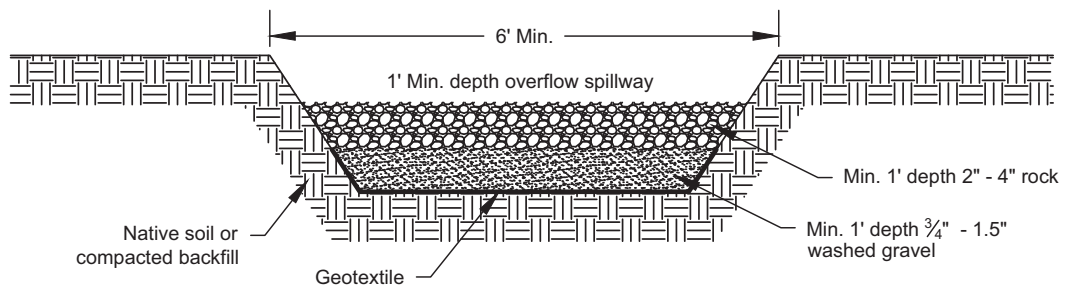
The diagram illustrates a cross-section of a sediment trap. On the left, a sloped area is labeled "3H: 1V Max." and a "Flat Bottom" is indicated. The depth of the flat bottom is specified as "3.5' - 5'". The top surface of the trap is labeled "Surface area determined at top of weir". The trap structure consists of several layers: a base of "2" - 4" Rock", followed by a layer of "3/4" - 1.5" Washed gravel", and a top layer of "Rip Rap". A "Geotextile" layer is shown between the rock and the gravel. The trap is 4' wide at the top. The height of the trap structure is 1' Min. The discharge area on the right is 1' Min. wide and leads to an "Overflow" area. The discharge is labeled "Discharge to stabilized conveyance, outlet, or level spreader".

Note: Trap may be formed by berm or by partial or complete excavation.

NOT TO SCALE



**Figure II-4.2.17 Sediment Trap Outlet**



NOT TO SCALE

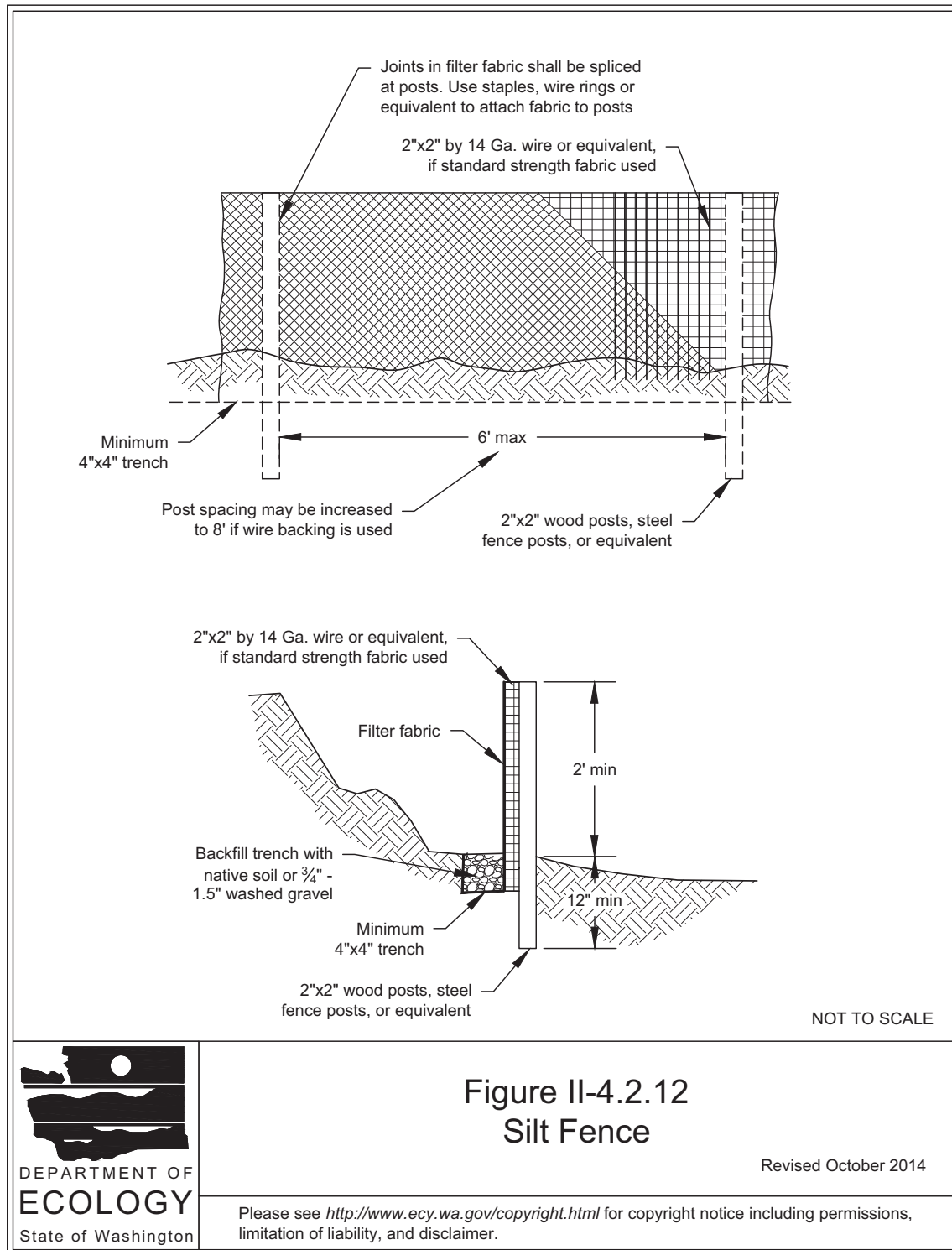


**Figure II-4.2.17  
Sediment Trap Outlet**

Revised November 2015

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**Figure II-4.2.12 Silt Fence**



**HERRIGSTAD ENGINEERING PS**  
**Civil Engineer**

4320 Whistle Lake Road  
Anacortes, WA 98221

Dale Herrigstad, P.E.  
(360) 299-8804

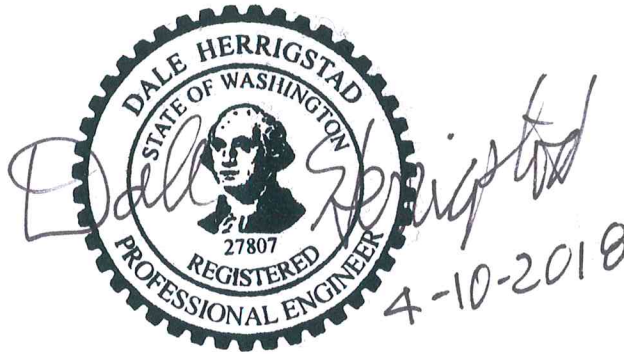
**ROCK RIDGE PHASE 4-5**  
**STORM DRAINAGE REPORT**  
**CITY OF ANACORTES**

April 10, 2018

Job # 2015-146

Prepared By:

Dale K. Herrigstad P.E.



**Owner:**

Strandberg Construction  
PO Box 319  
Anacortes, WA 98221



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### **PURPOSE OF THIS REPORT AND MEATHODOLGY**

This report is to address the detention requirements for additional impervious area over what was originally designed for the Rock Ridge South Phases 1 - 5 developments. The original report addressing Rock Ridge South was completed in August of 2005 by Young-Soo Kim P.E. P.L.S. The report indicates that the Rock Ridge Detention Pond was designed and constructed prior to the 2005 report and was designed for the Plat of Rock Ridge and expanded at some time for the subsequent Rock Ridge Plats including Rock Ridge South. The 2005 report was used to verify that the design did allow for the Rock Ridge South detention requirements and address water quality. Speaking with Irving Construction whom developed "The Meadows" in 1998, indicated the pond was also designed for this development. The design used the 93 DOE Storm Water Manual Requirements.

This report will address additional detention issues under minimum requirement #7 of the 2012 DOE Storm Water Manual, amended in December 2014. Minimum requirements 1-10 were address in the 2005 report from the 93 DOE manual. Each building permit application for the 33 lots of Rock Ridge South phase 4 and 5 will address minimum requirements 1-5 for each lot. At the time of this report all infrastructure has been completed and only the development of the individual lots remain for Phases 4 and 5 with single family homes.

The 2005 report allowed for 88 single-family residential home sites for Rock Ridge South at 2,500 square foot per lot of impervious roof and driveway area. The roadways and sidewalks for Rock Ridge South were accounted for separately at 4.657 acres. The report results indicated that the detention pond had more that adequate volume for the flow volumes. The designer utilized the NRCS SCS methodology for the comparison.

The comparisons results were summarized in the 2005 report as follows:

| Design year | Pond allowable<br>Discharge | Pond Actual<br>Discharge |
|-------------|-----------------------------|--------------------------|
| 2 yr.       | 0.570 cfs                   | 0.60 cfs *               |
| 10 yr.      | 3.939 cfs                   | 2.38 cfs                 |
| 25 yr       | 5.479 cfs                   | 3.13 cfs                 |
| 100 yr      | 9.966 cfs                   | 4.65 cfs                 |

\* Within 10% allowed by DOE

This report will address just the average impervious area over the 2,500 square feet originally designed as well as the south eastern portion of “The Crossings” 12 lot Long Plat that is currently being proposed before the city. The approach we have discussed with the City of Anacortes Engineering staff is to determine a volume requirement above the peak pond design that would accommodate this addition impervious area for the 100 year storm event using the current WWHM2012. The pond berm, outlet structure as well as overflow structure would be raised accordingly to accommodate the volume. The current control structure orifices will not be changed.

### **ROCK RIDGE SOUTH PHASES 4 & 5 ADDITIONAL ROOF AREA**

The anticipated average of impervious for the 33 lots of Phases 4 and 5 would be 5,000 square feet per lot or an additional 2,500 square feet per lot. Total new impervious area would be 82,500 square feet or 1.89 acres. Predevelopment will be modeled as landscaping grass hydrologic group D rather than Forested because the 2005 report modeled the postdevelopment as grass which we are replacing with impervious area.

Water quality was address in the 2005 report for the roadway and no change in roadway has been proposed so this report will not address water quality treatment for Phases 4 and 5 of Rock Ridge South.

### **THE CROSSINGS EAST BASIN**

The Crossings 12 lot Long Plat is a 5.20 acre site the discharges to two basins. The northwest portion of “The Crossings” will discharge to the west to a new proposed detention pond designed separately from this report. The Eastern portion of “The Crossings” is identified as a separate basin comprising of 1.00 acre of developed land that includes the right-of-way for Oregon Ave/Meadows Lane and an additional 0.70 acres of offsite property that will pass through this basin. The basin will comprise of 4 lots of “The Crossings” and adjoining road way. The design will allow for 4,000 square feet of impervious area per lot, 0.37 acres roof, in addition to 0.22 acres of road and 0.07 acres of sidewalks. The 0.70 pass through basin will be 4 lots (4,000 square feet/lot) and yards or 0.37 acres of impervious area and 0.33 acres of grass.

The pre-developed conditions of “The Crossings” contribution will be forested.

Due to limited downstream space, water quality will be design utilizing Filterra treatment for enhanced treatment of road and driveway runoff and will be addressed in the drainage report for “The Crossings”.

## ROCK RIDGE DETENTION POND

The Rock Ridge detention pond expansion design will be based on the existing surface area at the peak water level at the existing overflow structure of the existing detention pond. The peak pond elevation at the overflow structure is 248.0 feet and the area of the pond a 248.0 feet is 30,836 square feet (0.71 acres) and is based on a current topography survey of the pond completed on January 24, 2018.

The following are the design parameters:

Existing conditions

1.89 acres grass/landscaping - Rock Ridge South roof area contribution

1.70 acres forested – The Crossings contribution

Total 3.59 acres

Developed Conditions

1.89 acres (RR South) + 0.37 acres (The Crossings) = 2.26 acres roof

0.22 acres road (The Crossings)

0.07 acres of sidewalk (The Crossings)

0.34 acres of grass/landscaping (The Crossings)

Pass through basin

0.37 acres of roof (The Crossings)

0.33 acres of grass/landscaping(The Crossings)

## WVHM2012 RESULTS

### WVHM2012 PROJECT REPORT

---

**Project Name:** RR Pond Design Add  
**Site Name:** Crossing - RR  
**Site Address:** Anacopper Mine Road  
**City** : Anacortes  
**Report Date:** 3/27/2018  
**Gage** : Burlington  
**Data Start** : 1948/10/01  
**Data End** : 2009/09/30  
**Precip Scale:** 0.80  
**Version Date:** 2016/02/25  
**Version** : 4.2.12

---

**Low Flow Threshold for POC 1** : 50 Percent of the 2 Year

---

**High Flow Threshold for POC 1:** 50 year

---

### PREDEVELOPED LAND USE

**Name** : Basin 1



Bypass: No

|                          |             |
|--------------------------|-------------|
| <u>Pervious Land Use</u> | <u>acre</u> |
| C, Forest, Mod           | 1.7         |
| C, Lawn, Mod             | 1.89        |
| Pervious Total           | 3.59        |

|                            |             |
|----------------------------|-------------|
| <u>Impervious Land Use</u> | <u>acre</u> |
| Impervious Total           | 0           |
| Basin Total                | 3.59        |

---

**MITIGATED LAND USE**

Name : Basin 1  
Bypass: No

|                          |             |
|--------------------------|-------------|
| <u>Pervious Land Use</u> | <u>acre</u> |
| C, Lawn, Mod             | .34         |
| Pervious Total           | 0.34        |

|                            |             |
|----------------------------|-------------|
| <u>Impervious Land Use</u> | <u>acre</u> |
| ROADS MOD                  | 0.22        |
| ROOF TOPS FLAT             | 2.26        |
| SIDEWALKS MOD              | 0.07        |
| Impervious Total           | 2.55        |

|             |      |
|-------------|------|
| Basin Total | 2.89 |
|-------------|------|

---

|                          |                    |                    |
|--------------------------|--------------------|--------------------|
| <b>Element Flows To:</b> |                    |                    |
| <b>Surface</b>           | <b>Interflow</b>   | <b>Groundwater</b> |
| Trapezoidal Pond 1       | Trapezoidal Pond 1 |                    |

---

Name : Trapezoidal Pond 1  
 Bottom Length: 176.00 ft.  
 Bottom Width: 176.00 ft.  
 Depth: 3 ft.  
 Volume at riser head: 1.2803 acre-feet.  
 Side slope 1: 3 To 1  
 Side slope 2: 3 To 1  
 Side slope 3: 3 To 1  
 Side slope 4: 3 To 1  
Discharge Structure  
 Riser Height: 1.7 ft.  
 Riser Diameter: 18 in.  
 Notch Type: Rectangular  
 Notch Width: 0.093 ft.  
 Notch Height: 0.853 ft.  
 Orifice 1 Diameter: 1.336 in. Elevation: 0 ft.

Name : Basin 2  
Bypass: No

|                          |             |
|--------------------------|-------------|
| <u>Pervious Land Use</u> | <u>acre</u> |
| C, Lawn, Mod             | .33         |

Pervious Total 0.33

Impervious Land Use                      acre  
 ROOF TOPS FLAT                      0.37  
 Impervious Total                      0.37

Basin Total 0.7

**Element Flows To:**

|                    |                    |             |
|--------------------|--------------------|-------------|
| Surface            | Interflow          | Groundwater |
| Trapezoidal Pond 1 | Trapezoidal Pond 1 |             |

**ANALYSIS RESULTS**

**Predeveloped Landuse Totals for POC #1**

Total Pervious Area:3.59

Total Impervious Area:0

**Mitigated Landuse Totals for POC #1**

Total Pervious Area:0.67

Total Impervious Area:2.92

**Flow Frequency Return Periods for Predeveloped. POC #1**

| <u>Return Period</u> | <u>Flow(cfs)</u> |
|----------------------|------------------|
| 2 year               | 0.097728         |
| 5 year               | 0.204066         |
| 10 year              | 0.297382         |
| 25 year              | 0.441591         |
| 50 year              | 0.568158         |
| 100 year             | 0.711112         |

**Flow Frequency Return Periods for Mitigated. POC #1**

| <u>Return Period</u> | <u>Flow(cfs)</u> |
|----------------------|------------------|
| 2 year               | 0.040269         |
| 5 year               | 0.06076          |
| 10 year              | 0.078102         |
| 25 year              | 0.105033         |
| 50 year              | 0.129249         |
| 100 year             | 0.157488         |

The Facility **PASSED.**

**Flow(cfs) Predev Mit Percentage Pass/Fail**

|        |      |      |    |      |
|--------|------|------|----|------|
| 0.0489 | 7223 | 4387 | 60 | Pass |
| 0.0541 | 5366 | 2922 | 54 | Pass |
| 0.0594 | 4288 | 2310 | 53 | Pass |
| 0.0646 | 3433 | 1950 | 56 | Pass |
| 0.0698 | 2772 | 1626 | 58 | Pass |
| 0.0751 | 2154 | 1349 | 62 | Pass |
| 0.0803 | 1835 | 1159 | 63 | Pass |
| 0.0856 | 1519 | 980  | 64 | Pass |
| 0.0908 | 1223 | 856  | 69 | Pass |
| 0.0961 | 901  | 688  | 76 | Pass |
| 0.1013 | 732  | 541  | 73 | Pass |

|        |     |     |    |      |
|--------|-----|-----|----|------|
| 0.1066 | 616 | 495 | 80 | Pass |
| 0.1118 | 529 | 449 | 84 | Pass |
| 0.1171 | 451 | 399 | 88 | Pass |
| 0.1223 | 407 | 362 | 88 | Pass |
| 0.1275 | 372 | 319 | 85 | Pass |
| 0.1328 | 318 | 289 | 90 | Pass |
| 0.1380 | 270 | 243 | 90 | Pass |
| 0.1433 | 239 | 219 | 91 | Pass |
| 0.1485 | 210 | 204 | 97 | Pass |
| 0.1538 | 190 | 183 | 96 | Pass |
| 0.1590 | 179 | 161 | 89 | Pass |
| 0.1643 | 174 | 150 | 86 | Pass |
| 0.1695 | 167 | 146 | 87 | Pass |
| 0.1748 | 159 | 140 | 88 | Pass |
| 0.1800 | 151 | 136 | 90 | Pass |
| 0.1852 | 142 | 130 | 91 | Pass |
| 0.1905 | 135 | 125 | 92 | Pass |
| 0.1957 | 124 | 115 | 92 | Pass |
| 0.2010 | 116 | 110 | 94 | Pass |
| 0.2062 | 102 | 94  | 92 | Pass |
| 0.2115 | 95  | 85  | 89 | Pass |
| 0.2167 | 81  | 80  | 98 | Pass |
| 0.2220 | 75  | 68  | 90 | Pass |
| 0.2272 | 67  | 45  | 67 | Pass |
| 0.2325 | 61  | 38  | 62 | Pass |
| 0.2377 | 56  | 33  | 58 | Pass |
| 0.2429 | 47  | 27  | 57 | Pass |
| 0.2482 | 41  | 15  | 36 | Pass |
| 0.2534 | 36  | 4   | 11 | Pass |
| 0.2587 | 30  | 0   | 0  | Pass |
| 0.2639 | 24  | 0   | 0  | Pass |
| 0.2692 | 24  | 0   | 0  | Pass |
| 0.2744 | 24  | 0   | 0  | Pass |
| 0.2797 | 23  | 0   | 0  | Pass |
| 0.2849 | 22  | 0   | 0  | Pass |
| 0.2902 | 22  | 0   | 0  | Pass |
| 0.2954 | 21  | 0   | 0  | Pass |
| 0.3006 | 18  | 0   | 0  | Pass |
| 0.3059 | 17  | 0   | 0  | Pass |
| 0.3111 | 15  | 0   | 0  | Pass |
| 0.3164 | 15  | 0   | 0  | Pass |
| 0.3216 | 14  | 0   | 0  | Pass |
| 0.3269 | 14  | 0   | 0  | Pass |
| 0.3321 | 13  | 0   | 0  | Pass |
| 0.3374 | 13  | 0   | 0  | Pass |
| 0.3426 | 13  | 0   | 0  | Pass |
| 0.3479 | 13  | 0   | 0  | Pass |
| 0.3531 | 12  | 0   | 0  | Pass |
| 0.3583 | 12  | 0   | 0  | Pass |
| 0.3636 | 9   | 0   | 0  | Pass |
| 0.3688 | 9   | 0   | 0  | Pass |
| 0.3741 | 9   | 0   | 0  | Pass |
| 0.3793 | 9   | 0   | 0  | Pass |
| 0.3846 | 9   | 0   | 0  | Pass |
| 0.3898 | 9   | 0   | 0  | Pass |
| 0.3951 | 8   | 0   | 0  | Pass |
| 0.4003 | 8   | 0   | 0  | Pass |
| 0.4056 | 8   | 0   | 0  | Pass |
| 0.4108 | 7   | 0   | 0  | Pass |
| 0.4160 | 5   | 0   | 0  | Pass |



|        |   |   |   |      |
|--------|---|---|---|------|
| 0.4213 | 5 | 0 | 0 | Pass |
| 0.4265 | 4 | 0 | 0 | Pass |
| 0.4318 | 4 | 0 | 0 | Pass |
| 0.4370 | 4 | 0 | 0 | Pass |
| 0.4423 | 4 | 0 | 0 | Pass |
| 0.4475 | 4 | 0 | 0 | Pass |
| 0.4528 | 4 | 0 | 0 | Pass |
| 0.4580 | 4 | 0 | 0 | Pass |
| 0.4633 | 4 | 0 | 0 | Pass |
| 0.4685 | 4 | 0 | 0 | Pass |
| 0.4737 | 4 | 0 | 0 | Pass |
| 0.4790 | 4 | 0 | 0 | Pass |
| 0.4842 | 4 | 0 | 0 | Pass |
| 0.4895 | 4 | 0 | 0 | Pass |
| 0.4947 | 3 | 0 | 0 | Pass |
| 0.5000 | 3 | 0 | 0 | Pass |
| 0.5052 | 3 | 0 | 0 | Pass |
| 0.5105 | 3 | 0 | 0 | Pass |
| 0.5157 | 3 | 0 | 0 | Pass |
| 0.5209 | 3 | 0 | 0 | Pass |
| 0.5262 | 3 | 0 | 0 | Pass |
| 0.5314 | 3 | 0 | 0 | Pass |
| 0.5367 | 3 | 0 | 0 | Pass |
| 0.5419 | 3 | 0 | 0 | Pass |
| 0.5472 | 3 | 0 | 0 | Pass |
| 0.5524 | 3 | 0 | 0 | Pass |
| 0.5577 | 3 | 0 | 0 | Pass |
| 0.5629 | 3 | 0 | 0 | Pass |
| 0.5682 | 3 | 0 | 0 | Pass |

---

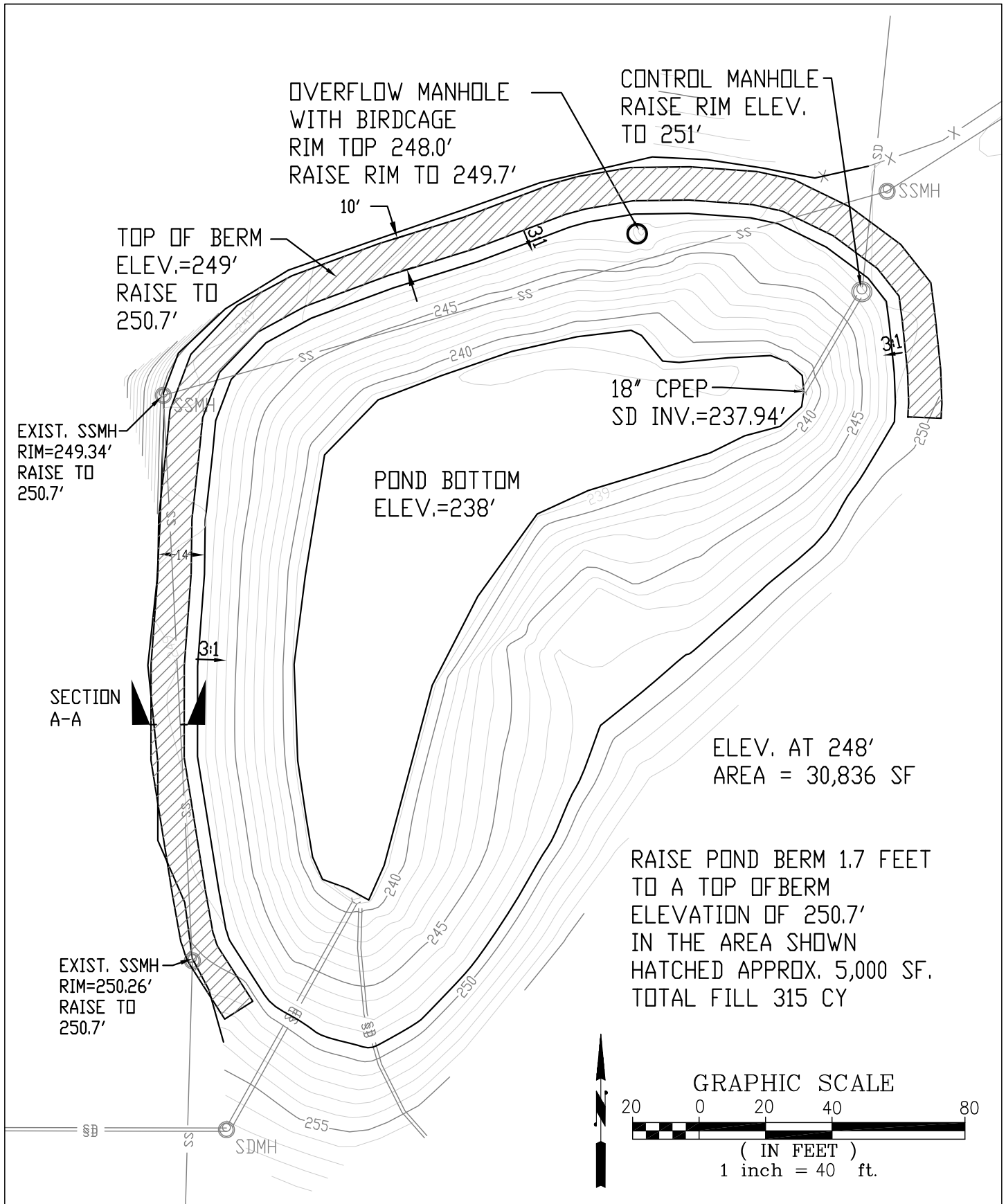
### **SUMMARY OF RESULTS**

Raise the pond height by 1.7' with a 3:1 inside slope to account for the addition impervious areas.



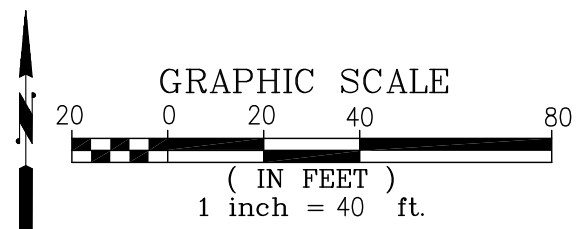
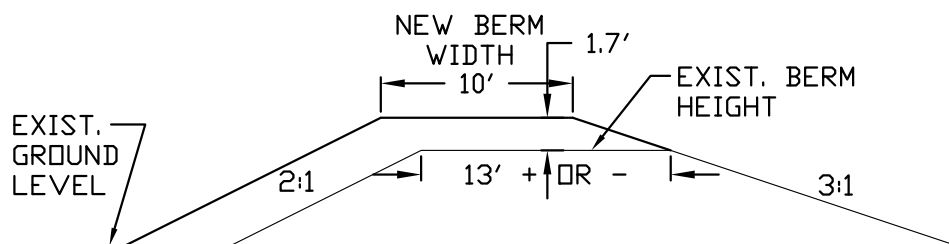






**HERRIGSTAD ENGINEERING & SURVEYING**  
4320 WHISTLE LAKE ROAD  
ANACORTES, WA 98221 299-8804

ROCK RIDGE DETENTION POND  
PROPOSED MODIFICATIONS  
April 10, 2018



**HERRIGSTAD ENGINEERING & SURVEYING**  
 4320 WHISTLE LAKE ROAD  
 ANACORTES, WA 98221 299-8804

ROCK RIDGE DETENTION POND  
 PROFILE MODIFICATION  
 April 10, 2018

ATTACHMENT D



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April 12, 2018  
Job No. 18-0119

Strandberg Construction  
PO Box 319  
Anacortes, Washington 98221

**City of Anacortes**

Received by PCED

**Date: February 21, 2020**

Attn: Nels Strandberg

**Re: Geotechnical Evaluation  
The Crossing Proposed Residential Development  
Meadows Lane  
Anacortes, Washington**

Dear Mr. Strandberg,

As requested, GeoTest Services, Inc. (GTS) is pleased to submit this report summarizing the results of our geotechnical evaluation for the proposed development to be located off Meadows Lane in Anacortes, Washington, as shown on the Vicinity Map (Figure 1). The purpose of this evaluation is to establish general subsurface conditions beneath the site from which geotechnical and geological recommendations for the proposed development could be formulated. Specifically, our scope of services includes the following tasks:

- Exploration of soil and groundwater conditions underlying the subject property by excavating 11 test pits with a rubber-tired backhoe, provided by the client, to evaluate subsurface conditions.
- Laboratory testing on representative samples in order to classify and evaluate the engineering characteristics of the soils encountered.
- An evaluation of the geologically hazardous areas per current City of Anacortes Code.
- Provide this written report containing a description of the general geologic conditions, subsurface soils and groundwater conditions. Also presented in this report are our findings and recommendations pertaining to site preparation and earthwork, fill and compaction, wet weather construction and seismic design considerations. Included in these recommendations are discussions pertaining to foundation support, post-construction settlement, slab-on-grade construction, drainage, resistance to lateral loads, temporary and permanent slopes, utilities, stormwater infiltration and geotechnical consultation and construction monitoring.

## **PROJECT DESCRIPTION**

GTS understands that there are plans to construct a residential development consisting of 18 cottage homes and 3 single family homes on the subject property. Although no specific residential construction plans were available at the time of this report, GTS



expects that the proposed residences will be wood-framed and utilize shallow conventional foundations and slab-on-grade floors, similar to other residential structures that have previously are currently being constructed in the vicinity of the subject property.

## **SITE CONDITIONS**

This section discusses the general surface and subsurface conditions observed at the project site at the time of our field investigation. Interpretations of the site conditions are based on the results of our review of available information, site reconnaissance, subsurface explorations, laboratory testing, and our experience in the project vicinity.

### **General Geologic Conditions**

Geologic information for the project site was obtained from the online interactive *Geologic Map of Washington State*, published by the Washington State Department of Natural Resources (DNR). According to the online DNR map, subsurface conditions within the vicinity of the project site is composed of Pleistocene aged glacial till deposited during the Fraser Glaciation (Qgt).

### **Surface Conditions**

The project is currently the site of one existing residential structure and two associated out buildings. Generally, the subject property is bordered to the north, east and south by previously developed single-family residences. Anacopper Mine Road borders the site to the west.

The project site slopes gently from south to north with approximately 30 feet of elevation differential across the property. Additionally, the central portion of the project site is dominated by a local topographic high that transects the subject property from north to south in the vicinity of the existing residence. The topographic high gently slopes towards the east and west, away from the north / south trending ridgeline that dissects the subject project. At the time of our site visit in February of 2018, standing / frozen surface water was observed along the eastern extent of the project (Image 1) as well as within the mapped wetland area on the western extent of the property.



Image 1: Approximate vicinity of standing / frozen surface water on February 21, 2018. Surface water location shown in blue.

### **Subsurface Soil Conditions**

Subsurface conditions were explored by excavating and sampling 11 test pits (TP-1 through TP-11) on February 21, 2018. Test pits were advanced, with a rubber-tired backhoe provided by the client, to depths up to 8 feet below ground surface (BGS). Test pits were terminated due to rapid groundwater seepage or because contact with firm, native soils was encountered. After the test pit explorations were completed, the pits were backfilled with the excavated soils and compacted with the bucket of the excavator. Approximate locations of the explorations have been plotted on the Site and Exploration Plan (Figure 2).

Subsurface soils encountered on-site generally consisted of approximately 7 to 15 inches of loose to medium dense, very silty sand with abundant organics (Topsoil). Overlying the Topsoil was 8 inches to 2 feet of a medium dense, silty, gravelly sand interpreted to be representative of weathered glacial till. Native, un-weathered glacial till, which consisted of dense to very dense, very silty, gravelly sand and very stiff to hard very sandy, silt/clay underlies the weathered glacial till and extended to the full extent of our field explorations. In some locations, approximately 10 to 12 inches of medium dense to dense, reddish brown, damp to wet, very silty, gravelly sand (Weathered Continental Glacial Till / B Horizon) was observed at the base of the topsoil unit.

Please refer to the Test Pit Logs, Figures 6 through 11, for more detail of subsurface soil conditions.

### **Groundwater Seepage and Seasonal Groundwater**

At the time of our subsurface explorations on February 21, 2018, shallow, perched groundwater was encountered in all test pits (except TP-10) due to the dense nature and elevated fines content of the near surface native deposits. No groundwater was observed in TP-10. The near surface perched groundwater is indicative of normally occurring interflow that is able to pass through topsoil but is somewhat impeded by the underlying,

relatively dense and fine-grained soil. It should be expected that perched groundwater conditions are unlikely to persist during extended periods of dry weather. A distinct mottled horizon was observed in the upper ~2 feet of Continental Glacial Till soils. A distinct mottled horizon or “rust line, may be indicative of the seasonal high of a regional groundwater table or aquifer. Gleyed horizons are indicative of poorly drained and potentially restrictive soils.

## GEOLOGIC HAZARDS AND RECOMMENDED MITIGATION

The following discussion of potential geologic hazards is based on a review of the Anacortes Municipal Code (AMC) *Chapter 17.70 Critical Area Regulations*, and upon the conditions exposed during our site explorations. According to the AMC, geologically hazardous areas include areas susceptible to erosion, landslide, rock fall, subsidence, earthquake, or other geological events that pose a threat to the health and safety of citizens when incompatible development is sited in areas of significant hazard. Based on conditions present on the subject property and nearby vicinity, it is our opinion that there are no slopes within 200 feet of the subject property that would qualify as geologically hazardous areas as defined by AMC 17.17.190. The nearest slopes that would qualify as a geological hazardous area is located approximately 350 feet to the southeast of the site.

### Soil Survey

According to the United States Department of Agriculture (USDA) Natural Resource Conservation Service Soil Survey website, soils at subject property consist of Bow gravelly loam, dry, 3 to 8 percent slopes and Clallam gravelly loam. Please refer to the following Table 1 for a summary of the soil parameters found on the Soil Survey website.

| <b>Table 1</b><br>USDA Web Soil Survey Soil Classifications |                                                            |                                                            |
|-------------------------------------------------------------|------------------------------------------------------------|------------------------------------------------------------|
| Map Unit Symbol                                             | 19                                                         | 47                                                         |
| Map Unit Name                                               | Bow gravelly loam, dry, 0 to 3 percent slopes              | Clallam gravelly loam, 8 to 15 percent slopes              |
| Soil Description                                            | Gravelly ashy loam over clay loam over silty clay          | Gravelly ashy loam over very gravelly loam over sandy loam |
| Landform                                                    | Hillslopes and terraces                                    | Hillslopes                                                 |
| Parent Material                                             | Volcanic ash, glaciolacustrine deposits, and glacial drift | Colluvium from serpentine and glacial drift                |
| Land Capability Classification                              | 4w                                                         | 4s                                                         |
| Erosion K Factor, Whole Soil                                | 0.37                                                       | 0.20                                                       |

According to the Soil Survey, the Bow gravelly loam and Clallam gravelly loam have a land capability classification of 4w and 7s respectively. Soils with the subclass of “e” have been determined to be potentially prone to erosion. Subclasses “s” and “w” signify land use limitations related to problems in the rooting zone (s) and excess wetness (w).



The Soil Survey also classifies the site soils as having an erosion K factor, whole soil, of 0.37 for Bow gravelly loam and 0.20 for Dystric Xerochrepts, which generally correlate to a moderate to low susceptibility of site soil to sheet and rill erosion by water. Potential values of the K factor range from 0.02 to 0.69, and, other factors being equal the higher the value, the more susceptible the soil is to water erosion. The erosion K factor, whole soil, only accounts for the erosion potential of the soil and does not account for other factors promoting soil loss such as water sources and site topography.

Native soils observed at the project site appeared to be generally consistent with the Soil Survey descriptions.

### **Limited Aerial Photo Review**

We reviewed historical images of the subject property from 1977, 1994, 1998, 2001, 2005, 2006, 2009, 2011, 2014, 2015, 2016 and 2017 to determine if there has been any recent significant slide activity within the vicinity of the project site.

Based on our review, it appears that the slopes to the southeast of the subject property are relatively stable and had not exhibited any indications of large scale movement.

It appears that the vegetation pattern and general appearance of the subject slopes within and adjacent to the subject property have not changed significantly within the past approximately 40 years, not counting development to the area.

It should be noted that aerial photos may not truly depict actual surface conditions due to vegetation possibly obscuring the ground surface. Aerial photos were obtained from Washington State's Department of Ecology's Coastal Zone Atlas and Google Earth.

### **Bare Earth Imagery Review**

We reviewed bare earth imagery of the subject property and slopes in the near vicinity of the property. Based on our review, it does not appear that there is global slope instability near the subject property, as observed by tension cracks, hummocky and/or slumped terrain (Figure 4).

The reviewed bare earth imagery did not contain resolution high enough to identify small scale erosional processes that may be present on sloped topography. As such, the presence of erosional processes was not identified using bare earth imagery. No indications of instability were identified on the bare earth imagery.

### **Landslide Hazards and Slope Stability**

As discussed above, GTS also evaluated historical and bare earth imagery of the subject property. No obvious signs of recent instability or evidence of severe soil creep was observed on the subject property or on the bedrock slopes southeast of the site.

Large scale global instability, consisting of deep-seated rotational failures, can extend down into the subsurface to substantial depths. These failures typically leave geomorphic evidence of their existence on the slope. Typical indicators are recessional head scarps, tension cracks, sag ponds, seepage zones, hummocky ground surface and slump blocks. Obvious visual indications of large scale global slope instability, such as those referenced

above, were not observed on or adjacent to the subject property. Due to the observed globally stable condition of the subject slope on the property and vicinity, it is our opinion that there is a low risk of a large scale landslide occurring and affecting the site of the proposed construction.

Please keep in mind that the Pacific Northwest is seismically active and it is difficult to predict how the slope(s) at the subject site may behave during a large earthquake.

### **Erosion Hazards**

We recommend the following mitigations to reduce the risk of erosion occurring during construction:

- All clearing and grading activities for proposed residence construction will need to incorporate Best Management Practices (BMPs) for erosion control in compliance with current City of Anacortes codes and standards.
- We recommend that appropriate silt fencing be incorporated into the construction plan for erosion control.
- We recommend that onsite BMP's be implemented during construction. Areas of native vegetation left in place, could also be enhanced by adding additional native plant species and/or other vegetation enhancements.
- Removal of vegetation and trees without proper mitigation may increase the risk of failure for the surficial soils during periods of wet weather. Planting additional brush and vegetation within the subject site and in areas disturbed by excavation activities will help maintain near surface slope stability by providing a stable root base within the near surface soils.
- Yard waste should not be dumped onto the top or face of the slope. Yard waste can retain water and cause slope instability.
- Proper drainage controls have a significant effect on erosion. All surface water and any collected drainage water should not be allowed to be concentrated and discharged down the face of slope.
- All areas disturbed by construction practices should be vegetated or otherwise protected to limit the potential for erosion as soon as practical during and after construction. Areas requiring immediate protection from the effects of erosion should be covered with either plastic, mulch or erosion control netting/blankets. Areas requiring permanent stabilization should be seeded with an approved grass seed mixture, hydroseeded with an approved seed-mulch-fertilizer mixture or landscaped with a suitable planting design.

## **CONCLUSIONS AND RECOMMENDATIONS**

Based upon an evaluation of the data collected during this investigation, it is our opinion that subsurface conditions at the site are suitable for the proposed development, provided the recommendations contained herein are incorporated into the project design.

We recommend that all topsoil and soft portions of the native soil be removed from all structural areas and that the footings are placed on the suitably prepared native glacial till. We anticipate 1 to 2 feet of topsoil and weathered glacial drift may need to be removed to reach suitably firm soil for foundation support.

### **Site Preparation and Earthwork**

The portions of the site to be occupied by proposed foundation, floor slabs, pavements, and/or sidewalks should be prepared by removing any existing topsoil, fill soils, soft portions of the native soil, deleterious material and significant accumulations of organics from the area to be developed. Based on our explorations, GTS expects that between approximately 1 and 2 feet of topsoil and weathered glacial till will be removed during site stripping..

Additionally, GTS expects that the proposed development will require minor site grading due to the variable topography present at the project site. At the time of this report no preliminary grading plans are available.

### **Fill and Compaction**

Structural fill used to obtain final elevations for footings and soil-supported floor slabs must be properly placed and compacted. In general, any suitable, non-organic, predominantly granular soil may be used for fill material provided the material is properly moisture conditioned prior to placement and compaction, and the specified degree of compaction is obtained. Material containing topsoil, wood, trash, organic material, or construction debris will not be suitable for reuse as structural fill and should be properly disposed of offsite or placed in nonstructural areas.

#### *Reuse of Onsite Soil*

Reuse of the weathered and unweathered glacial drift as structural fill may prove difficult, especially during wet weather, due to the variable fines content, ranging from approximately 5 to 95 percent, observed within the near surface soils. We recommend if native site soils are to be reused in structural fill applications, they contain no organics and only be used during periods of extended dry weather.

Soils containing more than approximately 5 percent fines (the portion that passes the #200 sieve) are considered moisture sensitive. These soils are very difficult to compact to a firm and unyielding condition when over the optimum moisture content by more than approximately 2 percent. The optimum moisture content is that which allows the greatest dry density to be achieved at a given level of compactive effort.



### *Imported Structural Fill*

We recommend that imported structural fill consist of clean, well-graded sandy gravel, gravelly sand, or other approved naturally occurring granular material (pit run) or a well-graded crushed rock. We recommend structural fill for dry weather construction meet Washington State Department of Transportation (WSDOT) Standard Specification 9-03.14(2) for "Select Borrow" with the added requirement that 100 percent pass a 4-inch-square sieve. Soil containing more than about 5 percent fines (that portion passing the U.S. No. 200 sieve) cannot consistently be compacted to a dense, non-yielding condition when the water content is greater than optimum.

Accordingly, we recommend that imported structural fill for wet weather construction meet WSDOT Standard Specification 9-03.14(1) for "Gravel Borrow" with the added requirement that no more than 5 percent pass the U.S. No. 200 sieve. Due to wet weather or wet site conditions, soil moisture contents could be high enough that it may be difficult to compact even "clean" imported select granular fill to a firm and unyielding condition. Soils with over-optimum moisture contents should be scarified and dried back to more suitable moisture contents during periods of dry weather or removed and replaced with fill soils at a more suitable range of moisture contents.

### *Backfill and Compaction*

Structural fill should be placed in horizontal lifts 8 to 10 inches in loose thickness and thoroughly compacted. All structural fill placed under load bearing areas should be compacted to at least 95 percent of the maximum dry density, as determined using test method ASTM D1557. The top of the compacted structural fill should extend outside all foundations and other structural improvements a minimum distance equal to the thickness of the fill. We recommend that compaction be tested periodically throughout the fill placement.

### **Wet Weather Earthwork**

It is our experience that soils with elevated silt contents, such as the near surface site soils, are particularly susceptible to degradation during wet weather. As a result, it may be difficult to control the moisture content of the site soils during the wet season. If construction is accomplished during wet weather, we recommend that structural fill consist of imported, clean, well-graded sand or sand and gravel as described above. If fill is to be placed or earthwork is to be performed in wet weather or under wet conditions, the contractor may reduce soil disturbance by:

- Limiting the size of areas that are stripped of topsoil and left exposed
- Accomplishing earthwork in small sections
- Limiting construction traffic over unprotected soil
- Sloping excavated surfaces to promote runoff
- Limiting the size and type of construction equipment used
- Providing gravel "working mats" over areas of prepared subgrade
- Removing wet surficial soil prior to commencing fill placement each day
- Sealing the exposed ground surface by rolling with a smooth drum compactor or rubber-tired roller at the end of each working day

- Providing upgradient perimeter ditches or low earthen berms and using temporary sumps to collect runoff and prevent water from ponding and damaging exposed subgrades.

## Seismic Design Considerations

The Pacific Northwest is seismically active, and the site could be subject to ground shaking from a moderate to major earthquake. Consequently, moderate levels of earthquake shaking should be anticipated during the design life of the project, and the proposed structure should be designed to resist earthquake loading using appropriate design methodology.

For structures designed using the seismic design provisions of the 2015 International Building Code, the dense to very dense continental glacial till classifies as Site Class D, according to 2010 ASCE-7 Standard – Table 20.3-1, Site Class Definitions. The corresponding values for calculating a design response spectrum for the assumed soil profile type is considered appropriate for the site.

Please reference the following values for seismic structural design purposes:

Conterminous 48 States – 2015 International Building Code  
Zip Code 98221  
Central Latitude = 48.5001, Central Longitude = -122.6577

### Short Period (0.2 sec) Spectral Acceleration

Maximum Considered Earthquake (MCE) Value of  $S_s = 1.102$  (g)  
Site Response Coefficient,  $F_a = 1.059$  (Site Class D)  
Adjusted spectral response acceleration for Site Class D,  $S_{MS} = S_s \times F_a = 1.167$  (g)  
Design spectral response acceleration for Site Class D,  $S_{DS} = 2/3 \times S_{MS} = 0.778$  (g)

### One Second Period (1 sec) Spectral Acceleration

Maximum Considered Earthquake (MCE) Value of  $S_1 = 0.437$  (g)  
Site Response Coefficient,  $F_v = 1.563$  (Site Class D)  
Adjusted spectral response acceleration for Site Class D,  $S_{M1} = S_1 \times F_v = 0.684$  (g)  
Design spectral response acceleration for Site Class D,  $S_{D1} = 2/3 \times S_{M1} = 0.456$  (g)

## Foundation Support and Settlement

GTS recommends that new foundations be placed on firm and unyielding native glacial till or properly placed and compacted import structural fill, as defined in the *Structural Fill and Compaction* section of this report, placed over firm and unyielding native glacial till. Any overexcavation should be backfilled to the design footing elevation with compacted structural fill.

*Note: For lateral and bearing support, base fill shall extend a distance past each edge of the base of the footing equal to the depth of structural fill placed below the footing. For example, for a 2-foot wide perimeter footing, a 1.0 foot thick base pad will require a total width of 4.0 feet (1 foot each side plus 2 foot width of footing). Overexcavation areas of greater fill depth will also increase backfill width.*

The area bounded by lines extending downward at 1H:1V from any footing must not intersect another footing or retaining wall unless the lower elevation footing/retaining wall is designed to resist that load. A review of the proposed site layout is recommended to verify that new foundations don't surcharge any proposed below-grade tanks or other structural elements.

All continuous and isolated spread footings should be founded a minimum of 18 inches below the lowest adjacent final grade for freeze/thaw protection. The footings should be sized in accordance with the civil or structural engineer's prescribed design criteria and seismic considerations.

#### *Allowable Bearing Capacity*

Assuming the above foundation support criteria are satisfied, continuous or isolated spread footings founded directly on firm and unyielding glacial drift, or on compacted structural fill placed directly over glacial till, may be proportioned using a maximum net allowable soil bearing pressure of 2,500 pounds per square foot (psf).

The term "net allowable bearing pressure" refers to the pressure that can be imposed on the soil at foundation level resulting from the total of all dead plus live loads, exclusive of the weight of the footing or any backfill placed above the footing. The net allowable bearing pressure may be increased by one-third for transient wind or seismic loads.

#### *Foundation Settlement*

Settlement of shallow foundations depends on foundation size and bearing pressure, as well as the strength and compressibility characteristics of the underlying soil. Assuming construction is accomplished as previously recommended and for the maximum allowable soil bearing pressure recommended above, we estimate the total settlement of building foundations should be less than about one inch and differential settlement between two adjacent load-bearing components supported on competent soil should be less than about one half the total settlement. The soil response to applied stresses caused by building and other loads is expected to be predominantly elastic in nature, with most of the settlement occurring during construction as loads are applied.

#### **Floor Support**

Conventional slab-on-grade floor construction is considered feasible for the planned site improvements. Floor slabs may be supported on properly prepared, firm and unyielding native glacial till or on structural fill placed over properly prepared native soil. New floor slabs should not be founded on existing topsoil, uncontrolled fill, or loose native soils.

We recommend that interior concrete slab-on-grade floors be underlain by a minimum of 6 inches of compacted, clean, crushed free-draining gravel with less than 3 percent passing the U.S. Standard No. 200 sieve (based on a wet sieve analysis of that portion passing the U.S. Standard No. 4 sieve). The purpose of this layer is to provide uniform support for the slab, provide a capillary break, and act as a drainage layer. GTS recommends that material conforming to Washington State Department of Transportation Standard Specification 9-03.12(4), "Gravel Backfill for Drains", with the added requirement that the material consist of a crushed, angular aggregate material be used as capillary break material.



To help reduce the potential for water vapor migration through floor slabs, at a minimum a continuous impermeable membrane of 10- to 15-mil polyethylene sheeting with tape-sealed joints should be installed below the slab. The American Concrete Institute (ACI) guidelines suggest that the slab may either be poured directly on the vapor retarding membrane or on a granular curing layer placed over the vapor retarding membrane depending on conditions anticipated during construction. We recommend that the architect or structural engineer specify if a curing layer should be used. If moisture control within the building is critical, we recommend an inspection of the vapor retarding membrane to verify that all openings have been properly sealed.

Exterior concrete slabs-on-grade, such as sidewalks, may be supported directly on undisturbed native or on properly placed and compacted structural fill; however, long-term performance will be enhanced if exterior slabs are placed on a layer of clean, durable, well-draining granular material.

### **Foundation and Site Drainage**

To reduce the potential for groundwater and surface water to seep into interior spaces we recommend that an exterior footing drain system be constructed around the perimeter of new building foundations as shown in the Typical Footing and Wall Drain Section, Figure 3. The drain should consist of a minimum 4-inch diameter perforated PVC pipe, surrounded by a minimum 12 inches of filtering media with the discharge sloped to carry water to a suitable collection system.

The filtering media may consist of open-graded drain rock wrapped by a nonwoven geotextile fabric (such as Mirafi 140N or equivalent). The drainage backfill should be carried up the back of the wall and contain less than 3 percent by weight passing the U.S. Standard No. 200 sieve (based on a wet sieve analysis of that portion passing the U.S. Standard No. 4 sieve). The invert of the footing drain pipe should be placed at approximately the same elevation as the bottom of the footing or 12 inches below the adjacent floor slab grade, whichever is deeper, to prevent water seepage into the building. The footing drain should discharge to an approved drain system and include cleanouts to allow periodic maintenance and inspection. Typical drain systems used consist of a PVC pipe, anchored to the slope, that runs to the base of the slope.

Positive surface gradients should be provided adjacent to the proposed building to direct surface water away from the foundation and toward suitable drainage facilities. Roof drainage should not be introduced into the perimeter footing drains, but should be separately discharged directly to the stormwater collection system or other appropriate outlet, typically a PVC pipe running to the base of the slope as referenced above. Pavement and sidewalk areas should be sloped and drainage gradients should be maintained to carry all surface water away from the building towards the local stormwater collection system. Surface water should not be allowed to pond and soak into the ground surface near buildings or paved areas during or after construction. Construction excavations should be sloped to drain to sumps where water from seepage, rainfall, and runoff can be collected and pumped to a suitable discharge facility.

### **Temporary and Permanent Slopes**

Actual construction slope configurations and maintenance of safe working conditions, including temporary excavation stability, must be the responsibility of the contractor, who

is able to monitor the construction activities and has direct control over the means and methods of construction. All applicable local, state, and federal safety codes should be followed. All open cuts should be monitored during and after excavation for any evidence of instability. If instability is detected, the contractor should flatten the side slopes or install temporary shoring.

Temporary excavations in excess of 4 ft. should be shored or sloped in accordance with Safety Standards for Construction Work Part N, WAC 296-155-66403. Temporary unsupported excavations in the medium dense to dense native glacial drift are classified as a Type B soil and may be sloped as steep as 1H:1V. All soils encountered are classified as Type C soil in the presence of groundwater seepage. Flatter slopes or temporary shoring may be required in areas where groundwater flow is present and unstable conditions develop. The contractor should be prepared to address difficult excavation conditions for deep excavations including, but not limited to, utility excavations and excavations associated with below-grade tanks.

We recommend that permanent cut or fill slopes be designed for inclinations of 2H:1V or flatter. Permanent cuts or fills used in detention ponds, retention ponds, or earth slopes intended to hold water should be 3H:1V or flatter. All permanent cut slopes should be vegetated or otherwise protected to limit the potential for erosion as soon as practical after construction. Permanent slopes requiring immediate protection from the effects of erosion should be covered with either mulch or erosion control netting/blankets. Areas requiring permanent stabilization should be seeded with an approved grass seed mixture, or hydroseeded with an approved seed-mulch-fertilizer mixture.

## **Utilities**

It is important that utility trenches be properly backfilled and compacted to reduce the risk of cracking or localized loss of foundation, slab, or pavement support. It is anticipated that excavations for new underground utilities will be in the medium dense to dense native glacial drift.

Trench backfill in improved areas (beneath structures, pavements, sidewalks, etc.) should consist of structural fill as defined earlier in this report. Depending on the quantities of structural fill generated from other site excavations, supplemental use of imported, granular soil may be warranted in improved areas. Outside of improved areas, trench backfill may consist of onsite soils which are otherwise unsuitable for use as structural fill. Trench backfill should be placed and compacted in accordance with the report section

Surcharge loads on trench support systems due to construction equipment, stockpiled material, and vehicle traffic should be included in the design of any anticipated shoring system. The contractor should implement measures to prevent surface water runoff from entering trenches and excavations. The trench In addition, vibration as a result of construction activities and traffic may cause caving of the trench walls.

Actual trench configurations should be the responsibility of the contractor. All applicable local, state, and federal safety codes should be followed. All open cuts should be monitored by the contractor during excavation for evidence of instability. If instability is detected, the contractor should flatten the side slopes or install temporary shoring. If groundwater or groundwater seepage is present, and the trench is not properly dewatered,

the soil within the trench zone may be prone to caving, channeling, and running. Trench widths may be substantially wider than under dewatered conditions.

### **Pavement Subgrade Preparation**

Selection of a pavement section is typically a compromise between higher initial cost and lower maintenance on one side, and lower initial cost with more frequent maintenance on the other. For this reason, we recommend that the owner participate in the selection of proposed pavement improvements planned for the site. Site grading plans should include provisions for sloping of the subgrade soils in proposed pavement areas, so that passive drainage of the pavement section(s) can proceed uninterrupted during the life of the project.

We anticipate that asphalt pavement will be used for new access drives and parking areas. It is assumed that topsoil, uncontrolled fill, loose portions of the glacial drift soils and any soils with significant organic content will have been removed prior to paving activities. We recommend all pavements be founded on firm and unyielding native glacial till or on properly placed and compacted structural fill placed directly on firm and unyielding native soils. Due to the moisture sensitivity of the native deposits, compaction during wet grade or wet weather conditions is not recommended. Overexcavation of subgrade soils or reinforcement of subgrades with geotextile fabrics may be warranted during wet conditions.

Structural fill placed to establish subgrade elevation should be compacted to a minimum of 95 percent of its maximum dry density, as determined using test method ASTM D1557. Prior to the placement of base-course and paving materials, the exposed subgrade under all areas to be occupied by asphalt pavement should be proof rolled. Proof rolling should be accomplished with a loaded dump truck, large self-propelled vibrating roller, or equivalent piece of equipment. The purpose of this effort is to identify possible loose or soft soil and recompact disturbed areas of subgrade.

GTS should be allowed to review a grading plan prior to the start of construction as the amount of on-site grading has the potential to influence the pavement subgrade recommendations that we have presented below.

### *Flexible Pavement Sections*

We recommend that a minimum pavement section, consist of 3 inches of Class ½-inch HMA asphalt above 2 inches of WSDOT Standard Specification 9-03.9[3] Crushed Surfacing Top Course (CSTC), overlying 4 inches of crushed surfacing base course (CSBC) meeting criteria of the WSDOT Standard Specification 9-03.9[3]. Asphalt, CSTC and CSBC sections should be founded on existing firm and unyielding native glacial drift or on properly placed and compacted structural fill overlying firm and unyielding native deposits.



## Preliminary Stormwater Infiltration Potential

From the explorations excavated across the site, six representative soil samples were selected and mechanically tested for grain size distribution and interpretation according to the ASTM soil size distribution test procedure (ASTM D422). Calculated long-term infiltration rates were generated based on the simplified approach outlined in the 2012 Washington State Department of Ecology *Stormwater Management Manual for Western Washington* (DOE SMMWW). Calculated infiltration rates are shown in Table 2 below.

| <b>TABLE 2</b><br>Calculated Test Pit Soil Sample Infiltration Rates<br>Based on the 2012 DOE Stormwater Management Manual Section 3.3.6                                                                                                            |                    |                       |                                                 |                                                                             |                   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-----------------------|-------------------------------------------------|-----------------------------------------------------------------------------|-------------------|
| Test Pit Number                                                                                                                                                                                                                                     | Sample Depth (ft.) | Classification (USCS) | K <sub>sat</sub> Uncorrected Rate (Inches/Hour) | Calculated Infiltration Rate Per ASTM D422 Detailed Approach (Inches/Hour)* | Fines Content (%) |
| TP-1                                                                                                                                                                                                                                                | 4.0                | SM                    | 9.34                                            | 1.68                                                                        | 31.9              |
| TP-4                                                                                                                                                                                                                                                | 4.0                | ML                    | 0.99                                            | 0.17                                                                        | 71.2              |
| TP-6                                                                                                                                                                                                                                                | 3.0                | SM                    | 7.19                                            | 1.29                                                                        | 32.3              |
| TP-7                                                                                                                                                                                                                                                | 4.0                | SM                    | 3.06                                            | 0.55                                                                        | 24.8              |
| TP-8                                                                                                                                                                                                                                                | 3.5                | ML                    | 0.93                                            | 0.16                                                                        | 77.5              |
| TP-9                                                                                                                                                                                                                                                | 5.0                | ML                    | 0.51                                            | 0.09                                                                        | 89.7              |
| Notes:<br>-* Per ASTM D422 Simplified Approach<br>- K <sub>sat</sub> = Initial Saturated Hydraulic Conductivity<br>- Correction Factors Used: CF <sub>v</sub> = 0.5, CF <sub>t</sub> = 0.4, CF <sub>m</sub> = 0.9; Overall Correction Factor = 0.18 |                    |                       |                                                 |                                                                             |                   |

In the simplified approach (Section 3.3.6); the infiltration rate is derived by applying appropriate correction factors to the measured saturated hydraulic conductivity (K<sub>sat</sub>) from the ASTM 422 grain size analysis.

Saturated hydraulic conductivity is a quantitative measure of a saturated soil's ability to transmit water when subjected to a hydraulic gradient. It can be thought of as the ease with which pores of a saturated soil permit water movement.

Saturated Hydraulic Conductivity is expressed as follows:

$$\text{Log}_{10} (K_{\text{sat}}) = -1.57 + 1.90D_{10} + 0.015D_{60} - 0.013D_{90} - 2.08f_{\text{fines}}$$

Where D<sub>10</sub>, D<sub>60</sub>, and D<sub>90</sub> are the grain sizes in mm for which 10 percent, 60 percent, and 90 percent is finer and f<sub>fines</sub> is the fraction of the soil (by weight) that passes the U.S. No. 200 sieve. K<sub>sat</sub> is measured in cm/sec.

With this equation, we can determine the saturated hydraulic conductivity for our representative samples. See example below:

Test Pit TP-7 at 4.0 feet BGS: K<sub>sat</sub> = 0.0021 cm/sec or approximately 3.06 inches/hour

Correction factors for site variability (0.5), test method (0.4) and degree of influent control to prevent siltation and bio-buildup (0.9) were applied. Combining the correction factors yields an overall correction factor of 0.18. Applying the overall correction factor gives a corrected long-term infiltration rate of 0.55 inches/hour for the example above.

As displayed in Table 2, the native, glacial till deposits encountered underlying the topsoil have a calculated long-term infiltration rate ranging between 0.09 to 1.68 inches per hour based on the simplified approach as outlined by the 2012 DOE manual. **However, the simplified approach as outlined in the 2012 DOE SMMWW, does not consider the relative density of a given soil deposit and is generally only suitable for soils that have not been glacially consolidated. As the native site soils are glacially consolidated we anticipate that the actual infiltration rates for the glacial till deposits will be lower than the rate produced by the simplified approach. As such, the glacial till is, in our opinion, a restrictive layer and is not suitable for conventional stormwater infiltration.**

Alternative means of stormwater management utilizing LID (low impact development) concepts, such as pervious pavements and/or rain gardens, may be feasible at the project site but should be further evaluated as part of a more comprehensive infiltration study once the construction plan is more fully developed. It is anticipated that such facilities would likely require overflow protection or a pipe at the bottom of the facility to direct treated water toward an approved discharge facility or location. We are available to assist with the design of these alternative systems upon request.

### **Geotechnical Consultation and Construction Monitoring**

We recommend that geotechnical construction monitoring services be provided. These services should include observation by GeoTest personnel during fill placement/compaction activities and subgrade preparation operations to verify that design subgrade conditions are obtained beneath the proposed buildings. We also recommend that periodic field density testing be performed to verify that the appropriate degree of compaction is obtained. The purpose of these services would be to observe compliance with the design concepts, specifications, and recommendations of this report, and in the event subsurface conditions differ from those anticipated before the start of construction, provide revised recommendations appropriate to the conditions revealed during construction. GeoTest Services would be pleased to provide these services for you.

GeoTest Services is also available to provide a full range of materials testing and special inspection during building construction as required by the local building department and the International Building Code. This may include specific construction inspections on materials such as reinforced concrete, reinforced masonry, wood framing and structural steel. These services are supported by our fully accredited materials testing laboratory.

### **USE OF THIS REPORT**

GeoTest Services has prepared this report for the exclusive use of Nels Strandberg for specific application to the design of the proposed residential development known as The Crossing to be located off Meadows Lane in Anacortes, Washington. Use of this report by others or for another project is at the user's sole risk. Within the limitations of scope, schedule, and budget, our services have been conducted in accordance with generally

accepted practices of the geotechnical engineering profession; no other warranty, either expressed or implied, is made as to the professional advice included in this report.

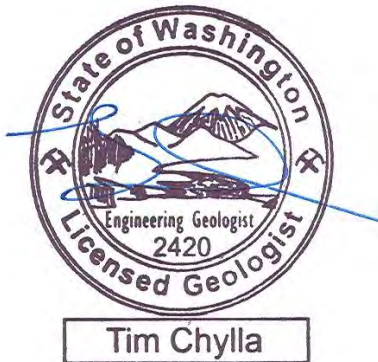
Our site explorations indicate subsurface conditions at the dates and locations indicated. It is not warranted that they are representative of subsurface conditions at other locations and times. The analyses, conclusions, and recommendations contained in this report are based on site conditions to the limited depth of our explorations at the time of our exploration program, a brief geological reconnaissance of the area, and review of published geological information for the site. We assume that the explorations are representative of the subsurface conditions throughout the site during the preparation of our recommendations. If variations in subsurface conditions are encountered during construction, we should be notified for review of the recommendations of this report, and revision of such if necessary. If there is a substantial lapse of time between submission of this report and the start of construction, or if conditions change due to construction operations at or adjacent to the project site, we recommend that we review this report to determine the applicability of the conclusions and recommendations contained herein.

The earthwork contractor is responsible to perform all work in conformance with all applicable WISHA/OSHA regulations. GeoTest Services, Inc. should not be assumed to be responsible for job site safety on this project, and this responsibility is specifically disclaimed.



We appreciate the opportunity to provide geotechnical services on this project and look forward to assisting you during the construction phase. If you have any questions regarding the information contained in this report, or if we may be of further service, please contact the undersigned.

Respectfully Submitted,  
**GeoTest Services, Inc.**



Tim Chylla, L.E.G.  
Licensed Engineering Geologist



Dave Rauch, P.E.  
Engineering Project Manager

|              |                 |                                             |
|--------------|-----------------|---------------------------------------------|
| Attachments: | Figure 1        | Vicinity Map                                |
|              | Figure 2        | Site and Exploration Plan                   |
|              | Figure 3        | Typical Footing and Wall Drain Section      |
|              | Figure 4        | Bare Earth Imagery                          |
|              | Figure 5        | Soil Classification System and Key          |
|              | Figures 6 – 11  | Test Pit Logs                               |
|              | Figures 12 - 13 | Grain Size Distribution                     |
|              | Attached        | Report Limitations and Guidelines (4 pages) |

## REFERENCES

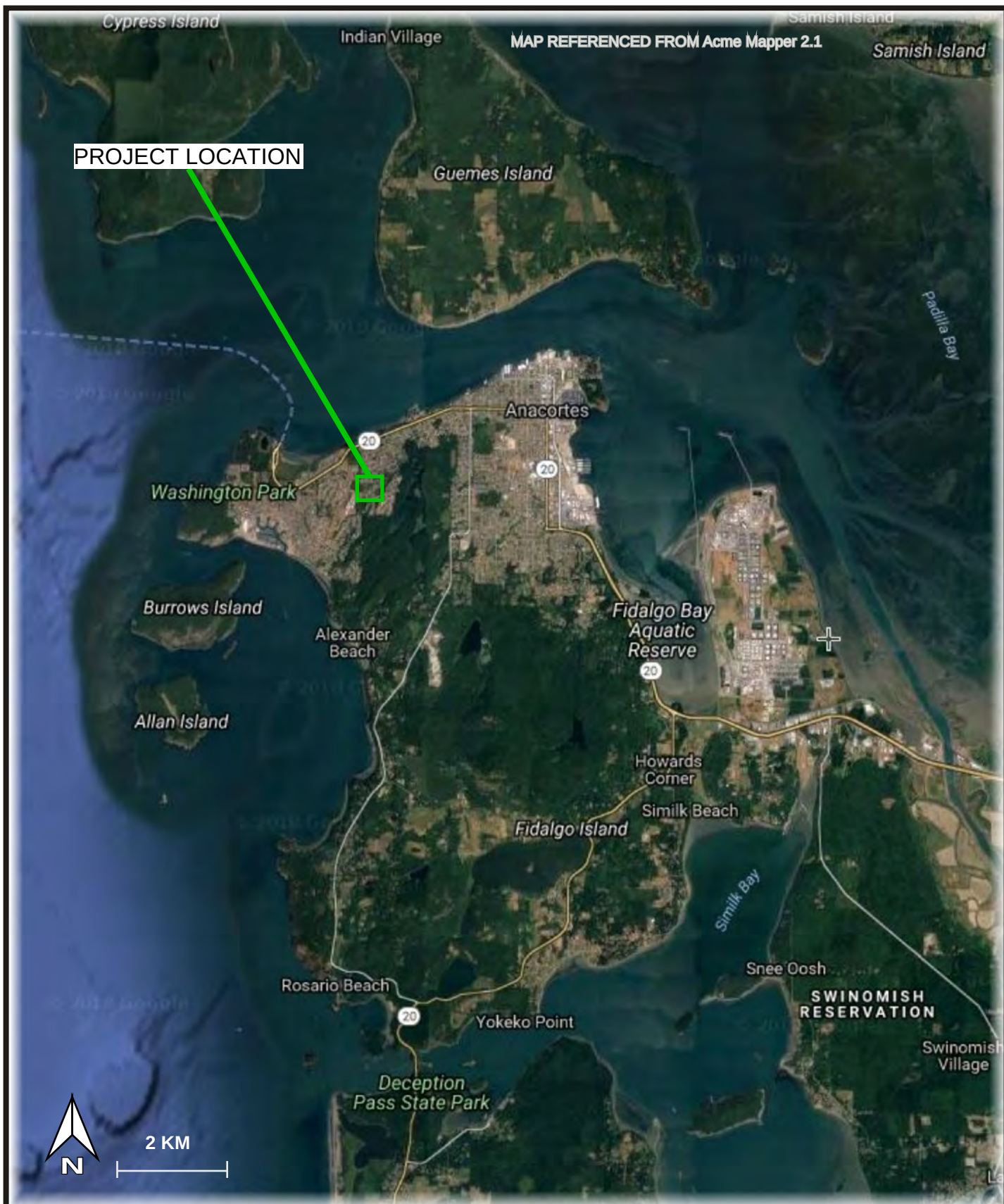
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Brown, N., 2014, *Geology of the San Juan Islands*, 1<sup>st</sup> Edition, Chuckanut Editions -Village Books, Bellingham Washington



**GEOTEST SERVICES, INC.**

741 Marine Drive  
Bellingham, WA 98225

phone: (360) 733-7318  
fax: (360) 733-7418

Date: 2-23-18

By: HS

Scale: As Shown

Project

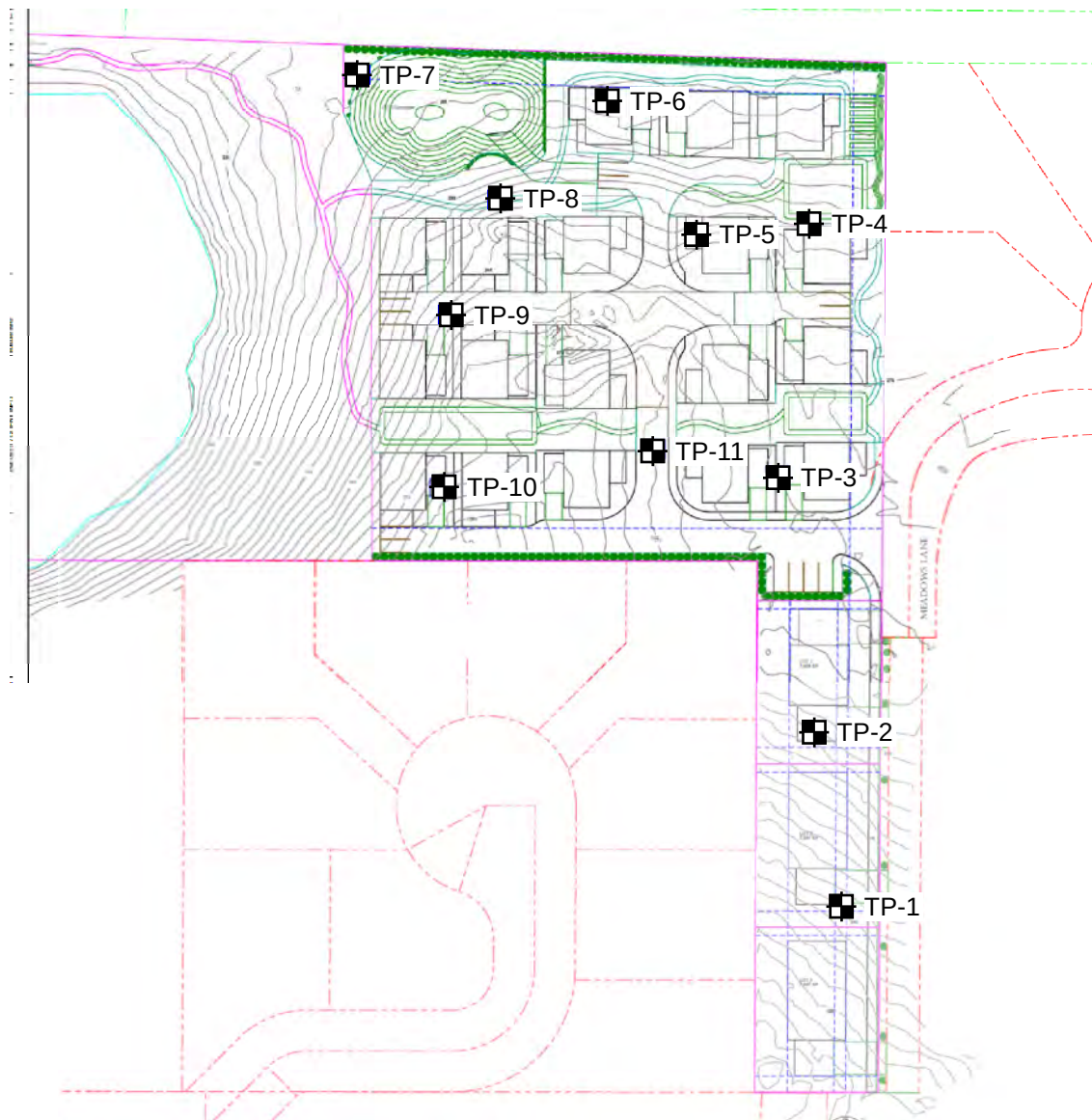
**SITE VICINITY MAP  
THE CROSSING  
MEADOWS LANE  
ANACORTES, WASHINGTON**

**18-0119**

Figure

**1**





 TP-# = Approximate Pit Location  
 Site plan provided by Strandberg Construction

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Date: 2-23-18

By: HS

Scale: Shown

### SITE AND EXPLORATION PLAN THE CROSSING MEADOWS LANE ANACORTES, WASHINGTON

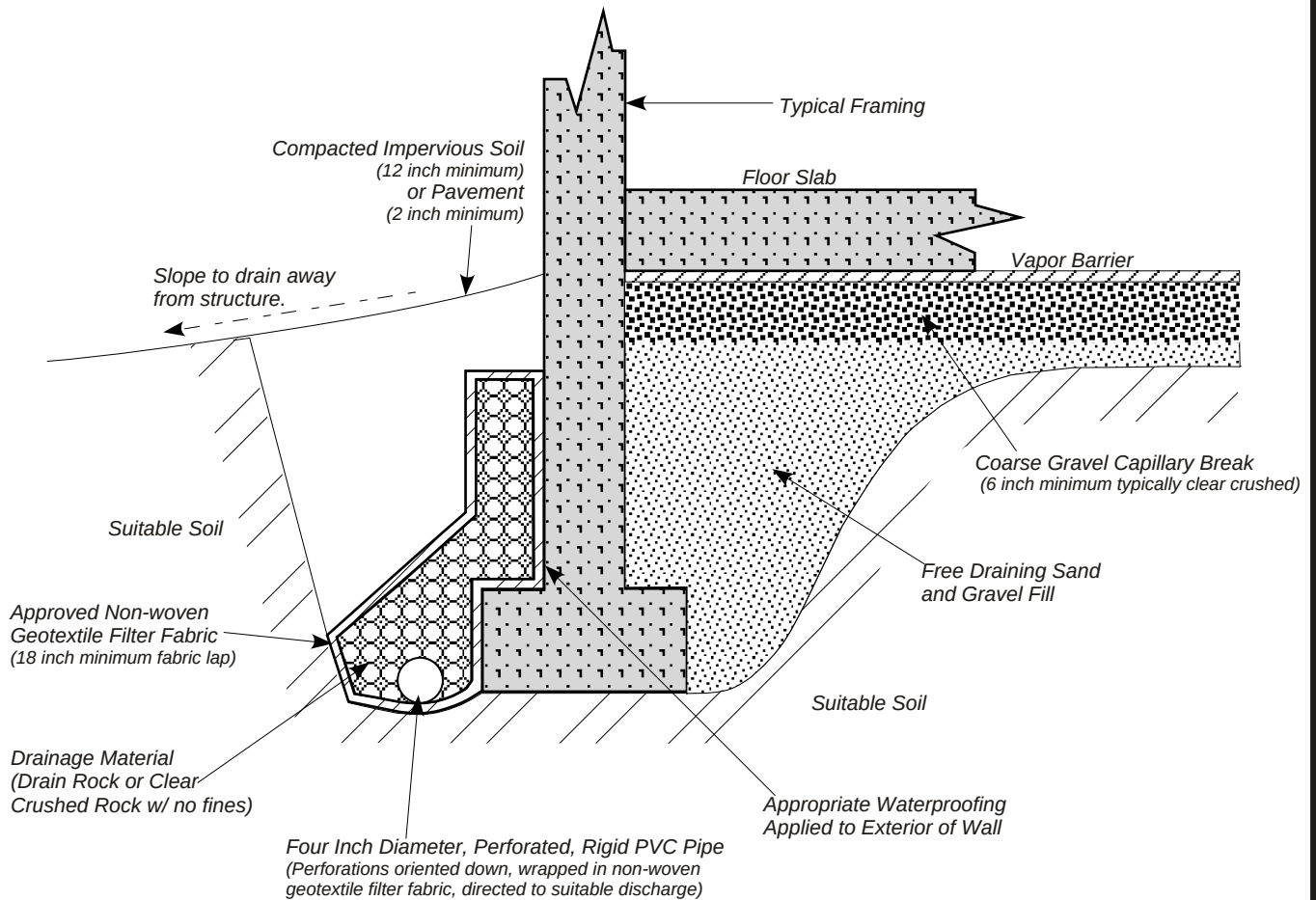
Project  
**18-0119**

Figure

**2**



## SHALLOW FOOTINGS WITH INTERIOR SLAB-ON-GRADE



### Notes:

Footings Should be properly buried for frost protection in accordance with International Building Code or local building codes  
(Typically 18 inches below exterior finished grades)

The footing drain will need to be modified from this typical drawing to fit the dimensions of the planned footing and slab configuration

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Scale: None

Project

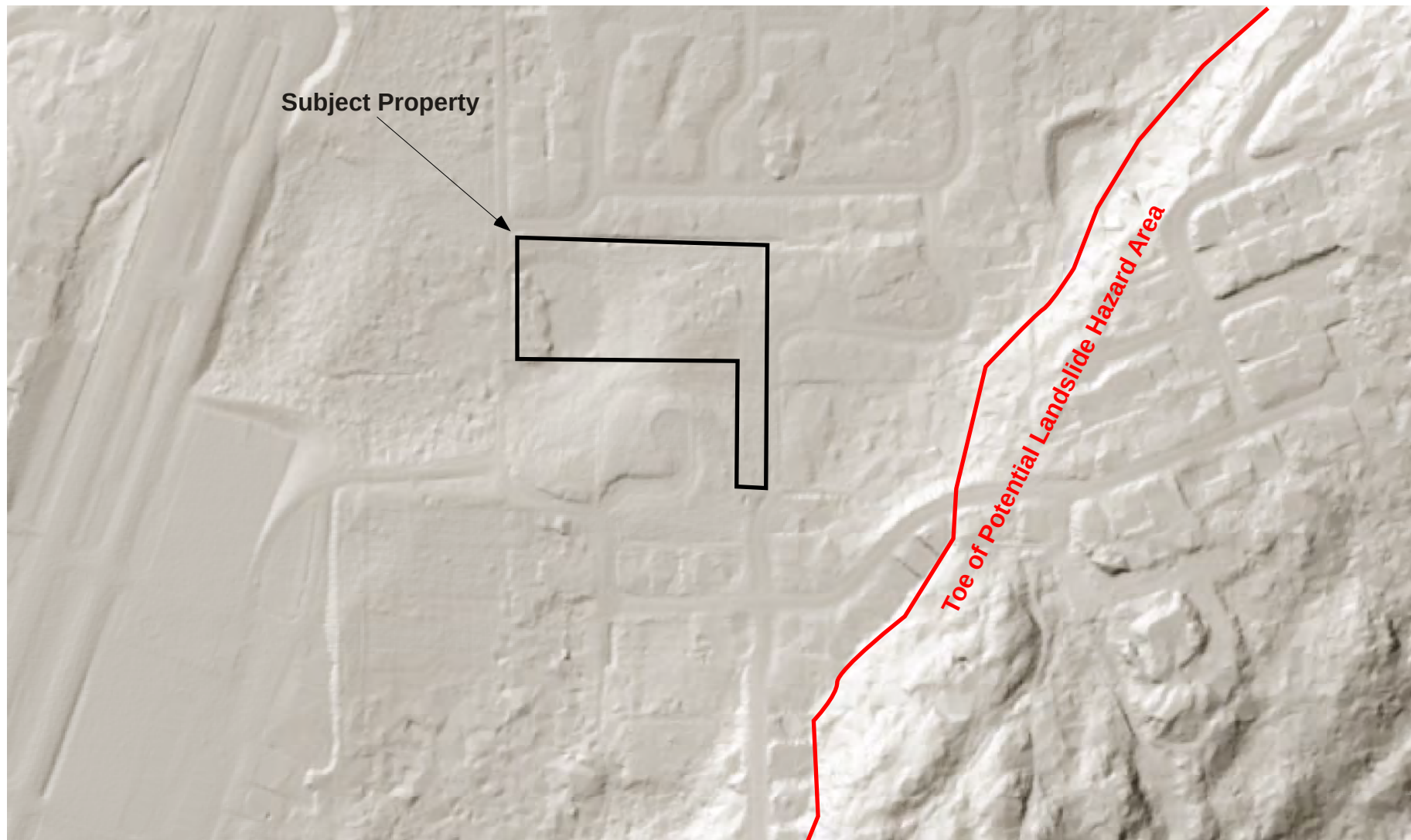
### TYPICAL FOOTING & WALL DRAIN SECTION

18-0119

THE CROSSING  
MEADOWS LANE  
ANACORTES, WASHINGTON

Figure

3



0' 250' 500'



**GEOTEST SERVICES, INC.**

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fax: (360) 733-7418

Date: 2-23-18

By: HS

Scale: Shown

**BARE EARTH IMAGERY**  
**THE CROSSING**  
**MEADOWS LANE**  
**ANACORTES, WASHINGTON**

Project

**18-0119**

Figure

**4**

## Soil Classification System

|                                                                                      | MAJOR DIVISIONS                                                                            |                                                    | GRAPHIC SYMBOL | USCS LETTER SYMBOL                  | TYPICAL DESCRIPTIONS <sup>(1)(2)</sup>                                                                                                                      |
|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|----------------------------------------------------|----------------|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| COARSE-GRAINED SOIL<br>(More than 50% of material is larger than No. 200 sieve size) | GRAVEL AND GRAVELLY SOIL<br><br>(More than 50% of coarse fraction retained on No. 4 sieve) | CLEAN GRAVEL<br>(Little or no fines)               |                | <b>GW</b>                           | Well-graded gravel; gravel/sand mixture(s); little or no fines                                                                                              |
|                                                                                      |                                                                                            | GRAVEL WITH FINES<br>(Appreciable amount of fines) |                | <b>GP</b><br><b>GM</b><br><b>GC</b> | Poorly graded gravel; gravel/sand mixture(s); little or no fines<br>Silty gravel; gravel/sand/silt mixture(s)<br>Clayey gravel; gravel/sand/clay mixture(s) |
|                                                                                      | SAND AND SANDY SOIL<br><br>(More than 50% of coarse fraction passed through No. 4 sieve)   | CLEAN SAND<br>(Little or no fines)                 |                | <b>SW</b><br><b>SP</b>              | Well-graded sand; gravelly sand; little or no fines<br>Poorly graded sand; gravelly sand; little or no fines                                                |
|                                                                                      |                                                                                            | SAND WITH FINES<br>(Appreciable amount of fines)   |                | <b>SM</b><br><b>SC</b>              | Silty sand; sand/silt mixture(s)<br>Clayey sand; sand/clay mixture(s)                                                                                       |
|                                                                                      |                                                                                            |                                                    |                |                                     |                                                                                                                                                             |
| FINE-GRAINED SOIL<br>(More than 50% of material is smaller than No. 200 sieve size)  | SILT AND CLAY<br><br>(Liquid limit less than 50)                                           |                                                    |                | <b>ML</b>                           | Inorganic silt and very fine sand; rock flour; silty or clayey fine sand or clayey silt with slight plasticity                                              |
|                                                                                      |                                                                                            |                                                    |                | <b>CL</b>                           | Inorganic clay of low to medium plasticity; gravelly clay; sandy clay; silty clay; lean clay                                                                |
|                                                                                      |                                                                                            |                                                    |                | <b>OL</b>                           | Organic silt; organic, silty clay of low plasticity                                                                                                         |
|                                                                                      | SILT AND CLAY<br><br>(Liquid limit greater than 50)                                        |                                                    |                | <b>MH</b>                           | Inorganic silt; micaceous or diatomaceous fine sand                                                                                                         |
|                                                                                      |                                                                                            |                                                    |                | <b>CH</b>                           | Inorganic clay of high plasticity; fat clay                                                                                                                 |
|                                                                                      |                                                                                            |                                                    |                | <b>OH</b>                           | Organic clay of medium to high plasticity; organic silt                                                                                                     |
|                                                                                      | HIGHLY ORGANIC SOIL                                                                        |                                                    |                | <b>PT</b>                           | Peat; humus; swamp soil with high organic content                                                                                                           |

| OTHER MATERIALS | GRAPHIC SYMBOL | LETTER SYMBOL   | TYPICAL DESCRIPTIONS                                  |
|-----------------|----------------|-----------------|-------------------------------------------------------|
| PAVEMENT        |                | <b>AC or PC</b> | Asphalt concrete pavement or Portland cement pavement |
| ROCK            |                | <b>RK</b>       | Rock (See Rock Classification)                        |
| WOOD            |                | <b>WD</b>       | Wood, lumber, wood chips                              |
| DEBRIS          |                | <b>DB</b>       | Construction debris, garbage                          |

Notes: 1. Soil descriptions are based on the general approach presented in the *Standard Practice for Description and Identification of Soils (Visual-Manual Procedure)*, as outlined in ASTM D 2488. Where laboratory index testing has been conducted, soil classifications are based on the *Standard Test Method for Classification of Soils for Engineering Purposes*, as outlined in ASTM D 2487.

2. Soil description terminology is based on visual estimates (in the absence of laboratory test data) of the percentages of each soil type and is defined as follows:

Primary Constituent: > 50% - "GRAVEL," "SAND," "SILT," "CLAY," etc.

Secondary Constituents: > 30% and ≤ 50% - "very gravelly," "very sandy," "very silty," etc.  
> 12% and ≤ 30% - "gravelly," "sandy," "silty," etc.

Additional Constituents: > 5% and ≤ 12% - "slightly gravelly," "slightly sandy," "slightly silty," etc.  
≤ 5% - "trace gravel," "trace sand," "trace silt," etc., or not noted.

| Drilling and Sampling Key                                                                                                                                              |              |                                            | Field and Lab Test Data |                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|--------------------------------------------|-------------------------|-------------------------------------------------|
| SAMPLE NUMBER & INTERVAL                                                                                                                                               | SAMPLER TYPE |                                            | Code                    | Description                                     |
|                                                                                                                                                                        | Code         | Description                                |                         |                                                 |
| Sample Identification Number                                                                                                                                           | a            | 3.25-inch O.D., 2.42-inch I.D. Split Spoon | PP = 1.0                | Pocket Penetrometer, tsf                        |
| Recovery Depth Interval                                                                                                                                                | b            | 2.00-inch O.D., 1.50-inch I.D. Split Spoon | TV = 0.5                | Torvane, tsf                                    |
| Sample Depth Interval                                                                                                                                                  | c            | Shelby Tube                                | PID = 100               | Photoionization Detector VOC screening, ppm     |
| Portion of Sample Retained for Archive or Analysis                                                                                                                     | d            | Grab Sample                                | W = 10                  | Moisture Content, %                             |
|                                                                                                                                                                        | e            | Other - See text if applicable             | D = 120                 | Dry Density, pcf                                |
|                                                                                                                                                                        | 1            | 300-lb Hammer, 30-inch Drop                | -200 = 60               | Material smaller than No. 200 sieve, %          |
|                                                                                                                                                                        | 2            | 140-lb Hammer, 30-inch Drop                | GS                      | Grain Size - See separate figure for data       |
|                                                                                                                                                                        | 3            | Pushed                                     | AL                      | Atterberg Limits - See separate figure for data |
|                                                                                                                                                                        | 4            | Other - See text if applicable             | GT                      | Other Geotechnical Testing                      |
|                                                                                                                                                                        |              |                                            | CA                      | Chemical Analysis                               |
| Groundwater                                                                                                                                                            |              |                                            |                         |                                                 |
| Approximate water elevation at time of drilling (ATD) or on date noted. Groundwater levels can fluctuate due to precipitation, seasonal conditions, and other factors. |              |                                            |                         |                                                 |



## TP-1

| SAMPLE DATA                                                      |                          |              | SOIL PROFILE |                |             | GROUNDWATER                                                                                                              |
|------------------------------------------------------------------|--------------------------|--------------|--------------|----------------|-------------|--------------------------------------------------------------------------------------------------------------------------|
| Depth (ft)                                                       | Sample Number & Interval | Sampler Type | Test Data    | Graphic Symbol | USCS Symbol | Excavation Method: <u>Rubber-tired Backhoe</u><br>Ground Elevation (ft): <u>Undetermined</u>                             |
| 0                                                                |                          |              |              |                |             |                                                                                                                          |
| 01                                                               | 01                       | d            | W = 14       |                | SM/OL       | Loose to medium dense, brown, damp to moist, silty SAND with occasional pebbles and cobbles, contains organics (Topsoil) |
| 02                                                               | 02                       | d            | W = 20       |                | SM          | Medium dense to dense, reddish brown, damp, silty, gravelly SAND (B-Horizon - Weathered Glacial Till)                    |
| 03                                                               | 03                       | d            | W = 14       |                | GM          | Dense, tan, slightly silty, moist, slightly silty, sandy GRAVEL (Weathered Continental Glacial Till)                     |
| 04                                                               | 04                       | d            | W = 13<br>GS |                | SM          | Dense to very dense, tan to orange, mottled, damp very silty SAND (Continental Glacial Till)                             |
| 6                                                                |                          |              |              |                |             |                                                                                                                          |
| Test Pit Completed 02/21/18<br>Total Depth of Test Pit = 6.0 ft. |                          |              |              |                |             |                                                                                                                          |
| 8                                                                |                          |              |              |                |             |                                                                                                                          |

▽ Slight groundwater seepage encountered at 3.0 ft.

## TP-2

| SAMPLE DATA                                                      |                          |              | SOIL PROFILE |                |             | GROUNDWATER                                                                                                              |
|------------------------------------------------------------------|--------------------------|--------------|--------------|----------------|-------------|--------------------------------------------------------------------------------------------------------------------------|
| Depth (ft)                                                       | Sample Number & Interval | Sampler Type | Test Data    | Graphic Symbol | USCS Symbol | Excavation Method: <u>Rubber-tired Backhoe</u><br>Ground Elevation (ft): <u>Undetermined</u>                             |
| 0                                                                |                          |              |              |                |             |                                                                                                                          |
| 05                                                               | 05                       | d            |              |                | SM/OL       | Loose to medium dense, brown, damp to moist, silty SAND with occasional pebbles and cobbles, contains organics (Topsoil) |
| 1                                                                |                          |              |              |                | SM          | Medium dense to dense, reddish brown, damp, silty, gravelly SAND (B-Horizon - Weathered Glacial Till)                    |
| 06                                                               | 06                       | d            |              |                |             |                                                                                                                          |
| 2                                                                |                          |              |              |                |             |                                                                                                                          |
| Test Pit Completed 02/21/18<br>Total Depth of Test Pit = 2.0 ft. |                          |              |              |                |             |                                                                                                                          |
| 3                                                                |                          |              |              |                |             |                                                                                                                          |
| 4                                                                |                          |              |              |                |             |                                                                                                                          |

▽ Rapid groundwater seepage encountered at 1.5 ft.

- Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
  2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
  3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

## TP-3

## SAMPLE DATA

## SOIL PROFILE

## GROUNDWATER

| Depth (ft) | Sample Number & Interval | Sampler Type | Test Data | Graphic Symbol | USCS Symbol | Excavation Method: <u>Rubber-tired Backhoe</u><br>Ground Elevation (ft): <u>Undetermined</u>                             |                                                    |
|------------|--------------------------|--------------|-----------|----------------|-------------|--------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| 0          |                          |              |           |                | SM/OL       | Loose to medium dense, brown, damp to moist, silty SAND with occasional pebbles and cobbles, contains organics (Topsoil) |                                                    |
| 1          |                          |              |           |                | GM          | Dense, tan, slightly silty, moist, slightly silty, sandy GRAVEL (Weathered Continental Glacial Till)                     | ▽ Rapid groundwater seepage encountered at 1.0 ft. |
| 2          |                          |              |           |                |             |                                                                                                                          |                                                    |

Test Pit Completed 02/21/18  
Total Depth of Test Pit = 2.0 ft.

## TP-4

## SAMPLE DATA

## SOIL PROFILE

## GROUNDWATER

| Depth (ft) | Sample Number & Interval | Sampler Type | Test Data    | Graphic Symbol | USCS Symbol | Excavation Method: <u>Rubber-tired Backhoe</u><br>Ground Elevation (ft): <u>Undetermined</u>                               |                                                       |
|------------|--------------------------|--------------|--------------|----------------|-------------|----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|
| 0          |                          |              |              |                | SM/OL       | Loose to medium dense, brown, damp to moist, silty SAND with occasional pebbles and cobbles, contains organics (Topsoil)   |                                                       |
| 1          |                          |              |              |                | GM          | - Charcoal debris observed at 1.66' BGS.                                                                                   |                                                       |
| 2          |                          |              |              |                | SM          | Medium dense, tan, slightly silty, moist, slightly silty, sandy GRAVEL (Weathered Continental Glacial Till)                | ▽ Moderate groundwater seepage encountered at 2.3 ft. |
| 3          |                          |              |              |                |             | - Material not present in entire test pit sidewall. Contact with Weathered Continental Glacial Till occurred at 8-20" BGS. |                                                       |
| 4          | 07                       | d            | W = 15<br>GS |                |             | Very dense, tan to reddish brown, mottled, damp, silty, gravelly SAND (Continental Glacial Till)                           |                                                       |
| 5          |                          |              |              |                |             |                                                                                                                            |                                                       |
| 6          |                          |              |              |                |             |                                                                                                                            |                                                       |

Test Pit Completed 02/21/18  
Total Depth of Test Pit = 6.0 ft.

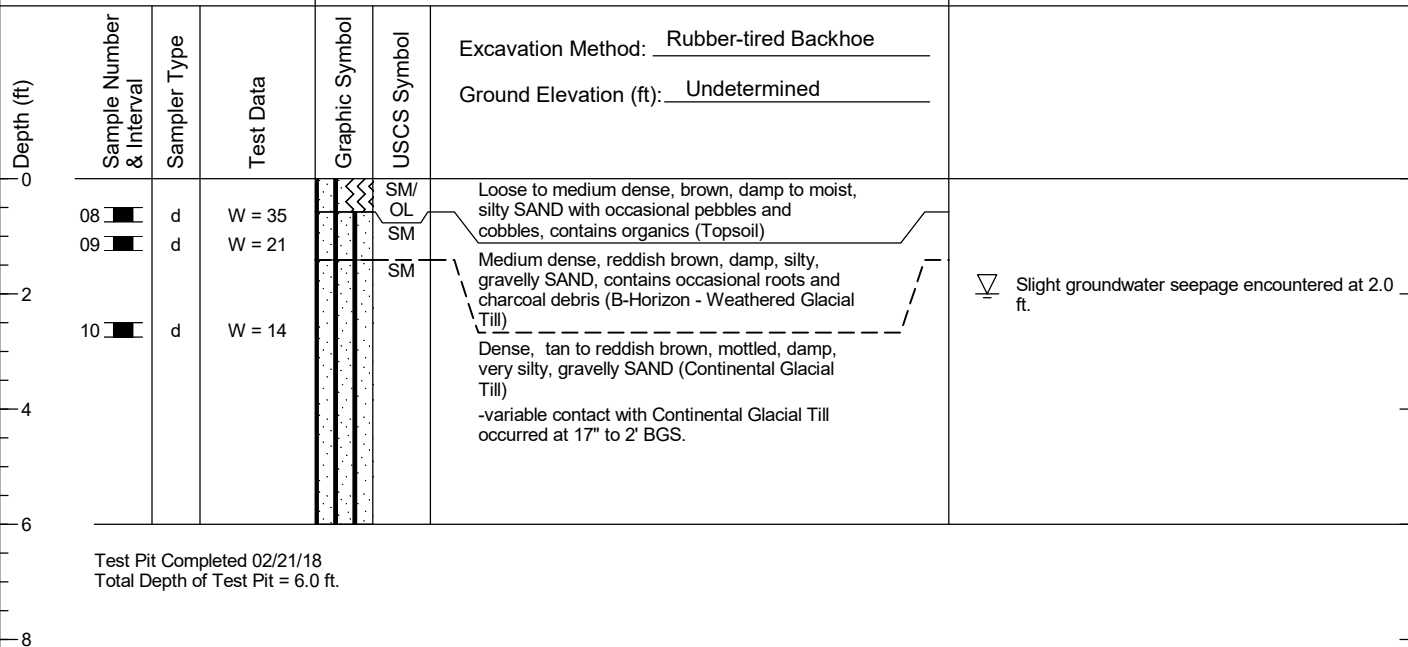
- Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
  2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
  3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

## TP-5

## SAMPLE DATA

## SOIL PROFILE

## GROUNDWATER

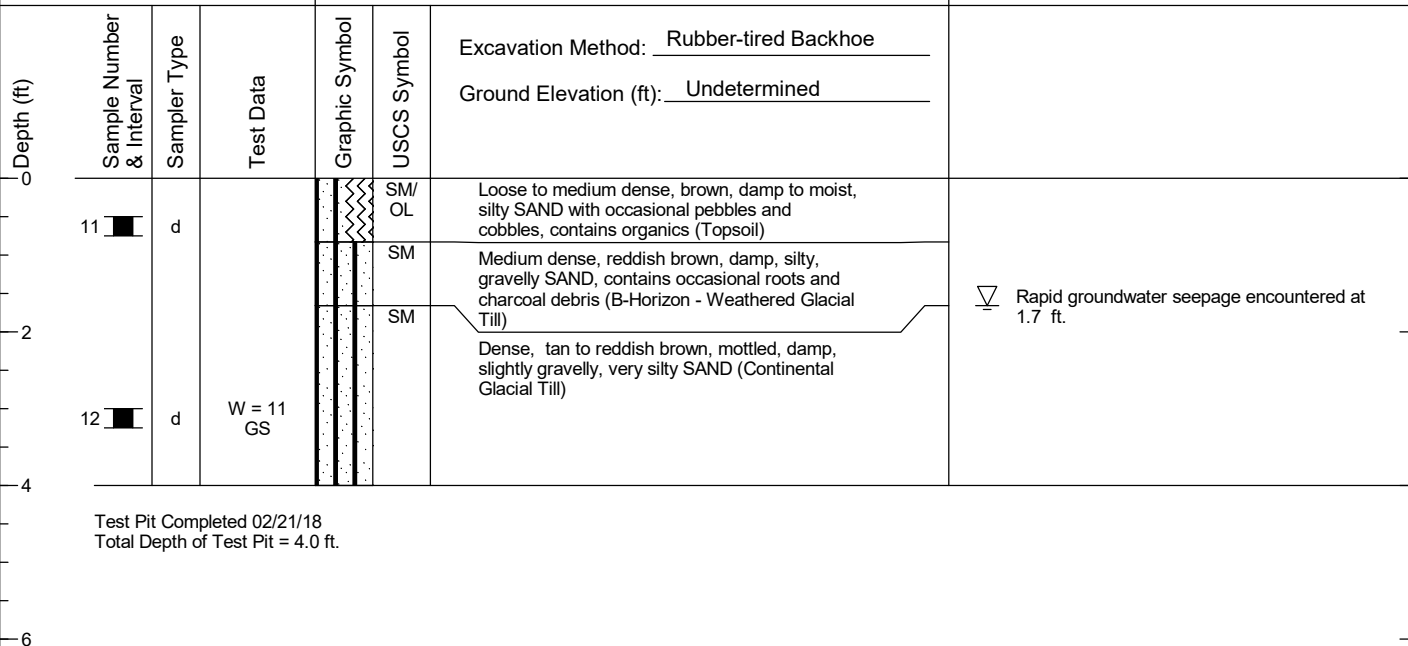


## TP-6

## SAMPLE DATA

## SOIL PROFILE

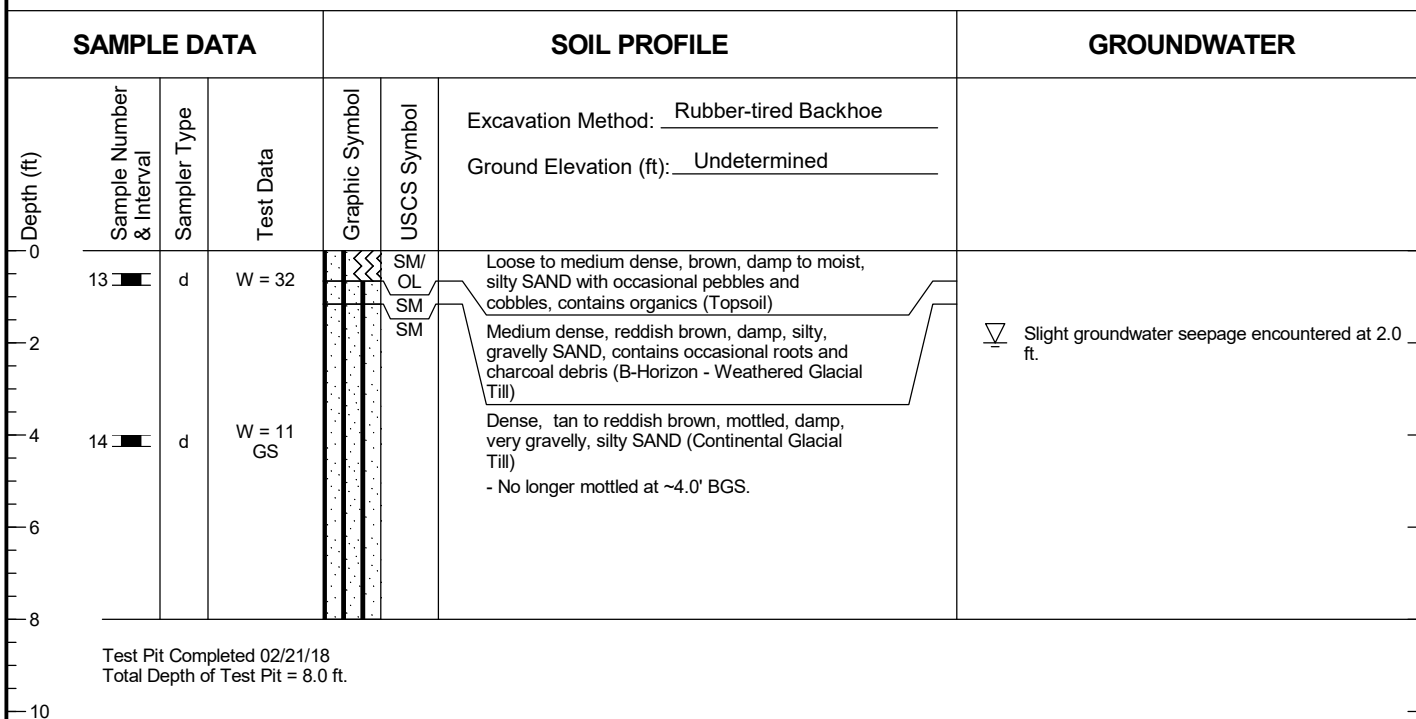
## GROUNDWATER



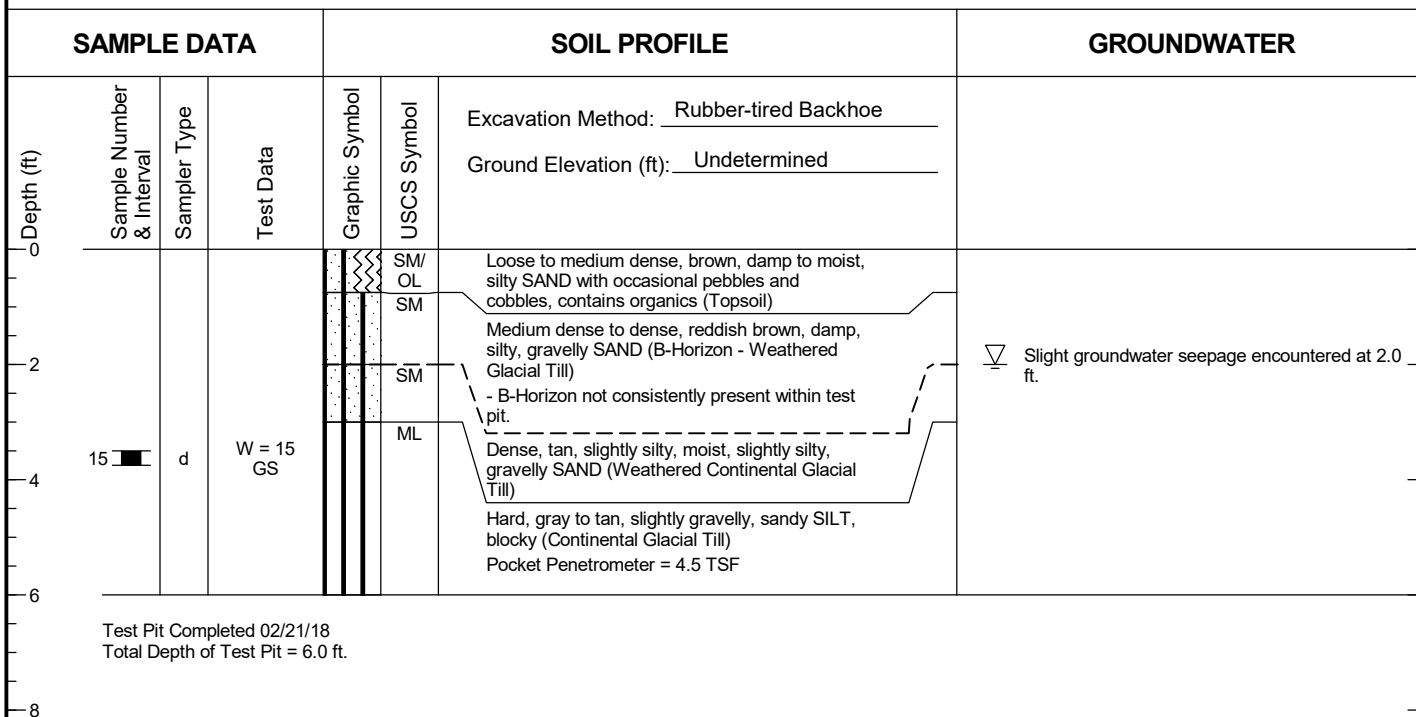
- Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
  2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
  3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.



## TP-7

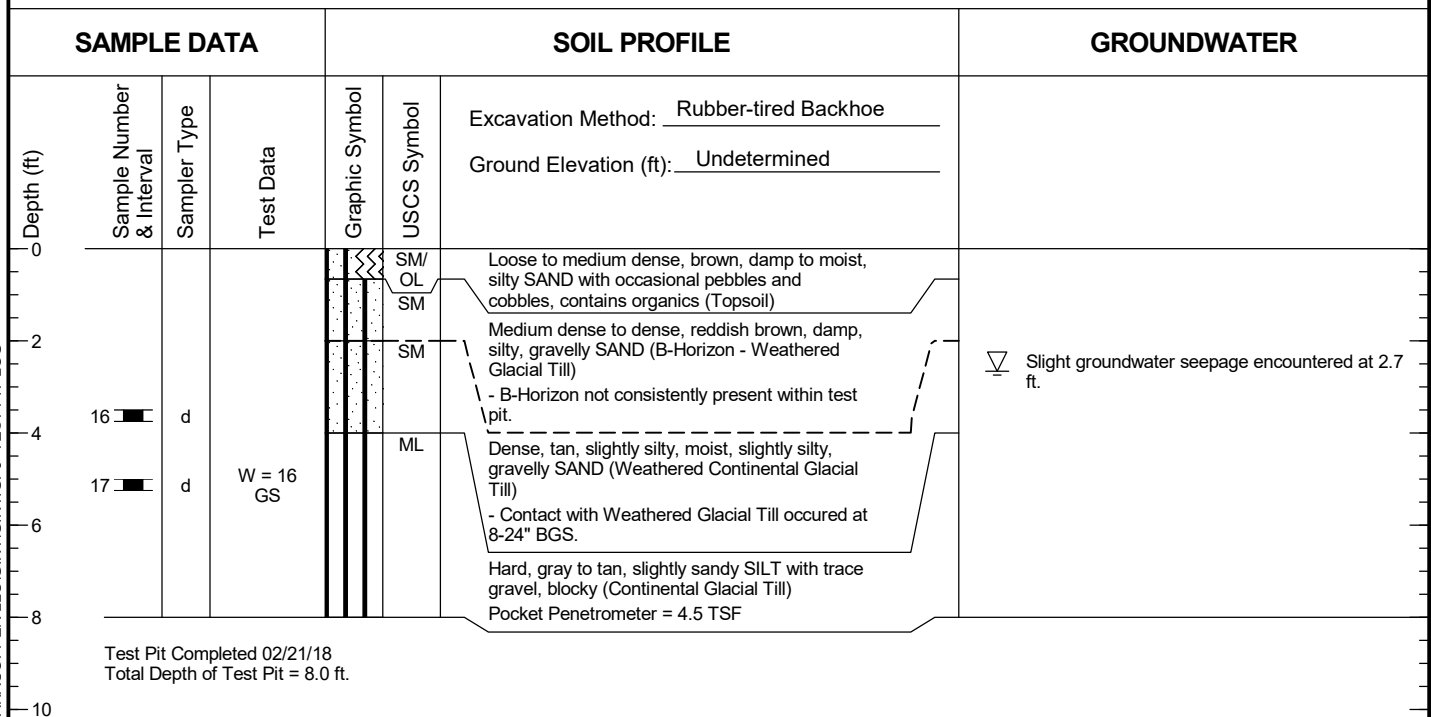


## TP-8

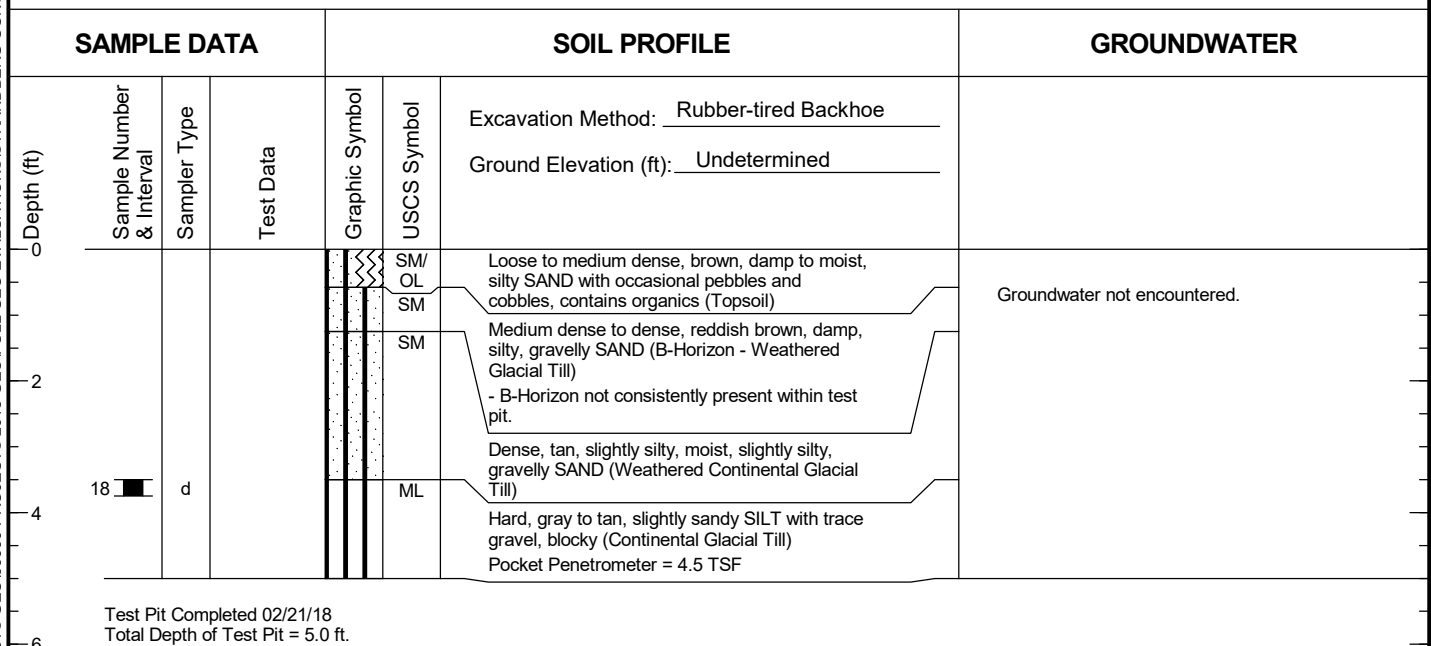


- Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
  2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
  3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.

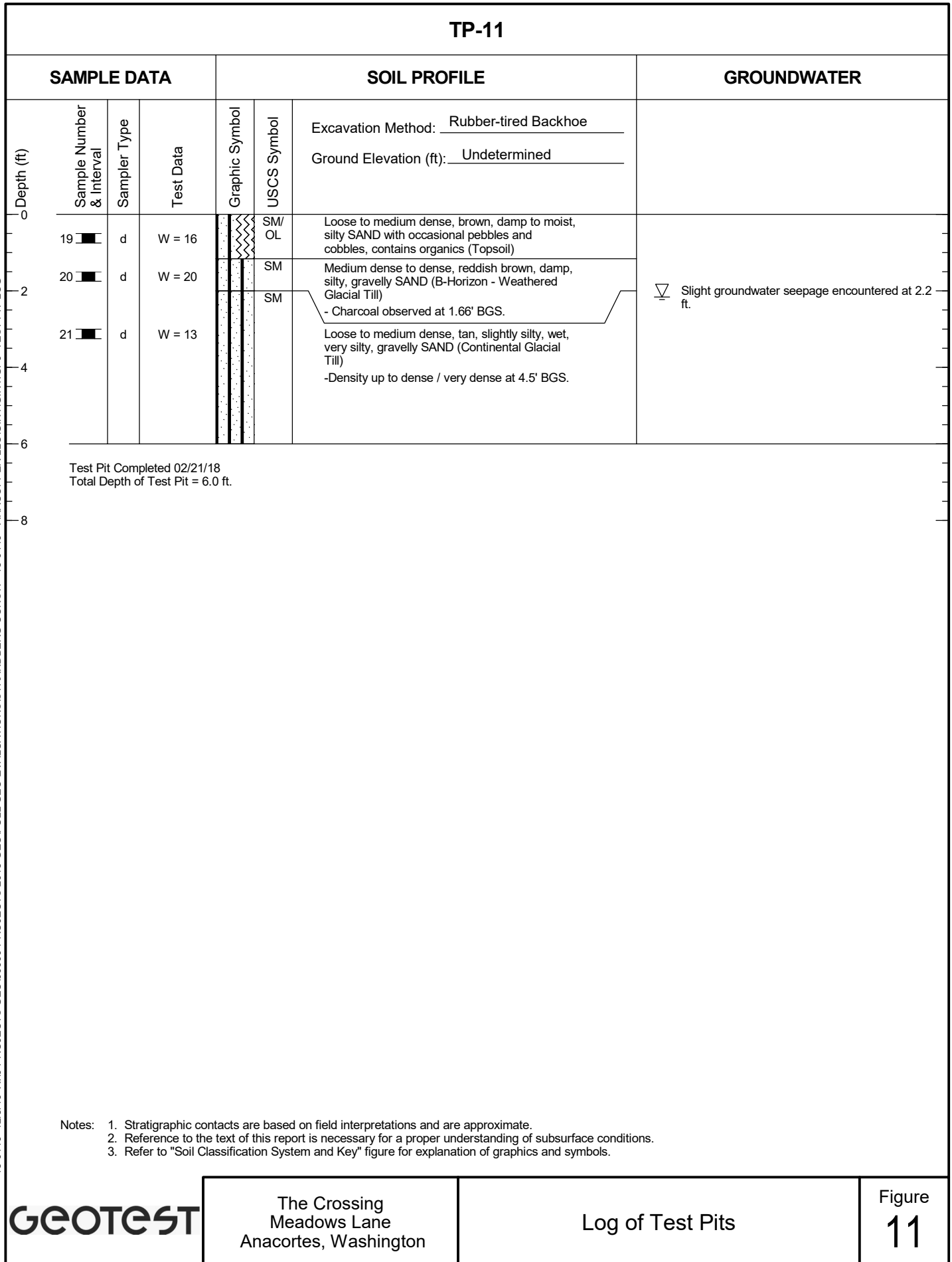
## TP-9



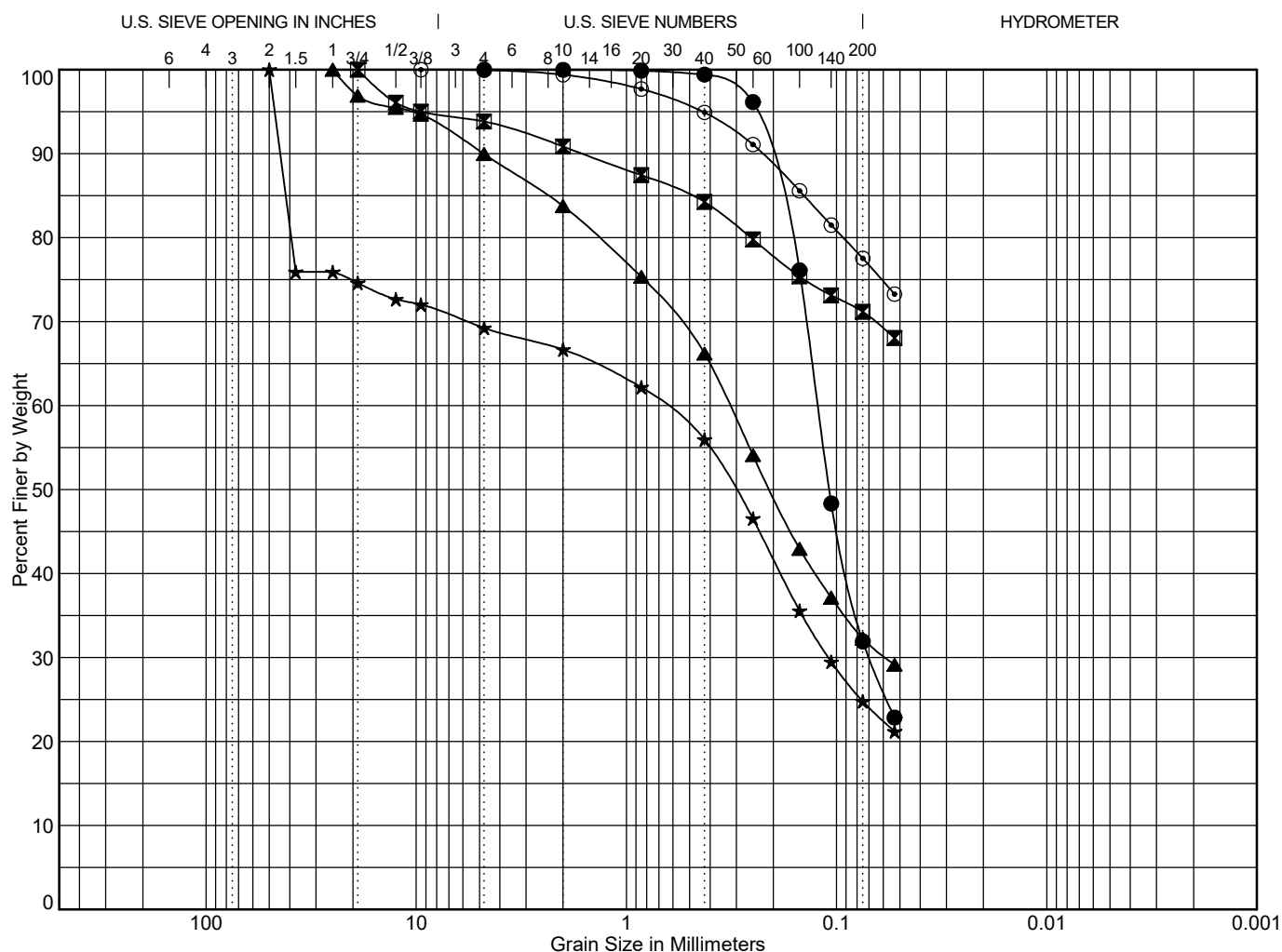
## TP-10



- Notes:
1. Stratigraphic contacts are based on field interpretations and are approximate.
  2. Reference to the text of this report is necessary for a proper understanding of subsurface conditions.
  3. Refer to "Soil Classification System and Key" figure for explanation of graphics and symbols.







| Cobbles | Gravel |      | Sand   |        |      | Silt or Clay |
|---------|--------|------|--------|--------|------|--------------|
|         | coarse | fine | coarse | medium | fine |              |

| Point | Depth | Classification  |                                         |                 |                 |                 |                |               |               | LL            | PL          | PI      | C <sub>c</sub> | C <sub>u</sub> |  |
|-------|-------|-----------------|-----------------------------------------|-----------------|-----------------|-----------------|----------------|---------------|---------------|---------------|-------------|---------|----------------|----------------|--|
| ●     | TP-1  | 4.0             | Very silty SAND (SM)                    |                 |                 |                 |                |               |               |               |             |         |                |                |  |
| ☒     | TP-4  | 4.0             | Slightly gravelly, sandy SILT (ML)      |                 |                 |                 |                |               |               |               |             |         |                |                |  |
| ▲     | TP-6  | 3.0             | Slightly gravelly, very silty SAND (SM) |                 |                 |                 |                |               |               |               |             |         |                |                |  |
| ★     | TP-7  | 4.0             | Very gravelly, silty SAND (SM)          |                 |                 |                 |                |               |               |               |             |         |                |                |  |
| ⊙     | TP-8  | 3.5             | Sandy SILT (ML)                         |                 |                 |                 |                |               |               |               |             |         |                |                |  |
| Point | Depth | D <sub>90</sub> | D <sub>60</sub>                         | D <sub>50</sub> | D <sub>30</sub> | D <sub>10</sub> | %Coarse Gravel | % Fine Gravel | % Coarse Sand | % Medium Sand | % Fine Sand | % Fines |                |                |  |
| ●     | TP-1  | 4.0             | 0.214                                   | 0.123           | 0.108           | 0.07            | 0.032*         | 0.0           | 0.0           | 0.0           | 0.6         | 67.5    | 31.9           |                |  |
| ☒     | TP-4  | 4.0             | 1.617                                   | 0.022*          | 0.007*          | 0.001*          | 0*             | 0.0           | 6.2           | 3.0           | 6.6         | 13.1    | 71.2           |                |  |
| ▲     | TP-6  | 3.0             | 4.782                                   | 0.324           | 0.207           | 0.058           | 0.006*         | 3.1           | 6.9           | 6.2           | 17.6        | 33.9    | 32.3           |                |  |
| ★     | TP-7  | 4.0             | 44.373                                  | 0.667           | 0.304           | 0.109           | 0.018*         | 25.4          | 5.4           | 2.6           | 10.7        | 31.2    | 24.8           |                |  |
| ⊙     | TP-8  | 3.5             | 0.226                                   | 0.018*          | 0.008*          | 0.002*          | 0*             | 0.0           | 0.1           | 0.5           | 4.5         | 17.4    | 77.5           |                |  |

\*Extrapolated from data

$$C_c = D_{30}^2 / (D_{60} * D_{10})$$

$$C_u = D_{60} / D_{10}$$

To be well graded:  $1 < C_c < 3$  and $C_u > 4$  for GW or  $C_u > 6$  for SW**GEOTEST**The Crossing  
Meadows Lane  
Anacortes, Washington

Grain Size Test Data

Figure  
**12**

|         |        |      |        |        |      |              |
|---------|--------|------|--------|--------|------|--------------|
| Cobbles | Gravel |      | Sand   |        |      | Silt or Clay |
|         | coarse | fine | coarse | medium | fine |              |

[illegible]
$$C_c = D_{30}^2 / (D_{60} * D_{10})$$

$$C_u = D_{60} / D_{10}$$

To be well graded:  $1 < C_u < 3$  and  $C_{u,1} > 4$  for GW or  $C_{u,1} > 6$  for SW



## REPORT LIMITATIONS AND GUIDELINES FOR ITS USE<sup>1</sup>

Subsurface issues may cause construction delays, cost overruns, claims, and disputes. While you cannot eliminate all such risks, you can manage them. The following information is provided to help:

### **Geotechnical Services are Performed for Specific Purposes, Persons, and Projects**

At GeoTest our geotechnical engineers and geologists structure their services to meet specific needs of our clients. A geotechnical engineering study conducted for a civil engineer may not fulfill the needs of an owner, a construction contractor or even another civil engineer. Because each geotechnical engineering study is unique, each geotechnical engineering report is unique, prepared solely for the client. No one except you should rely on your geotechnical engineer who prepared it. And no one – not even you – should apply the report for any purpose or project except the one originally contemplated.

### **Read the Full Report**

Serious problems have occurred because those relying on a geotechnical engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only.

### **A Geotechnical Engineering Report is Based on a Unique Set of Project-Specific Factors**

GeoTest's geotechnical engineers consider a number of unique, project-specific factors when establishing the scope of a study. Typical factors include: the clients goals, objectives, and risk management preferences; the general nature of the structure involved its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless GeoTest, who conducted the study specifically states otherwise, do not rely on a geotechnical engineering report that was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.





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Typical changes that can erode the reliability of an existing geotechnical engineering report include those that affect:

- the function of the proposed structure, as when it's changed, for example, from a parking garage to an office building, or from a light industrial plant to a refrigerated warehouse,
- elevation, configuration, location, orientation, or weight of the proposed construction,
- alterations in drainage designs; or
- composition of the design team; the passage of time; man-made alterations and construction whether on or adjacent to the site; or by natural alterations and events, such as floods, earthquakes or groundwater fluctuations; or project ownership.

Always inform GeoTest's geotechnical engineer of project changes – even minor ones – and request an assessment of their impact. Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.

### **Subsurface Conditions Can Change**

This geotechnical or geologic report is based on conditions that existed at the time the study was performed. Do not rely on the findings and conclusions of this report, whose adequacy may have been affected by: the passage of time; by man-made events, such as construction on or adjacent to the site; or by natural events, such as floods, earthquakes, or groundwater fluctuations. Always contact GeoTest before applying the report to determine if it is still relevant. A minor amount of additional testing or analysis will help determine if the report remains applicable.

### **Most Geotechnical and Geologic Findings are Professional Opinions**

Our site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. GeoTest's engineers and geologists review field and laboratory data and then apply their professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ – sometimes significantly – from those indicated in your report. Retaining GeoTest who developed this report to provide construction observation is the most effective method of managing the risks associated with anticipated or unanticipated conditions.



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## **A Report's Recommendations are Not Final**

Do not over-rely on the construction recommendations included in this report. Those recommendations are not final, because geotechnical engineers or geologists develop them principally from judgment and opinion. GeoTest's geotechnical engineers or geologists can finalize their recommendations only by observing actual subsurface conditions revealed during construction. GeoTest cannot assume responsibility or liability for the report's recommendations if our firm does not perform the construction observation.

## **A Geotechnical Engineering or Geologic Report may be Subject to Misinterpretation**

Misinterpretation of this report by other design team members can result in costly problems. Lower that risk by having GeoTest confer with appropriate members of the design team after submitting the report. Also, we suggest retaining GeoTest to review pertinent elements of the design teams plans and specifications. Contractors can also misinterpret a geotechnical engineering report. Reduce that risk by having GeoTest participate in pre-bid and preconstruction conferences, and by providing construction observation.

## **Do not Redraw the Exploration Logs**

Our geotechnical engineers and geologists prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors of omissions, the logs included in this report should never be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable; but recognizes that separating logs from the report can elevate risk.

## **Give Contractors a Complete Report and Guidance**

Some owners and design professionals mistakenly believe they can make contractors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give contractors the complete geotechnical engineering report, but preface it with a clearly written letter of transmittal. In that letter, consider advising the contractors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with GeoTest and/or to conduct additional study to obtain the specific types of information they need or prefer. A pre-bid conference can also be valuable. Be sure contractors have sufficient time to perform additional study. Only then might you be in a position to give contractors the best information available, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.



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In addition, it is recommended that a contingency for unanticipated conditions be included in your project budget and schedule.

### **Read Responsibility Provisions Closely**

Some clients, design professionals, and contractors do not recognize that geotechnical engineering or geology is far less exact than other engineering disciplines. This lack of understanding can create unrealistic expectations that can lead to disappointments, claims, and disputes. To help reduce risk, GeoTest includes an explanatory limitations section in our reports. Read these provisions closely. Ask questions and we encourage our clients or their representative to contact our office if you are unclear as to how these provisions apply to your project.

### **Environmental Concerns Are Not Covered in this Geotechnical or Geologic Report**

The equipment, techniques, and personnel used to perform an environmental study differ significantly from those used to perform a geotechnical or geologic study. For that reason, a geotechnical engineering or geologic report does not usually relate any environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated containments, etc. If you have not yet obtained your own environmental information, ask your geotechnical consultant for risk management guidance. Do not rely on environmental report prepared for some one else.

### **Obtain Professional Assistance to Deal with Biological Pollutants**

Diverse strategies can be applied during building design, construction, operation, and maintenance to prevent significant amounts biological pollutants from growing on indoor surfaces. Biological pollutants includes but is not limited to molds, fungi, spores, bacteria and viruses. To be effective, all such strategies should be devised for the express purpose of prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional biological pollutant prevention consultant. Because just a small amount of water or moisture can lead to the development of severe biological infestations, a number of prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may have been addressed as part of this study, the geotechnical engineer or geologist in charge of this project is not a biological pollutant prevention consultant; none of the services performed in connection with this geotechnical engineering or geological study were designed or conducted for the purpose of preventing biological infestations.



**REVISION #2  
SUBDIVISION GUARANTEE**

**SCHEDULE A**

Liability: \$ 2,000.00

Policy No.: 5003353-0002662e

Dated: February 14, 2020 at 8:00 A.M.

Order No.: 02-175279-F

Fee: \$ 0.00

Tax: \$ 0.00

Name of Assured:

ANACOPPER LLC

The assurances referred to on the face page are:

That, according to those public records which, under the recording laws, impart constructive notice of matters relative to the following described real property:

(See Schedule "A-1," attached.)

Title to said real property is vested in:

ANACOPPER LLC, a Washington limited liability company

subject to the matters shown below under Exceptions, which Exceptions are not necessarily shown in the order of their priority.

**EXCEPTIONS:**

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records.
2. Unpatented mining claims; reservations or exceptions in the United States Patents or in Acts authorizing the issuance thereof; water rights, claims or title to water.
3. Title to any property beyond the lines of the real property expressly described herein, or title to streets, roads, avenues, lanes, ways or waterways on which such real property abuts, or the right to maintain therein vaults, tunnels, ramps, or any other structure or improvement; or any rights or easements therein unless such property, rights or easements are expressly and specifically set forth in said description.
4. General taxes for the year 2020 in an amount not yet available from the Skagit County Treasurer.

General taxes, together with interest, penalty and statutory foreclosure costs, if any, first half delinquent May 1, 2020, if unpaid, second half delinquent November 1, 2020, if unpaid:

| <u>Account No.</u>        | <u>Year</u> | <u>Amount Billed</u> | <u>Amount Paid</u> | <u>Balance Owing</u> |
|---------------------------|-------------|----------------------|--------------------|----------------------|
| 350123-3-002-0201         | 2020        | \$6,192.44           | \$ 0.00            | \$6,192.44           |
| Property I.D. No.: P31752 |             |                      |                    |                      |

**DECLARATION  
OF  
COVENANTS, CONDITIONS, RESTRICTIONS,  
EASEMENTS AND RESERVATIONS FOR**

City of Anacortes  
Received by PCED  
Date: February 21, 2020

**“THE CROSSINGS”**

Declarations of Covenants, Conditions, Restrictions, Easements and Restrictions herein **“Declaration”** made by **Anacopper LLC**, a Washington State Limited Liability Company **“Declarant”** as of the \_\_\_\_<sup>th</sup> day of, 2020.

**RECITALS**

- A. Declarant is the owner of certain real property the **“Property”** in Anacortes, Skagit County, Washington, legally described on **“Exhibit A”** hereto.
- B. The Property is subdivided as shown on the Final Plat Map of **“The Crossings”** recorded under Auditors File No. \_\_\_\_\_, in records of Skagit County, Washington.
- C. Declarant wishes to subject the Properties in **“The Crossings”** Lots **1 through 18** to this Declaration.

**DECLARATION**

NOW, THEREFORE, Declarant hereby declares that the Property, subject to all restrictions and easements of the Plat, shall be held, transferred, sold, conveyed, leased, used and occupied subject to the covenants, conditions, restrictions, easements, and reservations, assessments and liens hereinafter set forth which are for the purpose of protecting the value and desirability of the Property and which shall be binding on all parties having any right, title or interest in the Property or any portion thereof and their respective heirs, successors and assigns, and shall inure to the benefit of each owner thereof.

**ARTICLE I  
DEFINITIONS**

1.1 **Words Defined.** For the purpose of this Declaration and any amendments hereto, the following terms shall have the following meanings and all definitions shall be applicable to the singular and plural forms of such terms:

- 1.1.1 **“Association”** shall mean **The Crossings Owners Association** described in Article 4 of this Declaration, and its successors and assigns.
- 1.1.2 **“Board”** shall mean the Board of Directors of the Owners Association.
- 1.1.3 **“Common Open Space Area”**, **“Common Private Space Area”** and **“Common Area Improvements”** shall each have the meaning set forth in Section 2.1
- 1.1.4 **“Construction”** and **“Constructed”** shall mean any construction, reconstruction, erection or alteration of an improvement, except wholly interior alterations to a then existing structure.
- 1.1.5 **“Declarant”** shall mean **Anacopper LLC**, a Washington State Limited Liability Company.

- 1.1.6 **“Declaration”** shall mean this Declaration of Covenants, Conditions, Restrictions, Easements and Reservations for **“The Crossings”**, as it may from time to time be amended.
- 1.1.7 **“First Mortgage”** and **“First Mortgagee”** shall mean, respectively, (a) a recorded Mortgage on a Lot that has legal priority over all other Mortgages thereon, and (b) the holder of a first mortgage. For purposes of determining the percentage of First Mortgagees approving a proposed decision or course of action in cases where a Mortgagee holds First Mortgages on more than one Lot, such Mortgagee shall be deemed a separate Mortgagee for each such First Mortgage so held.
- 1.1.8 **“Lot”** shall mean any one of the eighteen (18) numbered lots 1 thorough 18, together with the structures and Improvements thereon, as designated in the plat of **“The Crossings”**. Lots 19, 20 and 21 recorded on this plat are exempt from this document and will be self-governing.
- 1.1.9 **“Mortgage”** shall mean a recorded mortgage or deed of trust that creates a lien against a Lot and shall also mean a real estate contract for the sale of a lot.
- 1.1.10 **“Mortgagee”** shall mean the beneficial owner, or the designee of the beneficial owner, of an encumbrance on a Lot created by a mortgage or deed of trust and shall also mean the vendor, or the designee vendor, of a real estate contract for the sale of a Lot.
- 1.1.11 **“Owner”** shall mean the record owner, whether one or more persons, of the fee simple title to a Lot within the Property, including a contract seller, except those having such interest merely for the performance of an obligation.
- 1.1.12 **“Person”** shall mean an individual, corporation, partnership, association trustee or other legal entity.
- 1.1.13 **“Plat”** shall mean the recorded plat for **“The Crossings”** and any amendments, corrections or addenda thereto subsequently recorded.
- 1.1.14 **“Property”** shall mean the land described on Exhibit A and such additions thereto as may hereafter be subjected to the terms of the Declaration, and all improvements and structures now or hereafter placed on the Property.
- 1.1.15 **“Structure”** shall mean any building, fence, wall, patio or the like.
- 1.1.16 **“Transition Date”** is defined in Section 4.10.

1.2 **Form of Words.** The singular form of words shall include the plural and the plural shall include the singular. Masculine, feminine and neuter pronouns shall be used interchangeably.

## **ARTICLE 2 COMMON AREAS AND EASEMENTS**

2.1 **Common Open Space Areas.** “Common Areas” shall include the open space easements (including Tract “A Wetland and Buffer) (Tract “B Detention Pond and Swale), (Tract C Private Streets) and (Tract D Common Open Space”) as shown on the face of the Plat “The Crossings”.

2.2 **Common Private Space Areas.** “Private Common Areas” shall include the private space located on individual lots 1 through 18.

2.3 **Association to Maintain Common Open Space Areas.** The Owners Association shall maintain the “Common Areas”, located in Tract A, Tract B, Tract C and Tract D in a professional manner to include but not limited to the private streets, signage, entrance landscape, landscape planting strip at street and sidewalk, mailbox stands, landscape lighting, irrigation, paths, fences, critical area wetland and buffers, detention pond and swales, all shared common open space areas, as shown on the face of the plat



“The Crossings” and Landscape plan herein as Exhibit B and shown on the recorded final plat of “The Crossings”.

2.3.1 If the Owners Association fails to maintain any portion of the “Common Areas”, the City of Anacortes shall have the right to enforce these covenants that pertain to the obligation of the Association to maintain Common Areas.

2.3.2 Maintenance of the Critical Area Wetlands and Buffer “Tract A” as shown on the recorded plat of “The Crossings” shall be maintained as outlined in the ATSI-Critical Areas Report Dated February ,2020 – Exhibit C; Urban Forestry -Tree Preservation Plan Dated January 27<sup>th</sup>, 2002 -Exhibit D; the AMC 17.10 Critical Areas and articles herein.

2.3.3 No tree trimming or foliage removal within the Wetland and Buffer area without prior written approval of the City of Anacortes.

2.3.4 The use of pesticides, herbicides or non-organic fertilizers are strictly prohibited within 150 feet of the Wetlands, Buffer, Detention Pond, Swale and Common Open Spaces of (Tract A, Tract B and Tract D).

2.3.5 Hand removal of all invasive plants is required-Himalayan Blackberry and similar.

2.3.6 Split Rail Fencing and signage along the buffer shall not be removed or destroyed. Damaged fencing to be repaired in a timely manner.

2.3.7 Dumping of landscaping or any other debris in the Wetland, Buffer, Detention Pond, Swale and surrounding area is strictly prohibited.

2.3.8 Any disturbance to the Critical Areas Wetlands and Buffers that is inconsistent with the Critical Areas Report dated February, 2020 ATSI; Tree Preservation Plan Dated January 27<sup>th</sup>, 2020, Urban Forestry Services and AMC 17.70 Critical Areas shall be subject to the restoration of damaged property and penalties.

2.4 **Use of Common Open Space Areas.** The “Common Areas” are reserved for the exclusive use and enjoyment of the Owners of Lots 1 through 18 their guests and tenants. No noxious or offensive activity shall be carried on in any “Common Area” or “Common Structure”.

2.5 **Common Private Space Areas.** Owners to maintain the private open space designated to individual lots numbered 1 through 18 and defined in 3.4 herein.

2.6 **Alteration of Common Areas.** There shall be no alteration, construction or removal upon the “Common Areas” except upon written consent of the Board and pursuant to procedures required herein or by Anacortes codes and law. In no event will the Board authorize or make any change to the use of Common Areas other than authorized landscape maintenance and the designated use of.

2.7 **Easements for Utilities and Drainage.** Declarant does hereby establish, create and reserve for the benefit of itself, the Owners Association and all Owners, their respective heirs and assigns, and any applicable entity providing utilities to the Property and Lots, and easement the (“**Utilities and Drainage Easement**”) for the installation and maintenance of television, internet cable systems, security and similar systems, but not limited to storm sewers and drainage system, electric, gas, telephone, water and sewer lines. The Utilities and Drainage Easement is shown on the face of the plat and in the event of any discrepancy in the Utilities and Drainage Easement between the Plat and this Declaration, the Plat shall control. The beneficiaries of the Utilities and Drainage Easement have the right to access the utilities and/or drainage facilities contained therein on any Lot as may be necessary and appropriate for construction, maintenance and repair thereof. Each person accessing utilities or drainage located in the Utilities and Drainage Easement areas, whether located on another’s Lot or otherwise, shall promptly restore such areas to a condition as close to its original condition as reasonably practical after making such use. Each lot owner shall maintain the areas of his or her Lot subject to the Utilities and Drainage Easement in a condition which will not interfere with the operations and maintenance of said utilities and systems. No lot Owner shall be allowed or permit any structure or landscape to be located, install or grow upon the area subject to

the Utilities and Drainage and Easement which might in any way damage or interfere with the installation and operation of such utilities and systems.

### **ARTICLE 3 CONSTRUCTION ON LOTS AND USE OF LOTS**

**3.1 Uniformity of Use and Appearance.** One of the purposes of this Declaration is to assure, with respect to each lot, a uniformity of use and quality of workmanship, materials, design, maintenance and location of structures with respect topography and finish grade elevation. It is in the best interest of each Owner that such uniformity of use be maintained as hereinafter provided. No building shall be erected, altered, placed or permitted to remain on any Lot other than one single-family dwelling. Accessory structures, including any storage buildings are not permitted.

**3.2 Maximum Size.** Per Anacortes Code 19.43.010 (D) Cottage Housing; The single-family dwelling shall be no greater than 1200 sq. ft, one car garage and a covered porch of at least at least 70 sq. ft in in size with a dimension of seven feet on any side AMC 19.43.010 (D)(3)(K)(V).

**3.3 Maximum Height.** Per AMC 19.43.010(E) The single-family home building height can be no greater than 25 feet, all parts of the roof above 18 feet must be pitched with a minimum roof slope of 6:12.

**3.4 Setbacks.** No Structure shall be located closer to a Lot line than permitted by City of Anacortes Zoning and Code 19.43.010 (D) for Cottage Homes. All Structures shall comply with all applicable governmental laws, codes, ordinances and regulations pertaining to setbacks.

#### **3.5 Architectural Review Process.**

**3.5.1 Exterior Architecture Design Guidelines.** Design shall be generally consistent with the theme of the Community established by the Declarant.

(a) No alteration may be made to a Structure that will change the style or size of a Structure.

(b) Prior to painting any portion of the exterior of the Structure, Owners shall obtain written approval from the Board of the Owners Association of the proposed color palette. Exterior colors on Structures or Improvements are required to be consistent and harmonize with homes within the community.

(c) Submit all product information, documentation and color board for the proposed changes to exterior appearance of the Structure not less than forty-five (45) days before the such construction, alteration or improvement is desired commence. The Board will approve or disapprove a submittal not less than thirty (30) days prior to the date exterior work is to begin.

(d) At a future date and at the Boards discretion the Board may implement an Application Fee.

**3.5.2 No Liability for Architecture Design Review.** Neither the Declarant nor the Association nor any permitted designee shall be liable to any party for any good faith action or failure to act under the provisions of this Declaration.

#### **3.6 Use Restrictions**

**3.6.1 Residential Use.** The dwellings within the structures are intended for and restricted to use as a single-family residence only, on an ownership, rental or lease basis and for social or other reasonable

activities normally incidental to such use. Declarant and any participating builder may use dwellings it owns as a sales office and model homes for sale of other Lots.

**3.6.2 Lease Restrictions.** With the exception of an institutional lender in possession of a Structure following a default under a first mortgage, a foreclosure proceeding or any deed or other arrangement in lieu of foreclosure, no Lot Owner shall be permitted to lease all of any portion of a Structure for periods of less than six (6) months. Short term rentals or Vacation Rentals whether, daily, weekly or monthly are not allowed. Any lease agreement shall be required and deemed to provide that the terms of the lease shall be subject in all respects to the provisions of the Governing Documents, and that any failure by the Lessee to comply with such provision shall be a default under the lease, entitling the Owners Association to enforce such provisions as a real party in interest. All leases shall be in writing and include a copy of "The Crossings Covenants, Conditions, Restrictions, Easements and Reservations". A lease, as defined herein, shall include month-to-month rentals. Any tenant or subtenant of any portion of a Structure shall be deemed to have assumed all the responsibilities of an Owner under this section of the Declaration.

**3.6.3 Maintenance of Private Structures, Private Open Space and Lots.** Each Owner shall at the Owner's sole expense, keep the interior and exterior of the structure in a clean and sanitary condition free from rodents and pests, and at any time necessary to maintain the good appearance and condition of the Structure to include but not limited to painting, structure repairs, fence and private landscape.

**3.6.4 Parking.** To ensure safe passage of vehicles at all times and under all conditions, no street parking allowed, no permanent or removable basketball poles, and/or backboards, soccer goals or other sports devices shall be permitted on the private drive or upon the parking areas and private streets of the plat "The Crossings".

(a) Owners and residents are required to park one vehicle in the attached garage of the Structure. The driveway apron can be used for additional parking for operable vehicles only.

(b) Owners and residents may only park 2 vehicles onsite, additional vehicles are required to be stored offsite.

(c) Owners and residents are not allowed to use guest parking for additional vehicle storage.

(d) Street parking is not allowed at any time, owners and guest are to use the designated parking space assigned to the lot or allocated guest parking.

(e) No travel trailers, campers, motor homes, boat, boat trailers, utility trailers or any other similar type of recreational vehicle of any nature may be parked or stored on the private drive apron, designated parking spaces or streets within the plat "The Crossings".

(f) No inoperative vehicle including but not limited to trucks, cars, campers, trailers, boats, motorcycles or other recreational equipment or machinery of any part thereof shall be parked or permitted to remain on any street, common area, private parking area within the plat "The Crossings".

(g) The board may require removal of any inoperative or improperly licensed vehicle, or any unsightly vehicle and other equipment or item improperly stored in the parking spaces. If the same is not removed within 24 hours of the Board's giving notice to the owner of the vehicle or property, the Board may cause removal at the risk and expense of the owner thereof.

(h) Garages are to be kept so that they will accommodate 1 operable vehicle. Garages are for parking of vehicles only, not to be used as storage or converted to additional living space or for any other purpose than parking.

(i) The Private Streets and Easements shown on the Final Plat Map of record are for the benefit of Lots 1 through 18 and shall be maintained by the owners of the benefited Lots. Maintenance and repairs of the Private Streets and Parking Areas within the plat "The Crossings" will be shared equally by all Property Owners Lots 1 through 18. Driveway construction costs and maintenance are the sole responsibility of the individual Lot owner that benefits from the driveway.



3.6.5 **Signs.** No sign of any kind shall be displayed to the public view on or from any Lot, Common Open Space Area, except “For Rent” or “For Sale” signs. Signs for political cause and/or campaigns are not allowed. This section shall not apply to the Declarant or any Participating Builder.

3.6.6 **Animals.** No animals, including but not necessarily limited to horse, livestock, poultry, reptiles or pigs, shall be kept on any lot. Household pets (dogs or cats) shall not exceed three (3) in number, provided that unweaned puppies or kittens may be kept. At all times animal enclosures must be kept in a clean, neat and odor free condition. Owner must remove animal waste immediately from Common Open Space Areas. At all times pets are to be either carried, leashed or kept on the owners Lot by approved fence or invisible electronic fence, under no circumstances shall pets be allowed to run free. The Board may at any time require the removal of any pet which it finds is unreasonably disturbing other Owners or tenants, and at the Boards discretion, it may exercise this power as to specific pets even though other pets are permitted to remain. Notwithstanding anything set forth herein, all Owners shall comply with all governmental laws, codes, ordinances and regulations pertaining to animals.

3.6.7 **Temporary Structures.** No Structure of temporary character, trailer, tent, shack, garage, barn or other outbuilding shall be installed, placed or used on any Lot, either temporarily or permanently, except otherwise may be allowed by the provisions of this Declaration. Jobsite trailers and the like may be kept on site during the development and construction period of this plat “The Crossings”, as long as the appearance is kept clean and free of litter.

3.6.8 **Clothes Lines.** No washing, rugs, clothing apparel or any other article shall be hung from the exterior of any structure of a Lot so as to be visible from neighboring homes, streets or Common Open Space.

3.6.9 **Radio and Television Aerials.** No television, radio, amateur radio, single side band or other aerial antenna or tower, or other electronic receiving device shall be placed or erected outside of any building on any Lot, except small digital dishes. Equipment must be professionally installed; exterior lines and pipes shall be painted to blend with the surface to which it is attached, and the location and method of attachment must be approved by the Board.

3.6.10 **Solar Panels.** Solar panels may be allowed at the sole discretion of the Board, solar panel systems are to be integrated into the home design and when possible placed in a location that is the least visible from neighboring properties to prevent glare into other homes. Equipment, exterior lines and pipes shall be painted to blend with the surrounding areas as much as possible.

3.6.11 **Trash Containers and Debris.** All trash shall be placed in sanitary containers, screened so as not to be visible from adjoining Structures, streets and common areas. No Lot or any portion thereof shall be used as a dumping ground or for burial of trash or rubbish of any kind. Yard rakings, dirt and debris resulting from landscape work or construction shall not be dumped onto common areas, critical wetland, buffer or detention pond and swales.

3.6.12 **Offensive Activity.** No commercial or manufacturing enterprise, business or commercial activity of any kind, and no child care, day schools, nurseries or church schools, shall be conducted or permitted on any Lot, nor shall goods, equipment, vehicles or materials used in connection therewith be received, sold, distributed, kept, parked, stored, dismantled or repaired on or within any Lot or on any street adjacent to the Property. A “home occupation” or “home office” for a trade, craft, business or profession shall be permitted as provided by the law and regulations of the City of Anacortes provided, however, that all of the following conditions and restrictions are met at all times: (1) such “home occupation” and or “home office” within a Dwelling or other Structure on a Lot shall be contained entirely within such Dwelling or Structure; (2) there shall be no signage or other exterior indication that any such “home

occupation” is contained therein; (3) the only occupants and or users of such “home occupation” or “home office” shall be the owner of such Lot; and (4) such “home occupation” or “home office” shall not be used or permitted at any time to receive or accommodate customers, clients or other invitees within such Dwelling or other Structure. The foregoing shall not prevent in-house quarters for members of the Owner’s extended family or for domestic help or in-house care givers. No noxious or offensive activity, including but not limited to the creation of excess levels of noise, shall be carried on in any Lot, nor shall anything be done therein which may be or become an annoyance or nuisance to the Owners of other Lots or their tenants.

**3.6.13 Fences.** No fence may be constructed without the advance written permission of the Board. All fences shall be constructed in good and workman-like manner and shall adhere to the fence guidelines as established by the Declarant. All fences shall also comply with all applicable governmental laws, codes, ordinances and regulations.

**3.6.14 Roofs.** The roof of any building on any Lot shall be constructed of **INSERT PRODUCT** or equivalent composition roofing with metal roof accent. The color and roofing materials are as established by the Declarant. Written approval from the board is required to prior to the replacement of materials.

**3.6.15 Driveways.** All driveways shall be paved with **INSERT PRODUCT** from the edge of paved street to connect with the surface of the garage floor.

**3.6.16 Mailboxes.** The Declarant will install the initial mailbox stand. If they require repairs or replacement, the expense and responsibility to replace is that of the Owners Association and shared equally by the Owners of Lots 1 through 18.

**3.6.17 Landscape.** Landscape maintenance and improvements within the Private Common Area of the property is the sole responsibility of the individual lot owner.

**3.6.18 Compliance with Laws.** Notwithstanding anything to the contrary set forth herein, each Owner and the Association shall comply with the more restrictive of either:

- (a) the terms and conditions of this Declaration, or
- (b) the laws, codes, ordinances and regulations of any governmental entity having jurisdiction.

**3.6.19 Division of Lots.** Lots 19, 20 and 21 properties located within the recorded plat of “The Crossings” will be exempt from the dues, assessments, rules and regulations defined herein.

## **ARTICLE 4**

### **THE CROSSINGS OWNERS ASSOCIATION**

**4.1 Form of Association.** The Owners of Lots within the Property shall constitute the members of “The Crossings Owners’ Association”. The rights and duties of the members and of the Association shall continue to be governed by the provisions of this Declaration.

**4.2 Board of Directors.** The affairs of the Association shall be governed by a Board of Directors (the “Board”) which shall be composed of not less than three (3) nor more than five (5) members, to be determined at the reasonable discretion of the initial Board and, thereafter, at the first and each succeeding annual meeting by the vote of the Association. The initial Board shall be Nels Strandberg, Colleen Craig, and Debbie Headrick. Subject to any specific requirements hereof, the Board shall have authority to establish operating rules and procedures. In the event of death or resignation of any member or members of the Board, the remaining member or members, if any, shall have full authority to appoint a successor

member or members. Members of the Board shall not be entitled to any compensation for services performed pursuant to this Declaration. Upon the Transition Date and without further action by any person or persons:

- (a) the term of the initial Board members or their successors shall end, and
- (b) the initial Board members and their then successors shall be released from any and all liability whatsoever for claims arising out of or in connection with this Declaration or Plat arising up to and including the Transition Date.

**4.3 Qualification for Membership.** Each fee owner of a Lot (including Declarants) shall be a member of the Association and shall be entitled to one membership and one vote for each Lot owned; provided that if a Lot has been sold on contract, the contract purchaser shall exercise the rights of an Owner for the purposes of the Association and this Declaration, except as hereinafter limited, and shall be the voting representative of such Lot unless otherwise specified. Ownership of a Lot shall be the sole qualification for membership in the Association.

**4.4 Transfer of Membership.** The Association membership of each Owner (including Declarants) shall be appurtenant to the Lot giving rise to such membership, and shall not be assigned, transferred, pledged, hypothecated, conveyed or alienated in any way except upon the transfer of title to the Lot and then only to the transferee of title to the Lot. Any attempt to make a prohibited transfer shall be void. Any transfer of title to a Lot shall operate automatically to transfer the membership in the Association to the new Owner.

**4.5 Number of Votes.** The total voting power of the Association at any given time shall equal the number of Lots included within the Final Plat of "The Crossings", excluding Lots 19, 20 and 21. The Owner or Owners of each Lot 1 through 18 within such Final Plat shall be entitled to one vote. If a Person (including Declarants) owns more than one Lot, he or she shall have the votes appurtenant to each Lot owned.

**4.6 Voting.** If a Lot is owned by husband and wife and only one of them is at a meeting, the one who is present will represent the marital community. The vote for a Lot must be cast as a single vote, and fractional votes shall not be allowed. If joint Owners are unable to agree among themselves how their vote shall be cast, they shall lose their right to vote on the matter in question.

**4.7 Pledged Votes and Proxy to Vote.** An Owner may by notarized written statement give his, her or their proxy to another Owner or to their attorney, CPA or member of the Owner's family with the power and authority to vote for the maker(s) of the proxy, on any one or more specific issues or on all issues coming before the Association for vote on a specific date or dates, and to act in the name, place and stead of the maker(s) of the proxy as if such vote(s) had been made by the maker(s) of the proxy directly. An Owner may, but shall not be obligated to, pledge his vote on all issues or on certain specific issues to a Mortgagee; provided, however, that if an Owner is in default under a Mortgage on his Lot for ninety (90) consecutive days or more, the Owner's Mortgagee shall automatically be authorized to declare at any time thereafter that the Lot Owner has pledged his vote to the Mortgagee on all issues arising after such declaration and during the continuance of the default. If the Board has been notified of any such pledge to a Mortgagee, only the vote of the Mortgagee will be recognized on the issues that are subject to the pledge

**4.8 Annual and Special Meetings.** Within the period commencing thirty (30) days before the Transition Date and ending thirty (30) days after the Transition Date, there shall be a meeting of the members of the Association and thereafter there shall be an annual meeting of the members of the Association in the first quarter of each fiscal year at such reasonable place and time as may be designated by written notice from the Board delivered to the Owners no less than thirty (30) days before the meeting. At the first such meeting, and at each annual meeting thereafter, the Owners shall elect by majority vote



individuals to serve as Board members until a successor is elected at the next annual meeting. Each Lot shall be entitled to one vote for each director and the voting for directors shall be non-cumulative. The financial statement for the preceding fiscal year and the budget the Board has adopted for the pending fiscal year shall be presented at the annual meeting for the information of the members. Special meetings of the members of the Association may be called at any time upon not less than fourteen (14) days prior written notice to all Owners, for the purpose of considering matters which require the approval of all or some of the Owners, or for any other reasonable purpose. Any First Mortgagee of a Lot may attend or designate a representative to attend the meetings of the Association.

**4.9 Books and Records.** The Board shall cause to be kept complete, detailed and accurate books and records of the receipts and expenditures of the Association, in a form that complies with generally accepted accounting principles. The books and records, authorizations for payment of expenditures, and all contracts, documents, papers and other records of the Association shall be available for examination by the Lot Owners, Mortgagees and the agents or attorneys of either of them, during normal business hours and at any other reasonable time or times.

**4.10 Transition Date.** The "Transition Date" shall be the date control of the Board passes from the initial Board to the Association. The Transition Date will be either;

- (a) the date designated by Declarants in a written notice to the Owners, which date may be made by Declarants' election any date after this Declaration has been recorded or
- (b) the later of:
  - (i) three (3) years after the recording of this Declaration or
  - (ii) the 120<sup>th</sup> day after Declarants have transferred title to the purchasers of Lots representing 70% of the total voting power of all Lot Owners in the Association.

For purposes of the foregoing clause (b), however, transfer of title to a Lot by Declarants to any approved builder who is constructing for resale of the Lot shall be disregarded and title to any Lot owned by any such approved builder shall not be deemed transferred for the purposes of determining the Transition Date until the Lot is further transferred by the approved builder to a purchaser who is not either an approved builder or Declarants. From and after the Transition Date, the then Owners of 70% of the Lots in the Property shall have the power through a written instrument recorded in the real property records of Skagit County, Washington to amend or eliminate all or any of the approval powers and duties of the Board set forth in this Declaration, excluding the duty to maintain the Common Areas.

## **ARTICLE 5 NOTICES FOR ALL PURPOSES**

**5.1 Notices.** All notices given under the provisions of this Declaration or rules or regulations of the Association shall be in writing and may be delivered either personally or by mail. If delivery is made by mail, the notice shall be deemed to have been delivered on the third day of regular mail delivery after a copy has been deposited in the United States mail, first class, postage prepaid, addressed to the Person entitled to such notice at the most recent address known to the Board. Mailing addresses may be changed by notice in writing to the Board. Notices to the Board may be given to any Board member or mailed to the residence address of the president or secretary of the Board.

## **ARTICLE 6 AUTHORITY OF THE BOARD**

**6.1 Adoption of Rules and Regulations.** The Board is empowered to adopt, amend and revoke on behalf of the Association detailed administrative rules and regulations necessary or convenient from time to time to insure compliance with the general guidelines, and specific provisions of this Declaration, to promote the comfortable use and enjoyment of the Property, and to govern the operation and procedures

of the Association. The rules and regulations may, without limitation, authorize voting by proxy or mail, or both, on Association matters. The rules and regulations of the Association shall be binding upon all Owners and occupants of a Lot and all other Persons claiming any interest in the Property.

**6.2 Enforcement of Declaration, Etc.** The Board shall have the power to enforce the provisions of this Declaration, and the rules and regulations of the Association for the benefit of the Association. The failure of any Owner to comply with the provisions of this Declaration, or the rules and regulations of the Association will give rise to a cause of action in the Association (acting through the Board) and any aggrieved Lot owner for recovery of damages, or injunctive relief, or both. If a legal action is brought to interpret or enforce compliance with the provisions of this Declaration, or the rules or regulations of the Association, the prevailing party shall be entitled to judgment against the other party for its reasonable expenses, court costs and attorney's fees in the amount awarded by the court.

**6.3 Goods and Services.** The Board shall acquire and pay for as common expenses of the Association all goods and services reasonably necessary or convenient for the efficient and orderly maintenance of all portions of the Common Areas not maintained by public utility companies or a governmental entity. The goods and services shall include (by way of illustration and not limitation) policies of insurance; and maintenance, repair, landscaping, gardening and general upkeep of the Common Areas. The Board may hire such employees as it considers necessary for the foregoing purposes only.

**6.4 Protection of Common Area.** The Board may spend such funds and take such action as it may from time to time deem necessary to preserve the Common Areas, settle claims or otherwise act in what it considers to be the best interests of the Association.

## **ARTICLE 7**

### **BUDGET AND ASSESSMENT FOR COMMON EXPENSES**

**7.1 Fiscal Year; Preparation of Budget.** The Board may adopt such fiscal year for the Association as it deems convenient. Unless another year is adopted, the fiscal year will be the calendar year. As soon as the Board in its discretion deems advisable and prior to the expiration of each fiscal year thereafter, the Board shall establish a budget for the costs of maintaining the Common Area during the ensuing fiscal year. The Board shall then assess each Lot within the Property with its pro rata share, based upon the number of Lots then within the Property, of such estimated annual costs of maintaining the Common Area Tracts A, B, C and D. The Board, at its election, may require the Lot Owners to pay the amount assessed in equal monthly or quarterly installments or if less than \$300 annually for each Lot, in one lump sum. The Board shall notify each Lot Owner in writing at least ten (10) days in advance of each assessment period of the amount of the assessment for said period, which notice shall be accompanied by a copy of the budget upon which the assessment is based. The assessments levied by the Board shall be used exclusively for the improvement and maintenance of the Common Areas, and to pay, defray and reimburse expenses or liabilities of the Board and or Association and for the indemnification of the Board all as authorized by this Declaration.

**7.2 Certificate of Unpaid Assessments.** Any failure by the Board or the Association to make the budget and assessments hereunder before the expiration of any fiscal year for the ensuing fiscal year shall not be deemed a waiver or modification in any respect of the provisions of this Declaration, or a release of the Owners from the obligation to pay assessments during that or any subsequent year, and the assessment amount and payment method established for the preceding fiscal year (if any) shall continue until a new assessment is established. Upon the request of any Owner or Mortgagee or prospective Owner or prospective Mortgagee of a Lot, the Board will furnish a statement of the amount, if any, of unpaid assessments charged to the Lot. The statement shall be conclusive upon the Board and the Association as to the amount of such indebtedness on the date of the statement in favor of all purchasers and Mortgagees

of the Lot who rely on the statement in good faith. All assessments and other receipts received by the Association shall belong to the Association.

**7.3 Date of Commencement of Annual Assessments.** The annual assessments provided for herein shall commence as to all Lots at such time as the Board in its absolute discretion deems advisable. The first annual assessment shall be adjusted according to the number of months remaining in the fiscal year.

## **ARTICLE 8**

### **LIEN AND COLLECTION OF ASSESSMENTS**

**8.1 Assessments Are a Lien; Priority.** All unpaid sums assessed by the Association for the share of the common expenses chargeable to any Lot and any sums specially assessed to any Lot under the authority of this Declaration shall constitute a lien on the Lot and all its appurtenances from the date the assessment becomes due and until fully paid. The lien for such unpaid assessments shall be subordinate to tax liens on the Lot in favor of any assessing unit and/or special district, and to all sums unpaid on all First Mortgages of record but, to the extent permitted by applicable law, shall have priority over all other liens against the Lot. A First Mortgagee that obtains possession through a Mortgage foreclosure or deed of trust sale, or by taking a deed in lieu of foreclosure or sale, or a purchaser at foreclosure sale, shall take the Lot free of any claims for the share of common expenses or assessments by the Association chargeable to the Lot which became due before such possession, but will be liable for the common expenses and assessments that accrue after the taking of possession. The Lot's past due share of common expenses or assessments shall become new common expenses chargeable to all of the Lot Owners, including the Mortgagee or foreclosure sale purchaser and their successors and assigns, in proportion to the number of Lots owned by each of them. Notwithstanding any of the foregoing, however, the Owner and the real estate contract purchaser shall continue to be personally liable for past due assessments as provided in Section 8.3. For purposes of this Section, "Mortgage" does not include a real estate contract and "Mortgagee" does not include the vendor or the assignee or designee of a vendor of a real estate contract.

**8.2 Lien May Be Foreclosed.** The Lien for delinquent assessments may be foreclosed by suit by the Board, acting on behalf of the Association, in like manner as the foreclosure of a mortgage of real property. The Board, acting on behalf of the Association, shall have the power to bid on the Lot at the foreclosure sale, and to acquire and hold, lease, Mortgage and convey the same.

**8.3 Assessments Are Personal Obligations.** In addition to constituting a lien on the Lot, all sums assessed by the Association chargeable to any Lot, together with interest, late charges, costs and attorney's fees in the event of delinquency, shall be the joint and several personal obligations of the Owner and any contract purchaser, and their grantees, of the Lot when the assessment is made. Suit to recover personal judgment for any delinquent assessments shall be maintainable without foreclosing or waiving the liens securing them.

**8.4 Late Charges and Interest on Delinquent Assessments.** The Board may from time to time establish late charges and a rate of interest to be charged on assessments delinquent for a period of more than ten (10) days after the date when due. In the absence of another established, non-usurious rate, delinquent assessments shall bear interest at the lesser of 12% per annum or the maximum periodic interest rate permitted by law. If an installment on an assessment against a Lot is not paid when due, the Board may elect to declare the entire assessments against the Lot for the remainder of the fiscal year to be immediately due and payable.

**8.5 Recovery of Attorney's Fees and Costs.** In any action to collect delinquent assessments, the prevailing party shall be entitled to recover as a part of its judgment a reasonable sum for attorney's fees



and all costs and expenses reasonably incurred in connection with the action, in addition to taxable costs permitted by law.

**8.6 Remedies Cumulative.** The remedies provided herein are cumulative and the Board may pursue them, and any other remedies which may be available under law although not expressed herein, either concurrently or in any order.

**8.7 No Avoidance of Assessments.** No Owner may avoid or escape liability for assessments provided for herein by abandoning his or her Lot.

## **ARTICLE 9 FAILURE OF BOARD TO INSIST ON STRICT PERFORMANCE NO WAIVER**

The failure of the Board in any instance to insist upon the strict compliance with this Declaration or rules and regulations of the Association, or to exercise any right contained in such documents, or to serve any notice or to institute any action, shall not be construed as a waiver or a relinquishment for the future of any term, covenant, condition, restriction or reservation. The receipt by the Board of payment of any assessment from an Owner, with knowledge of any breach by the Owner, shall not be a waiver of the breach. No waiver by the Board of any requirement shall be effective unless expressed in writing and signed by the Board.

## **ARTICLE 10 LIMITATION OF LIABILITY**

So long as a Board member, or Association member, or Declarants has acted in good faith, without willful or intentional misconduct, upon the basis of such information as is then possessed by such Person, then no such Person shall be personally liable to any Owner, or to any other Person, including the Association, for any damage, loss or prejudice suffered or claimed on account of any act, omission, error or negligence of such Person; provided that this Article shall not apply where the consequences of such act, omission, error or negligence are covered by any insurance actually obtained by the Board or the Association.

## **ARTICLE 11 INDEMNIFICATION**

Each Board member and Declarants shall be indemnified by the Association against all expenses and liabilities, including attorney's fees, reasonably incurred by or imposed in connection with any proceeding to which he/she may be a party, or in which she/he may become involved, by reason of holding or having held such position, or any settlement thereof, whether or not she/he holds such position at the time such expenses or liabilities are incurred, except to the extent such expenses and liability are covered by insurance and except in such cases wherein such Board member or Declarants is adjudged guilty of willful misfeasance in the performance of his or her duties; provided, that in the event of a settlement, the indemnification shall apply only when the Board approves such settlement and reimbursement as being for the best interests of the Association.

## **ARTICLE 12 INSURANCE**

At such times as the Board deems appropriate, the Board shall cause the Association to purchase and maintain as a common expense a policy or policies which the Board deems necessary or desirable to provide casualty insurance and or comprehensive liability insurance, with such deductible provisions as the Board deems advisable, and insurance, if available, for the protection of the Association's directors and representatives from personal liability in the management of the Association's affairs, and such other insurance as the Board deems advisable. The Board shall review the adequacy of the Association's insurance coverage at least annually.

## **ARTICLE 13 DAMAGE AND REPAIR OF DAMAGE TO PROPERTY**

In the event of any casualty, loss or other damage to the Common Area for which the then current assessments by the Association are insufficient to complete repairs or restoration, or for which there are not insurance proceeds or insufficient insurance proceeds available for such restoration or repair, the Board may make a special assessment against each Lot for its pro rata share of the cost and expenses to repair and/or restore the Common Areas. The special assessment shall be payable, at the determination of the Board, in either monthly or quarterly installments or if less than \$300, in a single lump-sum amount. The Board shall notify each Lot Owner of any such special assessment not less than twenty (20) days prior to the date such special assessment or the first installment thereon is due and payable, which notice shall be accompanied by a reasonably detailed statement of the Board's estimated costs and expenses of repairing and/or restoring Common Areas.

## **ARTICLE 14 AMENDMENTS OF DECLARATION**

Any Lot Owner may propose amendments to the Declaration to the Board. A majority of the members may cause a proposed amendment to be submitted to the members of the Association for their consideration and vote. If an amendment is proposed by Owners of 20% or more of the Lots, then, irrespective of whether the Board concurs in the proposed amendment, it shall be submitted to the members of the Association for their consideration and vote at the next regular or special meeting for which timely notice may be given. Notice of a meeting at which an amendment is to be considered shall include the text of the proposed amendment. Amendments may be adopted at a meeting of the Association or by written consent of the requisite number of Owners entitled to vote, after notice has been given to all Owners entitled to receive notice of a meeting of the Association. The unanimous consent of all Owners shall be required for adoption of any of the following:

- (a) an amendment changing the voting power or portion of assessments appurtenant to each Lot;
- (b) an amendment of this Article 14;
- (c) an amendment which imposes or places any lien, encumbrance, condition, limitation, covenant or restriction on any or all of the Lots without the written consent and agreement of a Lot Owner and Mortgagee of the Lot;
- (d) an amendment which has the effect of causing or would in any way cause any condition, covenant, limitation or restriction on a Lot contained in this Declaration or in the Final Plat to be more restrictive, limiting, expansive or burdensome, in any manner, than prior to the proposed amendment, without the written consent and agreement of a Lot Owner and Mortgagee of the Lot;
- (e) an amendment which would change, amend or add to, in any way, the conditions and or exceptions to title of any deed held by a Lot Owner or any Deed of Trust or Mortgage then of record, without the written consent and agreement of a Lot Owner and Mortgagee of the Lot.

All other amendments shall be adopted if approved by at least seventy percent (70%), rounded up to the next whole number, of the Lot Owners. Once an amendment has been adopted by the Association, the amendment will become effective when a certificate of the amendment, executed by a member of the Board, has been recorded in the real property records of Skagit County, Washington.

## **ARTICLE 15 ANNEXATION AND SUBDIVISION**

Residential property other than Common Areas may be annexed or added to the Property only with the unanimous consent of the Association. No Lot shall be subdivided or combined.

## **ARTICLE 16 DURATION**

The covenants, conditions, restrictions, easements and reservations of this Declaration shall run with and bind the Property and shall inure to the benefit of and be enforceable by the Owners, their respective legal representatives, heirs, successors and assigns, for a period of thirty (30) years from the date this Declaration is recorded, after which time the covenants, conditions, restrictions, easements and reservations shall be automatically extended for successive periods of ten (10) years each unless an instrument signed by seventy percent (75%) of the Lot Owners has been recorded agreeing to terminate the covenants, conditions, restrictions, easements and reservations.

## **ARTICLE 17 RESERVATION OF DECLARANTS'S RIGHT TO AMEND TO COMPLY WITH FNMA, FHLMC OR FHA REQUIREMENTS**

**Section 17.1 Amendment by Declarants.** Declarants reserve the right to amend the Declaration as may be necessary to comply with Federal Home Loan Mortgage Corporation (FHLMC) or Federal National Mortgage Association (FNMA) or Federal Housing Administration (FHA) regulations or requirements as necessary to enable the holders of first mortgages or deeds of trust to sell first mortgages or deeds of trust to FHLMC or FNMA or if such amendment is necessary to secure funds or financing provided by, through or in conjunction with FHLMC, FNMA or FHA.

**Section 17.2 Authorization to Amend.** If Declarants, at their option, determine that it is necessary to so amend the Declaration, then Declarants are hereby authorized to execute and to have recorded said required amendment or amendments for and on behalf of those Lots and Lot Owners. All lot Owners hereby grant to Declarant a full and complete power of attorney to take any and all actions necessary to effectuate and record said amendment of amendments and agree that said amendment or amendments shall be binding upon their respective Lots and upon them and their heirs, personal representatives, successors and assigns to the same extent as if they had personally executed said amendment or amendments. All Lot Owners hereby acknowledge and agree that the power granted herein shall be deemed coupled with an interest and shall be irrevocable.

**Section 17.3 Duration.** Declarants' rights under this Article shall exist only until the Transition Date.



**ARTICLE 18  
SEVERABILITY**

The provisions of this Declaration shall be independent and severable, and the unenforceability of any one provision shall not affect the enforceability of any other provision, if the remainder affects the common plan.

**ARTICLE 19  
EFFECTIVE DATE**

This Declaration shall be effective upon recording.

**ARTICLE 20  
ASSIGNMENT BY DECLARANTS**

Declarants reserve the right to assign, transfer, sell, encumber, lease or rent all or any portion of the Property owned by each of them, and reserve the right to assign all or any of their rights, duties and obligations created under this Declaration.

DATED this \_\_\_\_\_ day of \_\_\_\_\_, 2020

THE CROSSINGS

Anacopper LLC

By: \_\_\_\_\_  
Nels Strandberg, Member

Notary on Following Page

STATE OF WASHINGTON )  
 ) ss  
COUNTY OF SKAGIT )

I hereby certify that I know or have satisfactory evidence that Nels Strandberg is the person who appeared before me and said person acknowledged that he signed this instrument, on oath stated that he was authorized to execute the instrument and acknowledged it as the Member of ANACOPPER LLC, to be the free and voluntary act of such party for the use and purposes mentioned in the instrument.

DATED: \_\_\_\_\_, 2020.

\_\_\_\_\_  
NOTARY PUBLIC for the State of Washington,  
Residing in \_\_\_\_\_  
My Commission expires \_\_\_\_\_

**EXHIBIT A**

**“INSERT LEGAL DESCRIPTION OF PROPERTY HERE”**

DRAFT



**EXHIBIT B**

**“INSERT LANDSCAPE PLAN HERE”**

DRAFT

**EXHIBIT C**

**“INSERT CRITICAL AREAS REPORT HERE”**

DRAFT

**EXHIBIT D**

**“INSERT TREE PRESERVATION PLAN HERE”**

DRAFT



## SUBDIVISION GUARANTEE

Order No.: 02-175279-F

Policy No. 5003353-0002662e

### **SCHEDULE A**

#### EXCEPTIONS CONTINUED:

5. Municipal assessments and impact fees, if any, levied by the City of Anacortes.

#### 6. DEED OF TRUST AND THE TERMS AND CONDITIONS THEREOF:

|                |                                                        |
|----------------|--------------------------------------------------------|
| Grantor:       | Anacopper, LLC, a Washington limited liability company |
| Trustee:       | Land Title and Escrow                                  |
| Beneficiary:   | Skagit Bank                                            |
| Amount:        | \$435,000.00                                           |
| Dated:         | August 18, 2017                                        |
| Recorded:      | August 25, 2017                                        |
| Auditor's No.: | 201708250108                                           |

#### 7. ASSIGNMENT OF RENTS GIVEN AS ADDITIONAL SECURITY AND THE TERMS AND CONDITIONS THEREOF:

|                |                                                       |
|----------------|-------------------------------------------------------|
| Assignor:      | Anacopper LLC, a Washington limited liability company |
| Assignee:      | Skagit Bank                                           |
| Amount:        | Not disclosed                                         |
| Dated:         | August 18, 2017                                       |
| Recorded:      | August 25, 2017                                       |
| Auditor's No.: | 201708250109                                          |

8. Unrecorded leaseholds, if any; rights of vendors and holders of security interests on personal property installed upon said Land, and rights of tenants to remove trade fixtures at the expiration of the term.

9. Easements, restrictions, and other matters shown on Schedule "B-1" attached are also excepted from coverage. The easements, restrictions and other matters shown as lettered exceptions on Schedule "B-1" are excepted from policy coverage to the same extent that the numbered Schedule "B" Special Exceptions shown herein are excepted from policy coverage.

## SUBDIVISION GUARANTEE

Order No.: 02-175279-F

Policy No. 5003353-0002662e

### **SCHEDULE A**

#### EXCEPTIONS CONTINUED:

NOTE #1: EFFECTIVE JANUARY 1, 1997, AND PURSUANT TO AMENDMENT OF WASHINGTON STATE STATUTES RELATING TO STANDARDIZATION OF RECORDED DOCUMENTS, THE FOLLOWING FORMAT AND CONTENT REQUIREMENTS MUST BE MET. FAILURE TO COMPLY MAY RESULT IN REJECTION OF THE DOCUMENTS BY THE RECORDER.

Margins to be 3" on top of first page and 1" on sides and bottom, 1" on top, sides and bottom of each succeeding page. Font size of 8 points or larger, paper size of no more than 8 1/2" by 14". No attachments on pages such as stapled or taped notary seals, pressure seals must be smudged.

#### INFORMATION WHICH MUST APPEAR ON THE FIRST PAGE

Title or titles of documents. If assignment or reconveyance, reference to auditor's file number of subject deed of trust must be included. Names of grantor(s) and grantee(s) with reference to additional names on following pages, if any.  
Abbreviated legal description (lot, block, volume/page of plat or section/township/range and quarter section or government lot for unplatted).  
Assessor's tax parcel number(s). Return address which may appear in the upper left hand 3" top margin.

Pursuant to item c.) above, the abbreviated legal description for the subject property is as follows:

Ptn SW SW, 23-35-1.

NOTE #2: The property description included herein is based upon the application for Title Insurance. Before any instrument(s) pertaining to this property is/are prepared, the description should be verified and approved by all parties.

NOTE #3: Unless otherwise specified, this Company has assigned this file to the following Underwriter for the policy to issue: First American Title Company.

Schedule "A-1"

Order No.: 02-175279-F  
Policy No.: 5003353-0002662e

DESCRIPTION:

PARCEL "A":

The Southwest  $\frac{1}{4}$  of the Southwest  $\frac{1}{4}$  of the Southwest  $\frac{1}{4}$  of Section 23, Township 35 North, Range 1 East, W.M.;

EXCEPT the West 586.00 feet of the South 325.00 feet thereof;

ALSO EXCEPT the West 20 feet thereof;

AND ALSO EXCEPT the North 33 feet thereof;

Situate in the County of Skagit, State of Washington,

PARCEL "B":

That portion of the North 33 feet of the Southwest  $\frac{1}{4}$  of the Southwest  $\frac{1}{4}$  of the Southwest  $\frac{1}{4}$  of Section 23, Township 35 North, Range 1 East, W.M., described as follows:

Beginning at the Southeast corner of Tract C (being the Southeast corner of said North 33 feet of the Southwest  $\frac{1}{4}$  of the Southwest  $\frac{1}{4}$  of the Southwest  $\frac{1}{4}$  of said Section 23) of that certain Survey recorded April 11, 1978, in Volume 2 of Surveys, page 85, under Auditor's File No. 877240, records of Skagit County, Washington;

thence West along the South line of said Tract C to the Southwest corner thereof;

thence North along the West line of said Tract C, a distance of 18 feet;

thence Southeasterly in a straight line to the point of beginning.

Situate in the County of Skagit, State of Washington,



EXCEPTIONS:

A. EASEMENT, AND THE TERMS AND CONDITIONS THEREOF:

Granted To: Puget Sound Power & Light Company  
Purpose: Electric transmission and/or distribution line  
Recorded: August 17, 1962  
Auditor's No.: 625248

B. EASEMENT, AND THE TERMS AND CONDITIONS THEREOF:

Granted To: William R. Colby, et ux, et al  
Purpose: Utility lines, together with rights of ingress and egress  
Recorded: July 26, 1965  
Auditor's No.: 669404

Extinguishment of Easement and Water Association Agreement:

Recorded: April 6, 1995  
Auditor's No.: 9504060057

C. Any rights, interests, or claims which may exist or arise by reason of the following matters disclosed by survey:

Recorded: April 11, 1978  
Auditor's No.: 877240

D. Any rights, interests, or claims which may exist or arise by reason of the following matters disclosed by survey:

Recorded: July 19, 1988  
Auditor's No.: 8807190076

E. Letter, including the terms, covenants and provisions thereof:

Recorded: April 7, 1998  
Auditor's No.: 9804070077

F. TITLE NOTIFICATION, AND THE TERMS AND CONDITIONS THEREOF:

Between: Skagit County  
Recorded: July 7, 2017  
Auditor's File No.: 201707070120

EXCEPTIONS CONTINUED:

F. (continued):

Regarding:

This parcel lies within an area or within 500 feet of land designated as natural resource land (agricultural, forest or mineral resource land of long-term commercial significance) by Skagit County. A variety of natural resource land commercial activities occur or may occur in the area that may not be compatible with non-resource uses and may be inconvenient or cause discomfort to area residents. This may arise from the use of chemicals; or from spraying, pruning, harvesting or extraction with associated activities, which occasionally generates traffic, dust, smoke, noise, and odor. Skagit County has established natural resource management operations as a priority use on designated natural resource lands, and area residents should be prepared to accept such incompatibilities, inconveniences or discomfort from normal, necessary natural resource lands operation when performed in compliance with best management practices and local, state and federal law. In the case of mineral lands, application might be made for mining-related activities including extraction, washing, crushing, stockpiling, blasting, transporting and recycling of minerals. If you are adjacent to designated natural resource lands, you will have setback requirements from designated natural resource lands consistent with SCC 14.16.810.



Finance Department

020082-0007 Keri K. 03/02/2020 10:58AM

PERMITS AND INSPECTIONS

ANACOPPER LLC

LPS-2020-0001

Long Plat

18 lot cottage

development + 3 single-fa

pending

2020 Item: LPS-2020-0001

Sepa Review 480.00

Sub-Division

Application Fee 1,870.00

Miscellaneous Planning

Fee 240.00

SFR/duplex: site

plan/design 1,090.00

Stormwater Review 3,150.00

Publications 77.14

Mailing Fees 35.00

Payment Id: 275212

6,942.14

Subtotal 6,942.14

Total 6,942.14

CHECK 6,942.14

Check Number 001125

Change due 0.00

Paid by: ANACOPPER LLC

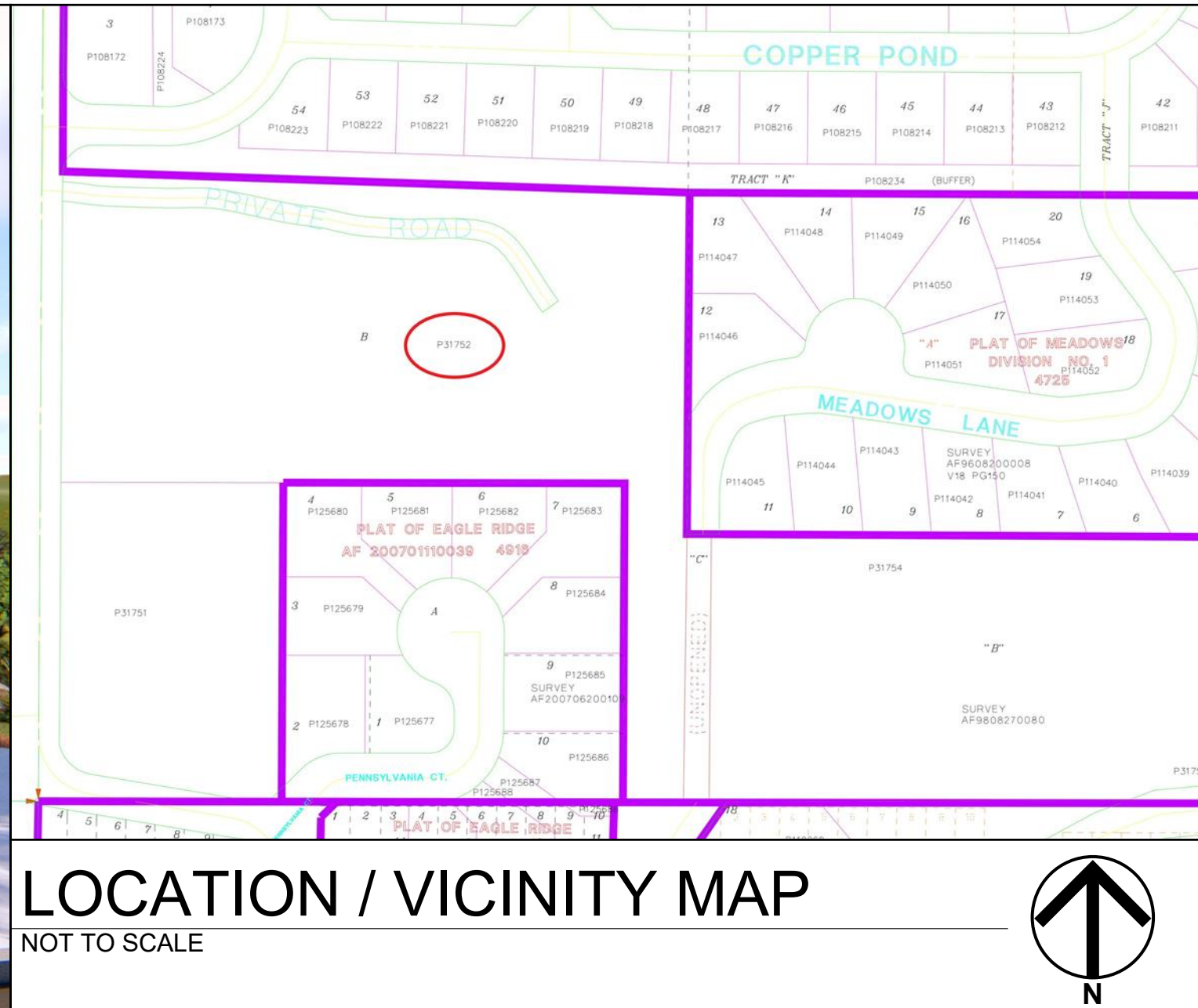


|                                                               |  |                            |
|---------------------------------------------------------------|--|----------------------------|
| ANACOPPER LLC<br>20 8718<br>ANACORTES, WA 98221<br>03/02/2020 |  | 1125<br>Amount<br>Auto Jct |
| CITY OF ANACORTES<br>1810 18th Street<br>ANACORTES, WA 98221  |  | \$ 6,942.14                |
| ANACOPPER-COTTAGE & THE GRASSING                              |  |                            |

Thank you for your payment

COPY



| PROJECT DESCRIPTION                                                                                                                                             |                                           | <div><div></div><div></div></div> <div>THE CROSSINGS</div> <div>1905 Anacopper Rd, Anacortes, WA 98221</div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  | PROJECT INFORMATION                                        |                | DESIGNED BY<br>JASON STERLING                                                                                        |                |  |     |       |  |     |      |             |  |             |  |  |  |  |    |                            |  |  |  |  |    |                          |  |  |  |  |    |                             |  |  |  |  |    |                                           |  |  |  |  |    |                            |  |  |  |  |    |                             |  |  |  |  |    |                                 |  |  |  |  |    |                                 |  |  |  |  |    |                                |  |  |  |  |    |                                    |  |  |  |  |    |               |  |  |  |  |    |                     |  |  |  |  |    |                             |  |  |  |  |    |                 |  |  |  |  |    |                      |  |  |  |  |    |               |  |  |  |  |    |                  |  |  |  |  |     |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |
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| “THE CROSSING” A 18-UNIT COTTAGE COMMUNITY, AND 3 STANDARD R2 RESIDENTIAL LOTS.                                                                                 |                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | PARCEL: P31752                                             |                | SCALE<br>1/4" = 1' U.N.O.                                                                                            |                |  |     |       |  |     |      |             |  |             |  |  |  |  |    |                            |  |  |  |  |    |                          |  |  |  |  |    |                             |  |  |  |  |    |                                           |  |  |  |  |    |                            |  |  |  |  |    |                             |  |  |  |  |    |                                 |  |  |  |  |    |                                 |  |  |  |  |    |                                |  |  |  |  |    |                                    |  |  |  |  |    |               |  |  |  |  |    |                     |  |  |  |  |    |                             |  |  |  |  |    |                 |  |  |  |  |    |                      |  |  |  |  |    |               |  |  |  |  |    |                  |  |  |  |  |     |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |
|                                                                                                                                                                 |                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | PROJECT ADDRESS:<br>1905 Anacopper Rd, Anacortes, WA 98221 |                | DATE<br>01/31/2020                                                                                                   |                |  |     |       |  |     |      |             |  |             |  |  |  |  |    |                            |  |  |  |  |    |                          |  |  |  |  |    |                             |  |  |  |  |    |                                           |  |  |  |  |    |                            |  |  |  |  |    |                             |  |  |  |  |    |                                 |  |  |  |  |    |                                 |  |  |  |  |    |                                |  |  |  |  |    |                                    |  |  |  |  |    |               |  |  |  |  |    |                     |  |  |  |  |    |                             |  |  |  |  |    |                 |  |  |  |  |    |                      |  |  |  |  |    |               |  |  |  |  |    |                  |  |  |  |  |     |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |
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| CODE COMPLIANCE                                                                                                                                                 |                                           | <div>LEGAL DISCRIPTION:<br/>(5.2000 ac) SW1/4 SW1/4 SW1/4 EXC W 586FT OF S 325FT THOF &amp; EXC W 20FT &amp; EXC N 33FT THOF TGW PTN S 33FT OF N 693FT DESC AF#887647</div> <div>ZONE: R-2</div> <div>USE CLASSIFICATION:<br/>LOTS 1-18: COTTAGE HOUSING<br/>LOTS 19-21: SINGLE-FAMILY</div> <div>DENSITY &amp; DIMENSIONAL CALCS.:<br/>SETBACK &amp; HEIGHT LIMITATIONS</div> <div><div>MAXIMUM FRONT SETBACK20 FEET</div><div>MAXIMUM SIDE SETBACK20 FEET</div><div>MAXIMUM REAR SETBACK20 FEET</div><div>MAXIMUM BUILDING HEIGHT (FROM AVG. ORG. GRADE)COTTAGES: 25 FEET</div><div>NORMAL SFR: 35 FEET</div></div> <div>COVERAGE CALCULATIONS</div> <div><div>SQUARE FOOTAGE OF THE ENTIRE LOT:226,334 SF</div><div>GROSS SITE AREA:5.19 A</div></div> <div><div>TOTAL SQ. FT. OF LOTS 1-18:42,351 SF</div><div>TOTAL SQ. FT. OF HOUSE FOOTPRINTS 1-18:22,824 SF</div><div>18" ROOF OVERHANGS ESTIMATE:4,644 SF</div><div>TOTAL SQ. FT. OF LOTS 19-21:22,847 SF</div><div>TOTAL SQ. FT. OF HOUSE FOOTPRINTS 19-21:7,980 SF</div><div>2" ROOF OVERHANGS ESTIMATE:1,455 SF</div><div>TOTAL BUILDING COVERAGE ON ENTIRE LOT (13.6%):30,804 SF</div><div>SIDEWALK ALONG ROAD:3,607 SF</div><div>DRIVEWAYS &amp; ROAD:25,015 SF</div></div> <div><div>TOTAL IMPERVIOUS COVERAGE (28.95%):65,525 SF</div><div>TOTAL ALLOWABLE IMP. COVERAGE (50%):113,165 SF</div></div> <div>DENSITY:</div> <div>DENSITY ALLOWED PER 5.19 ACRES:20.76 UNITS</div> <div>18 COTTAGES:9 UNITS</div> <div>3 SOUTH SFR:3 UNITS</div> <div>TOTAL DENSITY PER PROJECT:10 UNITS</div> <div>RANGE OF DESIGN:</div> <div>COTTAGES WILL HAVE AN ESTIMATED:</div> <div><div>LIVING AREA:1,200 SF</div><div>GARAGE:300 SF</div><div>BEDROOMS:2</div><div>STORIES:2</div><div>MAX HT.:25'</div></div> <div>SFR ON 3 SOUTH LOTS</div> <div>WILL HAVE AN ESTIMATED:</div> <div><div>MAIN LIVING:2,100+ SF</div><div>GARAGE:528+ SF</div><div>BEDROOMS:3+</div><div>STORIES:1+</div><div>MAX HT.:35'</div></div> <div>PARKING:</div> <div>GUEST PARKING REQUIREMENTS:</div> <div><div>GUEST PARKING: 1 PER 4 UNITS.</div><div>18 UNITS NEED 5 GUEST PARKING SPOTS.</div><div>11 GUEST PARKING SPOTS PROVIDED.</div></div> <div>OFF-STREET PARKING CALCULATIONS:</div> <div><div>PARKING REQUIRED: 1.5 PER UNIT.</div><div>18 UNITS NEED 27 PARKING STALLS.</div><div>34 PARKING STALLS PROVIDED.</div></div> |  | Strandberg DESIGN                                          |                |                                                                                                                      |                |  |     |       |  |     |      |             |  |             |  |  |  |  |    |                            |  |  |  |  |    |                          |  |  |  |  |    |                             |  |  |  |  |    |                                           |  |  |  |  |    |                            |  |  |  |  |    |                             |  |  |  |  |    |                                 |  |  |  |  |    |                                 |  |  |  |  |    |                                |  |  |  |  |    |                                    |  |  |  |  |    |               |  |  |  |  |    |                     |  |  |  |  |    |                             |  |  |  |  |    |                 |  |  |  |  |    |                      |  |  |  |  |    |               |  |  |  |  |    |                  |  |  |  |  |     |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |
| DEFERRED SUBMITTALS                                                                                                                                             |                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | BUILDER INFO:                                              |                | MAILING ADDRESS:<br>P.O. BOX 319<br>ANACORTES WA 98221<br>PHONE: 360-293-7431<br>WEB: www.strandbergconstruction.com |                |  |     |       |  |     |      |             |  |             |  |  |  |  |    |                            |  |  |  |  |    |                          |  |  |  |  |    |                             |  |  |  |  |    |                                           |  |  |  |  |    |                            |  |  |  |  |    |                             |  |  |  |  |    |                                 |  |  |  |  |    |                                 |  |  |  |  |    |                                |  |  |  |  |    |                                    |  |  |  |  |    |               |  |  |  |  |    |                     |  |  |  |  |    |                             |  |  |  |  |    |                 |  |  |  |  |    |                      |  |  |  |  |    |               |  |  |  |  |    |                  |  |  |  |  |     |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |
| - IRRIGATION DESIGN                                                                                                                                             |                                           | PROJECT / CLIENT INFO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  | THE CROSSINGS                                              |                |                                                                                                                      |                |  |     |       |  |     |      |             |  |             |  |  |  |  |    |                            |  |  |  |  |    |                          |  |  |  |  |    |                             |  |  |  |  |    |                                           |  |  |  |  |    |                            |  |  |  |  |    |                             |  |  |  |  |    |                                 |  |  |  |  |    |                                 |  |  |  |  |    |                                |  |  |  |  |    |                                    |  |  |  |  |    |               |  |  |  |  |    |                     |  |  |  |  |    |                             |  |  |  |  |    |                 |  |  |  |  |    |                      |  |  |  |  |    |               |  |  |  |  |    |                  |  |  |  |  |     |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |
| DESIGN INFORMATION                                                                                                                                              |                                           | COVER SHEET                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  | COVER SHEET                                                |                |                                                                                                                      |                |  |     |       |  |     |      |             |  |             |  |  |  |  |    |                            |  |  |  |  |    |                          |  |  |  |  |    |                             |  |  |  |  |    |                                           |  |  |  |  |    |                            |  |  |  |  |    |                             |  |  |  |  |    |                                 |  |  |  |  |    |                                 |  |  |  |  |    |                                |  |  |  |  |    |                                    |  |  |  |  |    |               |  |  |  |  |    |                     |  |  |  |  |    |                             |  |  |  |  |    |                 |  |  |  |  |    |                      |  |  |  |  |    |               |  |  |  |  |    |                  |  |  |  |  |     |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |
| CIVIL ENGINEER:<br>DALE HERRIGSTAD - HERRIGSTAD ENGINEERING & SURVEYING<br>DALE@HERRIGSTAD.COM<br>4320 WHISTLE LAKE RD<br>ANACORTES, WA 98221<br>(360) 299-8804 |                                           | <table><tr><th colspan="2">PAGE INDEX</th><th>COMMENTS</th><th colspan="2">REVISION TABLE</th></tr><tr><th>PG#</th><th>TITLE</th><th></th><th>PG#</th><th>DATE</th><th>DESCRIPTION</th></tr><tr><td></td><td>COVER SHEET</td><td></td><td></td><td></td><td></td></tr><tr><td>A1</td><td>SITE PLAN FOR THE CROSSING</td><td></td><td></td><td></td><td></td></tr><tr><td>A2</td><td>SITE PLAN SETBACK CALCS.</td><td></td><td></td><td></td><td></td></tr><tr><td>A3</td><td>SITE PLAN OPEN SPACE CALCS.</td><td></td><td></td><td></td><td></td></tr><tr><td>A4</td><td>SITE PLAN ROAD ACCESS, PARKING, FIRE INFO</td><td></td><td></td><td></td><td></td></tr><tr><td>A5</td><td>SITE PLAN FOR 3 SOUTH LOTS</td><td></td><td></td><td></td><td></td></tr><tr><td>A6</td><td>FULL SITE WITH AERIAL PHOTO</td><td></td><td></td><td></td><td></td></tr><tr><td>L1</td><td>LANDSCAPE PLAN FOR THE CROSSING</td><td></td><td></td><td></td><td></td></tr><tr><td>L2</td><td>LANDSCAPE PLAN FOR 3 SOUTH LOTS</td><td></td><td></td><td></td><td></td></tr><tr><td>C1</td><td>EROSION CONTROL &amp; GRADING PLAN</td><td></td><td></td><td></td><td></td></tr><tr><td>C2</td><td>GRADING &amp; CLEARING PLAN &amp; PROFILES</td><td></td><td></td><td></td><td></td></tr><tr><td>C3</td><td>DRAINAGE PLAN</td><td></td><td></td><td></td><td></td></tr><tr><td>C4</td><td>POND PLAN &amp; DETAILS</td><td></td><td></td><td></td><td></td></tr><tr><td>C5</td><td>SANITARY SEWER &amp; WATER PLAN</td><td></td><td></td><td></td><td></td></tr><tr><td>C6</td><td>BOUNDARY SURVEY</td><td></td><td></td><td></td><td></td></tr><tr><td>C7</td><td>TRACTS AND EASEMENTS</td><td></td><td></td><td></td><td></td></tr><tr><td>C8</td><td>COUNTOUR PLAN</td><td></td><td></td><td></td><td></td></tr><tr><td>C9</td><td>PRELIMINARY PLAT</td><td></td><td></td><td></td><td></td></tr><tr><td>C10</td><td>BMP DETAILS</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>                                                                                                                                                                                                         |  | PAGE INDEX                                                 |                | COMMENTS                                                                                                             | REVISION TABLE |  | PG# | TITLE |  | PG# | DATE | DESCRIPTION |  | COVER SHEET |  |  |  |  | A1 | SITE PLAN FOR THE CROSSING |  |  |  |  | A2 | SITE PLAN SETBACK CALCS. |  |  |  |  | A3 | SITE PLAN OPEN SPACE CALCS. |  |  |  |  | A4 | SITE PLAN ROAD ACCESS, PARKING, FIRE INFO |  |  |  |  | A5 | SITE PLAN FOR 3 SOUTH LOTS |  |  |  |  | A6 | FULL SITE WITH AERIAL PHOTO |  |  |  |  | L1 | LANDSCAPE PLAN FOR THE CROSSING |  |  |  |  | L2 | LANDSCAPE PLAN FOR 3 SOUTH LOTS |  |  |  |  | C1 | EROSION CONTROL & GRADING PLAN |  |  |  |  | C2 | GRADING & CLEARING PLAN & PROFILES |  |  |  |  | C3 | DRAINAGE PLAN |  |  |  |  | C4 | POND PLAN & DETAILS |  |  |  |  | C5 | SANITARY SEWER & WATER PLAN |  |  |  |  | C6 | BOUNDARY SURVEY |  |  |  |  | C7 | TRACTS AND EASEMENTS |  |  |  |  | C8 | COUNTOUR PLAN |  |  |  |  | C9 | PRELIMINARY PLAT |  |  |  |  | C10 | BMP DETAILS |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1905 Anacopper Rd, Anacortes, WA 98221 |  |
| PAGE INDEX                                                                                                                                                      |                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | COMMENTS                                                   | REVISION TABLE |                                                                                                                      |                |  |     |       |  |     |      |             |  |             |  |  |  |  |    |                            |  |  |  |  |    |                          |  |  |  |  |    |                             |  |  |  |  |    |                                           |  |  |  |  |    |                            |  |  |  |  |    |                             |  |  |  |  |    |                                 |  |  |  |  |    |                                 |  |  |  |  |    |                                |  |  |  |  |    |                                    |  |  |  |  |    |               |  |  |  |  |    |                     |  |  |  |  |    |                             |  |  |  |  |    |                 |  |  |  |  |    |                      |  |  |  |  |    |               |  |  |  |  |    |                  |  |  |  |  |     |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |
| PG#                                                                                                                                                             | TITLE                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                                                            | PG#            | DATE                                                                                                                 | DESCRIPTION    |  |     |       |  |     |      |             |  |             |  |  |  |  |    |                            |  |  |  |  |    |                          |  |  |  |  |    |                             |  |  |  |  |    |                                           |  |  |  |  |    |                            |  |  |  |  |    |                             |  |  |  |  |    |                                 |  |  |  |  |    |                                 |  |  |  |  |    |                                |  |  |  |  |    |                                    |  |  |  |  |    |               |  |  |  |  |    |                     |  |  |  |  |    |                             |  |  |  |  |    |                 |  |  |  |  |    |                      |  |  |  |  |    |               |  |  |  |  |    |                  |  |  |  |  |     |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |
|                                                                                                                                                                 | COVER SHEET                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                                                            |                |                                                                                                                      |                |  |     |       |  |     |      |             |  |             |  |  |  |  |    |                            |  |  |  |  |    |                          |  |  |  |  |    |                             |  |  |  |  |    |                                           |  |  |  |  |    |                            |  |  |  |  |    |                             |  |  |  |  |    |                                 |  |  |  |  |    |                                 |  |  |  |  |    |                                |  |  |  |  |    |                                    |  |  |  |  |    |               |  |  |  |  |    |                     |  |  |  |  |    |                             |  |  |  |  |    |                 |  |  |  |  |    |                      |  |  |  |  |    |               |  |  |  |  |    |                  |  |  |  |  |     |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |
| A1                                                                                                                                                              | SITE PLAN FOR THE CROSSING                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                                                            |                |                                                                                                                      |                |  |     |       |  |     |      |             |  |             |  |  |  |  |    |                            |  |  |  |  |    |                          |  |  |  |  |    |                             |  |  |  |  |    |                                           |  |  |  |  |    |                            |  |  |  |  |    |                             |  |  |  |  |    |                                 |  |  |  |  |    |                                 |  |  |  |  |    |                                |  |  |  |  |    |                                    |  |  |  |  |    |               |  |  |  |  |    |                     |  |  |  |  |    |                             |  |  |  |  |    |                 |  |  |  |  |    |                      |  |  |  |  |    |               |  |  |  |  |    |                  |  |  |  |  |     |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |
| A2                                                                                                                                                              | SITE PLAN SETBACK CALCS.                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                                                            |                |                                                                                                                      |                |  |     |       |  |     |      |             |  |             |  |  |  |  |    |                            |  |  |  |  |    |                          |  |  |  |  |    |                             |  |  |  |  |    |                                           |  |  |  |  |    |                            |  |  |  |  |    |                             |  |  |  |  |    |                                 |  |  |  |  |    |                                 |  |  |  |  |    |                                |  |  |  |  |    |                                    |  |  |  |  |    |               |  |  |  |  |    |                     |  |  |  |  |    |                             |  |  |  |  |    |                 |  |  |  |  |    |                      |  |  |  |  |    |               |  |  |  |  |    |                  |  |  |  |  |     |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |
| A3                                                                                                                                                              | SITE PLAN OPEN SPACE CALCS.               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                                                            |                |                                                                                                                      |                |  |     |       |  |     |      |             |  |             |  |  |  |  |    |                            |  |  |  |  |    |                          |  |  |  |  |    |                             |  |  |  |  |    |                                           |  |  |  |  |    |                            |  |  |  |  |    |                             |  |  |  |  |    |                                 |  |  |  |  |    |                                 |  |  |  |  |    |                                |  |  |  |  |    |                                    |  |  |  |  |    |               |  |  |  |  |    |                     |  |  |  |  |    |                             |  |  |  |  |    |                 |  |  |  |  |    |                      |  |  |  |  |    |               |  |  |  |  |    |                  |  |  |  |  |     |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |
| A4                                                                                                                                                              | SITE PLAN ROAD ACCESS, PARKING, FIRE INFO |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                                                            |                |                                                                                                                      |                |  |     |       |  |     |      |             |  |             |  |  |  |  |    |                            |  |  |  |  |    |                          |  |  |  |  |    |                             |  |  |  |  |    |                                           |  |  |  |  |    |                            |  |  |  |  |    |                             |  |  |  |  |    |                                 |  |  |  |  |    |                                 |  |  |  |  |    |                                |  |  |  |  |    |                                    |  |  |  |  |    |               |  |  |  |  |    |                     |  |  |  |  |    |                             |  |  |  |  |    |                 |  |  |  |  |    |                      |  |  |  |  |    |               |  |  |  |  |    |                  |  |  |  |  |     |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |
| A5                                                                                                                                                              | SITE PLAN FOR 3 SOUTH LOTS                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                                                            |                |                                                                                                                      |                |  |     |       |  |     |      |             |  |             |  |  |  |  |    |                            |  |  |  |  |    |                          |  |  |  |  |    |                             |  |  |  |  |    |                                           |  |  |  |  |    |                            |  |  |  |  |    |                             |  |  |  |  |    |                                 |  |  |  |  |    |                                 |  |  |  |  |    |                                |  |  |  |  |    |                                    |  |  |  |  |    |               |  |  |  |  |    |                     |  |  |  |  |    |                             |  |  |  |  |    |                 |  |  |  |  |    |                      |  |  |  |  |    |               |  |  |  |  |    |                  |  |  |  |  |     |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |
| A6                                                                                                                                                              | FULL SITE WITH AERIAL PHOTO               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                                                            |                |                                                                                                                      |                |  |     |       |  |     |      |             |  |             |  |  |  |  |    |                            |  |  |  |  |    |                          |  |  |  |  |    |                             |  |  |  |  |    |                                           |  |  |  |  |    |                            |  |  |  |  |    |                             |  |  |  |  |    |                                 |  |  |  |  |    |                                 |  |  |  |  |    |                                |  |  |  |  |    |                                    |  |  |  |  |    |               |  |  |  |  |    |                     |  |  |  |  |    |                             |  |  |  |  |    |                 |  |  |  |  |    |                      |  |  |  |  |    |               |  |  |  |  |    |                  |  |  |  |  |     |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |
| L1                                                                                                                                                              | LANDSCAPE PLAN FOR THE CROSSING           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                                                            |                |                                                                                                                      |                |  |     |       |  |     |      |             |  |             |  |  |  |  |    |                            |  |  |  |  |    |                          |  |  |  |  |    |                             |  |  |  |  |    |                                           |  |  |  |  |    |                            |  |  |  |  |    |                             |  |  |  |  |    |                                 |  |  |  |  |    |                                 |  |  |  |  |    |                                |  |  |  |  |    |                                    |  |  |  |  |    |               |  |  |  |  |    |                     |  |  |  |  |    |                             |  |  |  |  |    |                 |  |  |  |  |    |                      |  |  |  |  |    |               |  |  |  |  |    |                  |  |  |  |  |     |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |
| L2                                                                                                                                                              | LANDSCAPE PLAN FOR 3 SOUTH LOTS           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                                                            |                |                                                                                                                      |                |  |     |       |  |     |      |             |  |             |  |  |  |  |    |                            |  |  |  |  |    |                          |  |  |  |  |    |                             |  |  |  |  |    |                                           |  |  |  |  |    |                            |  |  |  |  |    |                             |  |  |  |  |    |                                 |  |  |  |  |    |                                 |  |  |  |  |    |                                |  |  |  |  |    |                                    |  |  |  |  |    |               |  |  |  |  |    |                     |  |  |  |  |    |                             |  |  |  |  |    |                 |  |  |  |  |    |                      |  |  |  |  |    |               |  |  |  |  |    |                  |  |  |  |  |     |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |
| C1                                                                                                                                                              | EROSION CONTROL & GRADING PLAN            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                                                            |                |                                                                                                                      |                |  |     |       |  |     |      |             |  |             |  |  |  |  |    |                            |  |  |  |  |    |                          |  |  |  |  |    |                             |  |  |  |  |    |                                           |  |  |  |  |    |                            |  |  |  |  |    |                             |  |  |  |  |    |                                 |  |  |  |  |    |                                 |  |  |  |  |    |                                |  |  |  |  |    |                                    |  |  |  |  |    |               |  |  |  |  |    |                     |  |  |  |  |    |                             |  |  |  |  |    |                 |  |  |  |  |    |                      |  |  |  |  |    |               |  |  |  |  |    |                  |  |  |  |  |     |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |
| C2                                                                                                                                                              | GRADING & CLEARING PLAN & PROFILES        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                                                            |                |                                                                                                                      |                |  |     |       |  |     |      |             |  |             |  |  |  |  |    |                            |  |  |  |  |    |                          |  |  |  |  |    |                             |  |  |  |  |    |                                           |  |  |  |  |    |                            |  |  |  |  |    |                             |  |  |  |  |    |                                 |  |  |  |  |    |                                 |  |  |  |  |    |                                |  |  |  |  |    |                                    |  |  |  |  |    |               |  |  |  |  |    |                     |  |  |  |  |    |                             |  |  |  |  |    |                 |  |  |  |  |    |                      |  |  |  |  |    |               |  |  |  |  |    |                  |  |  |  |  |     |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |
| C3                                                                                                                                                              | DRAINAGE PLAN                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                                                            |                |                                                                                                                      |                |  |     |       |  |     |      |             |  |             |  |  |  |  |    |                            |  |  |  |  |    |                          |  |  |  |  |    |                             |  |  |  |  |    |                                           |  |  |  |  |    |                            |  |  |  |  |    |                             |  |  |  |  |    |                                 |  |  |  |  |    |                                 |  |  |  |  |    |                                |  |  |  |  |    |                                    |  |  |  |  |    |               |  |  |  |  |    |                     |  |  |  |  |    |                             |  |  |  |  |    |                 |  |  |  |  |    |                      |  |  |  |  |    |               |  |  |  |  |    |                  |  |  |  |  |     |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |
| C4                                                                                                                                                              | POND PLAN & DETAILS                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                                                            |                |                                                                                                                      |                |  |     |       |  |     |      |             |  |             |  |  |  |  |    |                            |  |  |  |  |    |                          |  |  |  |  |    |                             |  |  |  |  |    |                                           |  |  |  |  |    |                            |  |  |  |  |    |                             |  |  |  |  |    |                                 |  |  |  |  |    |                                 |  |  |  |  |    |                                |  |  |  |  |    |                                    |  |  |  |  |    |               |  |  |  |  |    |                     |  |  |  |  |    |                             |  |  |  |  |    |                 |  |  |  |  |    |                      |  |  |  |  |    |               |  |  |  |  |    |                  |  |  |  |  |     |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |
| C5                                                                                                                                                              | SANITARY SEWER & WATER PLAN               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                                                            |                |                                                                                                                      |                |  |     |       |  |     |      |             |  |             |  |  |  |  |    |                            |  |  |  |  |    |                          |  |  |  |  |    |                             |  |  |  |  |    |                                           |  |  |  |  |    |                            |  |  |  |  |    |                             |  |  |  |  |    |                                 |  |  |  |  |    |                                 |  |  |  |  |    |                                |  |  |  |  |    |                                    |  |  |  |  |    |               |  |  |  |  |    |                     |  |  |  |  |    |                             |  |  |  |  |    |                 |  |  |  |  |    |                      |  |  |  |  |    |               |  |  |  |  |    |                  |  |  |  |  |     |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |
| C6                                                                                                                                                              | BOUNDARY SURVEY                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                                                            |                |                                                                                                                      |                |  |     |       |  |     |      |             |  |             |  |  |  |  |    |                            |  |  |  |  |    |                          |  |  |  |  |    |                             |  |  |  |  |    |                                           |  |  |  |  |    |                            |  |  |  |  |    |                             |  |  |  |  |    |                                 |  |  |  |  |    |                                 |  |  |  |  |    |                                |  |  |  |  |    |                                    |  |  |  |  |    |               |  |  |  |  |    |                     |  |  |  |  |    |                             |  |  |  |  |    |                 |  |  |  |  |    |                      |  |  |  |  |    |               |  |  |  |  |    |                  |  |  |  |  |     |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |
| C7                                                                                                                                                              | TRACTS AND EASEMENTS                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                                                            |                |                                                                                                                      |                |  |     |       |  |     |      |             |  |             |  |  |  |  |    |                            |  |  |  |  |    |                          |  |  |  |  |    |                             |  |  |  |  |    |                                           |  |  |  |  |    |                            |  |  |  |  |    |                             |  |  |  |  |    |                                 |  |  |  |  |    |                                 |  |  |  |  |    |                                |  |  |  |  |    |                                    |  |  |  |  |    |               |  |  |  |  |    |                     |  |  |  |  |    |                             |  |  |  |  |    |                 |  |  |  |  |    |                      |  |  |  |  |    |               |  |  |  |  |    |                  |  |  |  |  |     |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |
| C8                                                                                                                                                              | COUNTOUR PLAN                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                                                            |                |                                                                                                                      |                |  |     |       |  |     |      |             |  |             |  |  |  |  |    |                            |  |  |  |  |    |                          |  |  |  |  |    |                             |  |  |  |  |    |                                           |  |  |  |  |    |                            |  |  |  |  |    |                             |  |  |  |  |    |                                 |  |  |  |  |    |                                 |  |  |  |  |    |                                |  |  |  |  |    |                                    |  |  |  |  |    |               |  |  |  |  |    |                     |  |  |  |  |    |                             |  |  |  |  |    |                 |  |  |  |  |    |                      |  |  |  |  |    |               |  |  |  |  |    |                  |  |  |  |  |     |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |
| C9                                                                                                                                                              | PRELIMINARY PLAT                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                                                            |                |                                                                                                                      |                |  |     |       |  |     |      |             |  |             |  |  |  |  |    |                            |  |  |  |  |    |                          |  |  |  |  |    |                             |  |  |  |  |    |                                           |  |  |  |  |    |                            |  |  |  |  |    |                             |  |  |  |  |    |                                 |  |  |  |  |    |                                 |  |  |  |  |    |                                |  |  |  |  |    |                                    |  |  |  |  |    |               |  |  |  |  |    |                     |  |  |  |  |    |                             |  |  |  |  |    |                 |  |  |  |  |    |                      |  |  |  |  |    |               |  |  |  |  |    |                  |  |  |  |  |     |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |
| C10                                                                                                                                                             | BMP DETAILS                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                                                            |                |                                                                                                                      |                |  |     |       |  |     |      |             |  |             |  |  |  |  |    |                            |  |  |  |  |    |                          |  |  |  |  |    |                             |  |  |  |  |    |                                           |  |  |  |  |    |                            |  |  |  |  |    |                             |  |  |  |  |    |                                 |  |  |  |  |    |                                 |  |  |  |  |    |                                |  |  |  |  |    |                                    |  |  |  |  |    |               |  |  |  |  |    |                     |  |  |  |  |    |                             |  |  |  |  |    |                 |  |  |  |  |    |                      |  |  |  |  |    |               |  |  |  |  |    |                  |  |  |  |  |     |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |
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| DESIGNER: JASON STERLING - STRANDBERG CONSTRUCTION INC.<br>JASONS@STRANDBERGCONSTRUCTION.COM                                                                    |                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                                                            |                |                                                                                                                      |                |  |     |       |  |     |      |             |  |             |  |  |  |  |    |                            |  |  |  |  |    |                          |  |  |  |  |    |                             |  |  |  |  |    |                                           |  |  |  |  |    |                            |  |  |  |  |    |                             |  |  |  |  |    |                                 |  |  |  |  |    |                                 |  |  |  |  |    |                                |  |  |  |  |    |                                    |  |  |  |  |    |               |  |  |  |  |    |                     |  |  |  |  |    |                             |  |  |  |  |    |                 |  |  |  |  |    |                      |  |  |  |  |    |               |  |  |  |  |    |                  |  |  |  |  |     |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |
| BUILDER: STRANDBERG CONSTRUCTION, INC.<br>P.O. BOX 319<br>ANACORTES WA 98221<br>360-293-7431                                                                    |                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |                                                            |                |                                                                                                                      |                |  |     |       |  |     |      |             |  |             |  |  |  |  |    |                            |  |  |  |  |    |                          |  |  |  |  |    |                             |  |  |  |  |    |                                           |  |  |  |  |    |                            |  |  |  |  |    |                             |  |  |  |  |    |                                 |  |  |  |  |    |                                 |  |  |  |  |    |                                |  |  |  |  |    |                                    |  |  |  |  |    |               |  |  |  |  |    |                     |  |  |  |  |    |                             |  |  |  |  |    |                 |  |  |  |  |    |                      |  |  |  |  |    |               |  |  |  |  |    |                  |  |  |  |  |     |             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |                                        |  |
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COMMON AREA, GENERAL LANDSCAPING AND BUFFERS: 28,428 SF

ENCROACHED BUFFER AREA: 1,443.56 SF  
AVERAGED BUFFER AREA: 1,465.62 SF

WETLAND  
CONSERVATION  
BUFFER AREA

WETLAND AREA

DETENTION POND

TOOL SHED

12' PREVIOUS GRASSCRETE  
ACCESS ROAD

ROCK WALL

SWALE 291 SF

NOTE:

Density: Per 19.43.010(D)(3) The 18 cottages are the equivalent to 9 dwelling units. Per R2 zone, 4 dwelling units per acre are allowed. Lot is 5.2 acres.

Development is required to have at least 1 cluster made up of a min. of 3 cottages. There are 4 clusters of houses provided. Clusters are shown:

1. Cyan – 4 cottages
2. Yellow – 6 cottages
3. Green – 4 cottages
4. Red – 4 cottages

20' Setbacks provided at development frontage and external side and rear property lines of the entire cottage development.

Cottage design to incorporate 3' x 3' minimum covered entry from pedestrian path.

Driveway standards:

Table 19.53.040(B)

Residential shared driveway standards.

| Max. # units | Max. length | Min. Paved width | Min. Easement width | Turnaround?    |
|--------------|-------------|------------------|---------------------|----------------|
| Up to 3      | 150'        | 16'              | 20'                 | No             |
| Up to 5      | 150'        | 20'              | 20'                 | No             |
| Up to 6      | >150'       | 20'              | 20'                 | Yes – approved |

Individual cottages, for the purposes of these shared driveway standards, count as one-half dwelling unit.  
Or as determined by the Fire Department based on the number of units and the provision of fire suppression sprinklers.  
See AMC 19.52.050 for related standards.

Internal circulation for cottages and driveways to keep to AMC 19.53

Guest parking requirements:

- Guest parking: 1 per 4 units.
- 18 Units need 5 guest parking spots.
- 11 Guest parking spots provided.

Off-Street parking calculations:

- Parking required: 1.5 per unit.
- 18 Units need 27 parking stalls.
- 34 parking stalls provided.

Uncovered parking clusters have no more than 5 spaces

Garages to have a footprint of less than 300 SF, and will adhere to cottage design standards.

Landscaping area required:

- Must be min. 20% of whole cottage development.

PROPOSED ENTRANCE

MEADOWS LANE



SETBACK & HEIGHT LIMITATIONS

|                                                |                                          |
|------------------------------------------------|------------------------------------------|
| MAXIMUM FRONT SETBACK                          | 20 FEET                                  |
| MAXIMUM SIDE SETBACK                           | 20 FEET                                  |
| MAXIMUM REAR SETBACK                           | 20 FEET                                  |
| MAXIMUM BUILDING HEIGHT (FROM AVG. ORG. GRADE) | COTTAGES: 25 FEET<br>NORMAL SFR: 35 FEET |

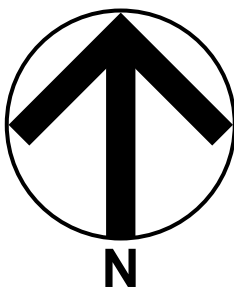
COVERAGE CALCULATIONS

|                                                |            |
|------------------------------------------------|------------|
| SQUARE FOOTAGE OF THE ENTIRE LOT:              | 226,334 SF |
| GROSS SITE AREA:                               | 5.19 A     |
| TOTAL SQ. FT. OF LOTS 1-18:                    | 42,351 SF  |
| TOTAL SQ. FT. OF HOUSE FOOTPRINTS 1-18:        | 22,824 SF  |
| 18' ROOF OVERHANGS ESTIMATE:                   | 4,644 SF   |
| TOTAL SQ. FT. OF LOTS 19-21:                   | 22,847 SF  |
| TOTAL SQ. FT. OF HOUSE FOOTPRINTS 19-21:       | 7,980 SF   |
| 2' ROOF OVERHANGS ESTIMATE:                    | 1,455 SF   |
| TOTAL BUILDING COVERAGE ON ENTIRE LOT (13.6%): | 30,804 SF  |
| SIDEWALK ALONG ROAD:                           | 3,607 SF   |
| DRIVEWAYS & ROAD:                              | 25,015 SF  |

|                                      |            |
|--------------------------------------|------------|
| TOTAL IMPERVIOUS COVERAGE (28.95%):  | 65,525 SF  |
| TOTAL ALLOWABLE IMP. COVERAGE (50%): | 113,165 SF |

SITE PLAN FOR THE CROSSING

SCALE: 1" = 20'



LOCATION / VICINITY MAP  
NOT TO SCALE

EXISTING HOUSE, BARN, OUT BUILDING

EXISTING UTILITIES

EXISTING STRUCTURES  
NOT TO SCALE

DESIGNED BY  
JASON STERLING

SCALE  
1" = 20' U.N.O.

DATE  
01/31/2020

05/27/2020

07/23/2020

Strandberg  
DESIGN

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THE CROSSINGS

1905 Anacopper RD, Anacortes, WA 98221

SITE PLAN FOR THE CROSSING

OWNER APPROVAL

INITIAL  
PAGE #  
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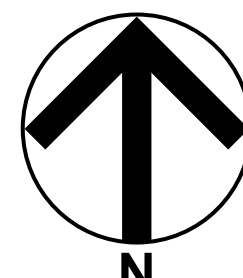
1 of 6





NOTE:  
Large circles at cottage corners have a 10' radius. Small circles have a 5' radius.  
Cottages have a min. of a 10' separation from other cottages.  
Cottages have a min. of a 5' separation from pedestrian paths.  
Cottages are setback 10' from any access lane servicing 4 or more cottages, and 5' from access lanes servicing 3 or less.

SITE PLAN SETBACK CALCS.  
SCALE: 1" = 20'



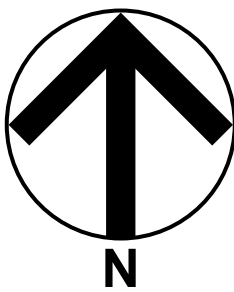
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|------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| DESIGNED BY<br>JASON STERLING                                                                  |  | <div>PROJECT / CLIENT INFO</div> <div>THE CROSSINGS</div> <div>1905 Anacopper RD, Anacortes, WA 98221</div>                                                                        | <div>SITE PLAN SETBACK<br/>CALCS.</div> <div>OWNER APPROVAL</div> <div>INITIAL<br/>PAGE #<br/><div>A2</div><div>PAGE:<br/>2 of 6</div></div> |
| SCALE<br>1" = 20' U.N.O.                                                                       |  |                                                                                                                                                                                    |                                                                                                                                              |
| DATE<br>01/31/2020                                                                             |  |                                                                                                                                                                                    |                                                                                                                                              |
| 05/27/2020                                                                                     |  |                                                                                                                                                                                    |                                                                                                                                              |
| 07/23/2020                                                                                     |  | <div>BUILDER INFO:</div> <div>MAILING ADDRESS:<br/>P.O. BOX 319<br/>ANACORTES WA 98221</div> <div>PHONE:<br/>360-295-7431</div> <div>WEB:<br/>www.strandbergconstruction.com</div> |                                                                                                                                              |
| <div></div> |  |                                                                                                                                                                                    |                                                                                                                                              |
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|                                                                                                |  |                                                                                                                                                                                    |                                                                                                                                              |

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SITE PLAN OPEN SPACE CALCS.  
SCALE: 1" = 20'



| COMMON OPEN SPACE CALCULATIONS PER AMC 19.43.010.D.3.i |                 |                                         |
|--------------------------------------------------------|-----------------|-----------------------------------------|
| # OF UNITS                                             | RATIO           | COMMON OPEN SPACE REQUIRED/PROVIDED     |
| 18                                                     | 400 SF PER UNIT | 7,200 SF REQUIRED<br>17,152 SF PROVIDED |

NOTE:

Common open space required per AMC 19.43.010.D.3.i:  
400 sf per cottage x 18 lots =  
7,200 sf of common open space required  
Common open provided: 17,152 sf

Common open space shaded in blue. No dimension less than 15'.

All common open spaces have at least 50% of the clustered cottages abutting the open space.

All cottages are within 100-foot walking distance of common open space and feature a direct pedestrian connection to the common open space.

Private open space required per AMC 19.43.010.D.3.k:  
200 sf per cottage.  
Each cottage has a 10' x 20' private open space.

Private open spaces don't infringe on any critical areas/buffers, or steep slopes.

DESIGNED BY  
JASON STERLING

SCALE  
1" = 20' U.N.O.

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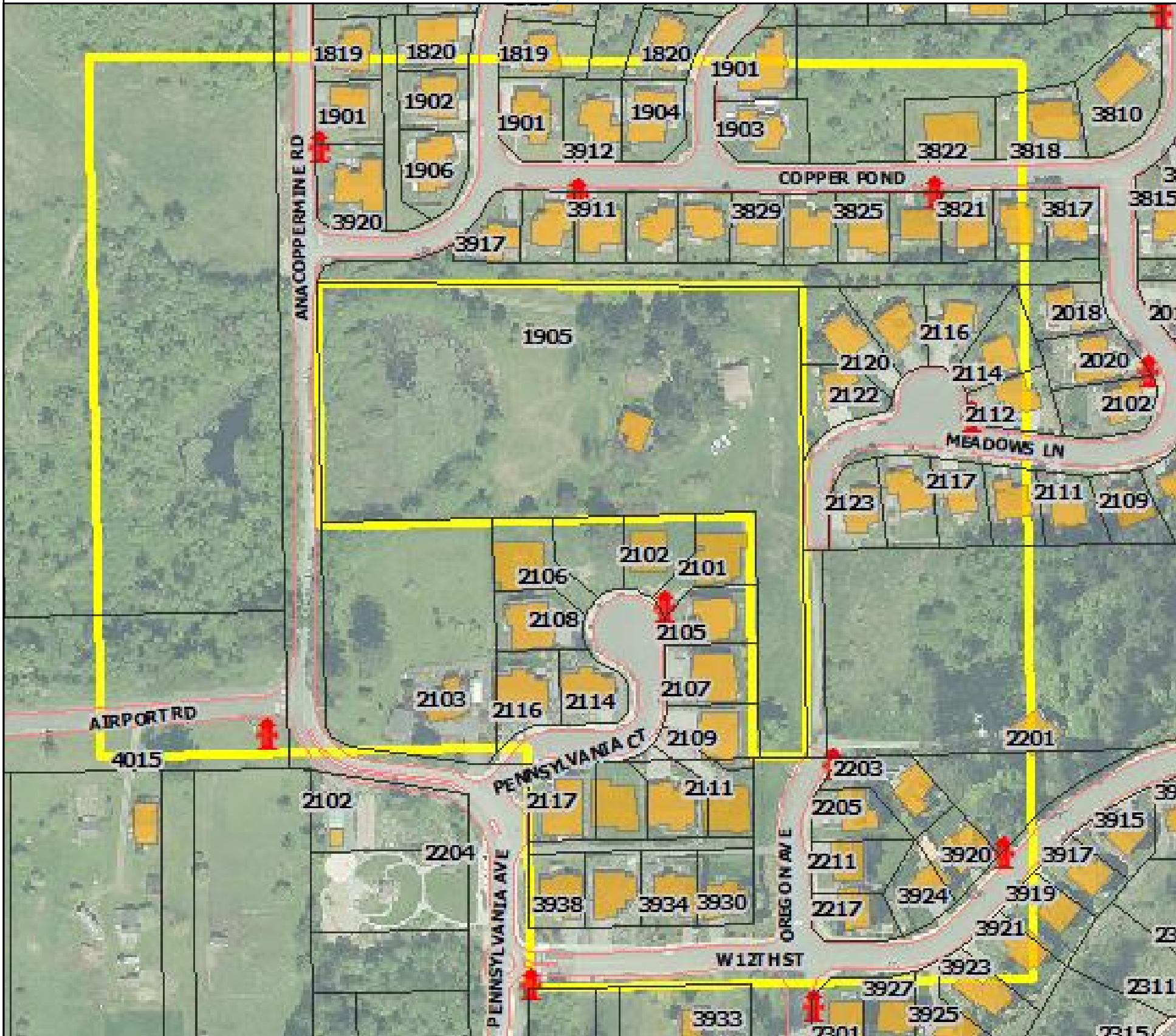
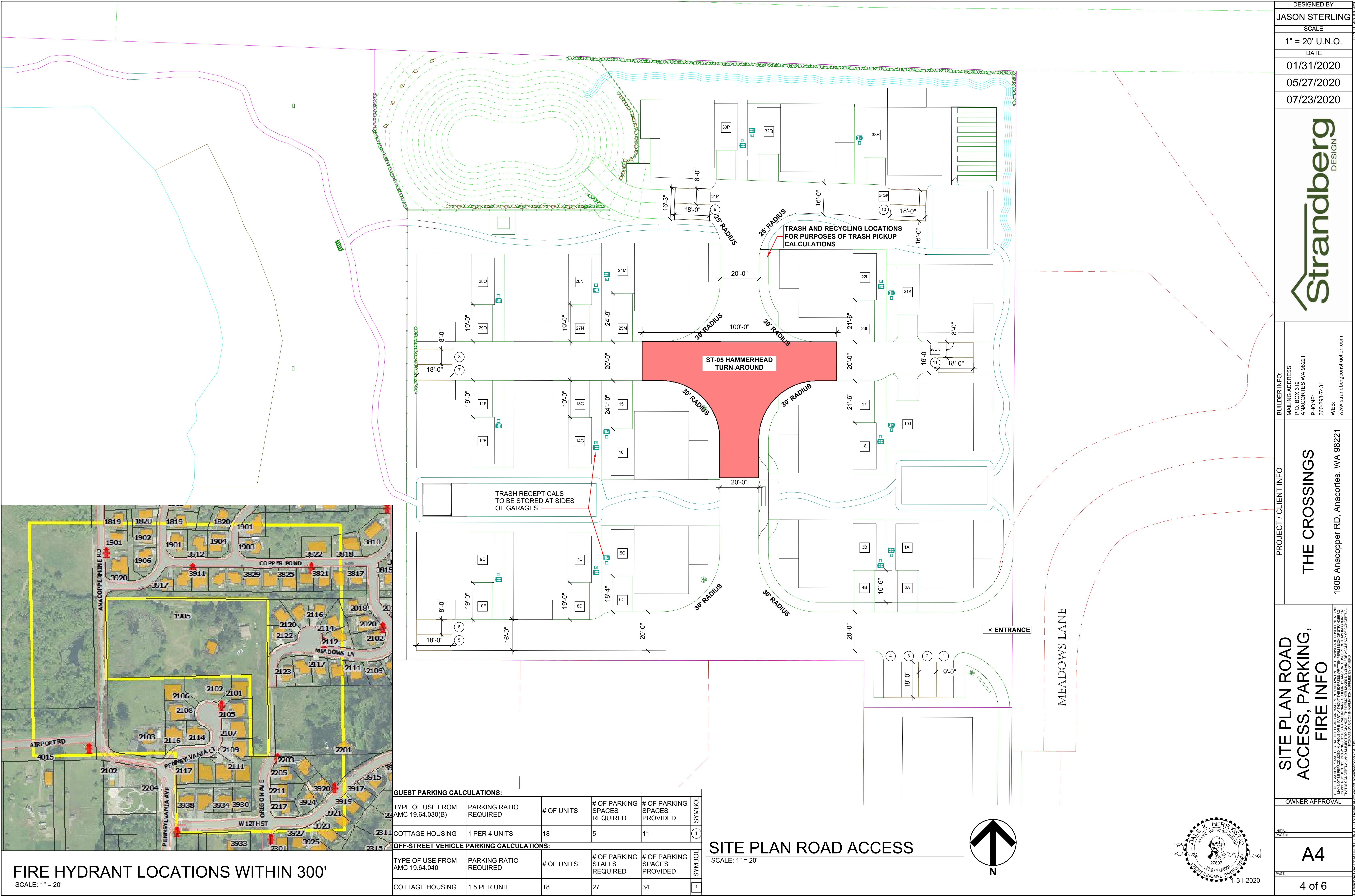
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SITE PLAN OPEN SPACE CALCS.

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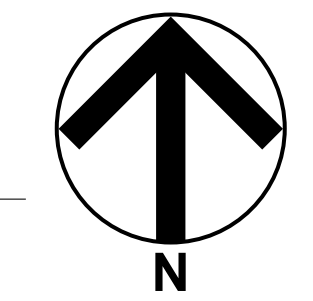
FIRE HYDRANT LOCATIONS WITHIN 300'

SCALE: 1" = 20'

| GUEST PARKING CALCULATIONS:              |                        |            |                              |                              |        |
|------------------------------------------|------------------------|------------|------------------------------|------------------------------|--------|
| TYPE OF USE FROM AMC 19.64.030(B)        | PARKING RATIO REQUIRED | # OF UNITS | # OF PARKING SPACES REQUIRED | # OF PARKING SPACES PROVIDED | SYMBOL |
| COTTAGE HOUSING                          | 1 PER 4 UNITS          | 18         | 5                            | 11                           | 1      |
| OFF-STREET VEHICLE PARKING CALCULATIONS: |                        |            |                              |                              |        |
| TYPE OF USE FROM AMC 19.64.040           | PARKING RATIO REQUIRED | # OF UNITS | # OF PARKING STALLS REQUIRED | # OF PARKING SPACES PROVIDED | SYMBOL |
| COTTAGE HOUSING                          | 1.5 PER UNIT           | 18         | 27                           | 34                           | 1      |

SITE PLAN ROAD ACCESS

SCALE: 1" = 20'



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SCALE  
1" = 20' U.N.O.

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01/31/2020

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THE CROSSINGS

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SITE PLAN ROAD  
ACCESS, PARKING,  
FIRE INFO

OWNER APPROVAL

INITIAL  
PAGE #

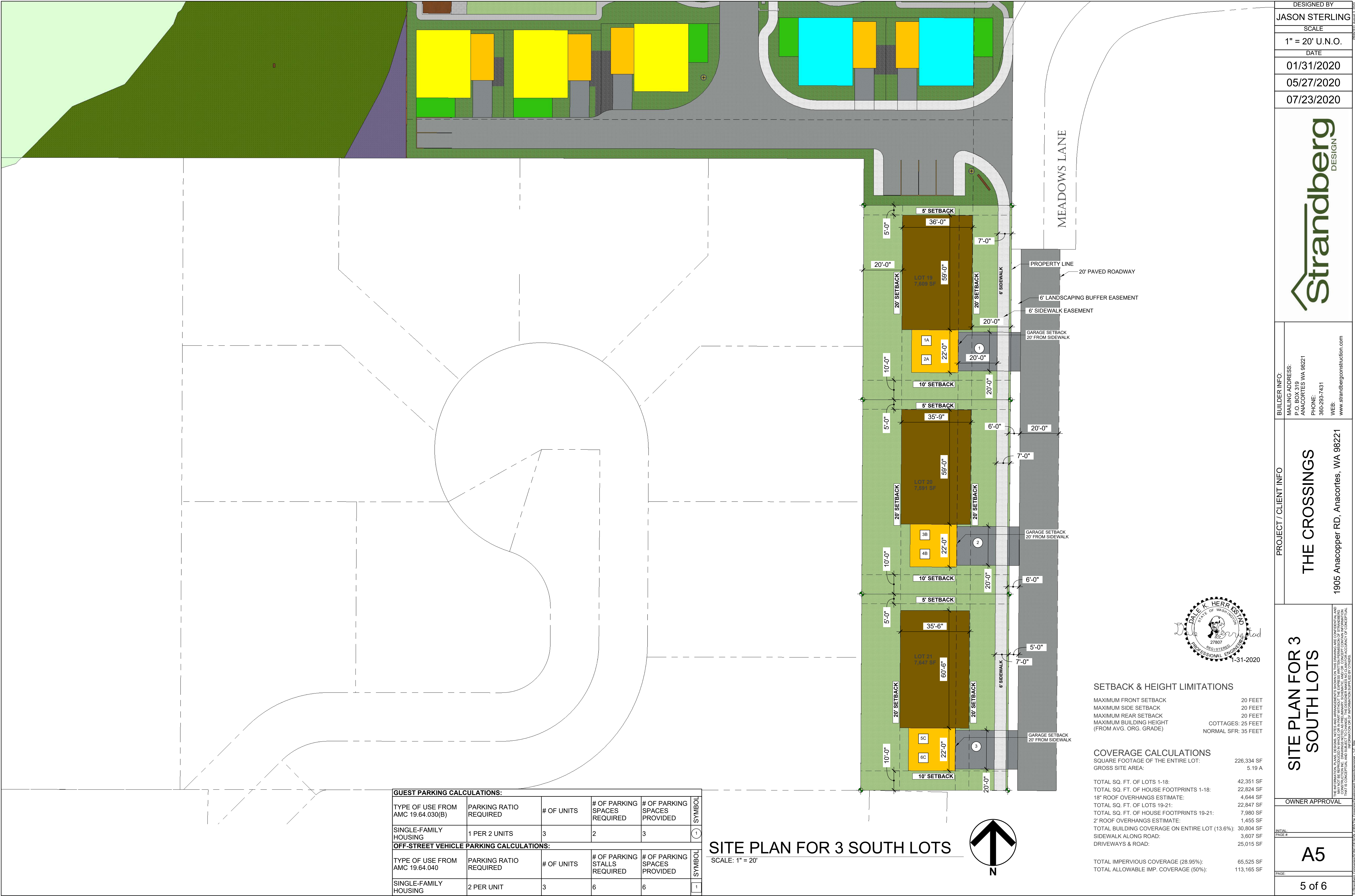
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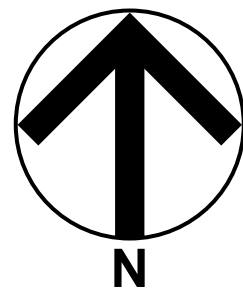




| GUEST PARKING CALCULATIONS:              |                        |            |                              |                              |        |
|------------------------------------------|------------------------|------------|------------------------------|------------------------------|--------|
| TYPE OF USE FROM AMC 19.64.030(B)        | PARKING RATIO REQUIRED | # OF UNITS | # OF PARKING SPACES REQUIRED | # OF PARKING SPACES PROVIDED | SYMBOL |
| SINGLE-FAMILY HOUSING                    | 1 PER 2 UNITS          | 3          | 2                            | 3                            | 1      |
| OFF-STREET VEHICLE PARKING CALCULATIONS: |                        |            |                              |                              |        |
| TYPE OF USE FROM AMC 19.64.040           | PARKING RATIO REQUIRED | # OF UNITS | # OF PARKING STALLS REQUIRED | # OF PARKING SPACES PROVIDED | SYMBOL |
| SINGLE-FAMILY HOUSING                    | 2 PER UNIT             | 3          | 6                            | 6                            | 1      |

SITE PLAN FOR 3 SOUTH LOTS

SCALE: 1" = 20'



SETBACK & HEIGHT LIMITATIONS

|                                                |                                          |
|------------------------------------------------|------------------------------------------|
| MAXIMUM FRONT SETBACK                          | 20 FEET                                  |
| MAXIMUM SIDE SETBACK                           | 20 FEET                                  |
| MAXIMUM REAR SETBACK                           | 20 FEET                                  |
| MAXIMUM BUILDING HEIGHT (FROM AVG. ORG. GRADE) | COTTAGES: 25 FEET<br>NORMAL SFR: 35 FEET |

COVERAGE CALCULATIONS

|                                                |            |
|------------------------------------------------|------------|
| SQUARE FOOTAGE OF THE ENTIRE LOT:              | 226,334 SF |
| GROSS SITE AREA:                               | 5.19 A     |
| TOTAL SQ. FT. OF LOTS 1-18:                    | 42,351 SF  |
| TOTAL SQ. FT. OF HOUSE FOOTPRINTS 1-18:        | 22,824 SF  |
| 18" ROOF OVERHANGS ESTIMATE:                   | 4,644 SF   |
| TOTAL SQ. FT. OF LOTS 19-21:                   | 22,847 SF  |
| TOTAL SQ. FT. OF HOUSE FOOTPRINTS 19-21:       | 7,980 SF   |
| 2" ROOF OVERHANGS ESTIMATE:                    | 1,455 SF   |
| TOTAL BUILDING COVERAGE ON ENTIRE LOT (13.6%): | 30,804 SF  |
| SIDEWALK ALONG ROAD:                           | 3,607 SF   |
| DRIVEWAYS & ROAD:                              | 25,015 SF  |
| TOTAL IMPERVIOUS COVERAGE (28.95%):            | 65,525 SF  |
| TOTAL ALLOWABLE IMP. COVERAGE (50%):           | 113,165 SF |

DESIGNED BY  
JASON STERLING

SCALE  
1" = 20' U.N.O.

DATE  
01/31/2020

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SITE PLAN FOR 3  
SOUTH LOTS

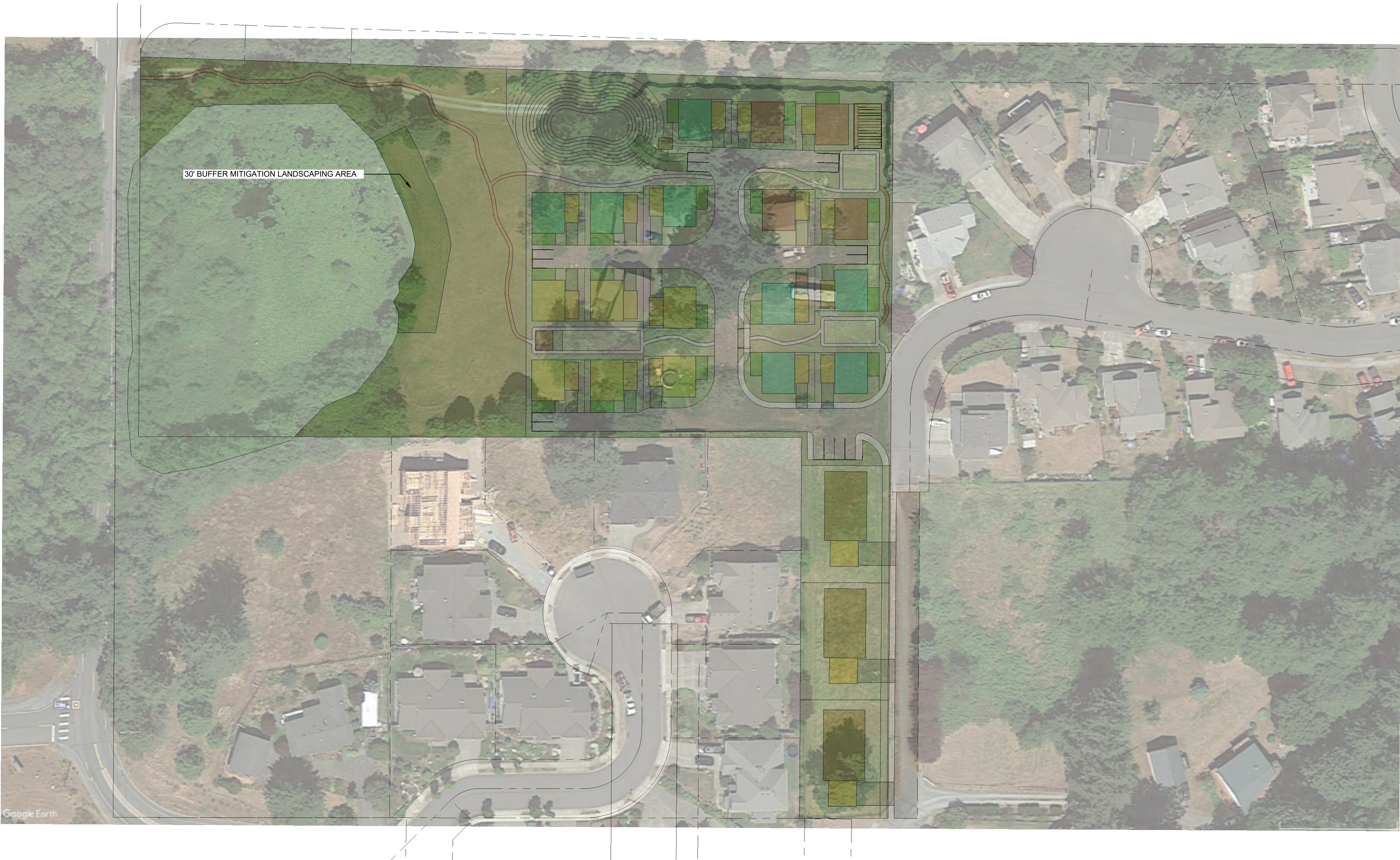
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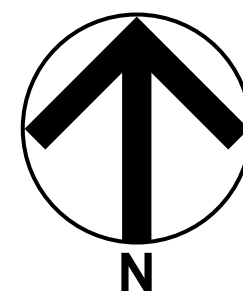
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SITE PLAN FOR 3 SOUTH LOTS  
SCALE: 1" = 40'



|                 |
|-----------------|
| DESIGNED BY     |
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| SCALE           |
| 1" = 20' U.N.O. |
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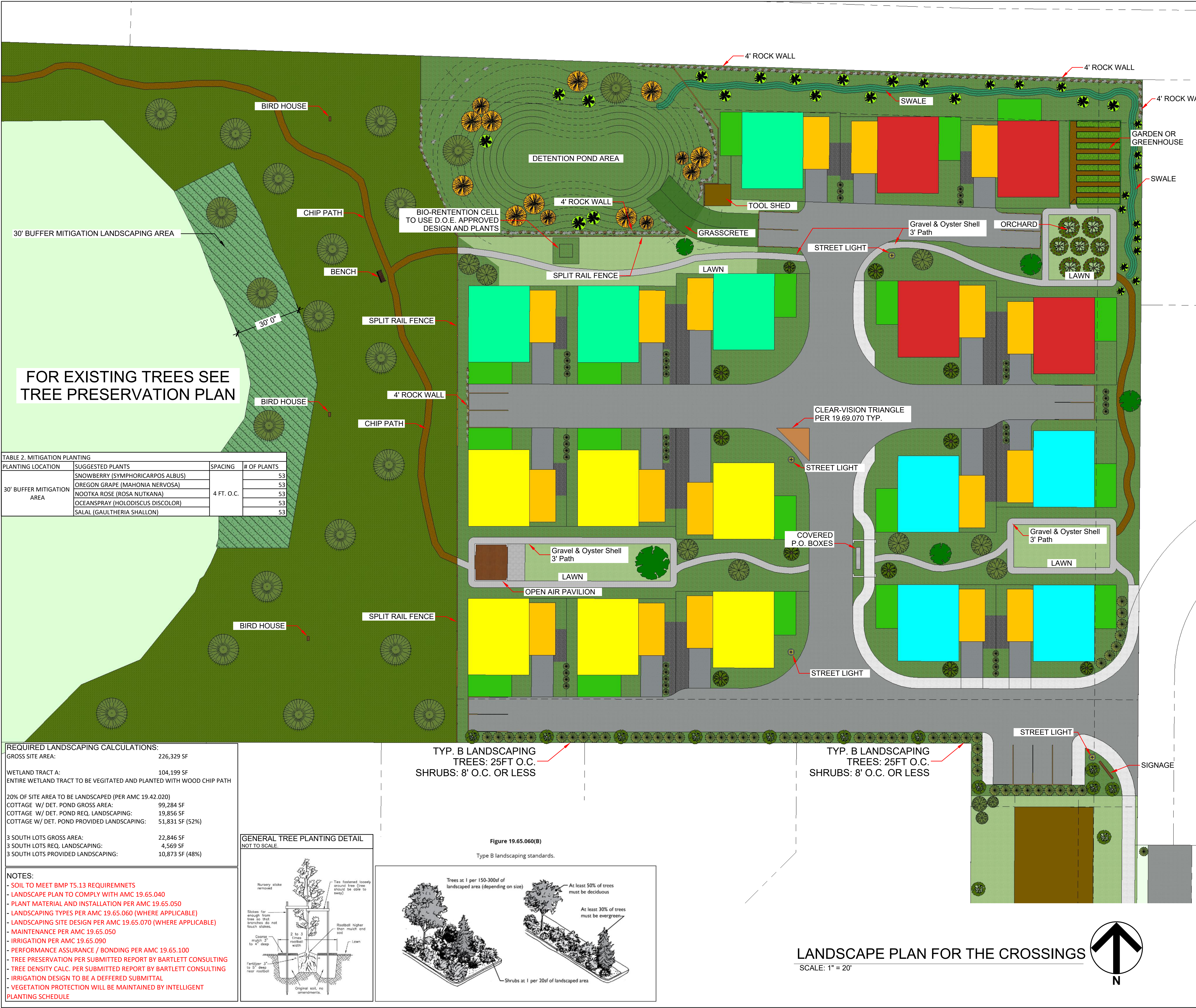
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
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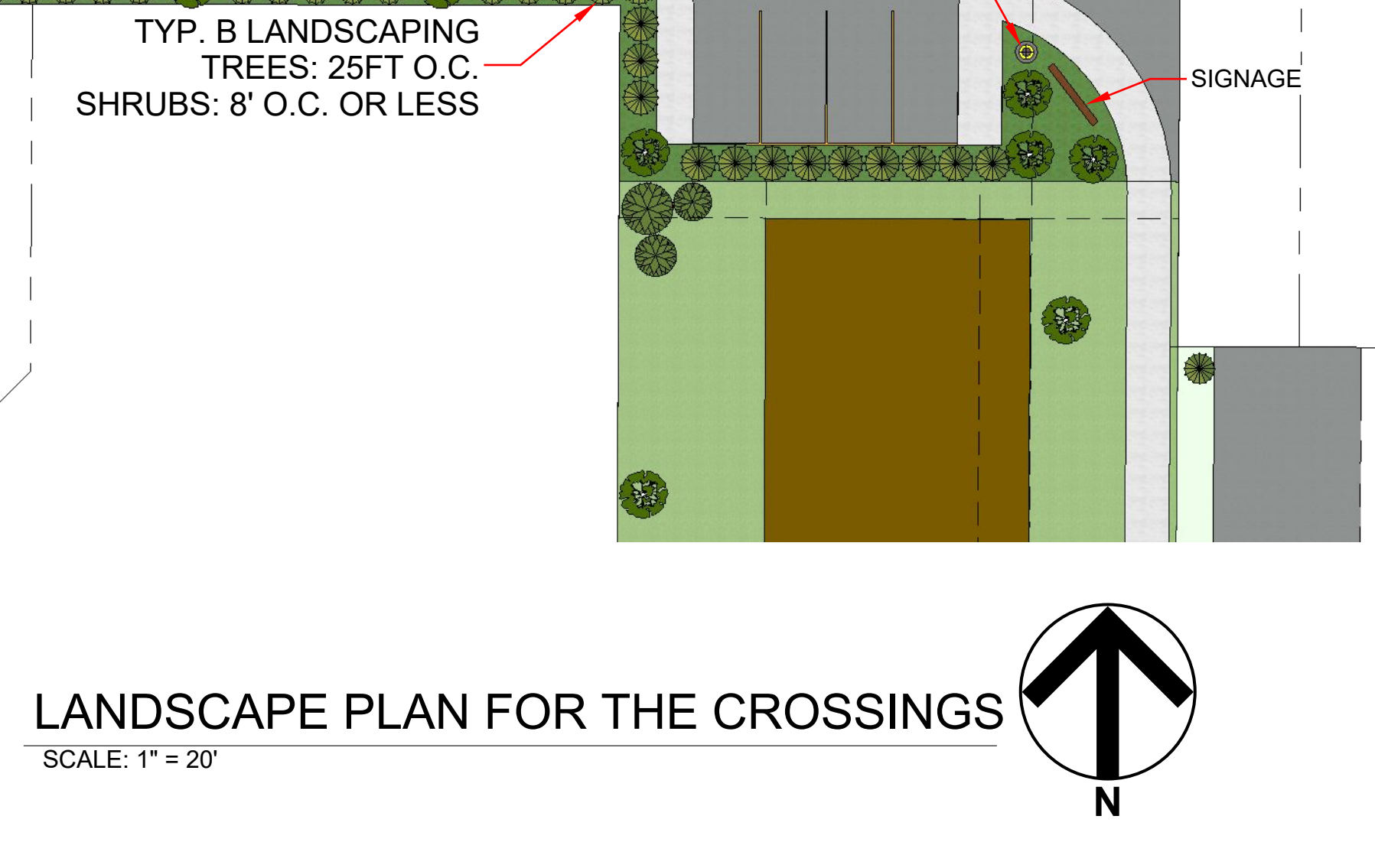
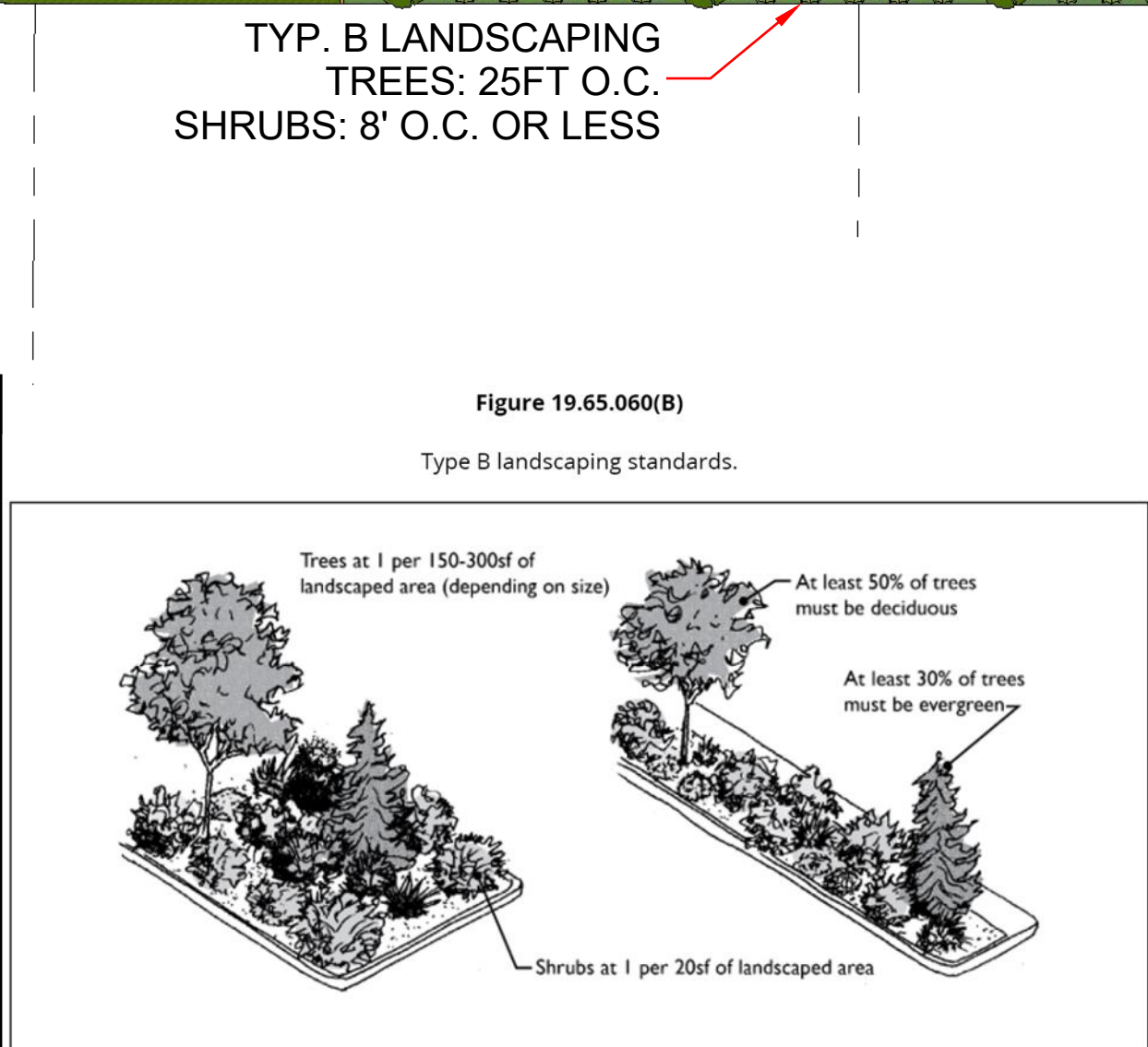
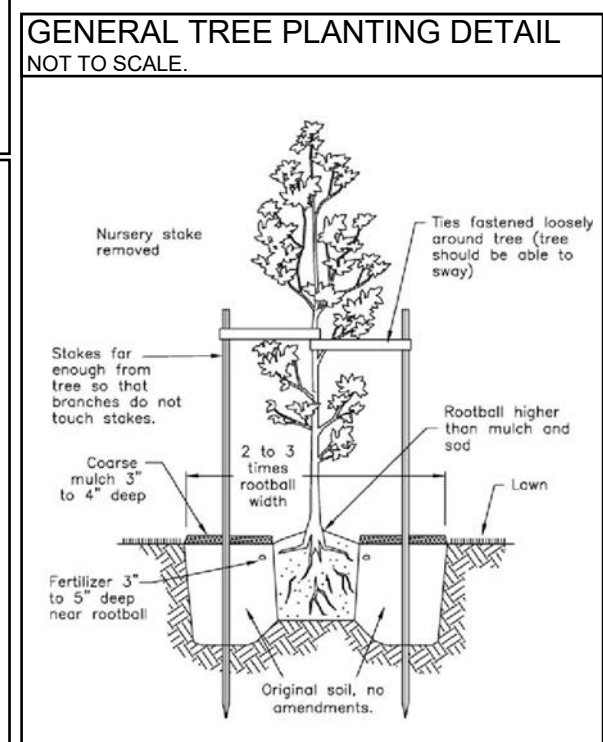




| TABLE 2. MITIGATION PLANTING |                                  |            |             |
|------------------------------|----------------------------------|------------|-------------|
| PLANTING LOCATION            | SUGGESTED PLANTS                 | SPACING    | # OF PLANTS |
| 30' BUFFER MITIGATION AREA   | SNOWBERRY (SYMPHORICARPOS ALBUS) | 4 FT. O.C. | 53          |
|                              | OREGON GRAPE (MAHONIA NERVOSA)   |            | 53          |
|                              | NOOTKA ROSE (ROSA NUTKANA)       |            | 53          |
|                              | OCEANSPRAY (HOLODISCUS DISCOLOR) |            | 53          |
|                              | SALAL (GAULTHERIA SHALLON)       |            | 53          |

| REQUIRED LANDSCAPING CALCULATIONS:                                   |                 |
|----------------------------------------------------------------------|-----------------|
| GROSS SITE AREA:                                                     | 226,329 SF      |
| WETLAND TRACT A:                                                     | 104,199 SF      |
| ENTIRE WETLAND TRACT TO BE VEGETATED AND PLANTED WITH WOOD CHIP PATH |                 |
| 20% OF SITE AREA TO BE LANDSCAPED (PER AMC 19.42.020)                |                 |
| COTTAGE W/ DET. POND GROSS AREA:                                     | 99,284 SF       |
| COTTAGE W/ DET. POND REQ. LANDSCAPING:                               | 19,856 SF       |
| COTTAGE W/ DET. POND PROVIDED LANDSCAPING:                           | 51,831 SF (52%) |
| 3 SOUTH LOTS GROSS AREA:                                             | 22,846 SF       |
| 3 SOUTH LOTS REQ. LANDSCAPING:                                       | 4,569 SF        |
| 3 SOUTH LOTS PROVIDED LANDSCAPING:                                   | 10,873 SF (48%) |

- NOTES:
- SOIL TO MEET BMP T5.13 REQUIREMENTS
  - LANDSCAPE PLAN TO COMPLY WITH AMC 19.65.040
  - PLANT MATERIAL AND INSTALLATION PER AMC 19.65.050
  - LANDSCAPING TYPES PER AMC 19.65.060 (WHERE APPLICABLE)
  - LANDSCAPING SITE DESIGN PER AMC 19.65.070 (WHERE APPLICABLE)
  - MAINTENANCE PER AMC 19.65.050
  - IRRIGATION PER AMC 19.65.090
  - PERFORMANCE ASSURANCE / BONDING PER AMC 19.65.100
  - TREE PRESERVATION PER SUBMITTED REPORT BY BARTLETT CONSULTING
  - TREE DENSITY CALC. PER SUBMITTED REPORT BY BARTLETT CONSULTING
  - IRRIGATION DESIGN TO BE A DEFERRED SUBMITTAL
  - VEGETATION PROTECTION WILL BE MAINTAINED BY INTELLIGENT PLANTING SCHEDULE



### LANDSCAPE LEGEND

|  |                                                                      |  |
|--|----------------------------------------------------------------------|--|
|  | 1 Cornus Sericea                                                     |  |
|  | Red Twig Dogwood<br>Quantity: 31<br>1 GAL.                           |  |
|  | 2 Myrica Californica                                                 |  |
|  | Wax Myrtle<br>Quantity: 63<br>1 GAL.                                 |  |
|  | 3 Betula papyrifera                                                  |  |
|  | White Paper Birch<br>Quantity: 23<br>6 FT Tall                       |  |
|  | 4 Fruit Tree                                                         |  |
|  | Plumb / Apple / Pear<br>Quantity: 7<br>6 FT Tall                     |  |
|  | 5 Populus Tremuloides                                                |  |
|  | Quaking Aspen<br>Quantity: 14<br>6 FT Tall                           |  |
|  | 6 Platanus Acerifolia                                                |  |
|  | London Planetree<br>Quantity: 5<br>6 FT Tall                         |  |
|  | 7 Populus tremula 'Erecta'                                           |  |
|  | Swedish Aspen<br>Quantity: 14<br>6 FT Tall                           |  |
|  | 8 Thuja Plicata 'Green Giant'                                        |  |
|  | Green Giant Arborvitae<br>Quantity: 17<br>6 FT Tall                  |  |
|  | 9 Pseudotsuga Menziesii                                              |  |
|  | Douglas Fir<br>Quantity: 21<br>6 FT Tall                             |  |
|  | 10 Mulch Planter Area                                                |  |
|  | 12 Chip Path                                                         |  |
|  | 13 5/8" Crushed Gravel                                               |  |
|  | 14 General Landscaping<br>See List of Acceptable General Landscaping |  |
|  | 15 5/8" Crushed Gravel and Oyster Shell Pervious Walkway             |  |
|  | 16 Existing Wetland Vegetation                                       |  |

List of Acceptable General Landscaping

Plants

- Japanese Holly (Ilex Crenata)
- Red Sword Fern
- Mexican Feather Grass (Stipa Tenuissima)
- Tall Oregon Grape (Mahonia Aquifolium)
- Salal (Gaultheria Shallon)
- Kinnikinnic (Aretostaphylos)
- Red Flowering Currant (Ribes Sanquineum)
- Rhodi - (Mixed)
- Western Azalea (Mixed)
- Strawberry Tree (Arbutus)

Perennials

- Spanish Lavender
- Salvia Nemorosa Caradonna (Sage)
- Passion Sage
- Yarrow
- Black Eyed Susan

Type of irrigation to be drip, soaker hose & standard spray style sprinklers. Will meet AMC 19.65.090.

DESIGNED BY  
JASON STERLING

SCALE  
1" = 20' U.N.O.

DATE  
01/31/2020

05/27/2020

07/23/2020

**Strandberg**  
DESIGN

BUILDER INFO:  
MAILING ADDRESS:  
P.O. BOX 319  
ANACORTES WA 98221  
PHONE:  
360-293-7431  
WEB:  
www.strandbergconstruction.com

PROJECT / CLIENT INFO  
**THE CROSSINGS**  
1905 Anacopper RD, Anacortes, WA 98221

**LANDSCAPE PLAN FOR THE CROSSINGS**

OWNER APPROVAL

INITIAL  
PAGE #

**L1**

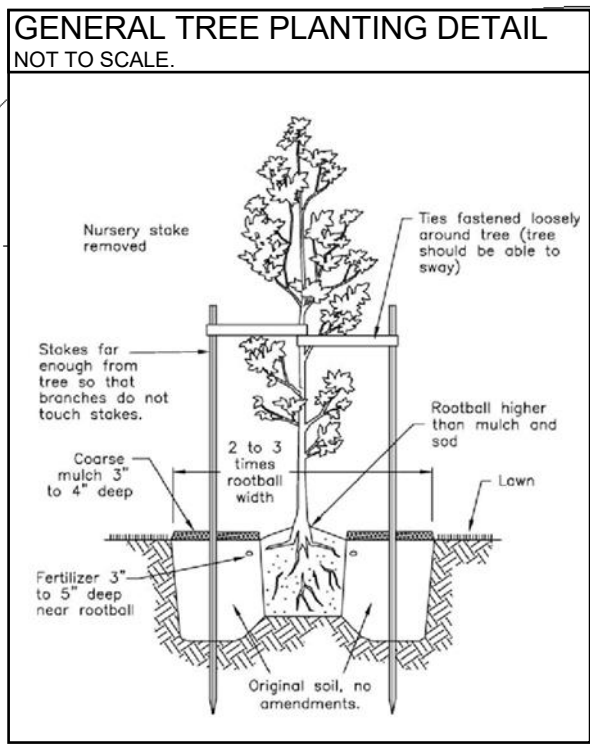
PAGE:  
1 of 2





|                                                                      |                 |
|----------------------------------------------------------------------|-----------------|
| REQUIRED LANDSCAPING CALCULATIONS:                                   |                 |
| GROSS SITE AREA:                                                     | 226,329 SF      |
| WETLAND TRACT A:                                                     | 104,199 SF      |
| ENTIRE WETLAND TRACT TO BE VEGETATED AND PLANTED WITH WOOD CHIP PATH |                 |
| 20% OF SITE AREA TO BE LANDSCAPED (PER AMC 19.42.020)                |                 |
| COTTAGE W/ DET. POND GROSS AREA:                                     | 99,284 SF       |
| COTTAGE W/ DET. POND REQ. LANDSCAPING:                               | 19,856 SF       |
| COTTAGE W/ DET. POND PROVIDED LANDSCAPING:                           | 51,831 SF (52%) |
| 3 SOUTH LOTS GROSS AREA:                                             | 22,846 SF       |
| 3 SOUTH LOTS REQ. LANDSCAPING:                                       | 4,569 SF        |
| 3 SOUTH LOTS PROVIDED LANDSCAPING:                                   | 10,873 SF (48%) |

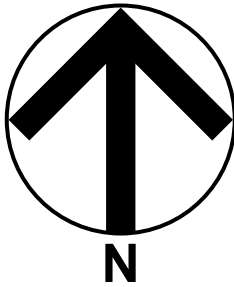
- NOTES:
- SOIL TO MEET BMP T5.13 REQUIREMENTS
  - LANDSCAPE PLAN TO COMPLY WITH AMC 19.65.040
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  - IRRIGATION DESIGN TO BE A DEFERRED SUBMITTAL
  - VEGETATION PROTECTION WILL BE MAINTAINED BY INTELLIGENT PLANTING SCHEDULE



NOTE: FINAL LANDSCAPING FOR PH II LOTS TO BE DETERMINED UPON DEVELOPMENT OF LOTS.

## LANDSCAPE PLAN FOR 3 SOUTH LOTS

SCALE: 1" = 20'



LANDSCAPE LEGEND

|  |                                                                    |  |
|--|--------------------------------------------------------------------|--|
|  | 1 Cornus Sericea                                                   |  |
|  | Red Twig Dogwood<br>Quantity: 31<br>1 GAL.                         |  |
|  | 2 Myrica Californica                                               |  |
|  | Wax Myrtle<br>Quantity: 63<br>1 GAL.                               |  |
|  | 3 Betula papyrifera                                                |  |
|  | White Paper Birch<br>Quantity: 23<br>6 FT Tall                     |  |
|  | 4 Fruit Tree                                                       |  |
|  | Plumb / Apple / Pear<br>Quantity: 7<br>6 FT Tall                   |  |
|  | 5 Populus Tremuloides                                              |  |
|  | Quaking Aspen<br>Quantity: 14<br>6 FT Tall                         |  |
|  | 6 Platanus Acerifolia                                              |  |
|  | London Planetree<br>Quantity: 5<br>6 FT Tall                       |  |
|  | 7 Populus tremula 'Erecta'                                         |  |
|  | Swedish Aspen<br>Quantity: 14<br>6 FT Tall                         |  |
|  | 8 Thuja Plicata 'Green Giant'                                      |  |
|  | Green Giant Arborvitae<br>Quantity: 17<br>6 FT Tall                |  |
|  | 9 Pseudotsuga Menziesii                                            |  |
|  | Douglas Fir<br>Quantity: 21<br>6 FT Tall                           |  |
|  | 10 Mulch Planter Area                                              |  |
|  | 12 Chip Path                                                       |  |
|  | 5/8" Crushed Gravel                                                |  |
|  | 14 General Landscape<br>See List of Acceptable General Landscaping |  |
|  | 5/8" Crushed Gravel and Oyster Shell Pervious Walkway              |  |
|  | 16 Existing Wetland Vegetation                                     |  |

DESIGNED BY  
JASON STERLING

SCALE  
1" = 20' U.N.O.

DATE  
01/31/2020

05/27/2020

07/23/2020

BUILDER INFO:  
MAILING ADDRESS:  
P.O. BOX 319  
ANACORTES WA 98221  
PHONE:  
360-293-7431  
WEB:  
www.strandbergconstruction.com

PROJECT / CLIENT INFO  
THE CROSSINGS  
1905 Anacopper RD, Anacortes, WA 98221

LANDSCAPE PLAN FOR  
3 SOUTH LOTS

OWNER APPROVAL  
INITIAL  
PAGE #  
L2  
PAGE:  
2 of 2

List of Acceptable General Landscaping

Plants

1. Japanese Holly (Ilex Crenata)  
2. Red Sword Fern  
3. Mexican Feather Grass (Stipa Tenuissima)  
4. Tall Oregon Grape (Mahonia Aquifolium)  
5. Salal (Gaultheria Shallon)  
6. Kinnikinnick (Aretostaphylos)  
7. Red Flowering Currant (Ribes Sanquineum)  
8. Rhodi - (Mixed)  
9. Western Azalea (Mixed)  
10. Strawberry Tree (Arbutus)

Perennials

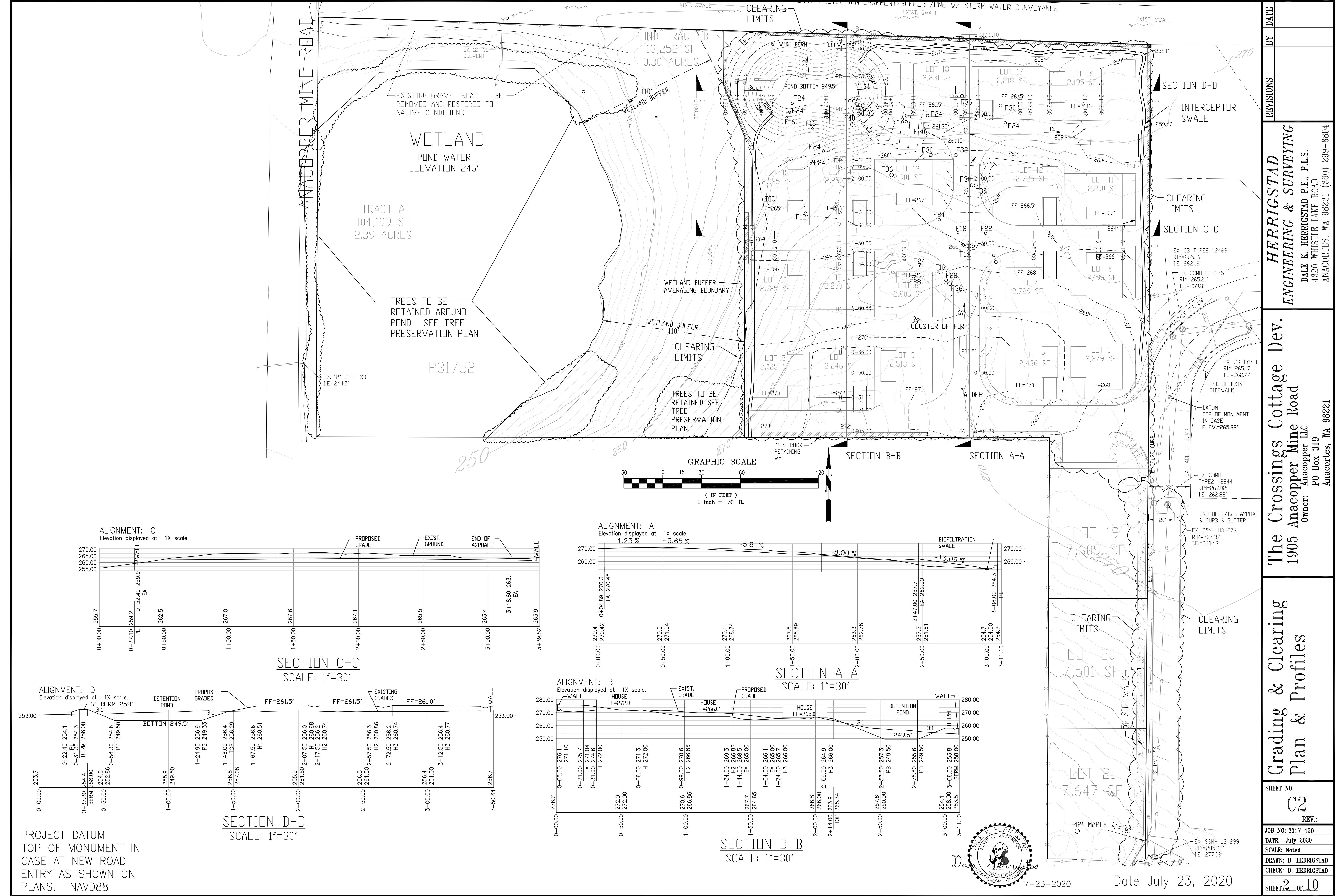
1. Spanish Lavender  
2. Salvia Nemorosa Caradonna (Sage)  
3. Passion Sage  
4. Yarrow  
5. Black Eyed Susan

Type of irrigation to be drip, soaker hose & standard spray style sprinklers. Will meet AMC 19.65.090.

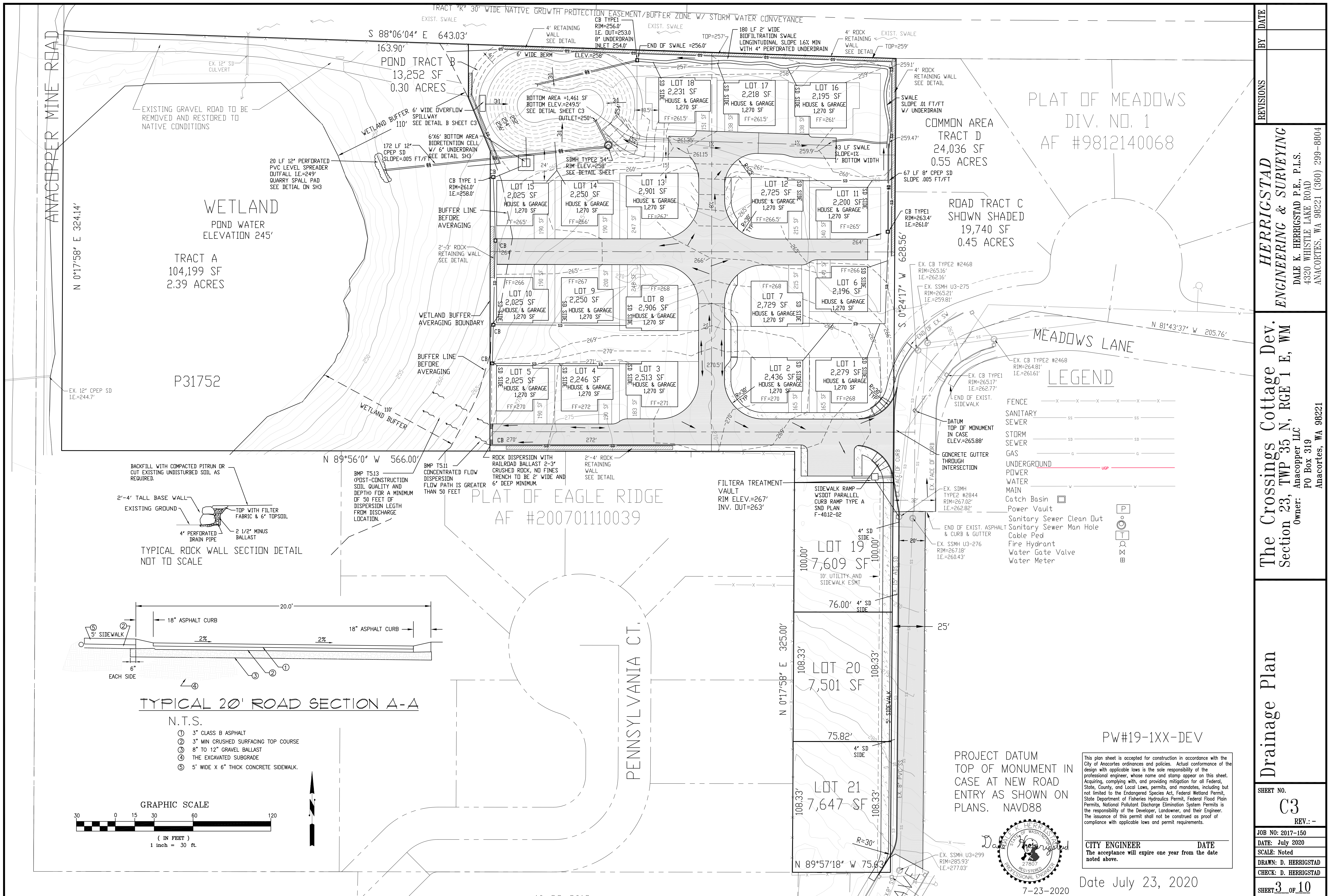






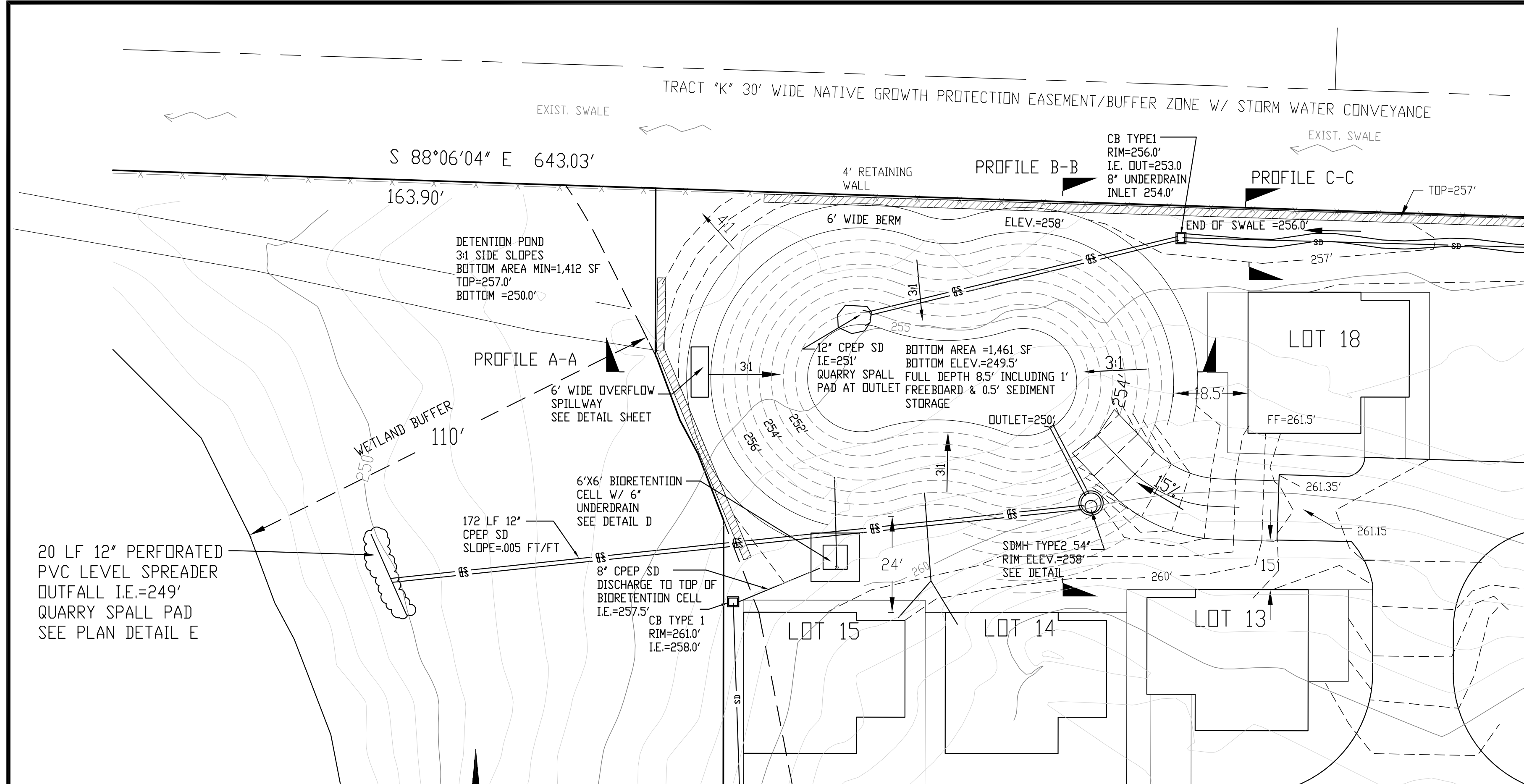




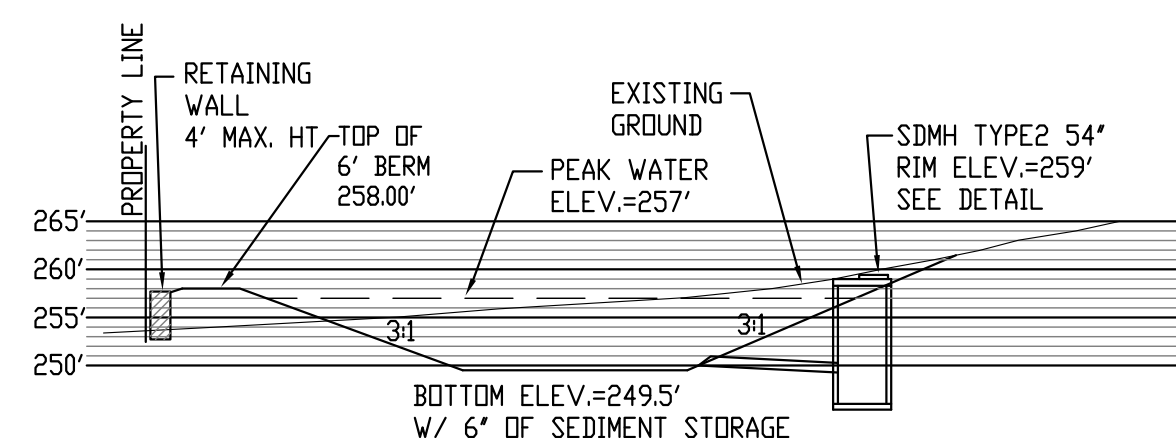
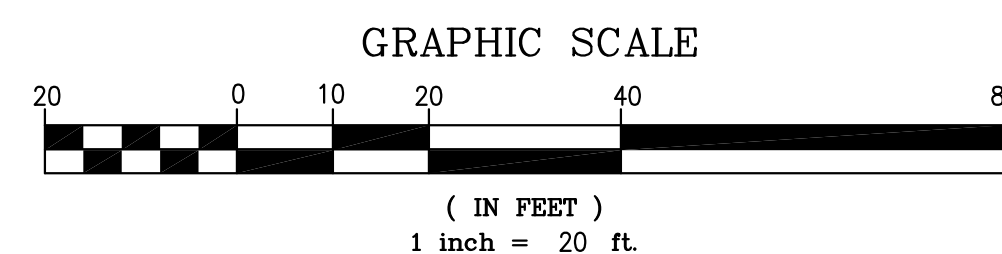


|                                                                                |                  |                 |                                                                                                                              |                      |                                                                                                                                                      |                             |           |    |      |
|--------------------------------------------------------------------------------|------------------|-----------------|------------------------------------------------------------------------------------------------------------------------------|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-----------|----|------|
| SHEET NO.<br><div style="font-size: 2em; text-align: center;">C3</div> REV.: - | Drainage Plan    |                 | The Crossings Cottage Dev.<br>Section 23, TWP 35 N, RGE 1 E, WM<br>Owner: Anacopper LLC<br>PO Box 319<br>Anacortes, WA 98221 |                      | <i>HERRIGSTAD<br/>ENGINEERING &amp; SURVEYING</i><br>DALE K. HERRIGSTAD P.E., P.L.S.<br>4320 WHISTLE LAKE ROAD<br>ANACORTES, WA 98221 (360) 299-8804 |                             | REVISIONS | BY | DATE |
|                                                                                | JOB NO: 2017-150 | DATE: July 2020 | SCALE: Noted                                                                                                                 | DRAWN: D. HERRIGSTAD | CHECK: D. HERRIGSTAD                                                                                                                                 | SHEET <u>3</u> OF <u>10</u> |           |    |      |

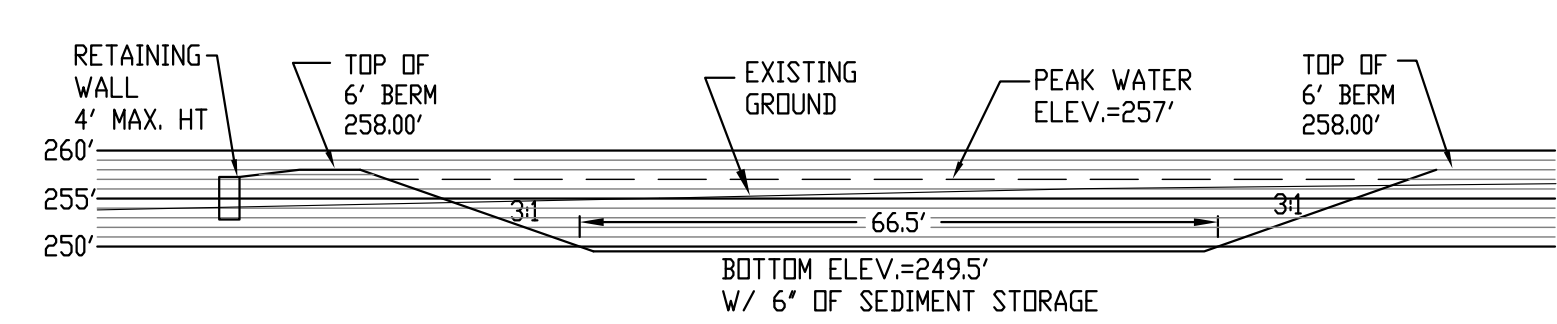




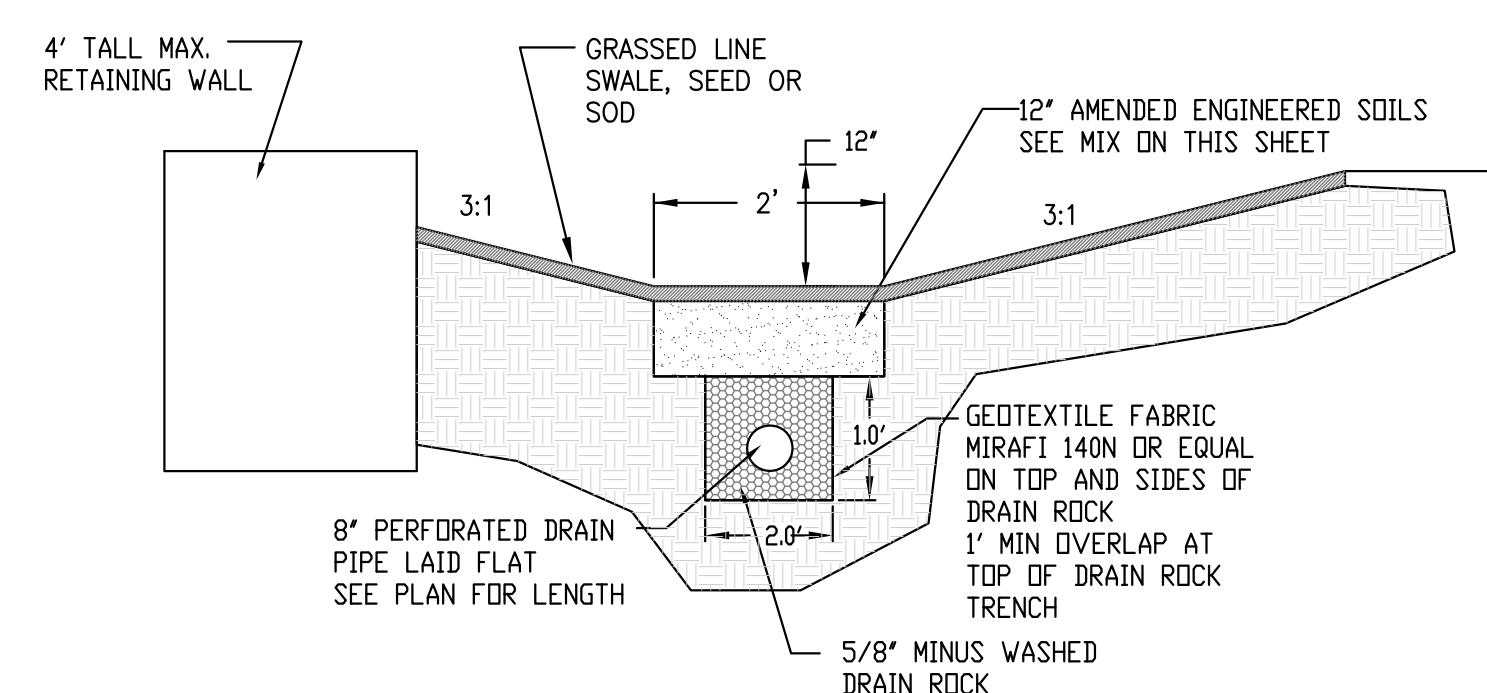
DETENTION POND AND SEDIMENT POND DURING CONSTRUCTION



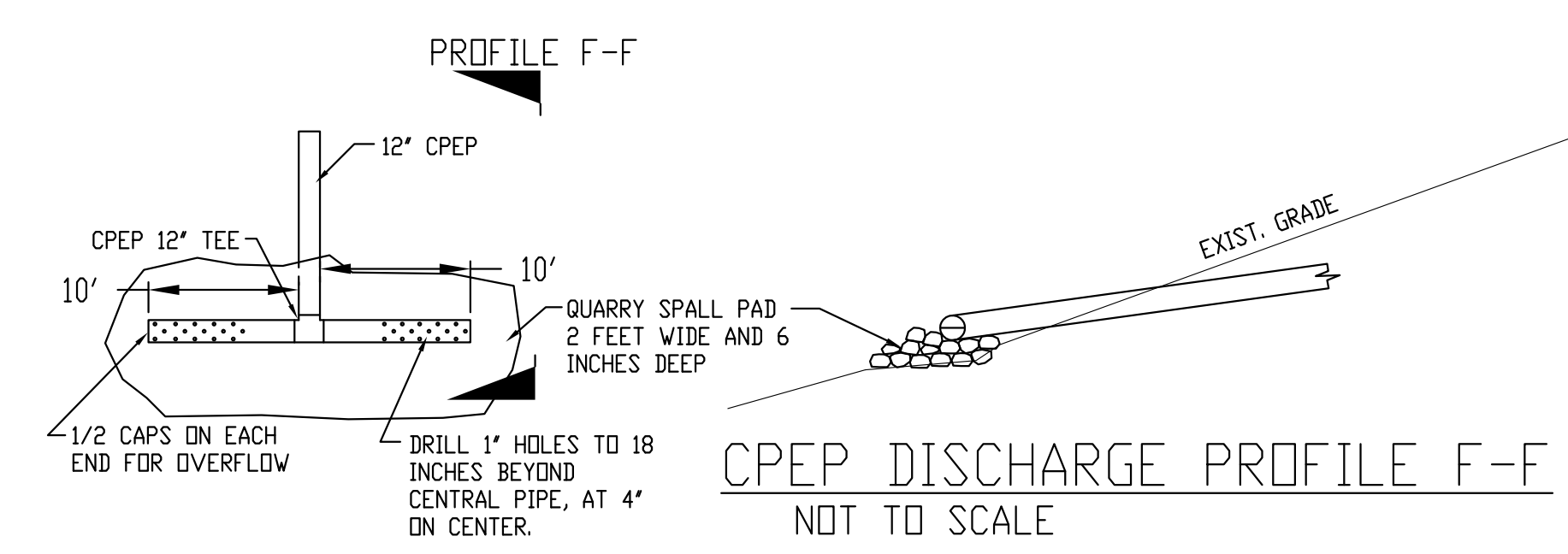
PROFILE B-B  
SCALE: 1"=20' HOR/VERT.



PROFILE A-A  
SCALE: 1"=20' HOR/VERT.

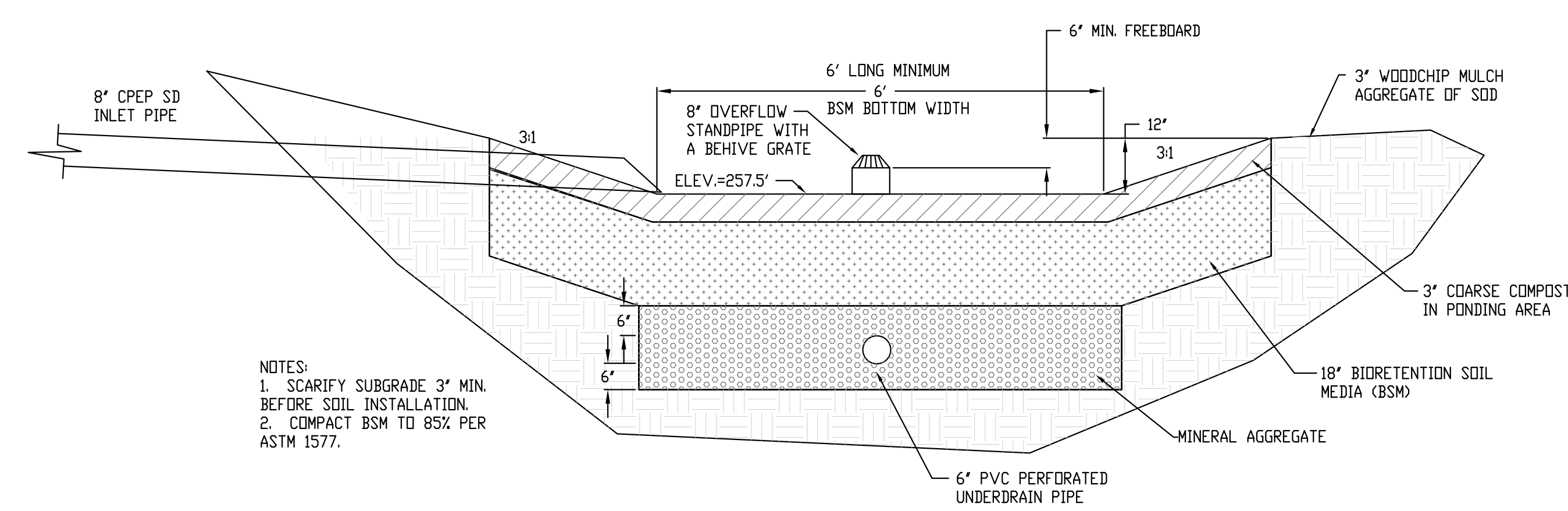


SWALE SECTION C-C  
SCALE: NONE

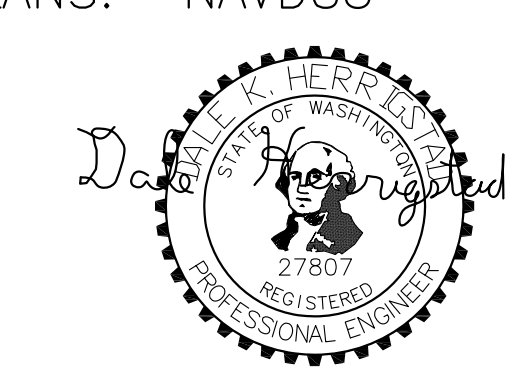
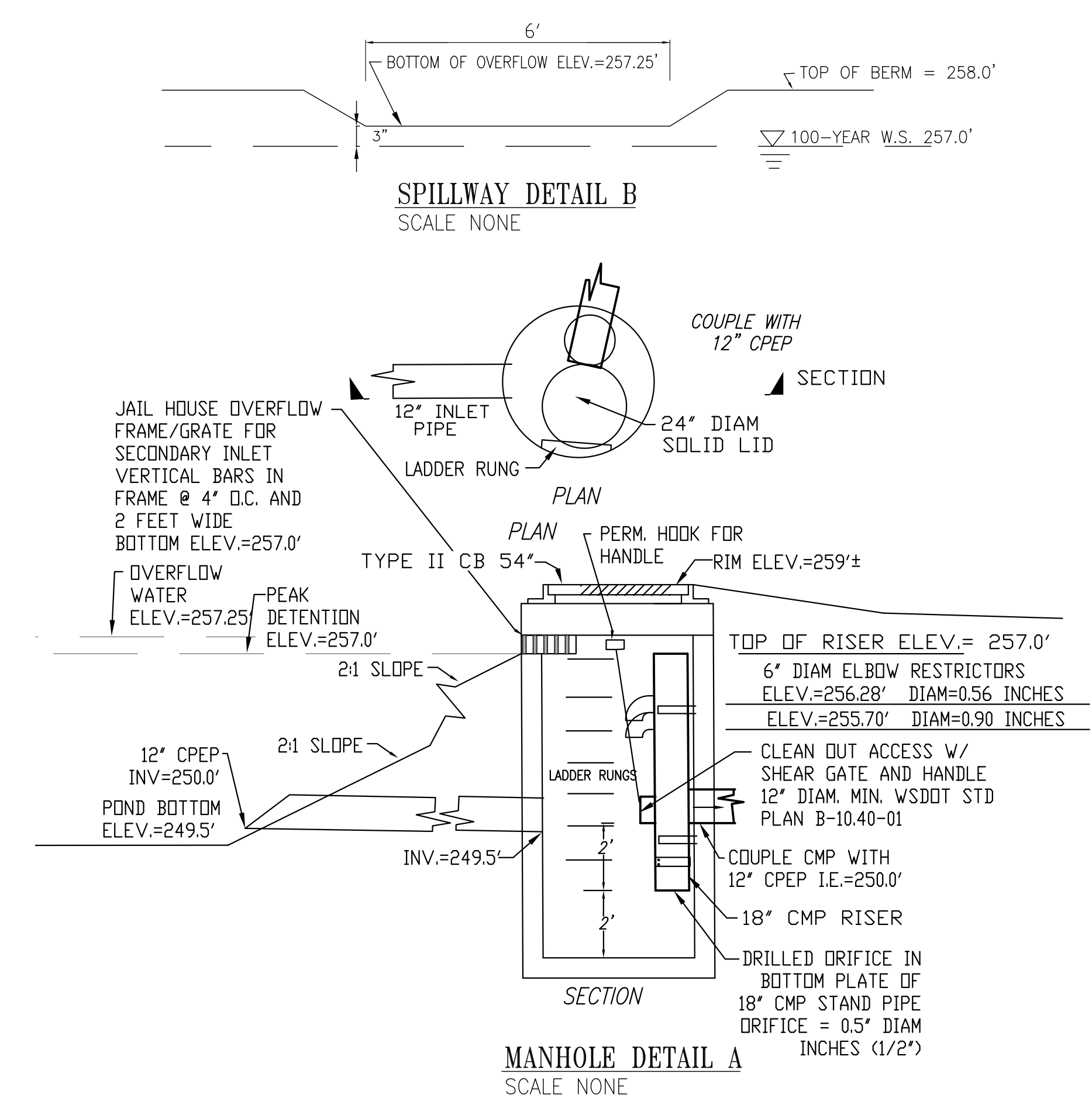


CPEP DISCHARGE PROFILE F-F  
NOT TO SCALE

CPEP DISCHARGE DETAIL PLAN E  
NOT TO SCALE



BIORETENTION CELL SECTION DETAIL D  
NOT TO SCALE



PROJECT DATUM  
TOP OF MONUMENT IN  
CASE AT NEW ROAD  
ENTRY AS SHOWN ON  
PLANS. NAVD88

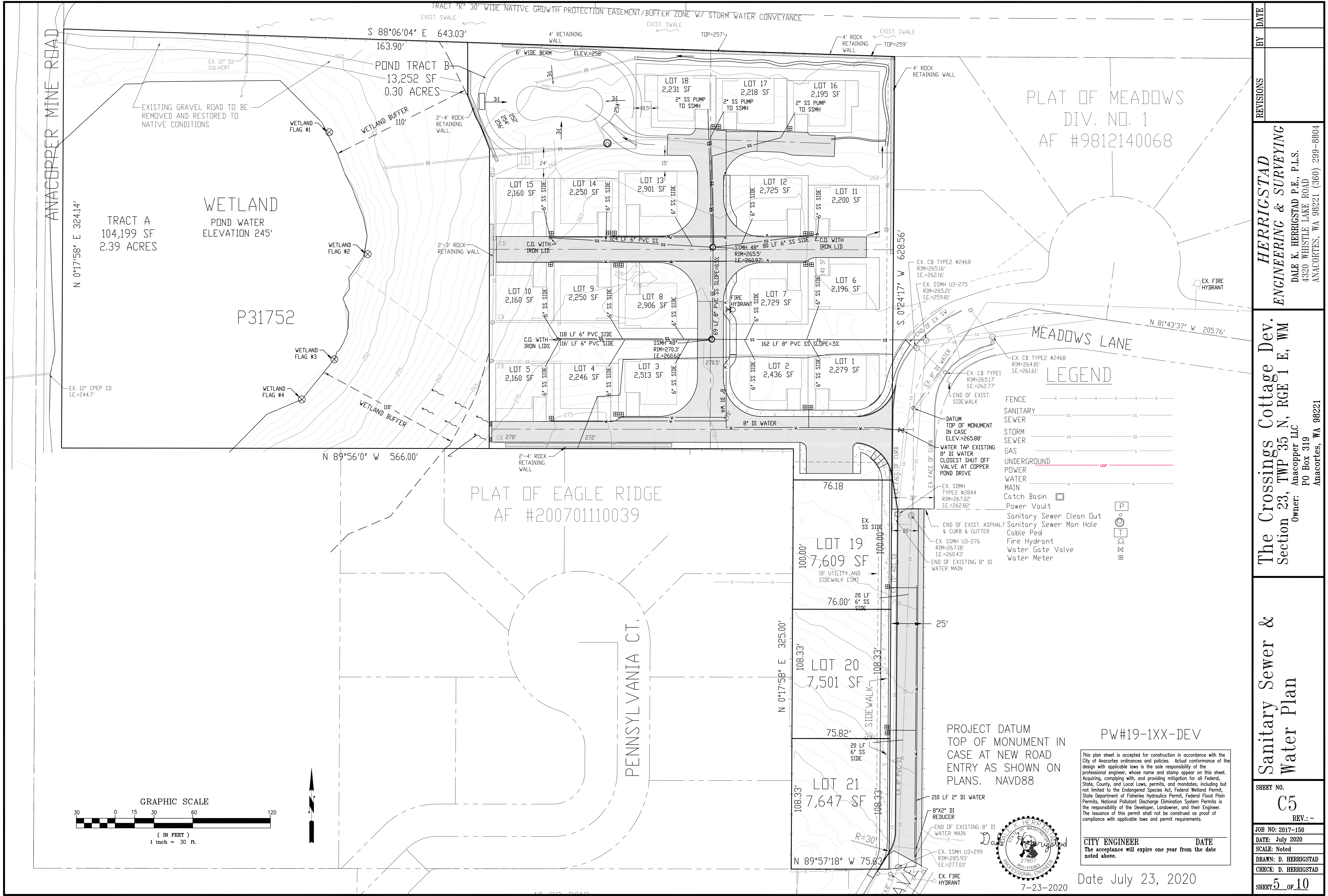
This plan sheet is accepted for construction in accordance with the City of Anacortes ordinances and policies. Actual conformance of the design with applicable laws is the sole responsibility of the professional engineer, whose name and stamp appear on this sheet. Acquiring, complying with, and providing mitigation for all Federal, State, County, and Local Laws, permits, and mandates, including but not limited to the Endangered Species Act, Federal Wetland Permit, State Department of Fisheries Hydraulics Permit, Federal Flood Plain Permits, National Pollutant Discharge Elimination System Permits is the responsibility of the Developer, Landowner, and their Engineer. The issuance of this permit shall not be construed as proof of compliance with applicable laws and permit requirements.

CITY ENGINEER DATE  
The acceptance will expire one year from the date noted above.

Date July 23, 2020

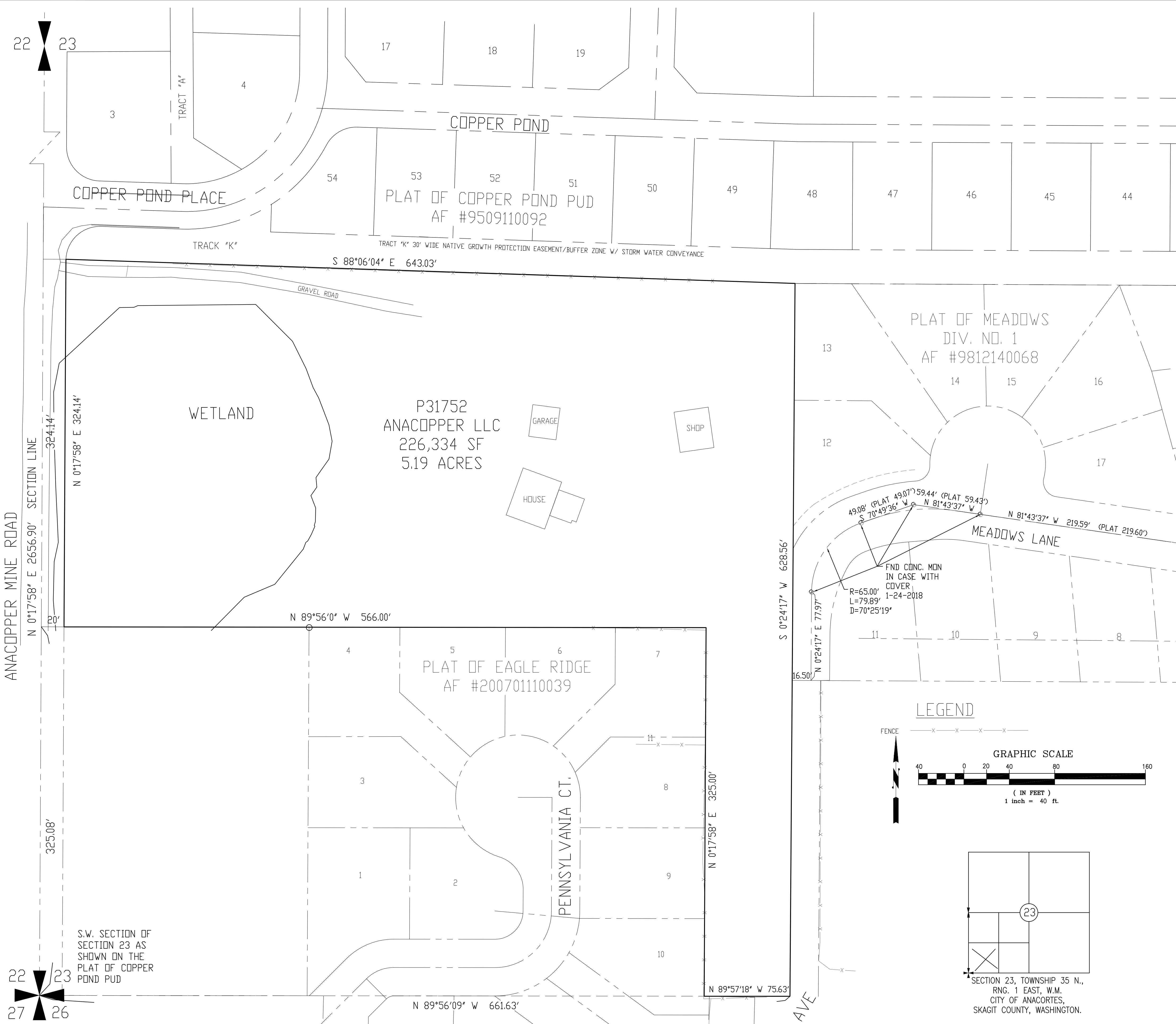
| REVISIONS                                                                                                                                | BY | DATE |
|------------------------------------------------------------------------------------------------------------------------------------------|----|------|
|                                                                                                                                          |    |      |
| HERRIGSTAD<br>ENGINEERING & SURVEYING<br>DALE K. HERRIGSTAD P.E., P.L.S.<br>4320 WHISTLE LAKE ROAD<br>ANACORTES, WA 98221 (360) 299-8804 |    |      |
| The Crossings Cottage Dev.<br>Section 23, TWP 35 N, RGE 1 E, WM<br>Owner: Anacopper LLC<br>PO Box 319<br>Anacortes, WA 98221             |    |      |
| Pond Plan &<br>Details                                                                                                                   |    |      |
| SHEET NO. C4<br>REV.: -                                                                                                                  |    |      |
| JOB NO: 2017-150                                                                                                                         |    |      |
| DATE: July 2020                                                                                                                          |    |      |
| SCALE: Noted                                                                                                                             |    |      |
| DRAWN: D. HERRIGSTAD                                                                                                                     |    |      |
| CHECK: D. HERRIGSTAD                                                                                                                     |    |      |
| SHEET 4 OF 10                                                                                                                            |    |      |





| REVISIONS                                                                                                                                                  | BY | DATE |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|----|------|
|                                                                                                                                                            |    |      |
| <b>HERRIGSTAD</b><br><b>ENGINEERING &amp; SURVEYING</b><br>DALE K. HERRIGSTAD P.E., P.L.S.<br>4320 WHISTLE LAKE ROAD<br>ANACORTES, WA 98221 (360) 299-8804 |    |      |
| <b>The Crossings Cottage Dev.</b><br><b>Section 23, TWP 35 N, RGE 1 E, WM</b><br><b>Owner:</b> Anacopper LLC<br>PO Box 319<br>Anacortes, WA 98221          |    |      |
| <b>Sanitary Sewer &amp; Water Plan</b>                                                                                                                     |    |      |
| <b>SHEET NO.</b><br><b>C5</b><br><b>REV.:</b> -                                                                                                            |    |      |
| <b>JOB NO:</b> 2017-150                                                                                                                                    |    |      |
| <b>DATE:</b> July 2020                                                                                                                                     |    |      |
| <b>SCALE:</b> Noted                                                                                                                                        |    |      |
| <b>DRAWN:</b> D. HERRIGSTAD                                                                                                                                |    |      |
| <b>CHECK:</b> D. HERRIGSTAD                                                                                                                                |    |      |
| <b>SHEET 5 OF 10</b>                                                                                                                                       |    |      |





LEGAL DESCRIPTION

PARCEL "A":  
The Southwest ¼ of the Southwest ¼ of the Southwest ¼ of Section 23, Township 35 North, Range 1 East, W.M.; EXCEPT the West 586.00 feet of the South 325.00 feet thereof; ALSO EXCEPT the West 20 feet thereof; AND ALSO EXCEPT the North 33 feet thereof;

Situate in the County of Skagit, State of Washington.

PARCEL "B":  
That portion of the North 33 feet of the Southwest ¼ of the Southwest ¼ of the Southwest ¼ of Section 23, Township 35 North, Range 1 East, W.M., described as follows:

Beginning at the Southeast corner of Tract C (being the Southeast corner of said North 33 feet of the Southwest ¼ of the Southwest ¼ of the Southwest ¼ of said Section 23) of that certain Survey recorded April 11, 1978, in Volume 2 of Surveys, page 85, under Auditor's File No. 877240, records of Skagit County, Washington; thence West along the South line of said Tract C to the Southwest corner thereof; thence North along the West line of said Tract C, a distance of 18 feet; thence Southeasterly in a straight line to the point of beginning.

Situate in the County of Skagit, State of Washington,

- NOTES
- 1. FOUND CONCRETE MONUMENT IN CASE, 1-24-2018.
  - 2. FOUND REBAR AND CAP OR REBAR W/OUT CAP AS NOTED.
  - 3. BASIS OF BEARINGS: Plat of The Meadows AF #9812140068, center line of Meadows Lane.
  - 4. EQUIPMENT USED: Carlson CR2 2" TOTAL STATION.
  - 5. ERROR OF CLOSURE MEETS WASHINGTON STATE SURVEY STANDARDS.
  - 6. SURVEY METHOD: STANDARD FIELD TRAVERSE.

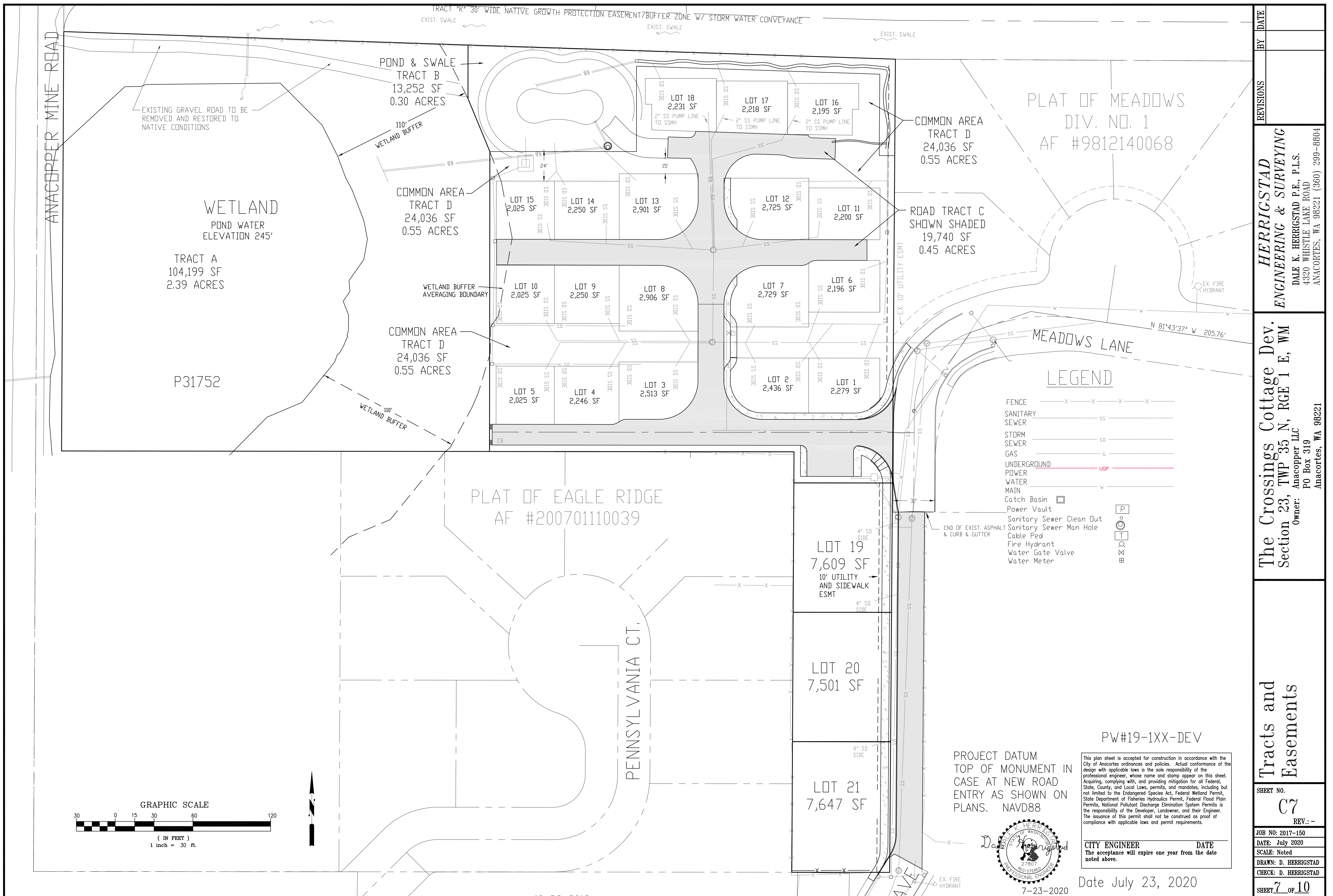


7-23-2020

Date July 23, 2020

| REVISIONS                                                                                                                                | BY | DATE |
|------------------------------------------------------------------------------------------------------------------------------------------|----|------|
|                                                                                                                                          |    |      |
| HERRIGSTAD<br>ENGINEERING & SURVEYING<br>DALE K. HERRIGSTAD P.E., P.L.S.<br>4320 WHISTLE LAKE ROAD<br>ANACORTES, WA 98221 (360) 299-8804 |    |      |
| The Crossings Cottage Dev.<br>Section 23, TWP 35 N, RGE 1 E, WM<br>Owner: Anacopper LLC<br>PO Box 319<br>Anacortes, WA 98221             |    |      |
| Boundary Survey                                                                                                                          |    |      |
| SHEET NO.<br>C6<br>REV.: -                                                                                                               |    |      |
| JOB NO: 2017-150                                                                                                                         |    |      |
| DATE: Jan, 2020                                                                                                                          |    |      |
| SCALE: Noted                                                                                                                             |    |      |
| DRAWN: D. HERRIGSTAD                                                                                                                     |    |      |
| CHECK: D. HERRIGSTAD                                                                                                                     |    |      |
| SHEET 6 OF 10                                                                                                                            |    |      |





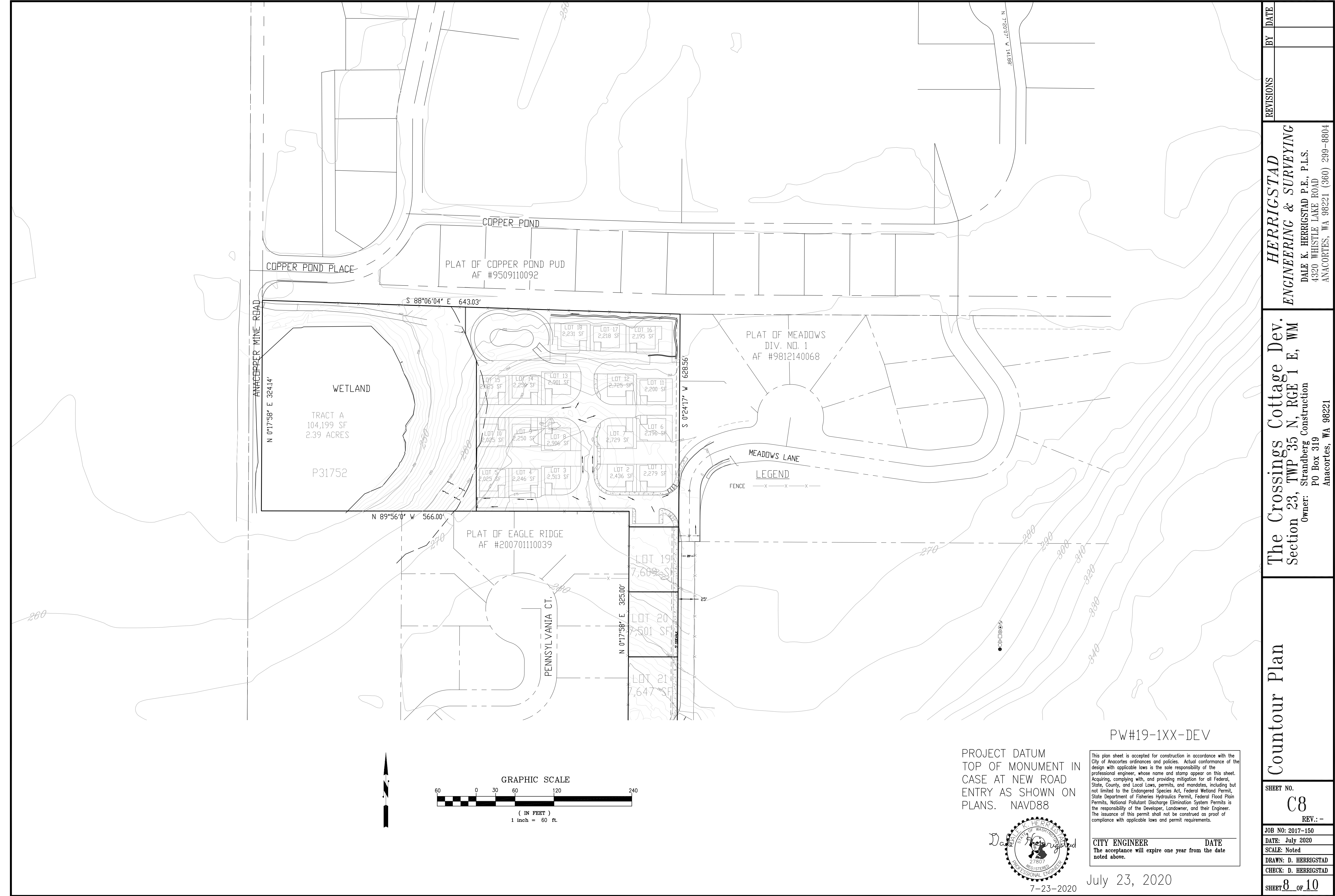
***HERRIGSTAD***  
***ENGINEERING & SURVEYING***  
DALE K. HERRIGSTAD P.E., P.L.S.  
4320 WHISTLE LAKE ROAD  
ANACORTES, WA 98221 (360) 299-8804

The Crossings Cottage Dev.  
Section 23, TWP 35 N, RGE 1 E, WM  
Owner: Anacopper LLC  
PO Box 319  
Anacortes, WA 98221

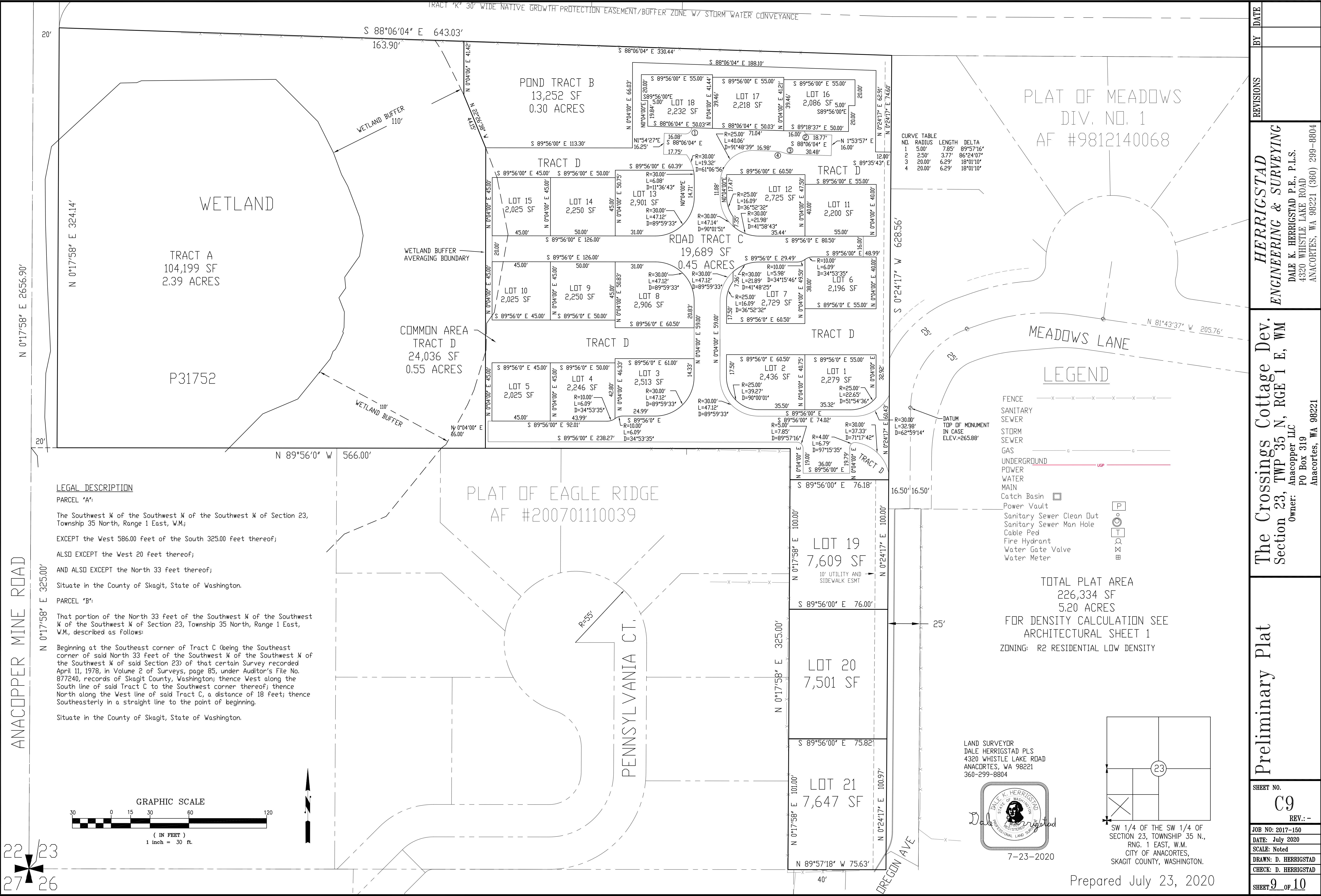
## Tracts and Easements

SHEET NO. C7  
 REV.: -  
 B NO: 2017-150  
 DATE: July 2020  
 SCALE: Noted  
 DRAWN: D. HERRIGSTAD  
 CHECK: D. HERRIGSTAD  
 SHEET 7 OF 10









| REVISIONS                                                                                                                                                  | BY | DATE |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|----|------|
|                                                                                                                                                            |    |      |
| <b>HERRIGSTAD</b><br><b>ENGINEERING &amp; SURVEYING</b><br>DALE K. HERRIGSTAD P.E., P.L.S.<br>4320 WHISTLE LAKE ROAD<br>ANACORTES, WA 98221 (360) 299-8804 |    |      |
| <b>The Crossings Cottage Dev.</b><br><b>Section 23, TWP 35 N, RGE 1 E, WM</b><br><b>Owner:</b> Anacopper LLC<br>PO Box 319<br>Anacortes, WA 98221          |    |      |
| <b>Preliminary Plat</b>                                                                                                                                    |    |      |
| <b>SHEET NO.</b><br><b>C9</b><br><b>REV.: -</b>                                                                                                            |    |      |
| <b>JOB NO: 2017-150</b>                                                                                                                                    |    |      |
| <b>DATE: July 2020</b>                                                                                                                                     |    |      |
| <b>SCALE: Noted</b>                                                                                                                                        |    |      |
| <b>DRAWN: D. HERRIGSTAD</b>                                                                                                                                |    |      |
| <b>CHECK: D. HERRIGSTAD</b>                                                                                                                                |    |      |
| <b>SHEET 9 OF 10</b>                                                                                                                                       |    |      |



Figure II-4.1.1 Stabilized Construction Entrance

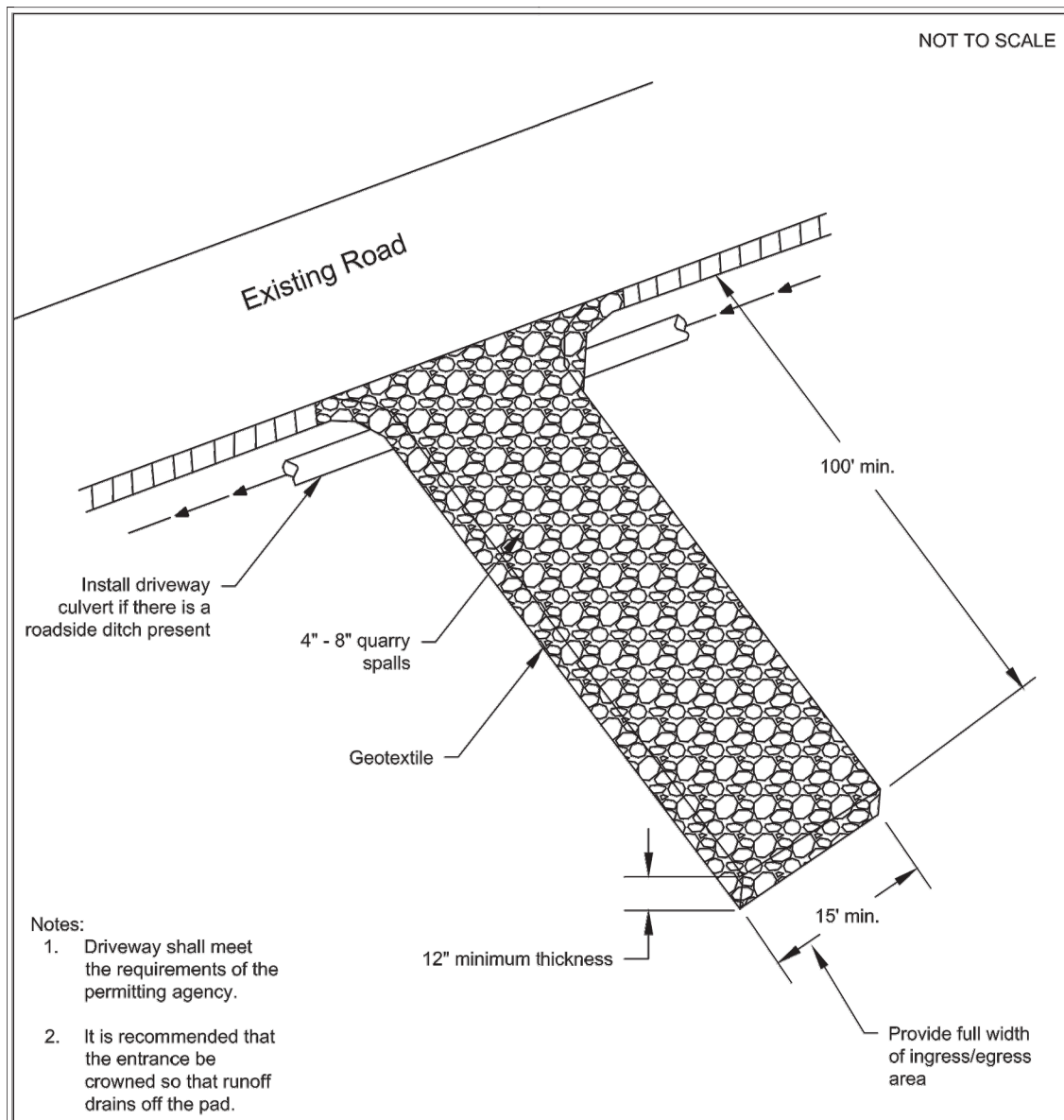


Figure II-4.1.1  
Stabilized Construction Entrance  
Revised June 2015

DEPARTMENT OF  
ECOLOGY  
State of Washington

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BMP C107: Construction Road/Parking Area Stabilization

- Purpose** Stabilizing subdivision roads, parking areas, and other on-site vehicle transportation routes immediately after grading reduces erosion caused by construction traffic or runoff.
- Conditions of Use** Roads or parking areas shall be stabilized wherever they are constructed, whether permanent or temporary, for use by construction traffic. • High Visibility Fencing (see [BMP C103](#)) shall be installed, if necessary, to limit the access of vehicles to only those roads and parking areas that are stabilized.
- Design and Installation Specifications**
- On areas that will receive asphalt as part of the project, install the first lift as soon as possible.
  - A 6-inch depth of 2- to 4-inch crushed rock, gravel base, or crushed surfacing base course shall be applied immediately after grading or utility installation. A 4-inch course of asphalt treated base (ATB) may also be used, or the road/parking area may be paved. It may also be possible to use cement or calcium chloride for soil stabilization. If cement or cement kiln dust is used for roadbase stabilization, pH monitoring and BMPs ([BMPs C252](#) and [C253](#)) are necessary to evaluate and minimize the effects on stormwater. If the area will not be used for permanent roads, parking areas, or structures, a 6-inch depth of hog fuel may also be used, but this is likely to require more maintenance. Whenever possible, construction roads and parking areas shall be placed on a firm, compacted subgrade.
  - Temporary road gradients shall not exceed 15 percent. Roadways shall be carefully graded to drain. Drainage ditches shall be provided on each side of the roadway in the case of a crowned section, or on one side in the case of a super-elevated section. Drainage ditches shall be directed to a sediment control BMP.
  - Rather than relying on ditches, it may also be possible to grade the road so that runoff sheet-flows into a heavily vegetated area with a well-developed topsoil. Landscaped areas are not adequate. If this area has at least 50 feet of vegetation that water can flow through, then it is generally preferable to use the vegetation to treat runoff, rather than a sediment pond or trap. The 50 feet shall not include wetlands or their buffers. If runoff is allowed to sheetflow through adjacent vegetated areas, it is vital to design the roadways and parking areas so that no concentrated runoff is created.
  - Storm drain inlets shall be protected to prevent sediment-laden water entering the storm drain system (see [BMP C220](#)).
- Maintenance Standards** Inspect stabilized areas regularly, especially after large storm events. Crushed rock, gravel base, etc., shall be added as required to maintain a stable driving surface and to stabilize any areas that have eroded. Following construction, these areas shall be restored to pre-construction condition or better to prevent future erosion. Perform street cleaning at the end of each day or more often if necessary.

Figure II-4.1.7a Concrete Washout Area

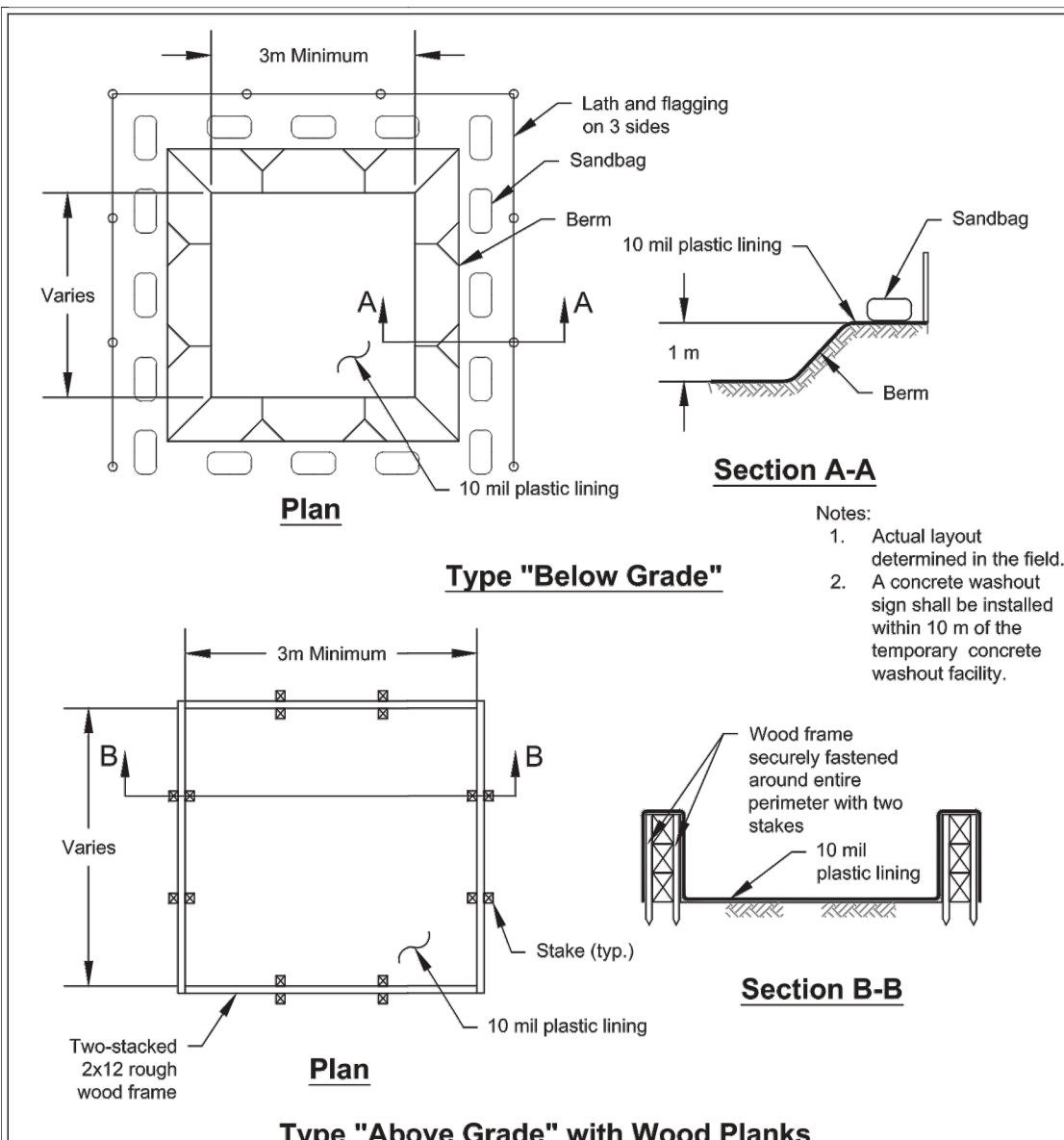


Figure II-4.2.12 Silt Fence

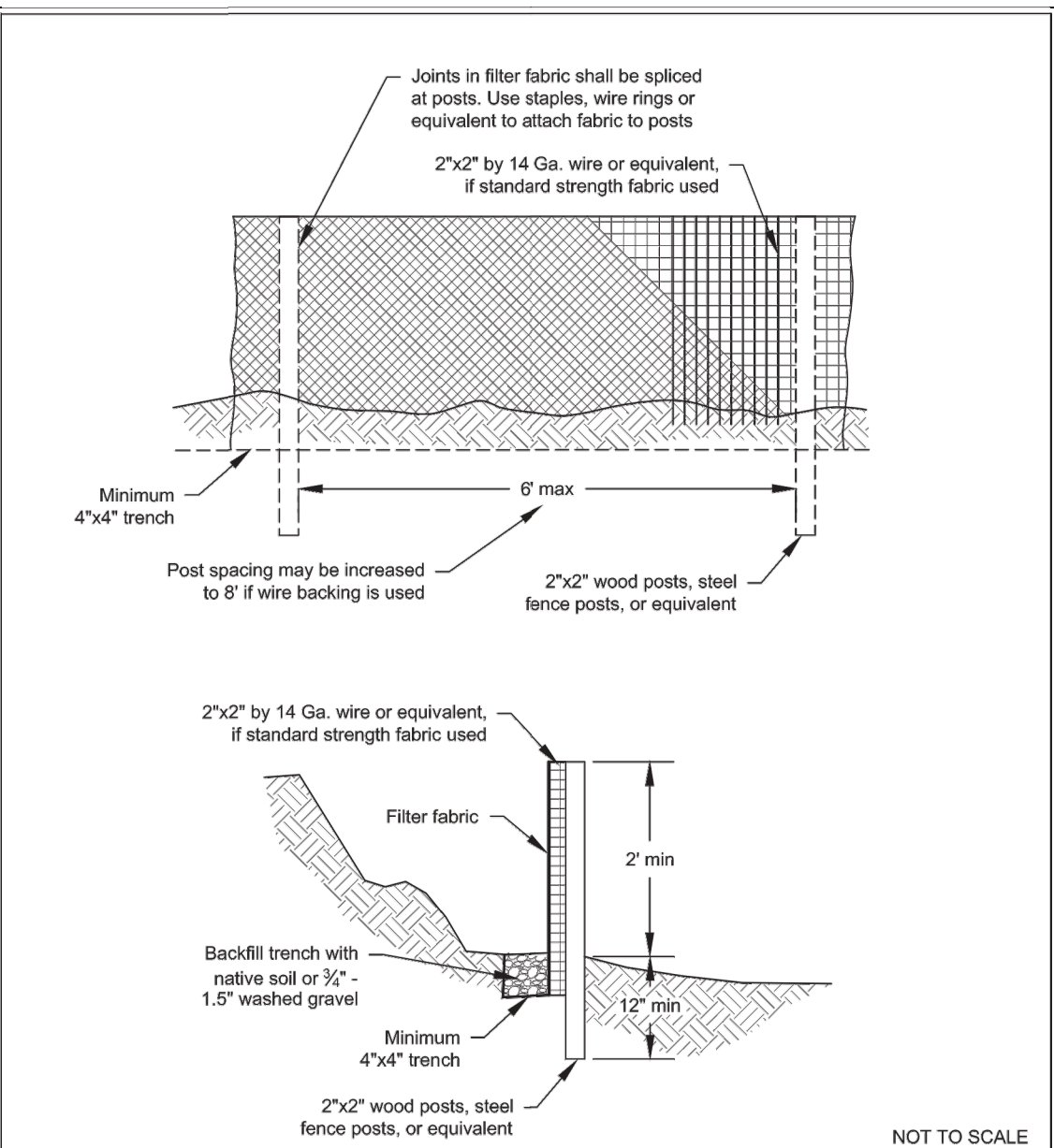


Figure II-4.2.12  
Silt Fence  
Revised October 2014

DEPARTMENT OF  
ECOLOGY  
State of Washington

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Figure II-4.2.16 Cross Section of Sediment Trap

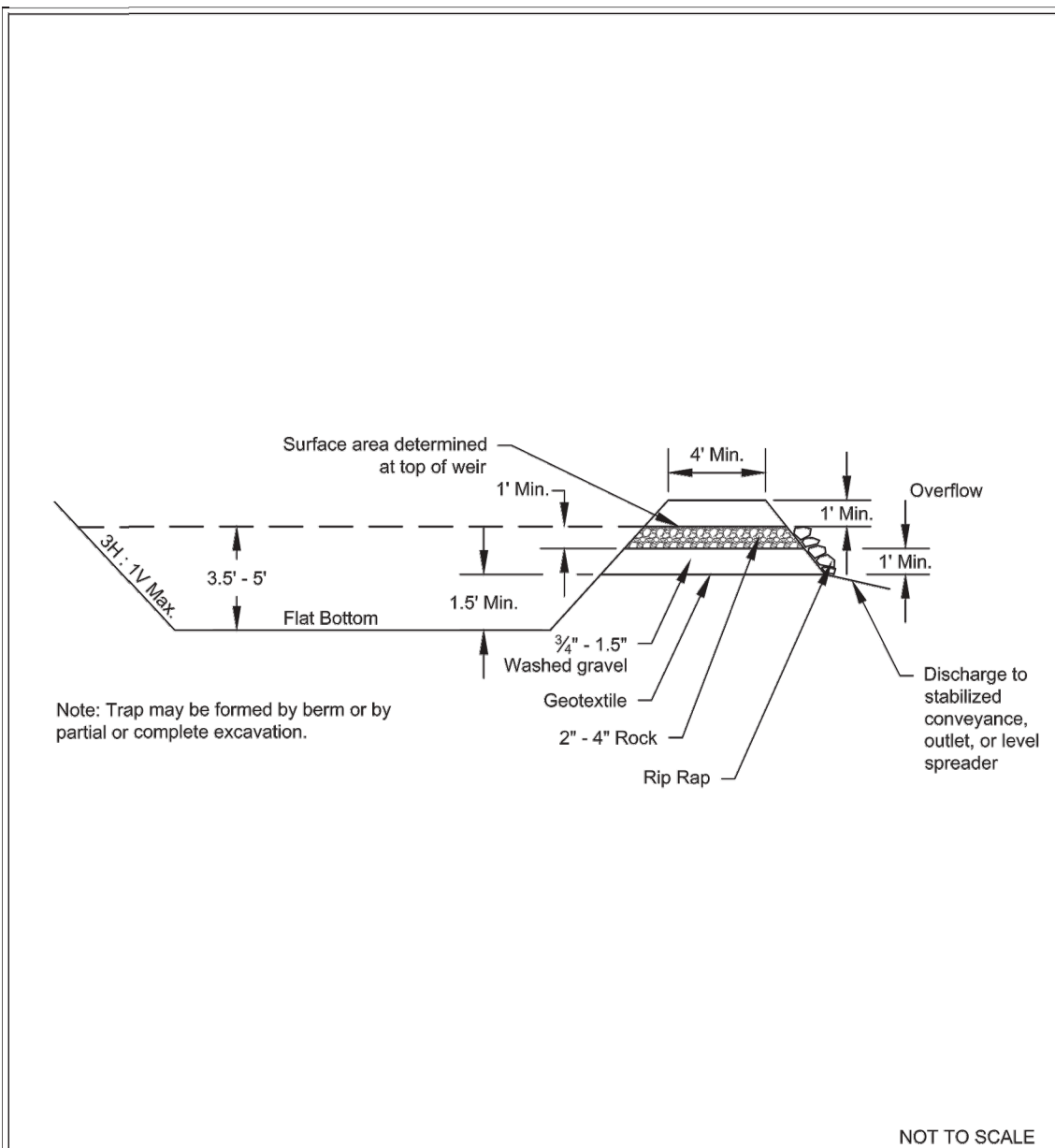


Figure II-4.2.16  
Cross Section of Sediment Trap  
Revised November 2015

DEPARTMENT OF  
ECOLOGY  
State of Washington

Please see <http://www.ecy.wa.gov/copyright.html> for copyright notice including permissions, limitation of liability, and disclaimer.

Figure II-4.2.17 Sediment Trap Outlet

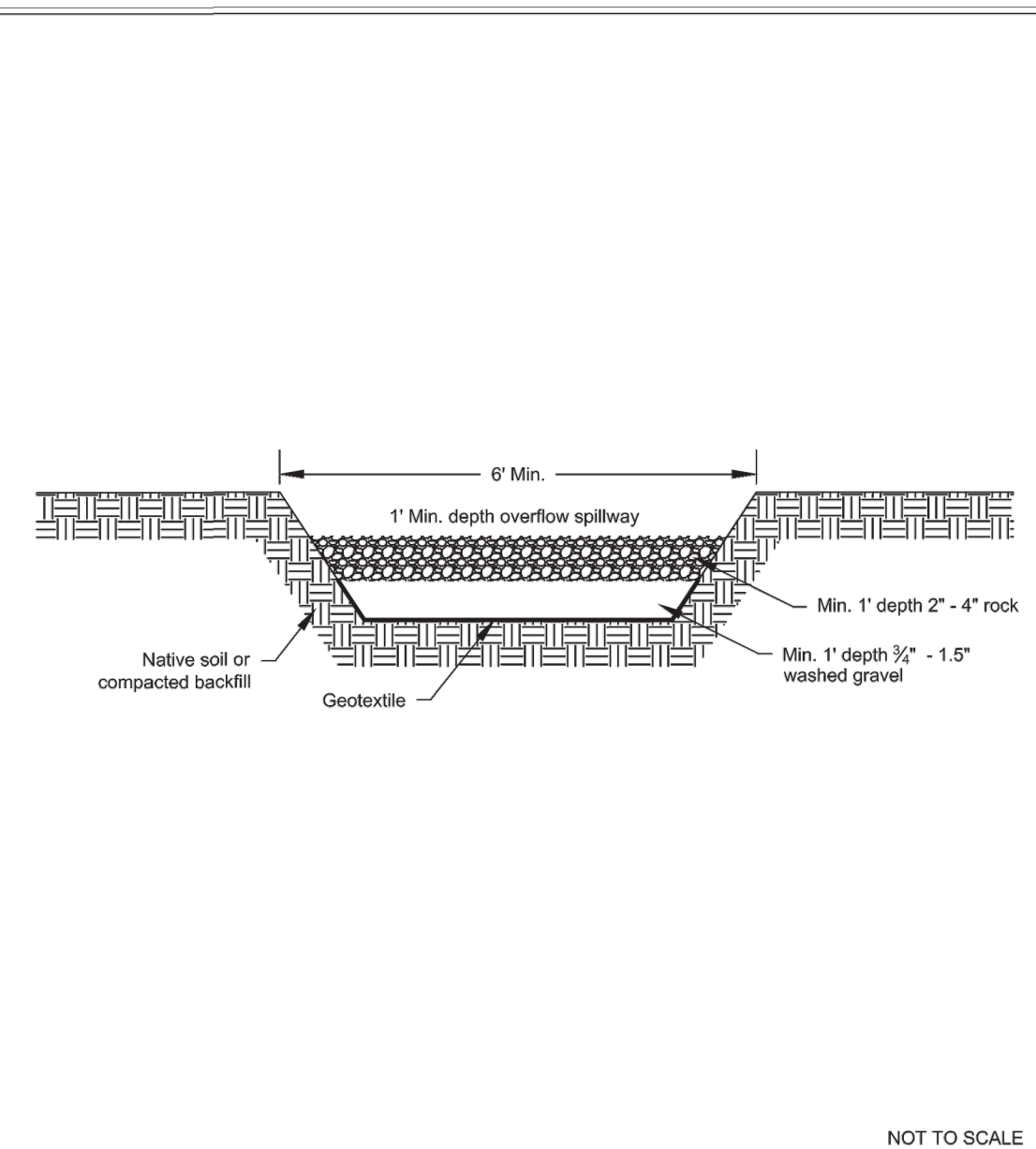


Figure II-4.2.17  
Sediment Trap Outlet  
Revised November 2015

DEPARTMENT OF  
ECOLOGY  
State of Washington

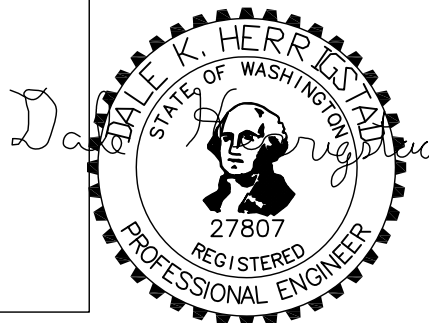
Please see <http://www.ecy.wa.gov/copyright.html> for copyright notice including permissions, limitation of liability, and disclaimer.

PW#19-1XX-DEV

This plan sheet is accepted for construction in accordance with the City of Anacortes ordinances and policies. Actual conformance of the design with applicable laws is the sole responsibility of the professional engineer, whose name and stamp appear on this sheet. Acquiring, complying with, and providing mitigation for all Federal, State, County, and Local Laws, permits, and mandates, including but not limited to the Endangered Species Act, Federal Wetland Permit, State Department of Fisheries Hydraulics Permit, Federal Flood Plain Permits, National Pollutant Discharge Elimination System Permits is the responsibility of the Developer, Landowner, and their Engineer. The issuance of this permit shall not be construed as proof of compliance with applicable laws and permit requirements.

CITY ENGINEER DATE  
The acceptance will expire one year from the date noted above.

Date July 23, 2020



7-23-2020

| REVISIONS                                                                                                                                | BY | DATE |
|------------------------------------------------------------------------------------------------------------------------------------------|----|------|
|                                                                                                                                          |    |      |
| HERRIGSTAD<br>ENGINEERING & SURVEYING<br>DALE K. HERRIGSTAD P.E., P.L.S.<br>4320 WHISTLE LAKE ROAD<br>ANACORTES, WA 98221 (360) 299-8804 |    |      |
| The Crossings Cottage Dev.<br>Section 23, TWP 35 N, RGE 1 E, WM<br>Owner:<br>Anacopper LLC<br>PO Box 319<br>Anacortes, WA 98221          |    |      |
| BMP Details                                                                                                                              |    |      |
| SHEET NO.<br>C10<br>REV.: -                                                                                                              |    |      |
| JOB NO: 2017-150                                                                                                                         |    |      |
| DATE: Jan, 2020                                                                                                                          |    |      |
| SCALE: Noted                                                                                                                             |    |      |
| DRAWN: D. HERRIGSTAD                                                                                                                     |    |      |
| CHECK: D. HERRIGSTAD                                                                                                                     |    |      |
| SHEET 10 OF 10                                                                                                                           |    |      |



# Exhibit 3

## Vicinity Map

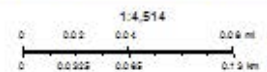
# Anacortes Everything Editable Map-Internal Only



September 17, 2020



City of Anacortes



| Parcel Data        |  | CM2 | MS      | R3              |
|--------------------|--|-----|---------|-----------------|
| <all other values> |  | HM  | OldTown | R4              |
| AZ                 |  | I   | P       | R4A             |
| C                  |  | LM  | R1      | UGA             |
| CBD                |  | LM1 | R2      | Street Segments |



Exhibit 4  
Preliminary  
Plat Map

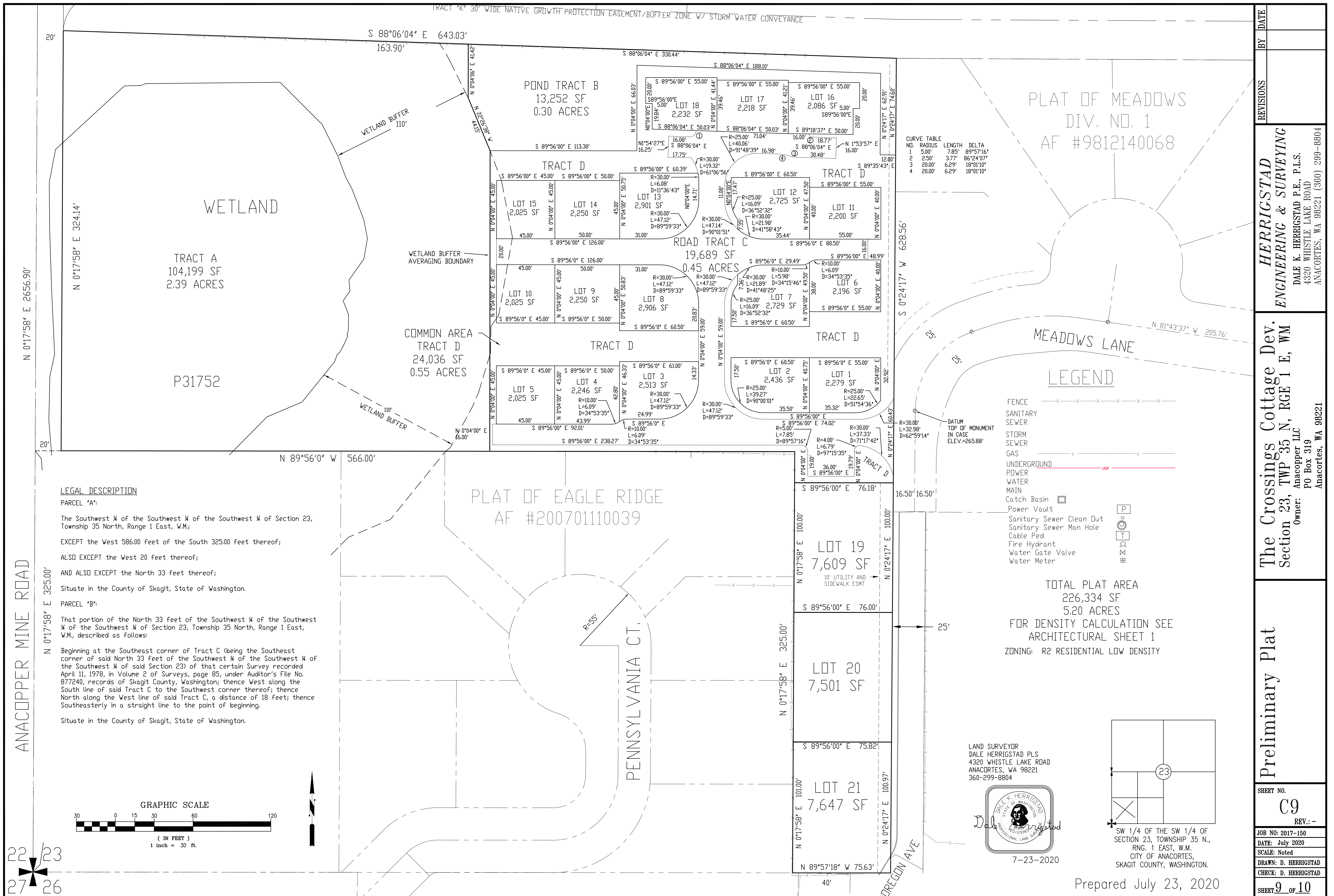


Exhibit 5  
Cottage Site  
Plan







# Exhibit 6

## Public Notices

# LAND USE PERMIT NOTICE DISTRIBUTION

File Number: LPS-2020-0001

Project Name: The Crossings



## Notice of Application - Affidavit of Posting

| Where                                       | Date      | By:         | Notes        |
|---------------------------------------------|-----------|-------------|--------------|
| <b>REQUIRED BY CODE</b>                     |           |             |              |
| Anacortes American                          | 4/1/2020  |             | sent 3/24/20 |
| Applicant                                   | 3/24/2020 |             |              |
| Appellant                                   | N/A       |             |              |
| Parties of Record                           | N/A       |             |              |
| Any person who requested notice             | N/A       |             |              |
| Agencies with Jurisdiction or who commented | N/A       |             |              |
| WSDOT                                       | N/A       |             |              |
| Skagit County                               | N/A       |             |              |
| 300' Property Owners                        | 3/26/2020 | Dave Oicles |              |
| Skagit County Assessor                      | N/A       |             |              |
| Posting property                            | 3/26/2020 | Groc Fyrce  |              |
| <b>COURTESY</b>                             |           |             |              |
| Webpage                                     | 3/24/2020 |             |              |
| City Hall                                   | 3/25/2020 |             |              |
| Library                                     | 3/25/2020 |             |              |

## Other Requests for Review

|                           |           |     |           |
|---------------------------|-----------|-----|-----------|
| Anacortes School District | 3/25/2020 | LBG | via email |
| Port of Anacortes         | 3/25/2020 | LBG | via email |
| Skagit Transit            | 3/25/2020 | LBG | via email |
| DAHP                      | 3/25/2020 | LBG | via email |
| DOE - wetlands            | 3/25/2020 | LBG | via email |
| Samish Tribe              | 3/25/2020 | LBG | via email |
| Swinomish Tribe           | 3/25/2020 | LBG | via email |
| Sauk-Suiattle Tribe       | 3/25/2020 | LBG | via email |
| Skagit Coop               | 3/25/2020 | LBG | via email |





## NOTICE OF APPLICATION

### Notice Is Hereby Given That An Application Was Made For The Following Proposal:

**File Number:** LPS-2020-0001

**Applicant:** Anacopper LLC

**Date of Application:** February 21, 2020

**Date of Complete Application:** March 20, 2020

**Date of Notice of Application:** March 24, 2020

**Project Location:** 1905 Anacopper Mine Rd. (Parcel #P31752)

**Application Type / Description:** Cottage housing site plan and unit lot subdivision/preliminary long subdivision application to divide 5.2 acres into 21 lots, with 18 cottage units and 3 standard single family homes in the R2 zone. The project includes installation of private access road and driveways, pedestrian paths, parking, open space, landscaping, stormwater infrastructure, extension of utilities, and construction of a portion of new public street between Oregon Avenue and Meadows Lane. Wetlands and buffers are present on the site; buffer width averaging is proposed. One existing home will be removed from the site.

**Other Required Project Permits/Approvals:** The following may be required in addition to the above: Construction stormwater general permit from WADOE, construction plan approval, right-of-way permit, final land division approval, building permits.

**Existing Environmental Documents:** The following environmental documents evaluate the proposed project: Critical areas report, Traffic report, Stormwater Site Plan, Geotechnical Report, SEPA checklist.

Application documents may be reviewed at <https://www.anacorteswa.gov/161/Planning-Community-Economic-Development> by clicking "Notices of Application" and then opening the appropriate project file number folder.

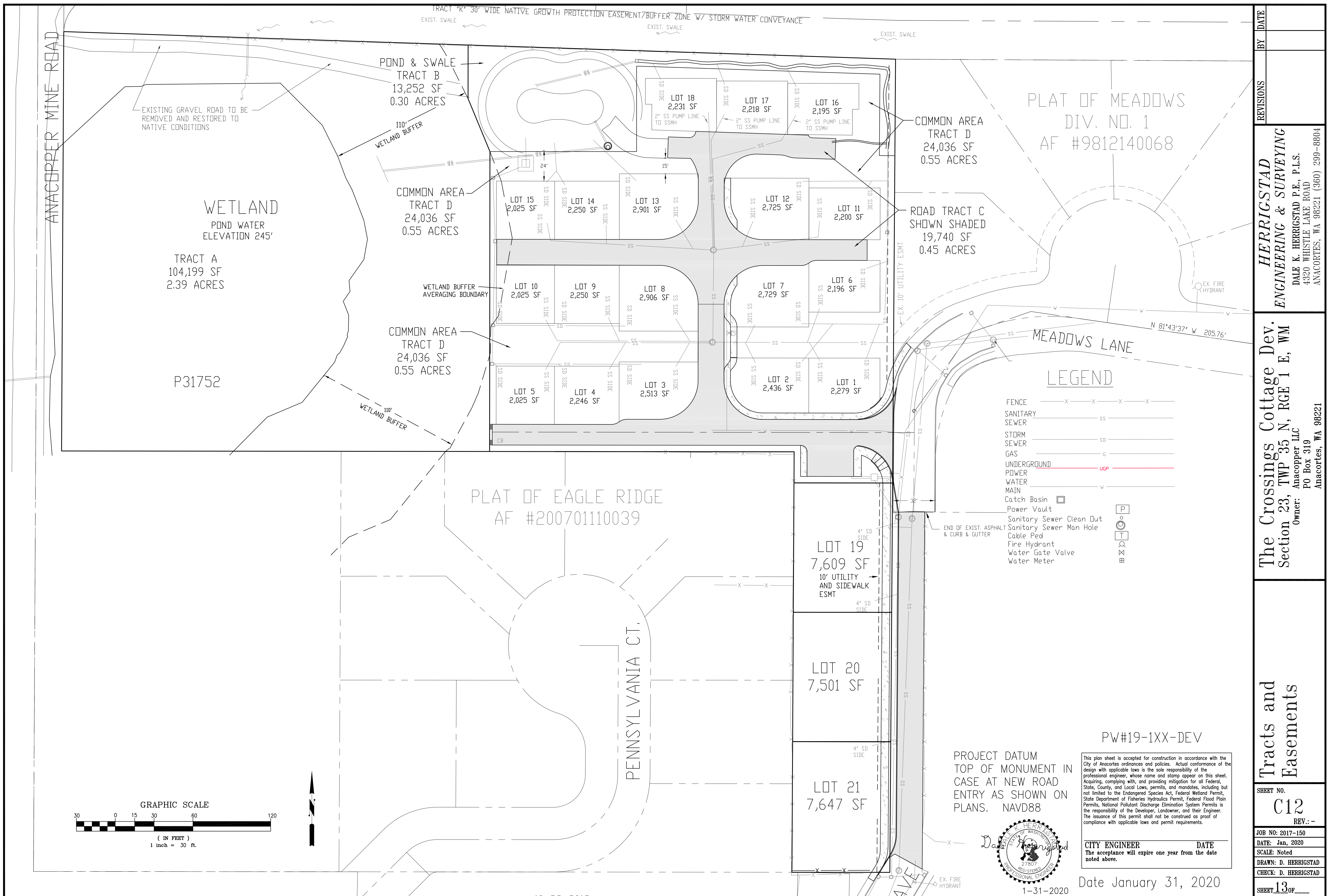
**Public Comment Period:** Written comments must be submitted to the contact below by **5:00 PM on April 22, 2020**. Any person may comment on the application, receive notice of and participate in any hearings, and request a copy of the decision, once made.

**Public Hearing:** A public hearing is required to be held before the Planning Commission; the hearing has not yet been scheduled.

**Preliminary Determination of Consistency:** At a minimum, this project will be subject to the following plans and regulations: Anacortes Municipal Code Title 16 Tree Preservation, Title 18 Environmental Protection, Ch. 17.70 Critical Areas, Title 19 Unified Development Code Municipal Code, and the Anacortes Engineering Design Standards.

**Appeals:** The SEPA threshold determination, once made, is appealable to the Hearing Examiner per AMC Table 19.20.030. The project permits are being processed using consolidated review under a Type 4 review process, which has no local appeal available. Please refer to AMC 19.20.030 and AMC 19.20.210 for appeal procedures.

**For Project Information:** Libby Grage, Planning Manager; Phone: (360) 299-1986  
Email: [libbyb@cityofanacortes.org](mailto:libbyb@cityofanacortes.org); City of Anacortes, P.O. Box 547, Anacortes, WA 98221



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Salesperson: JEANETTE MOODY

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-----  
Acct #: 210430

Ad #: 2004496

Status: New

CITY OF ANACORTES  
PO BOX 547  
ANACORTES WA 98221

Start: 04/01/2020 Stop: 04/01/2020  
Times Ord: 1 Times Run: \*\*\*  
STDS 1.00 X 19.55 Words: 405  
Total STDS 20.00  
Class: 0001 LEGAL NOTICES  
Rate: AAOR Cost: 165.60  
# Affidavits: 1

Contact:

Phone: (360)293-1900

Fax#:

Email: LibbyB@cityofanacortes.org

Agency:

Ad Descrpt: AA-2004496

Given by: \*

P.O. #:

Created: jka30 03/25/20 08:16

Last Changed: jka30 03/25/20 08:24  
-----

| PUB  | ZONE | EDT | TP | START        | INS | STOP         | SMTWTF |
|------|------|-----|----|--------------|-----|--------------|--------|
| AA   | A    | 97  | W  | Wed 04/01/20 | 1   | Wed 04/01/20 | W      |
| SVWN | A    | 97  | W  | Wed 04/01/20 | 1   | Wed 04/01/20 | SMTWTF |

-----

AUTHORIZATION

Under this agreement rates are subject to change with 30 days notice. In the event of a cancellation before schedule completion, I understand that the rate charged will be based upon the rate for the number of insertions used.

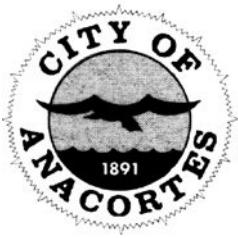
\_\_\_\_\_  
Name (print or type)

\_\_\_\_\_  
Name (signature)

(CONTINUED ON NEXT PAGE)

This ad has been reformatted for proofing purposes. Column breaks are not necessarily as they will appear in publication.





## NOTICE OF APPLICATION

### Notice Is Hereby Given That An Application Was Made For The Following Proposal:

**File Number:**

LPS-2020-0001

**Applicant:** Anacopper LLC

**Date of Application:**

February 21, 2020

**Date of Complete Application:**

March 20, 2020

**Date of Notice of Application:**

March 24, 2020

**Project Location:**

1905 Anacopper Mine Rd.  
(Parcel #P31752)

**Application Type / Description:**

Cottage housing plans and regulations: Anacortes Municipal Code Title 16 Tree Preservation, Title 18 Environmental Protection, Ch. 17.70 Critical Areas, Title 19 Unified Development Code Municipal project includes installation of private access road and driveways, pedestrian

paths, parking, open space, landscaping, stormwater infrastructure, extension of utilities, and construction of a portion of new public street between Oregon Avenue and Meadows Lane. Wetlands and buffers are present on the site; buffer width averaging is proposed. One existing home will be removed from the site.

**Other Required Project**

**Permits/Approvals:** The following may be required in addition to the above: Construction stormwater general permit from WA-DOE, construction plan approval, right-of-way permit, final land division approval, building permits.

evaluate the proposed project:  
Critical areas report, Traffic report, Stormwater Site Plan, Geotechnical Report, SEPA checklist.

Application documents may be reviewed at <https://www.anacorteswa.gov/161/Planning-Community-Economic-Development> by clicking "Notices of Application" and then opening the appropriate project file number folder.

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Written comments must be submitted to the contact below by 5:00 PM on April 22, 2020. Any person may comment on the application, receive notice of and participate in any hearings, and request a copy of the decision, once made.

**Public Hearing:** A public hearing is required to be held before the Planning Commission; the hearing has not yet been scheduled.

**Preliminary Determination of Consistency:**

At a minimum, this project will be subject to the following plans and regulations: Anacortes Municipal Code Title 16 Tree Preservation, Title 18 Environmental Protection, Ch. 17.70 Critical Areas, Title 19 Unified Development Code Municipal project includes installation of private access road and driveways, pedestrian

**Appeals:** The SEPA threshold determination, once made, is appealable to the Hearing Examiner per AMC Table 19.20.030. The project permits are being processed using consolidated review under a Type 4 review process, which has no local appeal available. Please refer to AMC 19.20.030 and AMC 19.20.210 for appeal procedures.

**For Project Information:**

Libby Grage, Planning Manager; Phone: (360) 299-1986; Email: [libbyb@cityofanacortes.org](mailto:libbyb@cityofanacortes.org)

City of Anacortes, P.O. Box 547, Anacortes, WA 98221

**Existing Environmental Documents:** The following environmental documents

**Published  
April 1, 2020  
AA-2004496**

SCHAARSCHMIDT HENRY  
SCHAARSCHMIDT DOLORES  
1819 ANACOPPER RD  
ANACORTES, WA 98221

GUDBRANSON RASCHELLE L  
1901 ANACOPPER ROAD  
ANACORTES, WA 98221

FEAGIN RICHARD O  
FEAGIN MARY P  
3920 COPPER POND  
ANACORTES, WA 98221

GIBBONS GREGORY A & GIBBONS  
CONSTANCE  
1906 COPPER POND PL  
ANACORTES, WA 98221

ADAM ERIC T & ADAM STACY M  
1902 COPPER POND PL  
ANACORTES, WA 98221

MCCROSKEY DANIEL L & MCCROSKEY  
MARY K  
1820 COPPER POND PL  
ANACORTES, WA 98221

GRIGGS VICKI MICHELLE AND GARY R  
1819 COPPER POND PL  
ANACORTES, WA 98221

SPENCER TRUST  
SIMON DAVID AND SIMON ISAAC TRUSTEES  
ADLER DEANNE TRUSTEE  
3803 STERLING PL  
ANACORTES, WA 98221

SELLARDS KATHERINE FAYE  
BOBKA MICHAEL GEORGE  
3912 COPPER POND  
ANACORTES, WA 98221

KALLERSON LEONARD R  
KALLERSON JEANNE  
1904 OHIO AVE  
ANACORTES, WA 98221

CALDWELL KATHY M  
1820 OHIO AVE  
ANACORTES, WA 98221

MIOLANO REVOCABLE LIVING TRUST  
OSPENSON TAMMY J TRUSTEE  
2506 OREGON AVE  
ANACORTES, WA 98221

SIMNAD VIRGINIA I  
ASHLIN DAVID L  
6735 NE 201ST PLACE  
KENMORE, WA 98028

DEWEY SETH R  
GREENWOOD DAWN M  
3822 COPPER POND  
ANACORTES, WA 98221

GILCHRIST LENUE III  
3819 COPPER POND  
ANACORTES, WA 98221

ACKERMANN ESTHER  
3821 COPPER POND  
ANACORTES, WA 98221

MOORE JAMES N & MOORE MELINDA A  
3823 COPPER POND  
ANACORTES, WA 98221

JOHNSON RICHARD N & JOHNSON  
CHARLENE T  
3825 COPPER POND  
ANACORTES, WA 98221

HOWARD TRUST  
HOWARD STEPHEN J AND BOZENNA E  
TRUSTEES  
3827 COPPER POND  
ANACORTES, WA 98221

SPONHOLZ SAWYER G  
HAGG SPONHOLZ OLIVIA M  
3829 COPPER POND  
ANACORTES, WA 98221

TERRY GERALD A  
3901 COPPER POND  
ANACORTES, WA 98221

DENT LIVING TRUST  
DENT LARRY B TRUSTEE  
4140 EDITH POINT RD  
ANACORTES, WA 98221

SHORAB MOHAMMED  
NISHA SOPHIA K  
2105 28TH ST  
ANACORTES, WA 98221

DARNTON JOHN C & DARNTON NANCY L  
3915 COPPER POND  
ANACORTES, WA 98221

ROETH 2019 REVOCABLE TRUST  
ROETH ELAYNE TRUSTEE  
PO BOX 1793  
SOQUEL, CA 95073

CREEKSIDE VILLAGE DEVELOPMENT  
PO BOX 973  
ANACORTES, WA 98221

CREEKSIDE VILLAGE DEVELOPMENT  
PO BOX 973  
ANACORTES, WA 98221

CREEKSIDE VILLAGE DEVELOPMENT  
PO BOX 973  
ANACORTES, WA 98221

CREEKSIDE VILLAGE DEVELOPMENT  
PO BOX 973  
ANACORTES, WA 98221

PATRICK AMY E  
PATRICK SHAWN K  
2113 MEADOWS LANE  
ANACORTES, WA 98221

WALTERS THOMAS W & SWIATKOWSKI  
LYNN M  
2117 MEADOWS LN  
ANACORTES, WA 98221

EVANS JUDY K  
2119 MEADOWS LN  
ANACORTES, WA 98221

TRUESDELL TRUST  
TRUESDELL ROBERT SCOTT TRUSTEE  
2123 MEADOWS LANE  
ANACORTES, WA 98221

SCOTT JAMES S & SCOTT SHARON K  
2122 MEADOWS LN  
ANACORTES, WA 98221

SLADICH JOSEPH A & MULCAIRE EILEEN M  
1217 S JEFFERSON ST  
SPOKANE, WA 99204

REIDER JEFFREY S  
2118 MEADOWS LANE  
ANACORTES, WA 98221

NICHOLS ROBERT G  
NICHOLS CARLENE M  
2116 MEADOWS LANE  
ANACORTES, WA 98221

JONES KATELYN J  
JONES ADAM B  
2114 MEADOWS LANE  
ANACORTES, WA 98221

HUNTSMAN JON M III  
HUNTSMAN MORGAN  
2112 MEADOWS LANE  
ANACORTES, WA 98221

WHEELER FAMILY TRUST 2004 & WHEELER  
DANIEL E TRUSTEE  
WHEELER CAROL L TRUSTEE  
1004 COMMERCIAL AVE #1089  
ANACORTES, WA 98221

SHAW WILLIAM J  
SHAW ERIKA E  
2301 OREGON AVE  
ANACORTES, WA 98221

ZHONG ELAINE  
PRINCIPATO DAVID JOHN  
2217 OREGON AVE  
ANACORTES, WA 98221

MILLER MATTHEW C & MILLER HEATHER A  
818 HADDON RD  
ANACORTES, WA 98221

FLANIGAN MICHAEL T  
FLANIGAN ERIN E  
2205 OREGON AVENUE  
ANACORTES, WA 98221

GOYER JUSTIN M  
GOYER CHERIE E  
2203 OREGON AVENUE  
ANACORTES, WA 98221

WARM SUSAN LAVELL  
3920 WEST 12TH STREET  
ANACORTES, WA 98221

GIANELLO RICHARD A  
GIANELLO BRIAN T  
GIANELLO TAMI V  
3924 W 12TH ST  
ANACORTES, WA 98221

SCOTT RALPH R  
PO BOX 634  
ANACORTES, WA 98221

BORDIN CAROL A  
PO BOX 3034  
ANACORTES, WA 98221

FISHER DANE S  
FISHER ANNALIES M  
3930 W 12TH ST  
ANACORTES, WA 98221

LUECKE DAVID  
VAN ACKEREN DIANE  
2114 PENNSYLVANIA CT  
ANACORTES, WA 98221

MCMILLEN EDWARD W & MCMILLEN  
CONSTANCE L  
2116 PENNSYLVANIA CT  
ANACORTES, WA 98221

HARDING DANIEL M  
HARDING ELAINE D  
2108 PENNSYLVANIA CT  
ANACORTES, WA 98221

HARPHAM MICHAEL H  
HARPHAM VIRGINIA R  
2106 PENNSYLVANIA COURT  
ANACORTES, WA 98221

EAGLE RIDGE PARTNERS LLC  
1921 WILLIAMSPORT ST  
HENDERSON, NV 89052

JENNINGS DOUGLAS J  
JENNINGS HEATHER N  
14357 VAN LUVEN PL  
ANACORTES, WA 98221

UMAYAM BENJAMIN  
UMAYAM KIMERLY  
2101 PENNSYLVANIA CT  
ANACORTES, WA 98221

KENNEDY MATTHEW J  
KENNEDY BONNIE E  
2105 PENNSYLVANIA CT  
ANACORTES, WA 98221

SLIVINSKI STANLEY R & SLIVINSKI MYKKI M  
2107 PENNSYLVANIA CT  
ANACORTES, WA 98221

JONES GLENN A  
COYNE KRYSTINA N  
2109 PENNSYLVANIA COURT  
ANACORTES, WA 98221



OEMICK NANCY J  
2111 PENNSYLVANIA COURT  
ANACORTES, WA 98221

HORNER WILLIAM  
2113 PENNSYLVANIA COURT  
ANACORTES, WA 98221

HUSTON FAMILY REVOCABLE TRUST  
HUSTON JOSEPH H TRUSTEE  
HUSTON SEREN S TRUSTEE  
1004 COMMERCIAL AVE UNIT 1082  
ANACORTES, WA 98221

KING JAY R & KING ESTELLE F  
2117 PENNSYLVANIA CT  
ANACORTES, WA 98221

PORT OF ANACORTES  
100 COMMERCIAL AVE  
ANACORTES, WA 98221

KELLY REVOKABLE LIVING TRUST  
KELLY MARION TRUSTEE  
2103 PENNSYLVANIA AVENUE  
ANACORTES, WA 98221

ANACOPPER LLC  
PO BOX 319  
ANACORTES, WA 98221

SCOTT RALPH R  
PO BOX 634  
ANACORTES, WA 98221

PORT OF ANACORTES  
100 COMMERCIAL AVE  
ANACORTES, WA 98221

BRANDT V JANE  
3936 W 12TH ST  
ANACORTES, WA 98221

HAYDEN ERNEST N  
HAYDEN VIRGINIA M P  
3938 WEST 12TH STREET  
ANACORTES, WA 98221

# LAND USE PERMIT NOTICE DISTRIBUTION

File Number: LPS-2020-0001

Project Name: The Crossings



## Notice of SEPA MDNS & PUBLIC HEARING - Affidavit of Posting

| Where                                       | Date              | By:         | Notes                                                                                          |
|---------------------------------------------|-------------------|-------------|------------------------------------------------------------------------------------------------|
| <b>REQUIRED BY CODE</b>                     |                   |             |                                                                                                |
| Anacortes American                          | 9/2/2020          |             | sent 8/28/20                                                                                   |
| Applicant                                   | 8/28/2020         |             |                                                                                                |
| Appellant                                   | N/A               |             |                                                                                                |
| Parties of Record                           | 9/2/2020          |             | see next page                                                                                  |
| Any person who requested notice             | N/A               |             |                                                                                                |
| Agencies with Jurisdiction or who commented | 9/2/2020          |             | bud.westcott@dnr.wa.gov<br>Stephanie.Jolivet@dahp.wa.gov<br>kevin.anderson@portofanacortes.com |
| WSDOT                                       | N/A               |             |                                                                                                |
| Skagit County                               | N/A               |             |                                                                                                |
| 300' Property Owners                        | 9/2/2020          |             |                                                                                                |
| Skagit County Assessor                      | N/A               |             |                                                                                                |
| Posting property                            | 9/2/2020          | Dave Oicles |                                                                                                |
| <b>COURTESY</b>                             |                   |             |                                                                                                |
| Webpage                                     | 9/2/2020          |             |                                                                                                |
| City Hall                                   | Closed - COVID-19 |             |                                                                                                |
| Library                                     | Closed - COVID-19 |             |                                                                                                |

### Other SEPA Agencies

|                           |          |     |           |
|---------------------------|----------|-----|-----------|
| Anacortes School District | 9/2/2020 | LBG | via email |
| Port of Anacortes         | 9/2/2020 | LBG | via email |
| Skagit Transit            | 9/2/2020 | LBG | via email |
| DAHPP                     | 9/2/2020 | LBG | via email |
| DOE - wetlands            | 9/5/2020 | LBG | via email |
| Samish Tribe              | 9/5/2020 | LBG | via email |
| Swinomish Tribe           | 9/2/2020 | LBG | via email |
| Skagit Coop               | 9/2/2020 | LBG | via email |



**NOTICE OF SEPA DNS;  
VIRTUAL / TELEPHONIC PLANNING COMMISSION PUBLIC HEARING  
& CITY COUNCIL CLOSED RECORD DECISION HEARING**

**Project Name:** The Crossings Cottages

**File Number:** LPS-2020-0001

**Applicant:** Anacopper LLC, PO Box 319, Anacortes, WA 98221

**Applicant Contact:** Debbie Headrick, PO Box 319, Anacortes, WA 98221; Ph: 360-293-7431;  
[debbie@strandbergconstruction.com](mailto:debbie@strandbergconstruction.com)

**Project Location:** 1905 Anacopper Mine Road (Parcel #P31752)

**Application Type / Description:** Cottage housing site plan and unit lot subdivision/preliminary long subdivision application to divide 5.2 acres into 21 lots, with 18 cottage units and 3 standard single family homes in the R2 zone. The project includes installation of private access road and driveways, pedestrian paths, parking, open space, landscaping, stormwater infrastructure, extension of utilities, and construction of a portion of new public street between Oregon Avenue and Meadows Lane. Wetlands and buffers are present on the site; buffer width averaging and enhancement is proposed. One existing home will be removed from the site.

**Environmental Review:** The City of Anacortes determined that this proposal will not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). This determination was based on review of an Environmental Checklist and other environmental information available at the URL below. The SEPA Threshold Determination of Nonsignificance (DNS) for this proposal was issued on September 2, 2020 under WAC 197-11-340(2) and the SEPA comment /appeal period will end on **September 16, 2020 at 5:00 PM**. Submit comments to the project contact below.

**Staff Report:** The staff report will be available no later than 5:00 p.m. on September 17, 2020 and can be viewed at <https://www.anacorteswa.gov/161/Planning-Community-Economic-Development> by clicking "Other Notices" and then opening the appropriate project file number folder (CUP-2020-0001). You may also request a copy by contacting the project contact listed below.

| Public Hearing Information                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>To view the live Meetings/Hearings without participating:</b> Visit <a href="#">Watch Meetings</a> on the City of Anacortes website ( <a href="https://www.anacorteswa.gov/700/Watch-Meetings">https://www.anacorteswa.gov/700/Watch-Meetings</a> ) or tune in to Channel 10.                                                                                                                                                                                                                           |
| <b>Planning Commission Public Hearing</b><br>Wednesday, September 23, 2020 at 6:00 PM                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Attending and Providing Comment at the Planning Commission Public Hearing:</b><br><br>1. <b>To participate in the Public Hearing:</b> <ul style="list-style-type: none"><li>On the date/time shown above, click <a href="#">this link</a> or copy/paste this URL into your browser: <a href="https://us02web.zoom.us/j/85918981678">https://us02web.zoom.us/j/85918981678</a> or</li><li>Dial in to the meeting by phone: Dial in the US: +1 253-215-8782, enter the Meeting ID 859 1898 1678</li></ul> |

- On the date/time shown above, click [this link](#) or copy/paste this URL into your browser: <https://us02web.zoom.us/j/85918981678> or
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2. **Written comments** received before 3:00 p.m. on the day of the Public Hearing will be distributed to the Planning Commission in advance of the public hearing. Comments can be submitted by:
- Emailing [libbyb@cityofanacortes.org](mailto:libbyb@cityofanacortes.org) (include in the subject line *Public Comment for Planning Commission Meeting on [date]*) or
  - Visit [Watch Meetings](#) on the City of Anacortes website and click the eComment link beside the agenda item for the public hearing you wish to comment on.

**City Council Closed Record Decision Hearing**

Monday, October 12, 2020 at 6:00 PM

**Attending the City Council Meeting:**

- Visit [Watch Meetings](#) on the City of Anacortes website (<https://www.anacorteswa.gov/700/Watch-Meetings>) or tune in to Channel 10.
- On the Web: Click the link provided on the City website or enter this URL into your browser: <https://us02web.zoom.us/j/89255646791>
- Via Telephone: Dial in the US: +1 253-215-8782, enter the Meeting ID 892 5564 6791

**Appeals:** There is no local appeal available for Type 4 City Council decisions.

**Project Contact:** Libby Grage, Planning Manager; Phone: (360) 661-3505; [libbyb@cityofanacortes.org](mailto:libbyb@cityofanacortes.org); City of Anacortes, P.O. Box 547, Anacortes, WA 98221

Members of the public who require special assistance to participate in or access the public hearing may contact the [City Clerk](#) 24 hours before the meeting to make special arrangements. Dial 360-299-1960.

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Total STDS 28.50  
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# Affidavits: 1

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Phone: (360)293-1900  
Fax#:  
Email: LibbyB@cityofanacortes.org  
Agency:

Ad Descrpt: AA-2032209  
Given by: \*  
P.O. #: NOH-LPS-2020-0001  
Created: hna30 08/28/20 08:50  
Last Changed: ple30 08/28/20 10:16

| PUB  | ZONE | EDT | TP | START        | INS | STOP         | SMTWTF |
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| AA   | A    | 97  | W  | Wed 09/02/20 | 1   | Wed 09/02/20 | W      |
| SVWN | A    | 97  | W  | Wed 09/02/20 | 1   | Wed 09/02/20 | SMTWTF |

AUTHORIZATION

Under this agreement rates are subject to change with 30 days notice. In the event of a cancellation before schedule completion, I understand that the rate charged will be based upon the rate for the number of insertions used.

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Name (signature)

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This ad has been reformatted for proofing purposes. Column breaks are not necessarily as they will appear in publication.



**NOTICE OF SEPA  
DNS; VIRTUAL /  
TELEPHONIC  
PLANNING  
COMMISSION  
PUBLIC HEARING  
& CITY COUNCIL  
CLOSED RECORD  
DECISION HEARING**

**Project Name:** The Crossings Cottages

**File Number:** LPS-2020-0001

**Applicant:** Anacopper LLC, number folder (CUP-2020-PO Box 319, Anacortes, 0001). You may also request a copy by contacting the project contact listed below.

**Applicant Contact:** Debbie Headrick, PO Box 319, Anacortes, WA 98221; Ph: 360-293-7431; [debbie@strandbergconstruction.com](mailto:debbie@strandbergconstruction.com)

**Project Location:** 1905 Anacopper Mine Road (Parcel #P31752)

**Application Type / Description:** Cottage housing site plan and unit lot subdivision/preliminary long subdivision application to divide 5.2 acres into 21 lots, with 18 cottage units and 3 standard single family homes in the R2 zone. The project includes installation of private access road and driveways, pedestrian paths, parking, open space, landscaping, stormwater infrastructure, extension of utilities, and construction of a portion of new public street between Oregon Avenue and Meadows Lane. Wetlands and buffers are present on the site; buffer width averaging and enhancement is proposed. One existing home will be removed from the site.

**Environmental Review:**

The City of Anacortes determined that this proposal will not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required

under RCW 43.21C.030(2) (c). This determination was based on review of an Environmental Checklist and other environmental information available at the URL below. The SEPA Threshold Determination of Nonsignificance (DNS) for this proposal was issued on September 2, 2020 under WAC 197-11-340(2) and the SEPA comment/appeal period will end on **September 16, 2020 at 5:00 PM**. Submit comments to the project contact below.

**Staff Report:** The staff report will be available no later than 5:00 p.m. on September 17, 2020 and can be viewed at <https://www.anacorteswa.gov/161/Planning-Community-Economic-Development> by clicking "Other Notices" and then opening the appropriate project file

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**Public Hearing Information**

**Planning Commission Public Hearing**  
Wednesday, September 23, 2020 at 6:00 PM

**Attending and Providing Comment at the Planning Commission Public Hearing:**

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On the date/time shown above, click [this link](https://us02web.zoom.us/j/85918981678) or copy/paste this URL into your browser:

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Emailing [libbyb@cityofanacortes.org](mailto:libbyb@cityofanacortes.org) (include in the subject line Public Comment for Planning Commission Meeting on [date]) or

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**City Council Closed Record Decision Hearing**  
Monday, October 12, 2020 at 6:00 PM

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Via Telephone: Dial in the US: +1 253-215-8782, enter the Meeting ID 892 5564 6791

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Via Telephone: Dial in the US: +1 253-215-8782, enter the Meeting ID 892 5564 6791

**Appeals:** There is no local appeal available for Type 4 City Council decisions.

**Project Contact:** Libby Grage, Planning Manager; Phone: (360) 661-3505; [libbyb@cityofanacortes.org](mailto:libbyb@cityofanacortes.org); City of Anacortes, P.O. Box 547, Anacortes, WA 98221

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**Published**  
**September 2, 2020**  
**AA-2032209**



Exhibit 7  
City Department  
Comments



Planning, Community & Economic Development Department  
904 6<sup>th</sup> Street; P.O. Box 547 Anacortes, WA 98221  
360-299-1984 - [pced@cityofanacortes.org](mailto:pced@cityofanacortes.org)

May 1, 2020

Debbie Headrick  
P.O. Box 319  
Anacortes, WA 98221  
[debbie@strandbergconstruction.com](mailto:debbie@strandbergconstruction.com)

Re: LPS-2020-0001 – The Crossings Cottage Development  
Technical Review Comments

Dear Ms. Headrick,

Technical review of your application has been completed resulting in the following comments. Please respond in writing to each comment, revise plans and documents, and/or provide the requested information, as appropriate.

## PW Engineering & Stormwater Review

1. See attached comments from Steven Lange, dated May 1, 2020.

## PCED Review

2. See attached comments from Tess Cooper, dated April 30, 2020, regarding the critical areas review.
3. The proposed stormwater outfall located within the buffer should be discussed in the wetland report, including conformance to Ecology guidance and COA code.
4. Sheet C1, "Coverage Calculations" references phases 1 & 2 – project narrative says no phasing. Please clarify.
5. Extend the internal pathways to provide clear pedestrian access to each individual porch/primary entry facing the common open space areas. (Note that all cottages abutting the common open space must be oriented around and have their primary entrance face the common open space per AMC 19.43.010.D.3.i.iv and also must include a porch per AMC 19.43.010.D.3.v).
6. Indicate the location and style/materials for crosswalks (where they are required when a pedestrian pathway crosses an on-site paved area accessible to vehicles). Crosswalks must contain contrasting material (such as concrete) and/or patterns (such as stamped asphalt), excluding painted surfaces.

7. Confirm conformance with façade transparency standards (8%) for facades facing common open spaces. (AMC 19.43.010.D.3.h).
8. Confirm conformance with [AMC 19.43.110.D.3.k.iii](#), which requires that private open space has direct access from the cottage via a door or porch.
9. The landscape buffer along the south side of the site must be a min. 5' wide Type A, B or C. Please see [AMC 19.65.060.A, B, or C](#), depending on which you are proposing, and revise the landscape plan accordingly.
10. Note the method of irrigation proposed on the landscaping on the plan.
11. Add the minimum size at time of planting for all plants and trees. Plant material and installation standards are listed in [AMC 19.65.050](#).
12. Tree preservation – please provide the breakdown showing the number of tree unit credits being claimed for each tree proposed to be retained based on Table 16.50.070(D).
13. The engineer of record needs to provide a design for the retaining walls and describe the drainage needs at the walls.
14. Confirm no clearing of lots 20, 21, 22.
15. Wetland buffer averaging should be clearly shown on the civil drawings.
16. Provide sidewalk details, along with curbcut/ADA ramp details.

## Water Dept.

17. According to the plans it looks like there may be a conflict with the hydrant and the mail boxes. One or both may need to be shifted to accommodate clearances.

## Fire Department

18. An approved “No Parking” plan must be submitted by the Developer. The plan must include, but is not limited to:
  - Language in the CC&Rs
  - HOA’s responsibility for enforcement
  - Signage and/or curb paint
19. 20’ clear width for fire apparatus must be maintained.
20. Fire Apparatus turn-around/cul-de-sac must meet city standard.
21. Required fire lanes must be clearly marked by an approved method.
22. 30’ minimum inside turning radius must be maintained.
23. Additional fire hydrants will be required based on IFC Appendix B and C – 2015 edition.



24. Residential fire sprinklers may be required for some or all units based upon building construction type, fire area, available fire flow, and/or access around structures. The need for sprinklers will be determined at time of building permit submittal.
25. These comments are preliminary in nature and subject to change as additional information becomes available.

Due to the COVID-19 pandemic, the city anticipates being unable to issue its final decision on the application within the time limits provided in AMC 19.120.160. We will continue to communicate with you the anticipated scheduling for your application as the situation evolves.

Please send the above items (plans and responses) to [libbyb@cityofanacortes.org](mailto:libbyb@cityofanacortes.org) when complete. At this time, hard copies are not requested.

Please contact me at 360-299-1986 or [libbyb@cityofanacortes.org](mailto:libbyb@cityofanacortes.org) with any questions.

Sincerely,



Libby Grage  
Planning Manager

cc: Steven Lange, PW Engineering Department  
Don Measamer, PCED Director



## ANACORTES PUBLIC WORKS DEPARTMENT

Steven Lange, Project Manager

P.O. BOX 547, ANACORTES, WA 98221

E-MAIL: [stevel@cityofanacortes.org](mailto:stevel@cityofanacortes.org)

PH(360) 661.3468

FAX(360) 293-1938

# Memo

Date: May 1, 2020

To: Libby Grage

From: Steven Lange

Subject: Preliminary Plat Submittal – The Crossings (PW#20-124-DEV)

cc: Eric Shjarback, Don Measamer, Fred Buckenmeyer

The following review has been completed on May 1, 2020 by the Public Works Engineering Department based on the information provided to date.

1. February 21, 2020: Preliminary Plat Submittal that includes the following

- Master Application (February 13, 2020)
- Preliminary Land Use Application (No date)
- Cottage Housing Site Plan Review Application (No date)
- Project Narrative (January 20, 2020)
- SEPA (January 30, 2020)
- Site Maps (January 31, 2020)
- Civil Plans (January 25, 2020)
- Storm Drainage Report (January 13, 2020)
- Cultural Resources Report (February 25, 2020)
- Critical Areas Report (February 2020)
- Geotechnical Report (April 12, 2018)
- Traffic Impact Report (December 6, 2019\March 5, 2020)
- Tree Preservation Plan (January 27, 2020)
- Landscape Plan (January 31, 2020)
- Archaeological Evaluation (January 03, 2020)
- Title Report – Revision 2 (5003353-0002662e) Order #02-175279-F

### **PROJECT NARRATIVE:**

1. Public Works Engineering will be developing a Sight Distance Triangle to determine an easement area for trimming vegetation. This information will be provided later.
2. Improvements along Anacopper Mine Road should remain within the existing road prism to not impact the adjacent wetlands. Public Works Engineering will be working with Operations on the installation\re-establishment of the pedestrian improvements installed in 2011.

### **SEPA:**

1. Text is tiny making it difficult to read the responses provided.

### **Storm Water Quality Plan**

1. There was no formal submittal after the January 30, 2020 Gray and Osbourne review summary. See attached.
2. See attached Gray and Osbourne response to Staff questions regarding the Drainage Report, dated January 13, 2020. This response was after the complete submittal.
3. Gray and Osbourne are reviewing the January 13, 2020 Drainage Report in full detail now that additional information is provided with the complete submittal. Review Summary will follow.

### **Traffic Impact Analysis**

1. Public Works Engineering concurs with the report. We will review the suggestions provided and provide feedback later.

Thank you,



Steven Lange  
Project Manager



## MEMORANDUM

TO: LIBBY GRANGE AND STAFF  
FROM: STACEY CLEAR, P.E.  
DATE: April 8, 2020  
SUBJECT: RESPONSE TO STAFF COMMENTS ON  
THE CROSSING

---

Below is our response to staff related comments regarding The Crossing as provided to us on April 1, 2020 via email. Please let us know if you have any questions regarding these responses.

- *According to the Landscape Plan (Sheet L1), some of the units will have crushed gravel parking/storage areas in addition to the proposed driveways. It's not clear whether the hard surface numbers in the report account for these areas.*

The gravel parking/storage and walking path areas do not appear to be accounted for in the impervious area calculations. These will need to be measured and included in the report.

- *Developed Conditions Summary (p. 3) – states that the second basin of 0.60 acres will be directed to the wetland buffer with a dispersion trench located at the top of slope to disperse all stormwater over and through the buffer. “This will allow the hard surfaces included in this basin to be modeled as grassed surfaces (landscaping).” However, the DOE guidance provides as follows: Where BMP T5.11: Concentrated Flow Dispersion is used to disperse runoff into an undisturbed native landscape area or an area that meets BMP T5.13: Post-Construction Soil Quality and Depth, and the vegetated flow path is at least 50 feet, the impervious area may be modeled as landscaped area.*

The wetland buffer area does not qualify as “native vegetation” following the Ecology definition. Although the text in the Developed Conditions Summary appears to be wrong, the modeling documentation provided under Minimum Requirement 7 makes it appear that the applicant correctly modeled the impervious areas of the basin.

- *The existing buffer is not undisturbed native landscape area and I'm not sure it meets BMP T5.13. (in our review of the wetland report, we are asking that the applicant address the quality of the existing buffer and its ability to protect wetland functions/values).*

The wetland report identifies an increase in ecological function of the wetland and wetland buffer. The wetland buffer will be converted to an herbaceous meadow with a forested canopy component by allowing the *existing* mowed lawn to grow and planting 19 douglas fir trees. To remedy this for stormwater concerns, if the City allowed, this area could be replanted using the amended soils in BMP T5.13.

- *MR2, Element 3 – Control Flow Rates*

*Proposed onsite drainage to be directed to Temporary Sediment Pond and then pumped to a perforated discharge pipe along the wetland buffer to allow filtration of silty water prior to reaching downstream wetland. Existing vegetation in wetland buffer is primarily orchard grass and Kentucky blue grass (nonnative). How do we know that wetland will not be impacted from this proposal (even if temporarily)? Will nonnative grass buffer on a slope effectively remove silt before reaching wetland? How will flow be controlled – do we need details re: how often pumping expected? Report does not seem to address whether this will include all construction site stormwater, including that from Basin B1 (which normally flows a different direction?) Is it important to preserve natural drainage patterns even during the construction phase?*

A properly implemented temporary sediment pond with controlling orifices should provide adequate protection for the wetland and buffer from sediment and increased flow rates. Plansheet C9 shows the details for the control structure that will meter flow toward the wetland area.

- *MR#5 Onsite Stormwater Management:*

*In addressing the feasibility criteria, the Herrigstad report refers multiple times to the Geotechnical report author's opinion (on page 15) that "the glacial till is a restrictive layer and is not suitable for conventional stormwater infiltration". However, the next paragraph in the Geotech report goes on to state that "Alternative means of stormwater management utilizing LID concepts, such as pervious pavements and/or rain gardens, may be feasible at the project site but should be further evaluated as part of a more comprehensive infiltration study once the construction plan is more fully developed..." It does not appear that this has been addressed by the Herrigstad report. Is it reasonable to ask that alternative LID concepts be explored pre geotech recommendation?*

The Manual identifies an infiltration rate of less than 0.3 inches per hour as infeasible for pervious pavement. The Geotech Report calculated rates from 0.09 to 1.68 inches

per hour, indicating that some areas may be feasible. The areas with higher infiltration rates, identified as TP-1 and TP-6, are located near the south and north extents of the project. Very low infiltration rates are calculated throughout the area in between these two points. As there is often a separation requirement between the bottom of an LID facility and the top of the groundwater surface, we would not recommend investigating LID facilities further due to evidence of groundwater within the upper 2' of soils.

- *MR#6 Runoff treatment:*

*The northern road in Basin A1 is proposed to discharge to a Bioretention cell prior to discharging to the detention pond. But the report previously (in MR#5) determines use of bioretention cells as infeasible.?*

Bioretention was identified as infeasible for flow control purposes due to the "restrictive layer that is not suitable for conventional stormwater infiltration". However, even though runoff cannot be infiltrated through the bioretention system, it can still be filtered for treatment purposes and conveyed to the detention system via an underdrain.

- *MR#7 Flow Control:*

*Does G&O confirm that the WWHM report assumptions used and calculations are accurate as part of your review?*

The modelling conducted appears to be accurate based on available information.





January 30, 2020

Mr. Steve Lange  
Project Manager  
City of Anacortes  
P.O. Box 547  
Anacortes, Washington 98221

SUBJECT: THIRD STORMWATER PLAN REVIEW, THE CROSSING COTTAGE  
CITY OF ANACORTES, SKAGIT COUNTY, WASHINGTON  
G&O #19411.07

Dear Mr. Lange:

We received the revised plans for the project on January 20, 2020.

The proposed project consists of constructing 18 cottage-style homes and 3 standard single-family homes. The proposal also includes a 20-foot wide road with curb, gutter, and sidewalk. Stormwater from the site will be conveyed to either the Meadows drainage system to the east or wetland to the west. Runoff conveyed to the wetland will be treated by either dispersing to the 110-foot wetland buffer, a bioswale, or bioretention. Runoff conveyed to the east will be treated by the existing Rockridge detention pond with a permanent wet pool.

The submittal included:

- Drainage Report
- Rockridge Drainage Report
- Civil Engineering Plans

We offer the following specific comments to the developer regarding our review of the submitted information.

#### **DRAINAGE REPORT**

1. The Rockridge Drainage Report does not identify the Rockridge detention pond as a water quality treatment facility. The report states that the Crossings development will use a Filterra system to achieve the water quality requirement. Runoff treatment must be provided for Basin B1.



Mr. Steve Lange  
January 30, 2020  
Page 2

2. Provide a wetland classification report to the City in accordance with site analysis requirements.

## **CIVIL ENGINEERING PLANS**

### **General**

1. The Basin A1 road area still appears to intrude into the wetland buffer. Wetland buffers must be protected in accordance with Minimum Requirement 8.

### **Sheet C-1**

2. Details must be provided for all erosion control BMPs in the final plan submittal.

Please contact me if you have any questions on this plan review.

Sincerely,

GRAY & OSBORNE, INC.

Stacey A. Clear, P.E.

SAC/hh  
Encl.



## MEMORANDUM

Date: 4/29/2020

To: Libby Grage, Planning Manager

From: Tess Cooper, Associate Planner

RE: The Cottage at Anacopper Mine Rd

The following Critical Area review has been completed on April 28, 2020 by the Planning Department in response to the application package submitted by Strandberg Construction. Staff have reviewed the Wetland Report by ATSI and conducted a site visit to the property, the following comments have been prepared:

1. The delineation flagging is mostly missing on site, however the few flags that remain appear to be accurate, while the wetland edge is fairly prominent without flagging, flags should remain in place until after all permitting is reviewed and approved.
2. The report and worksheets were reviewed for accuracy, there are few items identified on the rating worksheets, but they do not appear to make a drastic change in the rating results. Please correct and resubmit for review (see attached).
3. Upon brief observation, the water levels appear to be different in Wetland A and Wetland B, this may be an indicator that the wetlands are not hydrologically connected except for the overflows. The consultant should more clearly articulate the reasoning behind determining Wetlands A and B are functionally separate. Guidance is provided from Chis Luerkens of DOE on how to use the rating guidance to determine separation.
4. Buffer enhancement and restoration plan section 5.4 on page 16 of the Wetland Report describes the buffer enhancement area to be approximately 42,857 square feet in area and the voluntary restoration area to be 2,488 square feet in area. The enhancement of the 42,857 includes planting 19 Douglas Fir Trees and allowing the grass to grow tall creating an herbaceous forested meadow. The voluntary restoration includes removal of the gravel driveway, tilling the soil, and hydro-seeding an herbaceous grass seed mix. Staff questions the approach of the proposed enhancement and restoration specifically the herbaceous meadow in an urban environment for reasons including fire danger, and aesthetics of unmown grass as well as the lack of functional improvement to buffer functions with such a high density development upslope from the wetland. To ensure protection of the wetland staff recommends a shrub/scrub buffer planting plan with more appropriate plant densities. For example a 42,000 square foot planting area with trees at 10 foot on center spacing, would require 420 trees using industry standard density calculations; the proposed 19 trees seems substantially under numbered (i.e. the 2,488 sf area calls for 25 trees). The plan also lacks a monitoring and contingency plan for the enhancement and restoration efforts. Staff recommends a revised enhancement/restoration plan.



**From:** [Frisinger, Rob](#)  
**To:** [Grage, Libby](#)  
**Subject:** RE: PLN-2020-0001: The Crossings - Request for review  
**Date:** Monday, March 2, 2020 2:20:10 PM

---

Looks good from the building standpoint.

---

**From:** Grage, Libby <LibbyB@cityofanacortes.org>  
**Sent:** Monday, March 2, 2020 1:59 PM  
**To:** Development Review Group <DevelopmentReviewGroup@cityofanacortes.org>  
**Subject:** FW: PLN-2020-0001: The Crossings - Request for review

Sorry – I forgot to attach the comment form in the previous email. It is now attached. Thanks.

---

**From:** Grage, Libby  
**Sent:** Monday, March 2, 2020 1:53 PM  
**To:** Development Review Group <[DevelopmentReviewGroup@cityofanacortes.org](mailto:DevelopmentReviewGroup@cityofanacortes.org)>  
**Subject:** PLN-2020-0001: The Crossings - Request for review

Hi everyone,

Please take some time to review the attached project application. The complete file and large size plans are located on the back counter in the Planning/Engineering area. Please provide your review comments by **Monday, March 16, 2020**.

Thanks,

**Libby Grage** | City of Anacortes  
Planning, Community & Economic Development Department  
Planning Manager  
P.O. Box 547 | 904 6<sup>th</sup> Street | Anacortes, WA 98221  
360.299.1986 (work) | [libbyb@cityofanacortes.org](mailto:libbyb@cityofanacortes.org) | [www.cityofanacortes.org](http://www.cityofanacortes.org)

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**From:** [Andersen, Sandi](#)  
**To:** [Grage, Libby](#)  
**Subject:** RE: PLN-2020-0001: The Crossings - Request for review  
**Date:** Thursday, March 19, 2020 11:08:45 AM

---

Answering for me only, no comments. 😊

---

**From:** Grage, Libby <LibbyB@cityofanacortes.org>  
**Sent:** Thursday, March 19, 2020 11:00 AM  
**To:** Lange, Steve <stevel@cityofanacortes.org>; Nemeth, Terry <nemetht@cityofanacortes.org>; Kennedy, Jack <jackk@cityofanacortes.org>; Koegel, Matt <mattk@cityofanacortes.org>; Andersen, Sandi <sandia@cityofanacortes.org>; Measamer, Don <don@cityofanacortes.org>; Small, John <JohnS@cityofanacortes.org>; Lunsford, Jonn <JonnL@cityofanacortes.org>; Fox, Becky <beckyf@cityofanacortes.org>; Shjarback, Eric <erics@cityofanacortes.org>; Lunsford, Bret <bretl@cityofanacortes.org>  
**Subject:** FW: PLN-2020-0001: The Crossings - Request for review

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**Libby Grage** | City of Anacortes  
Planning, Community & Economic Development Department  
Planning Manager  
P.O. Box 547 | 904 6<sup>th</sup> Street | Anacortes, WA 98221  
360.299.1986 (work) | [libbyb@cityofanacortes.org](mailto:libbyb@cityofanacortes.org) | [www.cityofanacortes.org](http://www.cityofanacortes.org)

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**Sent:** Monday, March 2, 2020 1:59 PM  
**To:** Development Review Group <[DevelopmentReviewGroup@cityofanacortes.org](mailto:DevelopmentReviewGroup@cityofanacortes.org)>  
**Subject:** FW: PLN-2020-0001: The Crossings - Request for review

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Planning Manager  
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**From:** [Small, John](#)  
**To:** [Grage, Libby](#)  
**Subject:** RE: PLN-2020-0001: The Crossings - Request for review  
**Date:** Thursday, March 19, 2020 11:36:32 AM

---

Hi Libby,

I did review this earlier, but I did not have any major concerns from a police perspective. So, "no comments." Sorry for the delay.

John



John D. Small  
Chief of Police  
Anacortes Police Department  
1218 24<sup>th</sup> Street  
Anacortes, WA 98221  
(360) 293-4684

"Ensuring public safety; earning public trust."

---

**From:** Grage, Libby  
**Sent:** Thursday, March 19, 2020 11:00 AM  
**To:** Lange, Steve <stevel@cityofanacortes.org>; Nemeth, Terry <nemetht@cityofanacortes.org>; Kennedy, Jack <jackk@cityofanacortes.org>; Koegel, Matt <mattk@cityofanacortes.org>; Andersen, Sandi <sandia@cityofanacortes.org>; Measamer, Don <don@cityofanacortes.org>; Small, John <JohnS@cityofanacortes.org>; Lunsford, Jonn <JonnL@cityofanacortes.org>; Fox, Becky <beckyf@cityofanacortes.org>; Shjarback, Eric <erics@cityofanacortes.org>; Lunsford, Bret <bretl@cityofanacortes.org>  
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Planning Manager  
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**From:** [Koegel, Matt](#)  
**To:** [Grage, Libby](#)  
**Subject:** RE: PLN-2020-0001: The Crossings - Request for review  
**Date:** Thursday, March 19, 2020 11:30:22 AM

---

Libby,

All good from Solid Waste, thanks.

**Matt Koegel**  
**City of Anacortes**  
**Solid Waste Supervisor**  
**360-293-1921**

---

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**Sent:** Thursday, March 19, 2020 11:00 AM  
**To:** Lange, Steve <stevel@cityofanacortes.org>; Nemeth, Terry <nemetht@cityofanacortes.org>; Kennedy, Jack <jackk@cityofanacortes.org>; Koegel, Matt <mattk@cityofanacortes.org>; Andersen, Sandi <sandia@cityofanacortes.org>; Measamer, Don <don@cityofanacortes.org>; Small, John <JohnS@cityofanacortes.org>; Lunsford, Jonn <JonnL@cityofanacortes.org>; Fox, Becky <beckyf@cityofanacortes.org>; Shjarback, Eric <erics@cityofanacortes.org>; Lunsford, Bret <bretl@cityofanacortes.org>  
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Planning, Community & Economic Development Department  
Planning Manager

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**From:** [Nemeth, Terry](#)  
**To:** [Grage, Libby](#)  
**Subject:** RE: PLN-2020-0001: The Crossings - Request for review  
**Date:** Friday, March 20, 2020 2:47:16 PM

---

According to the plans it looks like there may be a conflict with the hydrant and the mail boxes. We may need to shift one or both to accommodate clearances.  
thanks

---

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**To:** Lange, Steve <stevel@cityofanacortes.org>; Nemeth, Terry <nemetht@cityofanacortes.org>; Kennedy, Jack <jackk@cityofanacortes.org>; Koegel, Matt <mattk@cityofanacortes.org>; Andersen, Sandi <sandia@cityofanacortes.org>; Measamer, Don <don@cityofanacortes.org>; Small, John <JohnS@cityofanacortes.org>; Lunsford, Jonn <JonnL@cityofanacortes.org>; Fox, Becky <beckyf@cityofanacortes.org>; Shjarback, Eric <erics@cityofanacortes.org>; Lunsford, Bret <bretl@cityofanacortes.org>  
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Libby,

In addition to the previous written comments as noted below, an approved "No Parking" plan must be submitted by the Developer.

The plan must include, but is not limited to:

- Language in the CC&R's
- HOA's responsibility for enforcement
- Signage and/or curb paint.

33. 20' clear width for fire apparatus must be maintained.

34. Fire Apparatus turn-around/cul-de-sac must meet City Standard.

35. Required fire lanes must be clearly marked by approved method.

36. 30' minimum inside turning radius must be maintained.

37. Additional fire hydrants will be required based on IFC Appendix B and C – 2015 edition.

38. Residential fire sprinklers may be required for some or all units based upon building construction type, fire area, available fire flow, and/or access around structures. The need for sprinklers will be determined at time of building permit submittal.

39. These comments are preliminary in nature and subject to change as additional information becomes available.

In addition to the Developer, I recommend a meeting with Fire, Building, and the Code Enforcement officer.

Thank you,

Jack

**From:** [Hoxie, Robert](#)  
**To:** [Grage, Libby](#)  
**Subject:** RE: PLN-2020-0001: The Crossings - Request for review  
**Date:** Thursday, April 9, 2020 12:29:59 PM

---

First glance.....

Probably give it a unique name of its own. Addresses for each house off that one name.

---

**From:** Grage, Libby <LibbyB@cityofanacortes.org>  
**Sent:** Thursday, April 9, 2020 12:26 PM  
**To:** Hoxie, Robert <robh@cityofanacortes.org>  
**Subject:** FW: PLN-2020-0001: The Crossings - Request for review

Rob, what are we going to do with the addressing for this? It's a private shared access drive serving the site off of Oregon/Meadows. ?

---

**From:** Nemeth, Terry  
**Sent:** Friday, March 20, 2020 2:47 PM  
**To:** Grage, Libby <[LibbyB@cityofanacortes.org](mailto:LibbyB@cityofanacortes.org)>  
**Subject:** RE: PLN-2020-0001: The Crossings - Request for review

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**From:** [Measamer, Don](#)  
**To:** [Grage, Libby](#)  
**Cc:** [Cooper, Tess](#); [Oicles, Dave](#)  
**Subject:** RE: 4/13 weekly update  
**Date:** Friday, April 17, 2020 9:55:14 AM

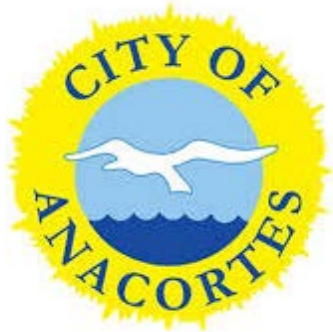
---

Thank you Libby,

A couple of comments on the Crossings,

1. The engineer of record needs to provide a design for the retaining walls and describe drainage needs at the walls.
2. Confirm no clearing at lots 20, 21, 22.
3. Wetland buffer averaging should be clearly shown on the civil drawings.
4. Sidewalk details, along with curb cut/ADA ramp details.
5. I am confused with the buffer averaging location.

Thanks



**DON MEASAMER**  
**Director of the Planning, Community & Economic Development Department**  
City of Anacortes  
904 6<sup>th</sup> Street & Q Avenue | Anacortes, WA 98221  
p: 360-299-1942  
[don@cityofanacortes.org](mailto:don@cityofanacortes.org) | [www.anacorteswa.gov](http://www.anacorteswa.gov)

---

**From:** Grage, Libby <LibbyB@cityofanacortes.org>  
**Sent:** Friday, April 17, 2020 9:27 AM  
**To:** Measamer, Don <don@cityofanacortes.org>  
**Cc:** Cooper, Tess <tessc@cityofanacortes.org>; Oicles, Dave <daveo@cityofanacortes.org>  
**Subject:** 4/13 weekly update

**Summary of activities during the week of April 13, 2020:**

Preapps:

**From:** [Lange, Steve](#)  
**To:** [Grage, Libby](#)  
**Cc:** [Measamer, Don](#); [Shjarback, Eric](#); [Ludemann, Wil](#); [Larson, Bill](#)  
**Subject:** The Cottage - TSI Report  
**Date:** Tuesday, September 1, 2020 3:51:01 PM

---

Libby,

1. Sight Distance at Copper Pond and Anacopper Mine Road was calculated by me and determined to be 403 feet looking south. This calculated was prior to the Operations folks doing their yearly brush clearing adjacent to roadways.
2. The Operations folks cleaned up the adjacent shoulder along the west side of Anacopper Mine Road and filled in potholes so pedestrians no longer need to step across the white shoulder line into traffic.
3. Justin Symonds set up the speed camera and found that there was some enforceable speeds identified. The Operations folks set up a speed feedback sign informing drivers of their speed and to slow down.
4. Public Works Engineering is not going to do anything with the intersection of Copper Pond and Ohio. This is a localized intersection and we see no need to revise the signage at this intersection.
5. There is a reference to a sight distance concern in the report at the new access to the Cottages and Meadow Lane. It is recommended that the Developer either work with the adjacent property owner to cut the hedge down, or add signage as recommended in the report.

Let me know if you need any additional information. I believe this covers what the Public Works Engineering and Operations folks stated we would do to alleviate concerns of the neighbors as brought up at the neighborhood meeting, as well as mentioned in the Traffic Report.

Thanks,  
Steven Lange  
Senior Engineering Tech

Exhibit 8  
Agency  
Comments



**Date Received:**

3/25/20

**From:** [Sad, Addam](#)  
**To:** [Grage, Libby](#)  
**Cc:** [Johnson, Matthew](#); [Pearcy, Don](#)  
**Subject:** RE: Request for Review: The Crossings (LPS-2020-0001)  
**Date:** Wednesday, March 25, 2020 1:56:55 PM  
**Attachments:** [image003.png](#)

---

Libby,

We do have a 1" PE gas line feeding two meters at what is or what was 1905 Anacopper Rd. This line will need to be retired prior to any construction.

Thank you,

[Addam Sad](#) | Operations Manager – Mount Vernon

---

**Cascade Natural Gas Corporation**  
*A Subsidiary of MDU Resources Group, Inc.*  
1520 S. 2nd St. Mount Vernon, WA. 98273  
Email: [addam.sad@cngc.com](mailto:addam.sad@cngc.com)  
Office: [360-336-3866](tel:360-336-3866)  
Cell: [360-391-6093](tel:360-391-6093)



---

**From:** Grage, Libby <[LibbyB@cityofanacortes.org](mailto:LibbyB@cityofanacortes.org)>  
**Sent:** Wednesday, March 25, 2020 9:54 AM  
**Subject:** Request for Review: The Crossings (LPS-2020-0001)

**\*\* WARNING: EXTERNAL SENDER. NEVER click links or open attachments without positive sender verification of purpose. DO NOT provide your user ID or password on sites or forms linked from this email. \*\***

---

Good morning,

The City of Anacortes Planning, Community & Economic Development Department is currently processing a cottage housing / preliminary subdivision application for 21 lots (18 cottage units; 3 standard single family homes) located at 1905 Anacopper Mine Road. The notice of application is attached, which includes instructions for how to view the application materials.



Please let me know if you have problems accessing the application documents or have any questions.

Please provide any written comments you may have to me by 5:00 PM April 22, 2020.

Best regards,

**Libby Grage** | City of Anacortes  
Planning, Community & Economic Development Department  
Planning Manager  
P.O. Box 547 | 904 6<sup>th</sup> Street | Anacortes, WA 98221  
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Allyson Brooks Ph.D., Director  
State Historic Preservation Officer

**City of Anacortes**  
*Planning, Community &  
Economic Development*

April 7, 2020

**Date Received:**

4/7/20

Ms. Libby Grage  
Senior Planner  
City of Anacortes  
PO Box 547  
Anacortes, WA 98221

In future correspondence please refer to:  
Project Tracking Code: 2020-02-01521  
Property: Cultural Resources Review of The Crossings Development, 1905 Anacopper Road  
(Parcel: P31752), Anacortes, Washington  
Re: Archaeology - Concur with Survey; Follow Inadvertent Discovery Plan

Dear Ms. Grage:

Thank you for contacting the State Historic Preservation Officer (SHPO) and the Department of Archaeology and Historic Preservation (DAHP) with documentation regarding the above referenced project. In response, we concur with the results and recommendations made in the survey report. Specifically, we agree that as no cultural resources were found during the survey, that no direct archaeological supervision should be required. However, we recommend that a standard Inadvertent Discovery Plan is followed during all ground disturbing activities.

We appreciate receiving copies any correspondence or comments from concerned tribes and other parties that you receive as you consult.

These comments are based on the information available at the time of this review and on behalf of the SHPO pursuant to Washington State law. Please note that should the project scope of work and/or location change significantly, please contact DAHP for further review.

Thank you for the opportunity to review and comment. Please ensure that the DAHP Project Number (a.k.a. Project Tracking Code) is attached to any future communications with the DAHP about this project. Should you have any questions, please feel free to contact me.

Sincerely,

Stephanie Jolivet  
Local Governments Archaeologist  
(360) 586-3088  
Stephanie.Jolivet@dahp.wa.gov





**Date Received:**

**4/10/20**

**From:** [Westcott, Bud \(DNR\)](#)  
**To:** [Grage, Libby](#)  
**Cc:** [Ranten, Steven \(DNR\)](#); [Penhale, Bob \(ECY\)](#)  
**Subject:** Ips-2020-0001  
**Date:** Monday, April 20, 2020 2:01:56 PM

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Hello

Just looking at this proposal. The pond that is on the property is actually connected to the F pond to the west via the culvert in the road. It is listed as a category III wetland in the documents. Man-made blockages of F water do not constitute breaks in stream/water typing. Therefore the F water to the west that is connected by the undersized culvert on Anacopper Rd should be viewed as one contiguous body of water and should be given the same protections. Additionally, the pond on the proposed development parcel does have at least .5 acres of ponded water for more than 7 days between 4/1 -10/1 (WAC 222-16-035 (1)(a)(ii))

I don't think this would necessarily impact this proposal, I just wanted to make sure the way the water typing is done is consistent.

Thanks

Bud

**Bud Westcott**

Forest Practices Forester

Northwest Region

Washington State Department of Natural Resources (DNR)

360-856-3500

[bud.westcott@dnr.wa.gov](mailto:bud.westcott@dnr.wa.gov)

[www.dnr.wa.gov](http://www.dnr.wa.gov)



Libby Grage  
Planning Manager,  
City of Anacortes  
904 6<sup>th</sup> Street  
Anacortes, WA 98221

4/22/2020

**City of Anacortes**  
*Planning, Community &  
Economic Development*

**Date Received:**

4/22/20

Dear Ms. Grage,

The Port of Anacortes has reviewed application documents for “The Crossings” development. The proposed development is adjacent to the Anacortes Airport. Since 1969, the Anacortes Airport has operated as a public general aviation airport. The Anacortes Airport has multiple take-offs and landings occurring throughout the day, year round.

Given the proposed development’s proximity to the Anacortes Airport, the Port of Anacortes recommends the proposed development contain an aviation easement to protect the long-term continuity of operations at the airport and familiarize purchasers with the operations of the airport. The Port wants to be a good neighbor to new residents; being open about the continued uses and necessity of the Anacortes Airport is important

Thank you for the opportunity to provide comment. If you need additional information or further comment, please do not hesitate to contact me (360-770-5194 [kevin.anderson@portofanacortes.com](mailto:kevin.anderson@portofanacortes.com)).

Best regards,

Kevin Anderson  
Environmental Specialist

CC: Dan Worra, Brenda Treadwell, and John Dumas

## Grage, Libby

---

**Subject:** FW: Request for Review: The Crossings (LPS-2020-0001)

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**From:** Luerkens, Chris (ECY) <CLUE461@ECY.WA.GOV>  
**Sent:** Monday, September 14, 2020 7:11 PM  
**To:** Grage, Libby <LibbyB@cityofanacortes.org>  
**Subject:** RE: Request for Review: The Crossings (LPS-2020-0001)

Hi Libby,

I reviewed the report from ATSI, dated July 16, 2020, which was an addendum to their Critical Areas Assessment for The Crossings proposal. I offer the following comments:

- 1) ATSI's report determined that Wetland A and Wetland B are separate wetlands and should be rated separately per the Washington Wetland Rating System, 2014. A culvert under Anacopper Road functions as an outlet from Wetland A, allowing water to flow into Wetland B. The flow through the culvert appears to be unidirectional into Wetland B. Based on the existing conditions, I concur that Wetland A and Wetland B are separated by the road and should be evaluated as different wetland units.
- 2) Wetland buffer. Anacortes Municipal Code 17.70.340.F.1, indicates that standard buffer widths presume a relatively intact native vegetation community to protect functions. The buffer between the subject wetland (Wetland A) and the proposed development is steeply sloped and primarily lawn/grass.
  - A trail is proposed through the buffer which will be fenced on both sides to deter access into the buffer.
  - The applicant will plant 19 Douglas Fir trees in the buffer and allow the grass to form an herbaceous meadow. It is understood that this meadow will be formed by applicant ceasing to mow the grass.
  - Additionally, the applicant has provided a enhance approximately 30 foot wide buffer next to the wetland with native plants.

I have a couple of comments regarding the items above.

- a) Per AMC 17.70.340.F.3.c, where buffer planting is proposed to substitute for increased buffer width, the planting density shall not be less than three feet on center for trees and eight feet on center for trees. It appears that the ATSI plan is for planting at 4 foot on center.
- b) The planting plan may consider adding or substituting some fast growing trees and/or shrubs that will be larger at maturity. This would help compete with and more quickly shade out the existing grass, and also increase habitat complexity. The proposed Salal will be relatively small at maturity and may be difficult to establish in the dense grass without significant maintenance. Other more competitive plants maybe be a good alternative and may aid in the success of the buffer enhancement area.

I would be happy to discuss any of the above comments further. Additionally, please let me kown if you would further review of any specific elements of the proposal. Thanks,

**Chris Luerkens** | Shorelands & Wetlands Permit Specialist | [Department of Ecology](#) | 360-255-4399 | cell: 360-410-4807  
[chris.luerkens@ecy.wa.gov](mailto:chris.luerkens@ecy.wa.gov)

*This communication is a public record and may be subject to disclosure as per the Washington State Public Records Act (RCW 42.56)*



# Exhibit 9

## Public Comments

**Date Received:**

3/26/20

**From:** [Erika McPhee-Shaw](#)  
**To:** [Nels Strandberg](#); [erikaelizabethshaw@icloud.com](mailto:erikaelizabethshaw@icloud.com)  
**Cc:** [Debbie Headrick](#); [Measamer, Don](#); [Grage, Libby](#); [Jeremy McCormick](#)  
**Subject:** Re: comments on proposed development plans  
**Date:** Thursday, March 26, 2020 5:49:45 PM

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Dear Nels and all

Thank you so much for your thoughtful and detailed answers to my questions. I feel I have a much better understanding of the planned project now and now understand the challenges you are up against with trees. Your explanations make a lot of sense.

I am encouraged to hear that the new street will be narrow and have parking along the sidewalk

I am very happy to hear you plan to put in "downcasting" lights. If there is anything I can do to help with providing neighbor input on that, please let me know.

Thank you again for getting back to me, and to all of you on this email chain: best wishes to keep safe and take care of yourselves and your neighbors!

Erika

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**From:** Nels Strandberg <[nels@strandbergconstruction.com](mailto:nels@strandbergconstruction.com)>  
**Date:** Monday, March 2, 2020 at 10:01 AM  
**To:** Erika McPhee-Shaw <[shawe3@wwu.edu](mailto:shawe3@wwu.edu)>, "erikaelizabethshaw@icloud.com" <[erikaelizabethshaw@icloud.com](mailto:erikaelizabethshaw@icloud.com)>  
**Cc:** Debbie Headrick <[debbie@strandbergconstruction.com](mailto:debbie@strandbergconstruction.com)>, "Measamer, Don" <[don@cityofanacortes.org](mailto:don@cityofanacortes.org)>, "Grage, Libby" <[LibbyB@cityofanacortes.org](mailto:LibbyB@cityofanacortes.org)>, Jeremy McCormick <[Jeremy@strandbergconstruction.com](mailto:Jeremy@strandbergconstruction.com)>  
**Subject:** RE: comments on proposed development plans

Erika, please see my responses below (in red),

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**From:** Erika McPhee-Shaw <[shawe3@wwu.edu](mailto:shawe3@wwu.edu)>  
**Date:** Sunday, March 1, 2020 at 6:46 PM  
**To:** 'Nels Strandberg' <[nels@strandbergconstruction.com](mailto:nels@strandbergconstruction.com)>, "Measamer, Don"

<[don@cityofanacortes.org](mailto:don@cityofanacortes.org)>, "Carter, Jeremy" <[jeremyc@cityofanacortes.org](mailto:jeremyc@cityofanacortes.org)>

**Cc:** Erika Shaw <[erikaelizabethshaw@icloud.com](mailto:erikaelizabethshaw@icloud.com)>

**Subject:** comments on proposed development plans

Dear Jeremy, Nels, and Don

I am writing regarding the proposed development at Annacopper Mine Rd and Copper Pond Road.

Thank you for hosting the community meeting with the city and developer on January 16. I attended and made one verbal comment, and appreciated the answer. I have meant to get back to you for weeks – apologies for the delay.

I'm pleased that the plan is to develop higher density housing than is standard in this neighborhood, and I was impressed by the plans for the shared space. It looks like it would be a fun community to live in. It seems like the plan fits in well with Anacortes' strategic plan and mission and I hope the houses will sell within the price range goal.

I have three requests, one of which (street lights) I brought up at the meeting and which Nels had thoughts on there.

- **Lighting.** Can you plan to have all street lighting set up in a way that is shaded from the sides and from above? I think there are examples in the developments by the ferry – they are shaped like upside down bells or something so the light shines downward toward the street only. Street lights in a new neighborhood and any street corner will have an adverse effect on everyone's enjoyment of the gorgeous Guemes Straits (most of us don't have views from our houses, but when we walk outside we can see from various places around the neighborhood) and the stars. We saw the northern lights a few years ago! Please let's keep some of the beauty of the sky here with this relatively easy proactive effort. Thank you SO much.

We completely agree with you on lighting.

- **Extant Tall Trees.** There are gorgeous old tall trees in that area that are not part of the riparian vegetation that is part of the wetlands. They are old, they have withstood wind storms, and eagles etc hang out in them. Beautiful old trees are precious. Can you build around at least a few of them instead of casually chopping them all down? Replacing with new small trees isn't quite the same as keeping a few of those sentinels. They don't have to be old growth to have character and give a neighborhood a sense of place and quality : )

I would love to leave some of the old firs as well. This is what were up against. Douglas Firs in particular are rather delicate in relation to their roots. The rule of thumb used by many arborist are one of two things. 1ft of radius of root zone protection for inch of diameter, so a tree that is 2ft thick would require a quite a large protection zone (almost 50ft across). Much larger than space we have planned right now. The other rule of thumb is a protection zone directly beneath the drip line (branches), this measure is likely less but still a huge area. If by chance there was an existing tree that was perfectly centered in our common space, which unfortunately there is not. We would then not be able to "cut" or "fill" or install any utilities in that root zone area, as typically any damage to



those roots will kill the tree. Unfortunately when you do try to layout out these huge protection area's on the site, and then calculate the risk to the tree, its starts to look pretty infeasible/impossible.

Additionally: trees do like to stand together, so leaving a few stand alone trees, is never recommended by arborists, so given we are required to use an arborist, and when the tree blows down on some ones home, I'll be the one liable for not following typical arborist guidelines. Some might even call this negligence, if it were to happen.

Not to beat a dead horse, but all my clients love trees, as long as there NOT in their view, NOT close enough to leave pine needles, sap, and cause other potential damage to their home. In 27 years of building I have left hundreds of trees, only to have the "client" either ask me to remove them later, or we find them removed years later. This HOA, when set up, will be worried ( and risk adverse) about everything and compromised Fir will be the top of their list to remove.

I'm sorry this is the honest truth and why developers almost never leave trees, its almost impossible to do so, especially in a dense development. I realize it takes time to regrow, but in the long run the correct species placed in the correct (permanent) location is the better solution to a compromised existing tree. After all these years, I am now go back to my older neighbors I built and see the results of well placed trees.

- **Consider sidewalks and encouraging parking on both sides of the revision of Oregon Ave.**

(?). It sounds like the gravel path where we all walk dogs etc will be paved and there will be new big houses on that road. There was a lot of grousing at the meeting about a lack of parking. Can you consider putting sidewalks on both sides of the new Oregon AND allowing parking on both sides of the street? Why would I want this? As a neighbor I hope this might meet two objectives: 1) provide parking for the new neighbors (including in the commons, not just the new bigger houses), and 2) result in the street being narrow so that cars would drive slower. Anything you can do to keep driving to a crawl on the revised roads would be great. West 12<sup>th</sup> has gotten a lot faster than it was meant to be because of all the new houses up at the top of the hill, and we've noticed when cars are parked on it the traffic is forced to slow down a bit.

-The new city street standard is 20ft wide and the first time we've used this standard. This is pretty narrow and hopefully we'll keep traffic slower, roads with less width usually perform that function.

-We are proposing sidewalk on one side, when property to the east is developed who ever develops that would install the 2<sup>nd</sup> sidewalk, this is pretty typical, we simply do not have the real estate to do more.

- We really feel we have parking handled pretty well. Code required parking within the 18 unit cottage portion is 31 spaces, spaces provided per our plan is 45. The three other lots would be

required to have 6 spaces we are proposing 12, although we have added a gravel area (since the neighborhood meeting) adjacent to 5 units garage apron, this could theoretically add 5 more additional space, bring our total count to 50. In our application we are not counting these as parking, only showing the gravel, as we are so far over the minimum.

Thanks so much! I'm writing this from the same email I originally contacted you from so you'll recognize me. However I should shift over to my non-work email account for personal business: [erikaelizabethshaw@icloud.com](mailto:erikaelizabethshaw@icloud.com) and it is cc'd above if you reply to this email.

I appreciate your taking the time to read this. Erika

Thank you for your comments, I have attached a few pages from our application for your reference.

Thanks Nels

--

Dr. Erika McPhee-Shaw  
Professor  
Department of Environmental Sciences  
Western Washington University  
AH 404, MS 9181  
516 High Street  
Bellingham, Washington 98225  
360-650-3713

**From:** [Ernie Hayden](#)  
**To:** [Grage, Libby](#)  
**Subject:** WRITTEN COMMENTS - RE: LPS-2020-0001  
**Date:** Thursday, April 9, 2020 7:14:27 PM

**City of Anacortes**  
*Planning, Community &  
Economic Development*

**Date Received:**

4/9/20

Greetings,

By means of this email I wish to provide written comments relative to the Notice of Application, LPS-2020-0001 by Anacopper LLC.

**Background:**

I currently live at 3938 West 12th Street, Anacortes, WA 98221-4537. My lot is approximately a half mile south of the proposed project location at 1905 Anacopper Mine Road. Therefore, I wish to provide comments relative to this project.

**Comments:**

1. Overall, I am against this project because it is essentially forcing a 21-lot housing site into 5.2 acres. This constitutes a "close compact" arrangement with the average lot size around 0.24 acres (or 43,560 sq ft X .24 = 10,454 sq ft lot). This is an extremely small lot not in keeping with the adjacent neighborhoods. Essentially the project is building a condominium concentration disguised as "cottages."

2. This will negatively impact the waterlands adjacent to the planned project. This is particularly important to the adjacent lots due to the need to have appropriate and controlled water drainage.

3. Assuming each lot is represented by 2 automobiles. Therefore, this project will introduce 42 additional automobiles to the traffic pattern in play on Anacopper Road/Pennsylvania Avenue. This will introduce excess noise, air pollution that does not positively contribute to the community or the neighborhoods -- and will scare away the wildlife in the area that we enjoy and appreciate.

In addition to the automobile traffic, please don't forget about the large Strandberg trucks that will be moving earth, etc for the project -- thus impacting noise levels, dirt/dust levels in the area and reducing the livability of our pristine neighborhoods.

Thank you for listening to my comments.

I am happy to offer additional responses if desired.

**Ernie Hayden MIPM CISSP CEH GICSP (Gold) PSP**

Consultant | Writer | Teacher | Photographer

Specialty: Critical Infrastructure Protection / Cybersecurity / Industrial Controls Security

**Owner/Principal: 443 Consulting LLC & Rising Moon NW Photography**

Phone: +1 425-765-1400



Email: [enhayden1321@gmail.com](mailto:enhayden1321@gmail.com)

*"The purpose of life is to contribute in some way to making things better." Robert F. Kennedy*

**From:** [Eric & Stacy](#)  
**To:** [kevinc@cityofanacortes.org](mailto:kevinc@cityofanacortes.org); [Shjarback, Eric](#); [Measamer, Don](#); [Symonds, Justin](#); [Hohmann, Tim](#); [Grage, Libby](#); [Cooper, Tess](#)  
**Subject:** Public Comment Regarding Parcel #P31752 - 1905 Anacopper Mine Road  
**Date:** Sunday, April 19, 2020 10:55:36 PM

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City of Anacortes  
Planning, Community &  
Economic Development

Date Received:

4/19/20

File Number LPS-2020-0001

**Regarding:** The traffic impact of the proposed Strandberg Cottage development at the intersection of Anacopper Mine Rd and Copper Pond will be significant.

First - I state that this is the moment to address the intersection based on two impacts that the Strandberg Cottage development at **parcel #P31752**, 1905 Anacopper Road will have. First, based on Mr. Strandberg's analysis, there will be approximately 150 vehicle trips per day generated by the new development. Despite the closing of the driveway that turns off Anacopper Mine Road and placing the development entry/exit on Oregon, the intersection at Copper Pond and Anacopper Mine Road will be heavily impacted by those vehicle trips because half or more will cross the intersection from one of its two directions. Since the 1905 driveway is closing, **I strongly urge the city to require changes that improve the sight line to a point where drivers exiting Copper Pond can see past the dip and up the hill to Airport Road.** Removal of all hedging, fences, low brush, trees, and even relocation of the Copper Pond sign may be required. The sight line needs to be cleared that far because drivers naturally speed up to nearly 40 MPH without willful speeding while coming downhill (Northbound) on Anacopper Mine Road. Drivers turning onto Anacopper need sufficient vision to safely make the turn onto Anacopper in these conditions. These are family homes, with new and seasoned drivers all of whom are at high risk - there have been numerous "near accidents" at this intersection.

Secondly, this is the moment to address Copper Pond Road. The increase in traffic from the proposed high density Cottage development will thread through Meadows Lane, then turn onto the raceway known as Copper Pond Road. That road is long, straight, and does not allow residents to park on it by HOA rules. Both factors cause drivers to increase their speeds on the straight stretch. Drivers having taken advantage of increased speed on a straight stretch find a stop sign at the end of the straightaway and the intersection of Copper Pond and Copper Pond Place. More drivers run that stop sign than stop at it, often without any reduction in speed other than to make the bend. Most drivers feel that they can run the stop sign without any repercussions or risk, further adding to the speed problem on this residential street where children are often at play. We, the residents here, need these problems addressed before we compound the problem even further with further housing development.

Several ideas I offer:

1. Increase the sight lines dramatically

2. Close off traffic from the new development to the neighborhoods to the North (Meadows & Copper Pond) by making ingress and egress via Oregon only
3. Add aggressive speed bumps
4. Control speed on Copper Pond road permanently by a redesign or feature enhancement
5. Place a roundabout at Copper Pond and Anacopper Mine Road

The Copper Pond and Anacopper Mine Road intersection was not planned for such high levels of traffic. It is my firm belief that the intersection is far above its design capacity. This intersection approaches negligence on the part of the city as increasing levels of risk are not addressed and will cause grave injury, or deaths. The platitude "accidents will happen" is not acceptable nor sufficient as a response to the issue. It is my hope the City of Anacortes will consider these issues of public safety carefully and work closely with concerned residents.

Eric Adam  
1902 Copper Pond Place



## Shawn & Amy Patrick

2113 Meadows LN  
Anacortes, WA 98221  
360-588-8367  
shawnpatrick@gmail.com

April 20, 2020

Libby Grage  
Planning Manager  
City of Anacortes  
PO Box 547  
Anacortes, WA 98221

**City of Anacortes**  
*Planning, Community &  
Economic Development*

**Date Received:**

4/20/20

Ms. Grage,

We are writing in response to the Notice of Application (File Number LPS-2020-0001) that we received in the mail for the proposed project on 1905 Anacopper Mine RD (Parcel #P31752). We live in the neighborhood, have attended the initial informational public meeting for the project, and would like to explain our opposition.

The parcel in question is quite beautiful. The trees are old and the frogs are rather vocal around the pond that lies on the property. There are a few eagles that sit in the trees and it is a very peaceful place. While it is a shame that it is going to be developed, we understand that is the right of the new property owner. Our opposition is not that it is going to be developed, but rather the way it is going to be developed.

This neighborhood and all the surrounding dwellings are standard single family homes. The developer wishes to vastly increase the density of the property by putting in 18 cottages and 3 standard single family homes. We don't have an issue with the 3 single family homes, or any number of single family homes that will fit on the property, but we are opposed to the cottages. It will vastly increase the density of our neighborhood, both for number of residents and more importantly, their automobiles. The developer claims that simple homeowner association rules will limit where these new residents can park their automobiles, but our experience with other cottage-type developments in Anacortes (the one across the street from Island View Elementary and the new one near 32nd and D Avenue) show that those rules are never enforced and simply do not work. That means cottage residents will be parking their automobiles, their guest's automobiles, their teenager's automobiles, their recreational vehicles, and their boats literally in our front yard. It goes without saying that the resulting increase in traffic in our neighborhood will not be welcome at all. As with most neighborhoods, there are families residing here with extremely young children that are not used to any traffic at all since this is not a through street.

Our other major concern with this development deals with rainwater runoff. The vacant parcel of land immediately adjacent to our backyard (#P31754) is a wetland. During the rainy season, it becomes a rather large body of water. The amount water has increased significantly over the years as Rockridge has been developed. The water comes down the hill and settles in the wetland, but because of the lay of the land, that water moves under Oregon Avenue, then percolates downhill through the soil of parcel #P31752 where it comes to rest in the pond. Any development on that parcel must address the rainwater runoff or all the other homes adjacent (including ours) will see flooding in the yards and crawlspaces, resulting in damage to our foundations.

If Parcel #P31752 is going to be successfully developed, we believe it should only be a small number of standard single family homes that match and compliment the existing neighborhood. Putting in 18 cottages will only increase the density to its breaking point and alienate everyone who already lives here.

Thank you,

Handwritten signatures of Shawn and Amy Patrick in cursive script.

Shawn & Amy Patrick

**From:** [Jane Brandt](#)  
**To:** [Grage, Libby](#)  
**Subject:** written comments re: LPS-2020-0001 Anacopper LLC  
**Date:** Tuesday, April 21, 2020 8:48:18 AM

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**City of Anacortes**  
*Planning, Community &  
Economic Development*

**Date Received:**

4/21/20

Ms. Grage

I live at 3936 W. 12<sup>th</sup> Street, Anacortes across the alley south of the Keystone development.

I greatly disapprove of the density of this development for several reasons.

The density is not consistent with the established surrounding neighborhoods

The resulting increased traffic of this higher density will have negative impact on the Copper Pond and West 12<sup>th</sup> streets.

Placing this much hardscape on land which has standing water in the winter does not seem reasonable.

There are mature conifers which will be removed further degrading the property and habitat.

This proposed development will definitely have a negative impact on the Keystone properties.

Respectfully submitted

Jane Brandt

I

Sent from [Mail](#) for Windows 10



**From:** [Measamer, Don](#)  
**To:** ["wetlands2save@frontier.com"](mailto:wetlands2save@frontier.com); [Cooper, Tess](#)  
**Cc:** [Grage, Libby](#)  
**Subject:** RE: Comments for The Crossing (Strandberg Project)  
**Date:** Thursday, April 23, 2020 8:31:01 AM

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**City of Anacortes**  
*Planning, Community &  
Economic Development*

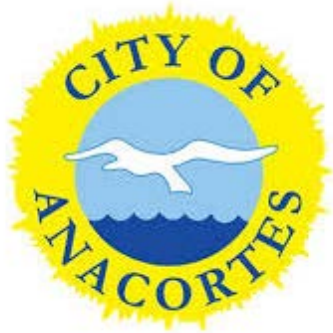
**Date Received:**

4/22/20

Hello Ms. Bordin,

Thank you for your comments. They will be included in the record moving forward and provided to the applicant.

Best Regards,



**DON MEASAMER**  
**Director of the Planning, Community &  
Economic Development Department**

City of Anacortes  
904 6<sup>th</sup> Street & Q Avenue | Anacortes, WA 98221  
p: 360-299-1942  
[don@cityofanacortes.org](mailto:don@cityofanacortes.org) | [www.anacorteswa.gov](http://www.anacorteswa.gov)

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**From:** wetlands2save@frontier.com <wetlands2save@frontier.com>  
**Sent:** Wednesday, April 22, 2020 4:48 PM  
**To:** Measamer, Don <don@cityofanacortes.org>; Cooper, Tess <tessc@cityofanacortes.org>  
**Subject:** Comments for The Crossing (Strandberg Project)

Dear City of Anacortes Public Works & Planning Dept.,  
City Planning Commission,  
Mayor Laurie Gere

I am making my comment here today with regards to "The Crossings" Project by Mr. Strandberg applicant proposed on the Copper Pond Wetland (east side of Anacopper Mine Road).

My comments consist of the following:

\_\_A **Determination of Significance** needs to be made for this regionally/locally significant wetland. It is one complete wetland, not two wetlands as the applicant, Mr. Strandberg has noted. This wetland has been thrice already impacted due to Anacopper Mine Road bisecting

it, a home constructed on the main portion of the property, and being mowed down to the water's edge. With more development, there will be more impacts, not less. A DNS is not adequate for encroachment on this major wetland allowing higher density development. There are more adequate areas for development by the applicant.

\_\_A **SEPA Determination** needs to be made for this project with regards to the Copper Pond Wetland, which is one large wetland bisected by Anacopper Mine Road in the late 60's. This needs to be completed and reviewed by the City, Council, DOE, and the public.

\_\_A **New EIS/EIR** needs to be completed for review by the City Planning Department, City Council, Department of Ecology, and the Public. The existing documents does not regard this property as one contiguous and homogenous wetland that it is which would increase the size of the wetland proper and it's buffer. This is a major issue. This needs to be completed and submitted for review by the City, Council, DOE, and the public.

\_\_A **thorough investigation** needs to be made with regards to vulnerable species of plants, and animal, turtles, birds, waterfowl, fish (if any), mammals and any other species that utilize this wetland either year-round, and or seasonally. An inventory needs to be made by a wildlife biologist/botanist on an **annual basis** to determine use by said species. This should be conducted before any development approved. This should be reviewed by the City, Council, DOE, and the public.

\_\_Department of Ecology needs to be on location to review the new wetland EIS/EIR, and other essential documents and reports that need to be completed to determine upgrading this one wetlands' status, and it's plants and animal life. This will also need to be reviewed by the City, Council, and by the public before declining or approving with restrictions.

\_\_Removing all the large Douglas Fir and Cedar trees will impact the function and value of this wetland. It will impact the microclimate as well. The City should seriously consider pulling this project back significantly in terms of size, location, and density in this already crowded area of Rock Ridge estates and Copper Pond estates.

\_\_A Detention pond has not been studied with association being built right next to a functioning wetland. This needs to be seriously considered and researched to determine immediate and ongoing impacts to the wetland.

\_\_The Critical Area Ordinance for this wetland needs upgrading to a larger wetland in total and a larger buffer in total. The buffers would be greater than 110 feet, more like 200-250 feet for this "ONE" wetland property combining the west side owned by the Port of Anacortes (Airport), and the east side owned by Nels Strandberg, applicant.

\_\_The existing home, garage, and other buildings should have never been built, nor trees cut down to build the home, nor wetland plants cut down and mowed down to the waters's edge of this wetland. In addition, Anacopper Mine Road should have never bisected this wetland, but a bridge should have been built over it to move traffic. This should be a new consideration--**to bridge this wetland as mitigation** should the project move forward with fewer cottages and or homes on this property.

\_\_A public meeting is out of the question with the Covid-19 order by Governor Islee to Stay

Home and Stay Safe during this pandemic. With the new updates needed for this project, as stated above in this comment letter, these will need to be completed and reviewed well in advance of a public meeting that cannot happen anyway due to the virus we are facing in Skagit County and globally.

Sincerely,

Carol Bordin  
Copper Pond Area  
Anacortes, WA 98221  
(360) 333-4128  
[wetlands2save@frontier.com](mailto:wetlands2save@frontier.com)



**From:** [Leonard Kallerson](#)  
**To:** [Grage, Libby](#)  
**Subject:** Anacopper LLC Public Hearing  
**Date:** Wednesday, April 22, 2020 4:02:10 PM

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**City of Anacortes**  
*Planning, Community &  
Economic Development*

**Date Received:**

4/22/20

I assume a public hearing will be held on Sandberg project next to the Copper Pond residence prior to approval.

There are multiple problems which will affect surrounding homes and must be addressed prior to a permit to build with current builder plans. There are flooding problems, traffic problems to mention a couple.

This will require a large area for the meeting so as to allow space between those attending due to the current 6 foot requirement between people.

I would suggest the room where the Mayor and city council members hold their meetings. This will allow for a decent turnout.

There are major expenses the city will be required to pay based on past documents produced by the city of Anacortes (based on my research).

Or, perhaps it become the builders expense. At any rate, this project needs more review. Another thing. A decent sound system is required so everyone can hear what is said. The meeting at the Senior Center was terrible.

This message is sent to Libby Grage 3:58 PM April 22, 2020

Sincerely,

Leonard R. Kallerson

1904 Ohio Avenue Anacortes, WA 98221

360-303-0450 [lennykallerson@gmail.com](mailto:lennykallerson@gmail.com)



Virus-free. [www.avast.com](http://www.avast.com)

**From:** [JAY R & ESTELLE KING](#)  
**To:** [Grage, Libby](#)  
**Subject:** Fwd: Cottage housing sit plan  
**Date:** Wednesday, April 22, 2020 4:58:49 PM

---

**City of Anacortes**  
*Planning, Community &  
Economic Development*

**Date Received:**

4/22/20

----- Original Message -----

From: JAY R & ESTELLE KING <getchell123@comcast.net>  
To: Libby@cityofanacortes.org  
Date: April 22, 2020 at 4:53 PM  
Subject: Cottage housing sit plan

Dear Ms. Grage,

I live at 2117 Pennsylvania Ct. here in Anacortes, WA . We are part of Keystone. I am writing to you in hopes that the Planning Commission will reject the dense housing development plan proposed by Strandberg Construction or Anacoper LLC. This development does not fit into the existing community and at \$450,00 can not be labeled low cost or affordable housing.

Some of the development's problems are as follows:

- 1 proposed next to a sensitive wetland. What will keep children out of the pond.
- 2 does not fit into the community and will devalue the existing houses and the serenity of the existing homeowners.
- 3 called a development of cottage housing which sounds inviting but in reality is just a dressed name for "housing project" where too many people are crowded into too small of a space which invites unhealthy living.
- 4 Lacking enough places to park cars of owners or guests. Most garages are filled with personal items and not cars
- 5 Lacking a storage space for outdoor furniture and tools and also where will bicycles and toys be stored?
- 6 the roads are not suitable for the amount of extra traffic especially on Anacopper Road. Anacopper Road runs through the middle of 2 ponds or one pond and can not be widened. There are many people who walk this road daily and it is narrow and hazardous.
- 7 If the residence of the proposed development use Oregon and West 12th in order to get to Anacopper Road on their way to town, then I believe they will eventually take a shortcut through the alley behind

Keystone. This short cut will allow the travelers to avoid 1 stop sign and the round-about. The houses along this ally have small back yards that would be highly impacted by noise, activity and dust and once again, their homes will be devalued.

When Considering "The Crossing" cottage plan, I hope you will consider the number of people it will effect in a negative way. We bought our home feeling it had a spacious up scale environment and paid accordingly, now our future is threatened in a very stressful way. I sincerely hope you will ask Mr. Strandberg or Anacopper LLC to revise the proposed plans and consider the quality of life of the existing home owners and not just the maximum profit of this misfit development.

Sincerely,

Estelle King



**From:** [Cherie Goyer](#)  
**To:** [Grage, Libby](#)  
**Subject:** The Crossings - Notice of Application  
**Date:** Thursday, April 23, 2020 8:05:43 AM

---

**City of Anacortes**  
*Planning, Community &  
Economic Development*

**Date Received:**

4/23/20

Hi Libby and whoever this may concern.

My name is Cherie Goyer. I live at 2203 Oregon Ave. First off, my property is 30 feet away from the proposed property and there is NO sign at the end of Oregon Ave telling us about any permits submitted or public hearings. We also did NOT receive any notice about the permits submitted and would like to be notified of ANY activity on the proposed property. Our home looks directly at the property and would impact our views, traffic, and property in general.

This project of The Crossings would disrupt our lives if they connected the road in front of our home. I have lived on both Meadows Lane and Oregon Ave over the past 11 years, and understand the traffic flow on both ends of this property. I do not believe this project should be built with the entrance located where they propose. I believe if they want to build something on that land, they should build from the entrance that is already place. If too much traffic is the issue of the entrance with the wetland surrounding it, I believe a different project should be placed in the area more represented of the the current home styles. (Single Family Homes). We also purchased our home on a dead end for a reason. This was a huge factor of our purchase of our home.

My main point is the traffic. Meadows Lane is narrow and curvy, and lots of cars park on the street. An increase of traffic to that street would be dangerous to any families, elderly, and the many people that walk that area. Rock Ridge is full of hills, and several children come to Oregon Ave to ride their bikes, play on a flat surface, and between the 5 houses located on that bottom area we all keep an eye out for people driving by to make the area safe for all. There are also several young children that live on West 12th and Oregon Ave. If the road were connected, it would be narrow and 65% of the traffic of all these units multiple times a day would be driving down that road. In my opinion, most of the traffic would go this way. Plus, the road would be narrow, no wider than a 2 car garage, so no one could park there, and would need to be super cautious when the other homes end up being built on this road, as they could not park on Oregon Ave at all.

If the road connects, more traffic would increase at Oregon Ave & W 12th. Which is a blind intersection. We crossed at that intersection every morning to catch the school bus. You can NOT see anyone coming down the hill of W 12th. I relied on my hearing to know if a car was coming or not. We have had many close calls and seen many speeders coming down that road, and it would need a review of the traffic at the intersection to proceed to add more traffic.

Construction. Covid -19 has made a huge difference in a lot of our lives. One thing I have enjoyed is the quiet. With no construction going on, it has been so nice to be outside and enjoy the sunshine and quiet during the day. Standberg is building the homes at the top of Rock Ridge and this is the first fully quiet chunk of time we have had in 2 years. When I attended the meeting Standberg said the project would take 5 years to complete. My daughter will be 6 next week, so with all the construction going on, if it started soon, she would be at least 11 when it ends, and that is literally construction on our street and in our front yard.

Cottage Homes. Covid-19 wants us to be separated, and with all going on, I am not sure if this

style of home is a good idea, knowing something like this could happen again. The homes are very close to each other. In my opinion 1,200 square feet is NOT a cottage, it is a rambler size, and single family home. With the garage space it is 1,500 square foot home. I think if they are going to do cottages, they need to be smaller and consist of a maximum of 2 bedrooms. Many homes in Anacortes are 1,200 square feet. The type of families that would be living in this kind of neighborhood would most likely be elderly who want a yard care and want to down size, with no need to have a second story, also making them park in a separate parking spot and not in their driveway would be very difficult for a 2 car elderly couple that may not be able to walk distances to get into their homes.

In conclusion, I believe that this project does not fit with the neighboring communities, should only be built if they can access the neighborhood from its original entrance on Anacopper, and the road between Meadows Lane and Oregon Ave should NOT be connected.

I know this is a day late, but I believe that no decisions on any permits, unless emergency situations, should be done during the COVID-19 stay at home order, or whenever we can gather again as public. There was no way for me to discuss this with neighbors, our HOA, or attend any meetings to share my opinion. I am very passionate about the road not connecting, and I know many of my neighbors would agree with me. Unfortunately none of us got notifications, and had many other things going on in our lives during this time that took away from being concerned about the neighboring property.

Please take this letter in consideration, and please keep me updated on any status changes, public notices, applications, anything to do with this property.

Thank you,

Cherie Goyer  
2203 Oregon Ave.

**From:** [rnj1358@gmail.com](mailto:rnj1358@gmail.com)  
**To:** [Grage, Libby](#)  
**Subject:** SEPA MDNS for LPS 2020-0001 "The crossings cottage development"  
**Date:** Wednesday, September 2, 2020 10:12:50 PM

---

Dear Libby Grage,

I am the Secretary for the Copper Pond Homeowners Association and our member homes boarder the proposed development.

Your information package, dated 2 September 2020, was delivered to me but was missing the notice of public hearing date and time. If you could relate that information to me I would appreciate it.

Our basic concern involves drainage into the Copper Pond alley way (non-accessible) that drains into the east pond. We have experience crawl space water, specifically at addresses 3825, 3827 and 3829 Copper Pond, over the past several years and have not had any success getting that drain field repaired by the city. However, any runoff from the development in question would only exacerbate our existing flooding problems.

While other issues are raised by the Barns study the runoff issue has not been addressed to my knowledge.

I would like to be sure our association members have an accurate date and time of the public hearing so we can have as many attend as possible

Thank you,

Rick Johnson  
3825 Copper Pond  
Copper Pond Home Owners Association Secretary.



**From:** [Constance Gibbons](#)  
**To:** [Grage, Libby](#)  
**Cc:** [Greg Gibbons](#); [Nancy Oemick](#); [Sean Clancy](#); [dan McCroskey](#); [mary McCroskey](#); [eric Adam](#); [Eric & Stacy](#); [Mary Feagin](#); [Jennifer & Neal Wychock](#); [Len & Jeanne Kallerson](#); [Rick/Char Johnson](#); [Roxanne Robles](#); [Jack Darnton](#)  
**Subject:** The Crossings Cottages  
**Date:** Monday, September 7, 2020 1:34:31 PM

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Libby,

Please know there has been no posted notice, as has been the practice in the past year, at the entrance to Copper Pond neighborhood intersecting with Anacopper Road, where many pedestrians attempt to walk safely despite the narrow road, and hefty traffic flow.

I would like to know why this is, when, as I walked through neighboring streets and along Meadows Lane after receiving your notification in late Friday's mail, I passed two posted signs posted elsewhere with notification of the hearing, in bright color too!

As you well know, many of those affected by the potential for increasing traffic safety impact, live in the Copper Pond neighborhood and may be renters, just like those Mr. Strandberg offered he could invite to The Cottages (as your meeting notes will offer), and may not receive your mailings directly. Those mailings may go to the absentee homeowners who are not affected by day to day change.

It would seem reasonable, and in consideration of all families, some with small children, some as senior walkers, to postpone the planned hearing until such a time as the notification was equitably displayed throughout all adjoining neighborhoods affected by The Cottages and all have been offered equal opportunity.

We all may eventually completely embrace the proposed development, and most assuredly will come to treasure our new neighbors if it comes to be. Therefore, please place awareness and safety ahead of your apparent priority rush and postpone your planned hearing for September 23!

Respectfully,

Greg and Connie Gibbons

**Date Received:**

9/16/20

**From:** [wetlands2save@frontier.com](mailto:wetlands2save@frontier.com)  
**To:** [Measamer, Don](#); [Grage, Libby](#)  
**Cc:** [Nancy Oemick](#); [Tom Glade](#); [Evergreen Islands](#); [Ross O. Barnes](#)  
**Subject:** Comments For SEPA Determination, The Crossings Proposed Development  
**Date:** Wednesday, September 16, 2020 1:47:55 PM  
**Attachments:** [Sept 16 2020 Comments Re SEPA MDNS The Cottages Strandberg 1.docx](#)

---

Dear Mr. Measamer and Ms. Libby Grage,

I have attached my comments due today, September 16, 2020 with regards to The Crossings Proposed Development on Copper Pond Wetland.

Thank you for your consideration and opportunity to provide comments regarding this project and the SEPA determination by the City.

Please let me know that you've received my comments today! Thank you!

Sincerely,

Carol Bordin  
(Copper Pond Wetland)

September 16, 2020

TO: Mayor Laurie Gere, City of Anacortes

Anacortes City-- Planning Commission,

Anacortes City Council,

City of Anacortes Planning/Community/Economic Dev. Dept.

FROM: Carol Bordin, Citizen/Resident/Tax Payer, City of Anacortes

RE: The Crossings, LPS-2020-001 @ 1905 Anacopper Mine Road, P31752, Anacopper LLC/Strandberg, on Copper Pond Wetland

I have received the Notice of SEPA DNS with regards to The Crossings Proposed Development at 1905 Anacopper Mine Road, within the City of Anacortes, Washington.

The City Planning, Community and Economic Development Department has determined that **this proposal will not have a probable significant adverse impact on the environment**. Furthermore, as stated, **an Environmental Impact Statement (EIS) is not required** under RCW 43.21C.030(2)c. This was determined by review of the Environmental Checklist provided by the land developer/proponent to the City, and, the **SEPA Threshold Determination of Nonsignificance (DNS) was issued on September 2, 2020.**

I have made comments in the past with regards to this proposed development in my neighborhood and wetland area. I have sought a proper Environmental Impact Review, Biological Assessment (Seasonally), and an Environmental Impact Statement to determine all the of the said impacts associated in, on, and around this locally significant wetland, Type II Wetland, since it is ONE wetland, that was impacted by constructing several roads through and around it, mowing the wetland, and constructing a home and out buildings on this property in the past, and, approved by the City in the past. In my humble opinion, this wetland is a "locally significant wetland" and is a Type II Wetland (not a Type III Depressional Wetland) based upon the fact that it is One Large Wetland that was cut into for land development in years past. It is STILL a Locally Significant Wetland and Deserves the FULL Measure of Protection, Wider/More Adequate Buffers and Upland Buffers to Protect it and its Unmonitored/Unstudied/Unknown Wildlife that Utilize It for Their Home. However, if one simply observes the wetland as I have, you would find several species of wildlife and birds that frequent the area for food, water, shelter, namely black-tailed deer, coyote, songbirds, and many other species. It needs a true seasonal monitoring of all species of plants, animals, birds, insects, and aquatic species that dwell and or visit or migrate to this wetland. **This is a MUST!**

I have walked the area just West of Tursi Park beyond its chain-link fence and sunk up to my knees in standing water this past June/July 2020. It was not a surprise to me since this area was also built on a wetland, water diverted, trapped by roads to the north and west of it that **would be** emptying into the Copper Pond Wetland. In addition, Clyde Creek has been piped underground and more than likely it may have also emptied into Copper Pond Wetland before road and land development ever occurred in this area. Which brings me back to the issue of incorrect wetland classification for Copper Pond Wetland. Are there archived photographs of this area way before construction was ever completed in, on, and around this large wetland? Perhaps the City of Anacortes Museum of Natural History has photographs? I believe that this wetland should have been classified as a Type II wetland which means it needs larger buffers and setbacks, which means not developing 18 cottage and infrastructure on it! In addition, homes or cottages constructed on wetlands is both detrimental to the structures, drainage, and stability of buildings no matter how much fill is laid down for



construction. (I know this because my home, as were many, were also built on the upper area of this wetland drainage area and continues to settle every year.

I am in disagreement with the City Planning Department that has issued a DNS for this proposed project! It should be a DS, Determination of Significance based on the merits of this wetland being improperly classified based upon inadequate monitoring and study of the drainage around and into it to from the southern, eastern and western proximities. It was also improperly classified based upon it being Two Wetlands instead of one continuous wetland due to roads dividing it and diverting water away from it instead of into it. (Due to the fact that I am no longer receiving funds to care for my 97-year-old mother, I will not be able to pay the \$200 filing fee to appeal this SEPA Environmental Determination!) Money is tight, as it is with so many people affected by Covid-19, job loss, loss of homes, businesses, and lives.) And so, it goes! However, I am a taxpayer and pay over \$4,000/per year for property taxes of which most goes to schools, medical, and public programs that serve our community! My voice about this SEPA Environmental Determination as a tax-paying citizen and resident of Anacortes is for a DS, Determination of Significance, and a proper and completed EIS for this proposed project! To allow for a DNS is an atrocity, and not is NOT based upon proper environmental review of all the impacts associated with this proposed project.

No further development by the City and Planning Commission should be allowed to proceed on and around this locally significant wetland without an unbiased EIS and EIR completed in advance, reviewed by the Mayor, City Council, Planning Commission, and the Public at this time. This wetland and its natural habitat provide food, water, and shelter for a number of species of wildlife, birds, insects, and is a mecca of herbaceous species of wetland plants, hydrophytes, and large coniferous trees and mixed deciduous trees. NO Biological Monitoring (on a Seasonal or On-going basis) has ever taken place on this large wetland (all of it, Port and Strandberg sides) up to date, and should be conducted, as I have recommended. There is no determination if any rare, sensitive, threatened, or endangered species of plants or animals, birds, or aquatic species of turtles, insects, or other wetlands species utilize and reside or visit this large wetland. This is a Must! Please complete the EIS and Biological Assessment/Monitoring on a Seasonal Basis, it is appropriate and necessary for Copper Pond Wetland, its wildlife, and its tax-paying public residents who have a vested interest in wetland protection and rehabilitation.

For your information, I have attached what is provided and involved in completing an Environmental Impact Statement (EIS). I believe you will find it useful in your decision-making process for Copper Pond Wetland, ONE WETLAND!

An **EIS** outlines the status of the environment in the affected area, provides a baseline for understanding the potential consequences of the proposed project, identifies positive and negative effects for the environment, and offers alternative actions, including inaction, in relation to the proposed project.

An **Introduction** including a statement of the Purpose and Need of the Proposed Action. A description of the Affected Environment. A Range of Alternatives to the proposed action. Alternatives are considered the "heart" of the EIS. For example, an EIS should include the following:

1. Summary. The summary presents an overview of the contents of the **EIS** and a comparison of **impacts** expected for the proposal and alternatives.
2. Purpose and Need. ...
3. Proposed Action and Alternatives. ...
4. Affected Environment. ...
5. Expected **Impacts**. ...
6. Consultation and Coordination. ...
7. Appendices.

The EIS analyzes the particular environmental concerns that are identified. A separate analysis is prepared for the proposal and each alternative. The objective of the analysis is to estimate the nature, severity, and duration of impacts that might occur and to compare the impacts of the proposal and alternatives.

In conclusion, I strongly believe the Mayor, City Council, Planning Commission, and City Planning Department should issue a DS, Determination of Significance realized for classifying Copper Pond Wetland as more than one wetland, should be determined as One Continuous Wetland, reclassify as a Type II Wetland with much larger buffers due to drainage/restricted drainage due to previous and existing as-built roads and buildings, and an Environmental Impact Statement should be a Necessity for the Copper Pond Wetland. This should be done to truly understand and know the impacts to this wetland, and also offer alternatives to construction on, and in, this wetland area.

Thank you for seriously and strongly considering my comments regarding this proposed construction project on the Copper Pond –One—Wetland!

Sincerely,

Carol Bordin

3934 W. 12<sup>th</sup> Street,

Anacortes, WA 98221

(wetlands2save@gmail.com)



**Evergreen Islands  
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Anacortes WA  
98221

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# EVERGREEN ISLANDS

PO Box 223, Anacortes, WA 98221

September 16, 2020

To: Don Measamer, Anacortes Director of Planning, Community & Economic Dev.  
cc: Mayor Gere and the Anacortes City Council  
(Ryan Walters, Brad Adams, Jeremy Carter, Matt Miller,  
Bruce McDougall, Carolyn Moulton, Anthony Young)  
Libby Grage, Planning Manager  
cc: Evergreen Islands Board of Directors

Re: The Crossings Cottages,LPS-2020-0001

Dear Mr. Measamer:

Evergreen Islands is concerned about the protection of the cojoined Wetland B (Airport) and the 'Adjacent' Copper Pond) as defined in the current Critical Areas Ordinance(CAO) 17.70.320 Designation, rating, and mapping wetlands:

E. Locally Significant Wetlands. Pursuant to subsection (B)(1)(b)(iv) of this section, the following wetlands are designated as Category II wetlands:

1. **The wetlands on or adjacent to the Port of Anacortes owned property** at the Anacortes Airport except as to buffer widths which shall be as required for Category III. (Ord. 2794 § 1 (Att. A), 2008; Ord. 2702 § 3, 2005)

## **Anacortes Airport Wetland Delineation Report, Grette Associates**

Anacortes Airport Wetland Delineation report prepared by Grette Associates  
Figure 1 is an aerial photograph and diagram of these two wetlands that were extracted from the 2015 Port of Anacortes, Anacortes Airport Wetland Delineation report prepared by Grette Associates (the Grette Report).

The Grette Report's Wetland Summary states (emphasis added):

**The pond is located in the eastern portion of Wetland B and connects to a larger ponded area outside of the study area to the east via a culvert under Anacopper Road** (Sheet 2). The pond appears to contain naturally-occurring groundwater and likely receives surface-water runoff from the surrounding uplands. **At the time of the site visit, surface water was present in the pond and flow was observed entering the pond through the culvert under Anacopper Road.** In addition to the surface water features listed above, a culvert is present to the west of Wetland B, between the margin of the airport property and the edge of the runway (Sheet 2). This culvert appears to run underneath the runway and taxiway and is expected to provide a surface-water outlet to the pond located in Wetland B. At the time of the site visit, no flow was observed through to the west side of the culvert



Section 5.10 WETLANDS OUTSIDE THE STUDY AREA of the Grette Report states (emphasis added):  
Per Anacortes Municipal Code (AMC) 17.70.330(B)(2), critical area reports should consider wetlands and other critical areas within three hundred feet of the project area, due to the maximum potential buffer size for wetlands. Based on recent aerial photography and a previous delineation of wetlands at the Anacortes Airport (Pentec Environmental 2001), one wetland area was identified within three hundred feet of the study area boundary. **This wetland connects to Wetland B via a culvert running underneath Anacopper Road. Although the buffer surrounding this wetland is likely to extend into the study area, it would lie entirely within the buffer surrounding Wetland B. In respect to the study area, the buffer surrounding Wetland B is inclusive and protective of the offsite wetland.**

### ***Critical Areas Assessment Report***

The Critical Areas Assessment Report, February 2020, prepared by AquaTerr Systems, Inc; states:

This project will include wetland buffer averaging that will result in 1,372 square feet of wetland buffer reduction and 1,416 square feet of wetland buffer addition in compliance with COA CAO Chapter 17.70.340.4 (Figure 5; COA 2008). The proposed 1,372 square foot impacted buffer area is currently comprised of mowed lawn. The proposed reduction will still maintain at least a 95 foot wetland buffer (Figure 5). This buffer reduction area will be offset by 1,416 square feet of wetland buffer addition that will be converted from mowed lawn to an herbaceous meadow with a forested canopy component.

Figure 3 from the Assessment Report illustrates the wetland adjustments.

### **CONCLUSION**

In conclusion Evergreen Islands requests

- that the proposed nature trail be eliminated
- a Sidewalk road improvement be required along the west property line which is adjacent to the Anacopper Mine.
- Evergreen Islands disputes ATSI conclusion that Wetlands A and Wetlands B have no hydraulic connection.

Respectfully yours,

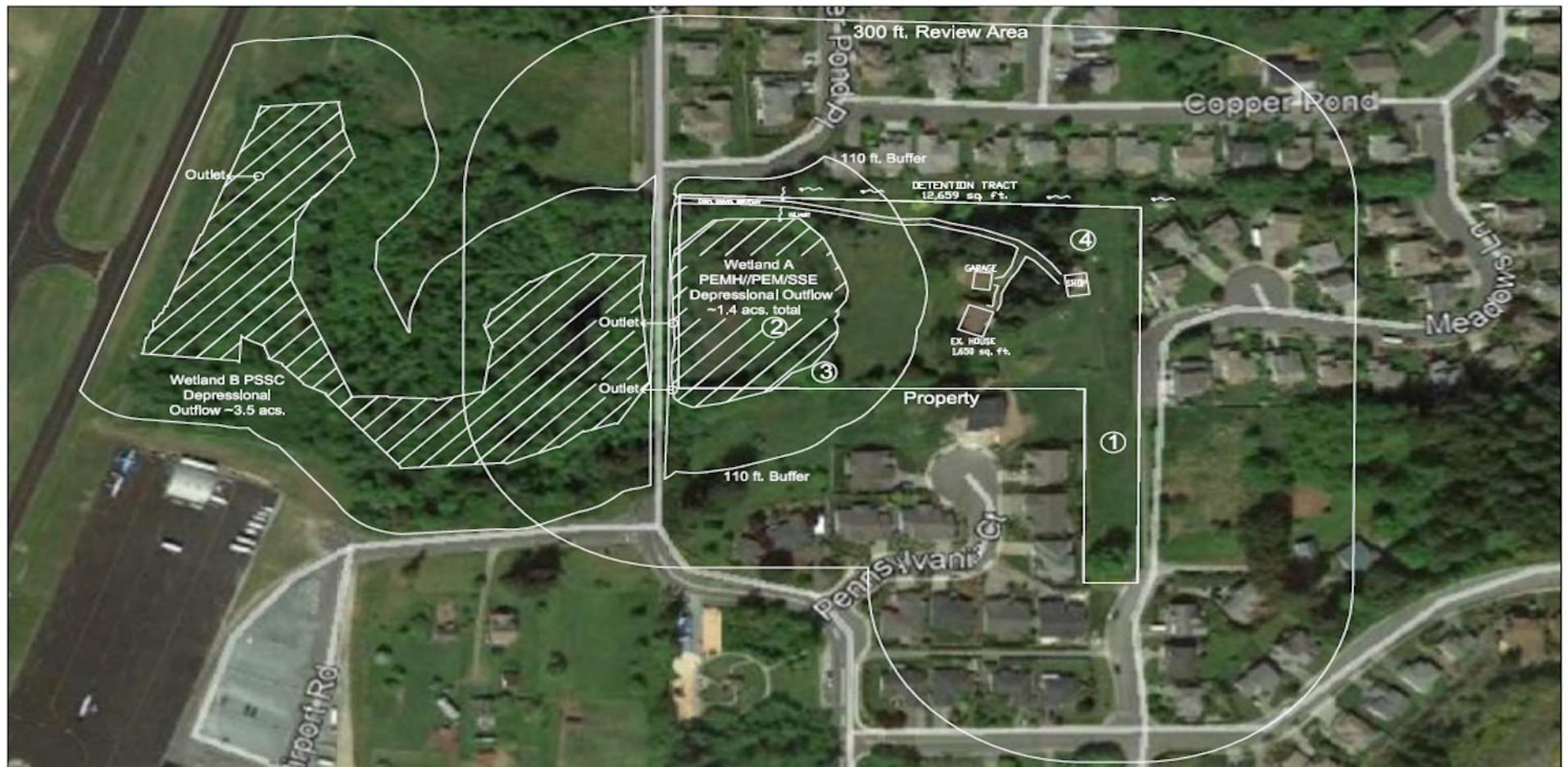


Tom Glade  
Evergreen Islands Board of Directors



Figure 1. 'Wetland B' across Anacopper Mine Road on the Anacortes Airport.

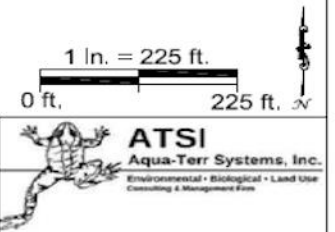




**Figure 2. Aerial Photograph, Existing Conditions, & Data Plots 1-4**

Strandberg-The Crossing  
 Parcel Number: P31752  
 1905 Anacopper Road, Anacortes, Washington  
 Section 3, Township 35 N, Range 01 E, WM  
 February 2020

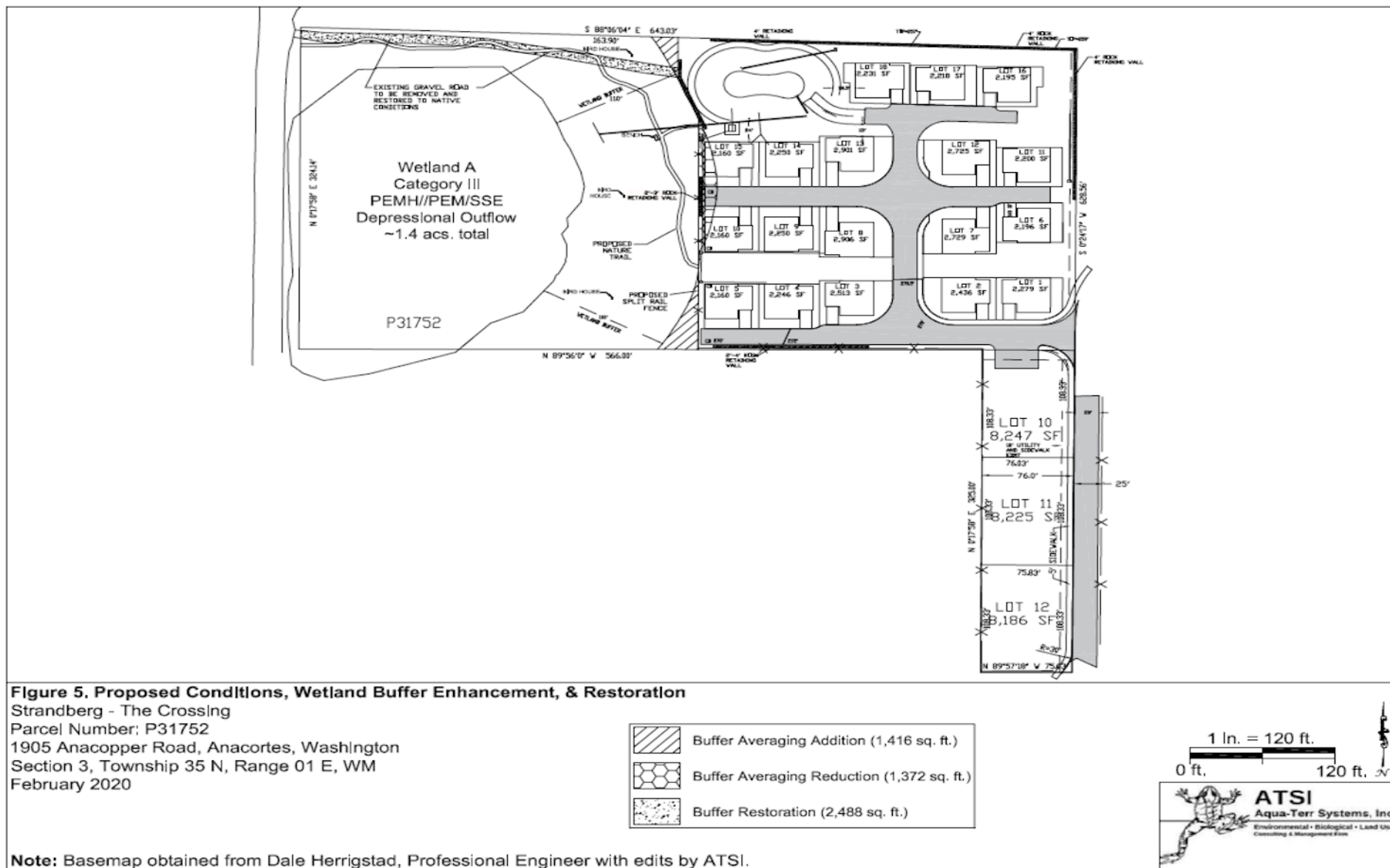
-  Wetland
-  Culvert Outlet
-  Data Plot



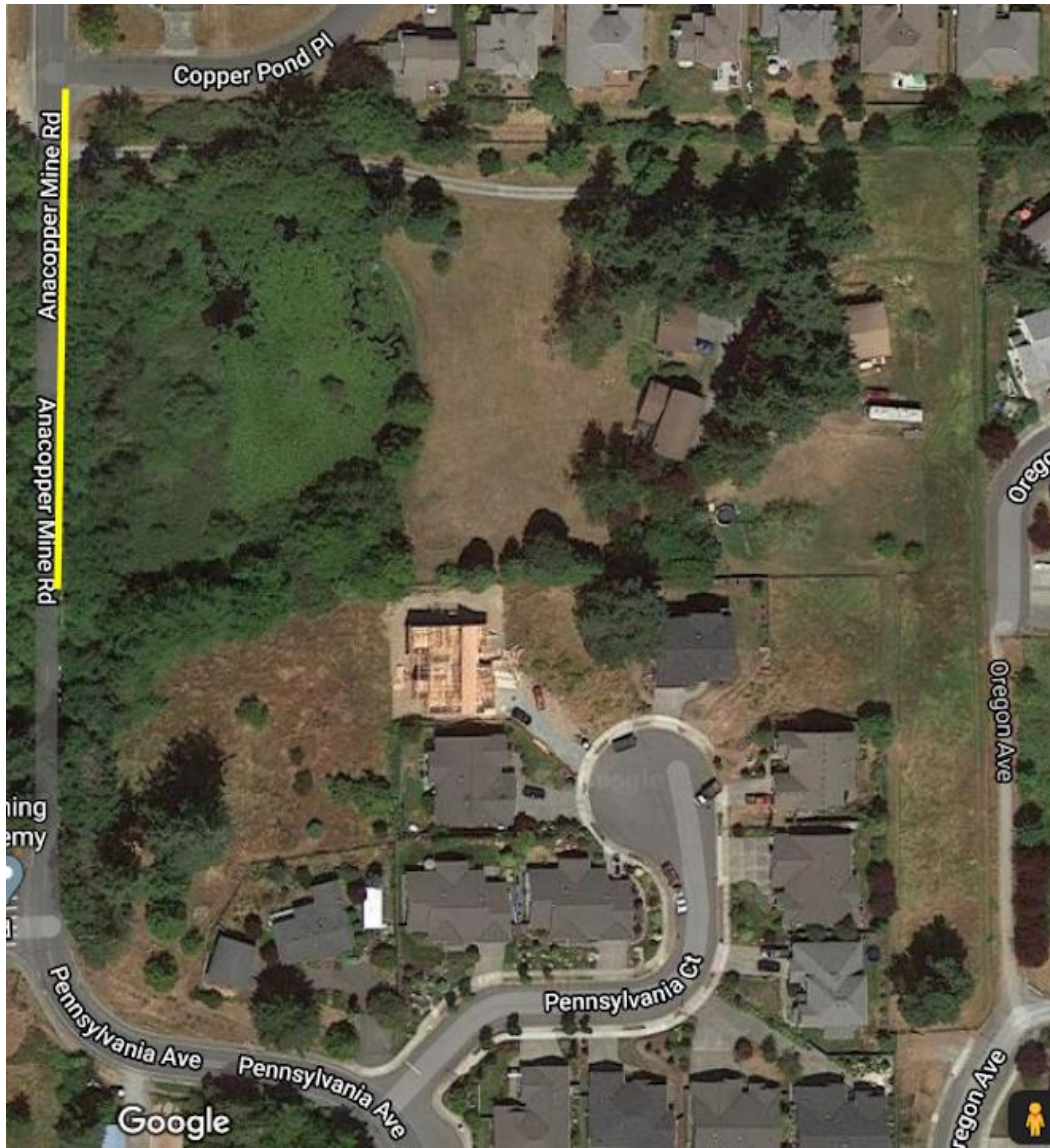
**Note:** Basemap obtained from Google Earth (Imagery Date: 2 May 2015). Wetland B location and information obtained from Grette Associates LLC (4 September 2015) with alterations by ATSI. Wetland B is not described as part of this rating. The wetland boundaries and locations are approximate and do not constitute a legal land survey. Wetland buffers do not cross roads per AMC 17.70.340.G.4 (16 December 2019).

**Figure 2. ATSI Wetland Delineation**



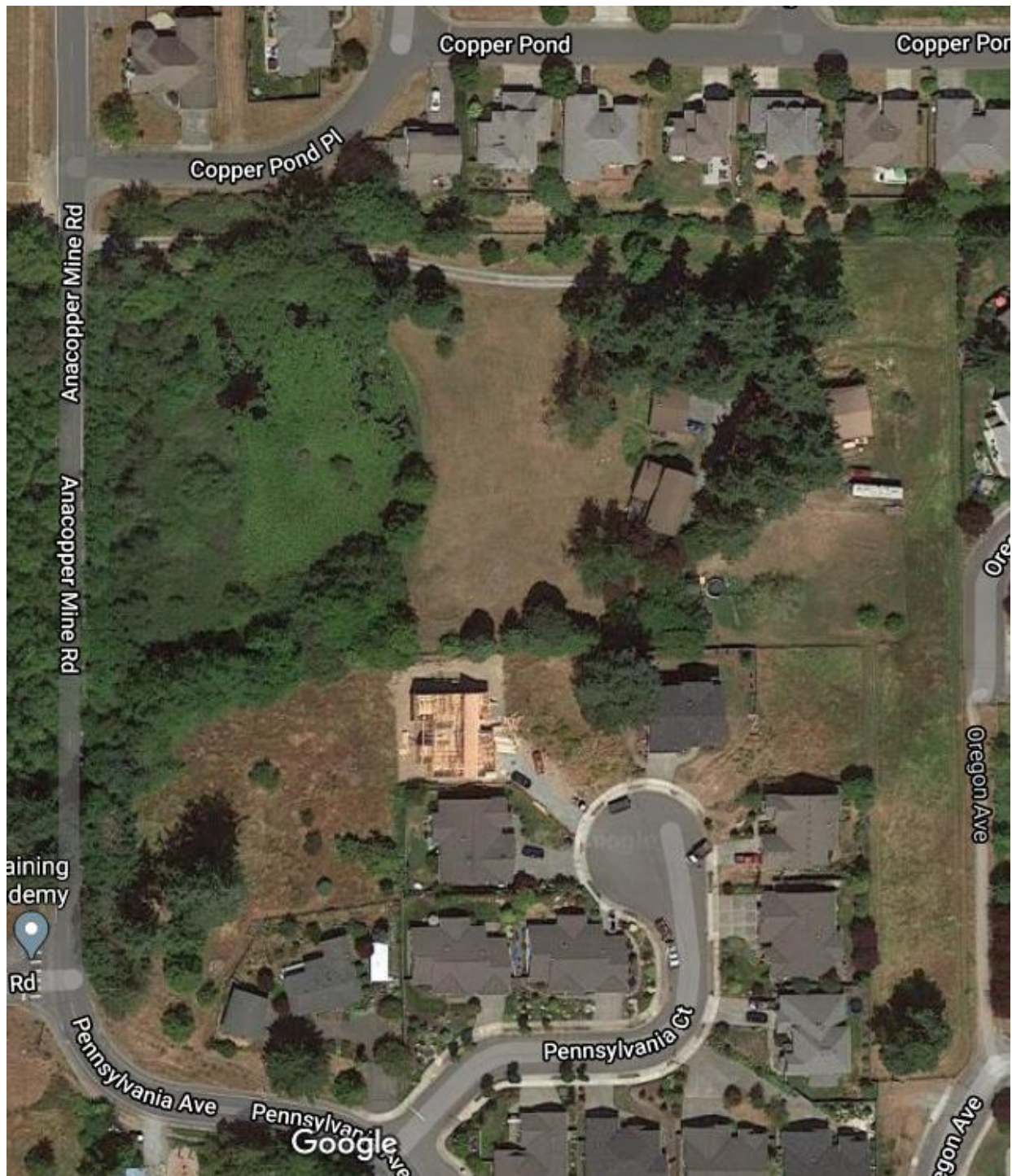


**Figure 3. ATSI Map of Proposed Conditions, Wetland Buffer Enhancement & Restoration**



***Figure 4. Sidewalk Added to Anacopper Mine Road to Allow Public Viewing of the Copper Pond Wetland***









## Appendix 8-C

### **Guidance on Widths of Buffers and Ratios for Compensatory Mitigation for Use with the Western Washington Wetland Rating System**

#### **8C.2.5.1 Condition 1: Buffer is Not Vegetated with Plants Appropriate for the Region**

The recommended widths for buffers are based on the assumption that the buffer is vegetated with a native plant community appropriate for the ecoregion or with one that performs similar functions. If the existing buffer is unvegetated, sparsely vegetated, or vegetated with invasive species that do not perform needed functions, **the buffer should either be planted to create the appropriate plant community *or the buffer should be widened to ensure that adequate functions of the buffer are provided.*** Generally, improving the vegetation will be more effective than widening the buffer.

**From:** [tom.glade@comcast.net](mailto:tom.glade@comcast.net)  
**To:** [Measamer, Don](#); [Grage, Libby](#)  
**Cc:** ["Nancy Oemick"](#); ["Evergreen Islands"](#); ["Ross O. Barnes"](#)  
**Subject:** RE: Comments For SEPA Determination, The Crossings Proposed Development  
**Date:** Wednesday, September 16, 2020 5:07:56 PM

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Evergreen Islands adopts Ms. Bordin's excellent comment letter!

Tom Glade  
Evergreen Islands

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**From:** wetlands2save@frontier.com <wetlands2save@frontier.com>  
**Sent:** Wednesday, September 16, 2020 1:48 PM  
**To:** Don Measamer <don@cityofanacortes.org>; Libby Grage <libbyb@cityofanacortes.org>  
**Cc:** Nancy Oemick <nancyoemick@gmail.com>; Tom Glade <tom.glade@comcast.net>; Evergreen Islands <evergreen.islands@comcast.net>; Ross O. Barnes <georbarnes@hotmail.com>  
**Subject:** Comments For SEPA Determination, The Crossings Proposed Development

Dear Mr. Measamer and Ms. Libby Grage,

I have attached my comments due today, September 16, 2020 with regards to The Crossings Proposed Development on Copper Pond Wetland.

Thank you for your consideration and opportunity to provide comments regarding this project and the SEPA determination by the City.

Please let me know that you've received my comments today! Thank you!

Sincerely,

Carol Bordin  
(Copper Pond Wetland)



**From:** [Nancy Oemick](#)  
**To:** [Grage, Libby](#); [Measamer, Don](#)  
**Cc:** [Tom Glade](#); [Ross O. Barnes](#)  
**Subject:** The Crossing Development, proposed for Copper Pond Parcel  
**Date:** Wednesday, September 16, 2020 4:51:09 PM

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This letter is being submitted on behalf of the neighborhood of the Keystone development, Copper Pond and Rock Ridge. Keystone is a community of 14 lots, 7 of which adjoin the parcel on which Strandberg proposes to build The Crossing (18 cottage homes, plus 3 single family units).

Without exception, Keystone property owners are strongly opposed to the cottage house development proposed on the adjoining Strandberg parcel. Many of us have attended City Planning Meetings where we have voiced our concern over this type of development being built in our neighborhood. We were joined by several neighbors from Copper Pond and Rock Ridge who also expressed opposition to this project. The reasons for our opposition to this development are detailed in documents which were posted on the City website. You will undoubtedly remember that many of us attended the Planning Commission meetings as well.

Despite our opposition to this project, it appears that you are turning a deaf ear to the existing community. We have come to believe that the City has allowed for public comment as a formality only. We have not felt that we were acknowledged or heard in this process. Indeed, even as our presentation was being made to the Planning Commission, one of its members sat on the podium rolling her eyes while our presentation was in progress! We feel that your only priority is to increase the tax base for the City -- and higher density will have the effect of increased taxes.

In short, we feel the City had no intention of seriously considering our objection to this project. It is indeed sad that we, as taxpayers, are left with that impression. Many of us spent considerable time and effort to respectfully submit our concerns. We had expected that the City would show more respect to us, the citizens of Anacortes who will be left to live with this development if and when it is built.

Respectfully submitted,  
Nancy Oemick

2111 Pennsylvania Ct.,  
Anacortes WA 98221

# Exhibit 10

## SEPA MDNS





## STATE ENVIRONMENTAL POLICY ACT (SEPA)

### *Mitigated Determination of Non-Significance (MDNS)*

| PROJECT INFORMATION:      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Project Title             | The Crossings                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| File Number               | LPS-2020-0001                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Site Address              | 1905 Anacopper Mine Road                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| APN(s)                    | P31752                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Landowner & Applicant     | Anacopper LLC<br>PO Box 319<br>Anacortes, WA 98221                                                                                                                                                                                                                                                                                                                                                                                                               |
| Complete Application Date | March 20, 2020                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Request                   | The applicant is requesting preliminary approval of a 21 unit lot subdivision, cottage housing site plan approval (Type 2), and SEPA review. The project includes 18 cottage units/lots and 3 single family building lots, improvement of Oregon Avenue between W. 12 <sup>th</sup> St. and Meadows Lane, and site infrastructure improvements, including utilities and stormwater facilities. Wetland buffer averaging and buffer enhancement is also proposed. |

The City of Anacortes Department of Planning, Community & Economic Development has determined that this project does not have a probable significant adverse impact on the environment. Pursuant to WAC 197-11-350(3), the proposal has been clarified, changed, and conditioned to include necessary mitigation measures to avoid, minimize or compensate for probable significant impacts. An environmental impact statement (EIS) is not required under RCW § 43.21C.030(2)(c). The necessary mitigation measures are listed below, the Environmental Checklist is attached, and additional project information is available at <https://www.anacorteswa.gov/161/Planning-Community-Economic-Development>.

#### **MITIGATION MEASURES:**

1. To reduce and control erosion impacts the project shall follow the recommendations in the geotechnical report by GeoTest, dated April, 12, 2018, as amended, and approved by PCED.
2. Proposed retaining walls must be designed by a structural engineer (if required by the Director), provide appropriate drainage facilities, and conform to the standards in AMC 19.66.080.
3. The applicant must comply with City, State and Federal regulations related to emissions to air and provide a dust emissions control plan for review prior to construction activities beginning on site.
4. Wetland buffer enhancement and restoration shall be completed per the ATSI report, dated February 2020, and addendum letter, dated July 16, 2020, prior to final subdivision approval, or

occupancy of the first residence, whichever occurs first. An as-built report shall be prepared by a qualified biologist and submitted to PCED upon installation completion. Monitoring of the restoration and enhancement areas shall be conducted by a qualified biologist and reports submitted to PCED for a period of five years or until the site is deemed successful.

5. The estimated cost for the installation of the buffer enhancement area and the proposed monitoring and maintenance work for a minimum period of five years shall be submitted to PCED. An acceptable financial guarantee shall be in place prior to final plat approval, or occupancy of the 1<sup>st</sup> residence, whichever occurs first.
6. The proposed trail within the buffer shall be located generally parallel to the wetland within the outer 25% of the buffer where possible, be designed to avoid removal of trees and native vegetation, not exceed 6' in width, and be made of native soils or pervious surfaces.
7. A split rail fence shall be installed along the eastern edge of the wetland buffer and on either side of the proposed trail, unless an alternative proposal is approved by the Director that would provide better protection of the wetland and buffer.
8. Permanent signs made of an enamel-coated metal face and attached to a metal post or other non-treated material of equal durability shall be posted at an interval of one every 50-feet. Sign verbiage shall be as follows, or as approved by the Director:

"Protected Wetland Area  
Do Not Disturb  
Contact City of Anacortes  
Regarding Uses, Restrictions, and Opportunities for Stewardship"
9. Design and installation of the proposed stormwater outfall features within the wetland buffer shall follow DOE 2014 SWMMWW guidelines for outfall systems, as approved by the Public Works Department.
10. To protect critical areas and trees proposed for retention, prior to any site work, construction limits fencing, silt fencing, and tree protection measures shall be installed and PCED contacted for an inspection.
11. Covenants shall be established limiting use of pesticides within 150' of the wetland and requiring application of integrated pest management.
12. Streetlights and exterior lighting shall be downcast to avoid glare and light trespass onto adjacent properties and the wetland/buffer.
13. The applicant shall either work with the property owner to trim the existing hedge located at the southeast corner of Oregon Ave. and Meadows Lane (upon obtaining appropriate approvals), or install appropriate advance advisory signage per the recommendations of the traffic report (TSI, March 5, 2020), as approved by the Public Works Dept.
14. A standard Inadvertent Discovery Plan shall be in place and followed during all ground disturbing activities. Should any human remains, archaeological, historic or cultural materials be discovered during construction, work in the affected area shall cease immediately and the area shall be secured, and appropriate agencies contacted.



15. An avigation easement shall be recorded for the property and noted on the face of the final plat.

This MDNS is issued under WAC 197-11-340(2) and the comment period will end **5:00 PM September 16, 2020**.

**Responsible Official:** Don Measamer  
**Position & Title:** Director of Planning, Community & Economic Development  
**Phone:** (360)-299-1942  
**Email:** don@cityofanacortes.org  
**Address:** P.O. Box 547, Anacortes, Washington 98221

Signature: \_\_\_\_\_



**Date of Issuance:** September 2, 2020

For further information, contact the City of Anacortes' Department of Planning, Community, & Economic Development at (360) 299-1984. The issuance of this Mitigated Determination of Non-significance should not be interpreted as acceptance or approval of the proposal as presented. The City of Anacortes reserves the right to deny or approve said proposal subject to conditions if it is determined to be in the best interests of the city and/or necessary for the general health, safety and welfare of the public to do so.

**SEPA APPEAL PROCEDURE:**

This environmental determination may be appealed in accordance with the procedures outlined in AMC Chapter 18.04 and 19.20. Appeals must be on forms provided by the Planning, Community & Economic Department (PCED), contain the information specified in AMC 19.20.180.F, be accompanied by a filing fee of \$200, and be delivered to the City Clerk by mail or personal delivery by **5:00 PM September 16, 2020**. Additional information regarding the appeal process may be obtained from City of Anacortes PCED, (360) 299-1984.





## Anacortes Planning, Community & Economic Development Department

904 6<sup>TH</sup> Street / P.O. Box 547, Anacortes, WA 98221

360.299-1984 - Office Hours: Mon-Fri 8:00 AM – 5:00 PM

# MEMO

**To:** Don Measamer, Planning Director, SEPA Responsible Official  
**From:** Libby Grage, Planning Manager  
**Subject:** SEPA Checklist Review – Staff Report  
**Date:** September 1, 2020

**PROJECT NAME:** The Crossings  
**FILE NUMBER:** LPS-2020-0001  
**APPLICANT & LANDOWNER:** Anacopper LLC  
P.O. Box 319  
Anacortes, WA 98221  
**SITE ADDRESS:** 1905 Anacopper Mine Road  
**PARCEL NUMBERS:** P31752

**PROJECT DESCRIPTION:** The applicant is requesting preliminary approval of a 21 unit lot subdivision, cottage housing site plan approval (Type 2), and SEPA review. The project includes 18 cottage units/lots and 3 single family building lots, improvement of Oregon Avenue between W. 12<sup>th</sup> St. and Meadows Lane, and site infrastructure improvements, including utilities and stormwater facilities. Wetland buffer averaging and buffer enhancement is also proposed.

## Staff Review & Amendments to the Environmental Checklist:

The following sections correspond with related categories of the environmental checklist submitted for the proposal (dated January 30, 2020), and clarify, amend, or add to that document.

## Environmental Checklist / Environmental Elements

### 1. EARTH:

The applicant submitted a geotechnical report for the project (GeoTest, April 12, 2018). The geotech report makes recommendations for site preparation and earthwork, fill and compaction, wet weather construction and seismic design considerations. The proposal's conformance to AMC 19.76 Stormwater, an approved stormwater site plan, the Department of Ecology 2014 Stormwater Management Manual for Western Washington (SWMMWW) and recommendations in the geotechnical report will adequately control erosion impacts and other impacts to the earth, during and after construction activities.

The preliminary grading plans show site grading that will result in fill slopes adjacent to some of the surrounding properties. Retaining walls are proposed to be constructed in certain areas along the north, east, south and west property lines. A building permit is required for retaining walls as determined by the Planning, Community & Economic Development (PCED) Department. Retaining walls must be designed by a structural engineer (if required by the Director), provide appropriate drainage facilities, and conform to the standards in AMC 19.66.080.

2. AIR:

The applicant must comply with City, State and Federal regulations related to emissions to air and provide a dust emissions control plan for review prior to construction activities beginning on site. Dust control measures will need to be employed as needed and directed by the City of Anacortes.

3. WATER:

Surface, ground and runoff water and drainage pattern impacts will be adequately mitigated through the proposal's conformance to AMC 19.76 Stormwater, an approved stormwater site plan, and DOE 2014 SWMMWW, including Minimum Requirement #8, Wetlands Protection. The applicant must obtain approval of the stormwater management plan prior to any site construction activities taking place. A construction stormwater general permit from the State of Washington Department of Ecology for construction activities may be required and is the applicant's responsibility to obtain.

4. PLANTS:

The environmental checklist adequately addresses the issues of this section.

5. ANIMALS:

The environmental checklist adequately addresses the issues of this section.

6. ENERGY & NATURAL RESOURCES:

The environmental checklist adequately addresses the issues of this section.

7. ENVIRONMENTAL HEALTH:

The environmental checklist adequately addresses the issues of this section.

8. LAND & SHORELINE USE:

The environmental checklist adequately addresses the issues of subsections a-k and m of this section.

I. The site contains one wetland, "Wetland A", according to the critical areas report and addendum letter prepared for the project (ATSI, February 2020 & ATSI, July 16, 2020). The wetland is an approximately 1.42 acre Category III, PEMH/PEM/SSE depressional outflow. Wetland A receives hydrology from an intermittently flowing stormwater detention tract located to the north of the property, which is culverted under the existing onsite gravel driveway and outlets into the wetland.

The wetland requires a 110' buffer per the ATSI report. The standard buffer widths listed shown in the Anacortes Municipal Code presume the existence of a relatively intact native vegetation community in the buffer zone adequate to protect the wetland functions and values at the time of the proposed

activity. (AMC 17.70.340.F.1) The existing buffer consists primarily of mowed lawn (orchard grass and kentucky blue grass, both nonnative) and there is a gravel driveway along the northwestern portion of the property.

Proposed activities in the buffer include installation of a wood chip trail, bench, birdhouses and a stormwater outfall. Buffer width averaging is also proposed. The development of a higher intensity land use than currently exists and the potential for increased human activity near the wetland has the potential to adversely impact the wetland.

The Critical Areas report and addendum letter identify proposed actions to avoid and minimize impacts to the wetland. To offset potential impacts of the proposal, the applicant proposes wetland buffer restoration and enhancement by:

- Removal of the existing gravel driveway, tilling the soil, adding supplemental topsoil, retilling, and then spraying the exposed topsoil with a native hydroseed herbaceous mix.
- Letting the existing mowed lawn grow and planting 19 Douglas fir trees, thus creating an herbaceous meadow with a forested canopy component.
- Planting an area just east of the wetland/pond approximately 30' wide by 170' long with native shrub species to increase native vegetation cover, habitat, and functionality. Monitoring and maintenance for a minimum of 5 years and financial guarantee will also be provided.

The measures listed above along with the project's conformance with the critical areas regulations in the Anacortes Municipal Code, including fencing, signage, and implementation of best management practices are expected to adequately mitigate the proposal's impact on adjacent critical areas.

#### 9. HOUSING:

The environmental checklist adequately addresses the issues of this section.

#### 10. AESTHETICS:

The environmental checklist adequately addresses the issues of this section.

#### 11. LIGHT & GLARE:

To minimize impacts to the wetland, residential lights must be directed away from the wetland per AMC Table 17.70.340(2). The applicant proposes use of dark sky, down lighting, and low voltage landscape lighting.

#### 12. RECREATION:

The environmental checklist adequately addresses the issues of this section.

#### 13. HISTORIC AND CULTURAL PRESERVATION:

Per a Cultural Resources Review of the proposal prepared by Drayton Archaeology, dated February 25, 2020, no cultural material was observed on the ground surface or within any of the shovel probes dug across the property. The WA State Department of Archaeology and Historic Preservation submitted a comment letter stating concurrence with the results and recommendations in the survey report, and



recommending that a standard Inadvertent Discovery Plan be followed during all ground disturbing activities.

#### 14. TRANSPORTATION:

The proposed development will create additional demand and need for public transportation facilities and infrastructure. Street and pedestrian improvements are required to be installed consistent with AMC Division 5 Community Design and Anacortes Engineering Design Standards. The project will eliminate an existing driveway onto Anacopper Mine Road, and complete the unfinished portion of Oregon Avenue between Meadows Lane and Oregon Ave., including paving, curb, gutter, sidewalks, and landscaping. On-site circulation for the cottage portion of the site will be via a shared private access road and a system of pedestrian pathways.

The applicant submitted a Traffic Study prepared by TSI, Inc., dated March 5, 2020. The report evaluated the existing street network, the project's trip generation, distribution and assignment, traffic operations, stopping and intersection sight distance, and safety. The report states that the proposed development is forecast to generate 151 new daily trips and 12 new PM peak hour trips to the local road network. According to the report, the project will not cause the level of service for surrounding streets and intersections to decline below the adopted level of service for the affected facilities; therefore, the project meets transportation concurrency requirements outlined in AMC 19.22 Concurrency. The report makes various recommendations to address intersection sight distance for the new driveways to the cottages and Lot 1 of the standard size lots.

Payment of transportation impact fees by the developer will pay for the development's proportionate share cost for transportation facilities needed to serve new growth and development.

Comments dated April 4, 2020 were received from the Port of Anacortes, which operates the Anacortes Airport. The Port of Anacortes recommends that, given the development's proximity to the airport, an aviation easement be recorded on the property title to protect the long-term continuity of operations at the airport and familiarize purchasers with the operations of the airport.

#### 15. PUBLIC SERVICES:

The proposed development will create additional demand and need for public services. Payment of fire impact fees by the applicant will pay for the development's proportionate share cost for fire protection service needed to serve new growth and development. The internal site access will be designed to meet fire department requirements for apparatus access and turnaround.

#### 16. PUBLIC UTILITIES:

The proposed development will create additional demand and need for public utilities. The applicant will pay general facilities charges for water, sewer, and stormwater services, which represent an equitable share of historic and future costs of the city's sanitary sewer collection and treatment and water treatment structures and facilities.

The City received a comment from Cascade Natural Gas Corporation stating that a 1" PE gas line feeds two meters at the subject site, and that the line will need to be required prior to any construction.

#### PUBLIC COMMENTS:

During the comment period multiple public comments were received. Concerns expressed in the comments are primarily related to project compatibility with the existing neighborhood, tree removal, density, wetland impacts, traffic impacts, stormwater and flooding impacts, and project lighting.

The applicant provided responses to the comments in a document received by the City on May 28, 2020. Public comments and applicant responses were considered in this environmental review.

#### CONCLUSIONS & RECOMMENDATIONS:

The environmental review indicates that there are no significant adverse environmental impacts from the subject proposal that cannot be mitigated through existing Anacortes Municipal Code land use and development regulations or through the authority of SEPA. Therefore, a Mitigated Determination of Non-Significance (MDNS) is appropriate.



## **SEPA ENVIRONMENTAL CHECKLIST**

### ***Purpose of checklist:***

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

### ***Instructions for applicants:*** [\[help\]](#)

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown. You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

### ***Use of checklist for nonproject proposals:*** [\[help\]](#)

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B plus the [SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS \(part D\)](#). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in Part B - Environmental Elements –that do not contribute meaningfully to the analysis of the proposal.



**A. BACKGROUND** [\[help\]](#)

1. Name of proposed project, if applicable:
- [\[help\]](#)

The Crossings

2. Name of applicant:
- [\[help\]](#)

Anacopper LLC

3. Address and phone number of applicant and contact person:
- [\[help\]](#)

PO Box 319 Anacortes, WA 98221 Debbie Headrick 360-293-7431

4. Date checklist prepared:
- [\[help\]](#)

01/30/2020

5. Agency requesting checklist:
- [\[help\]](#)

City of Anacortes

6. Proposed timing or schedule (including phasing, if applicable):
- [\[help\]](#)

Summer 2020

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.
- [\[help\]](#)

No

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.
- [\[help\]](#)

Critical Areas Study completed by ATSI Dated February 2020, Tree Preservation Plan by Urban Forestry Dated January 1, 2020, Geotech Report by Geotest Dated April 12, 2018, Traffic Study by TSI Inc. Dated December 9, 2019.

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.
- [\[help\]](#)

Department of Ecology Stormwater Permit

10. List any government approvals or permits that will be needed for your proposal, if known.
- [\[help\]](#)

City of Anacortes applications and permits to include Master Permit, Cottage Housing Checklist, Long Subdivision, Preliminary Application, Demo, Clear and Grade, SEPA, ROW, Final Plat Application, New Home Construction Permits.

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)
- [\[help\]](#)

The current site is 5.2 acres this proposal is for 18 Cottage Homes and 3 single family building lots, removal of existing home and 2 outbuildings install infrastructure to service all homes, detention pond, underground utilities, storm, sewer, electric, cable, telephone, roads, curb, gutter, sidewalks. Install improvements to connect Oregon Avenue and Meadows Lane, street, curb, gutter sidewalks landscape utilities to 3 single family building lots. The existing wetland buffer will be enhanced, current driveway removed from buffer area, planting of trees and shrubs to make the area more natural.

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and



Cultural Resources  
Report, Drayton  
Archaeology, Feb. 25,  
2020  
Stormwater Site Plan,  
Dale Herrigstad,  
1/13/20  
(LBG, 3/20/20)

range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. [\[help\]](#)

1905 Anacopper Rd Anacortes, WA 98221

Section 25 Township 35 Range 01

5.2 ac SW1/4 SW1/4 SW 1/4 EXC W 586ft OF S 325ft THOF & EXC W 20ft & EXC N 33ft THOF

TGW PTN S 33FT of N 693ft DESC AF#887647

## B. ENVIRONMENTAL ELEMENTS [\[help\]](#)

### 1. Earth

#### a. General description of the site [\[help\]](#)

(circle one): Flat, rolling, hilly, steep slopes, mountainous,  
other gently slopes south to north.

#### b. What is the steepest slope on the site (approximate percent slope)? [\[help\]](#)

Approximately 16%

#### c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils. [\[help\]](#)

Medium dense silty sand, abundant organic topsoil, gravelly sand, glacial til.

Per geotech report,  
Bow gravelly loam  
3-8% slopes and  
Clallam gravelly  
loam  
(LBG 3/20/20)

#### d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe. [\[help\]](#)

No signs of instability.

#### e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill. [\[help\]](#)

A significant amount of excavation will occur on the 5.2 acre site for underground utilities, road improvements, the wetland and buffer area approximately 1.97 acres will remain natural.

#### f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe. [\[help\]](#)

Yes, it is possible to have erosion, the areas disturbed by construction will be covered with straw and tarp or hydroseed, mulch onsite from grindings, silt fence, straw bales, to help prevent erosion and run off, when feasible vegetation will remain in place.

#### g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? [\[help\]](#)

Approximately 61,800 sq ft of the 5.2 acres

#### h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any: [\[help\]](#)

Disturbed areas will be covered with straw and tarp or hydroseed, mulch onsite from grinding, straw bales, silt fence to help prevent runoff, when feasible a conscious effort to keep native vegetation intact.

Conform to AMC  
19.76, approved  
stormwater site  
plan, DOE 2014  
SWMMWW and  
geotech report  
recommendations  
(LBG 3/20/20)



**2. Air**

- a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known. [\[help\]](#)  
Emissions discharged to the air will be typical of heavy equipment and trucks used for land clearing, dust from earth moving. Emissions upon completion will be that of typical single family neighborhood uses.
- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe. [\[help\]](#)

No

- c. Proposed measures to reduce or control emissions or other impacts to air, if any: [\[help\]](#)  
During dry season construction watering will be used for dust control.

**3. Water**

- a. Surface Water: [\[help\]](#)
- 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. [\[help\]](#)  
Wetland and pond are located on the property.
- 2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans. [\[help\]](#)  
Work within the 200 ft area will be removal of a gravel driveway, enhancement planting, installation of a split rail fence, detention pond and swale, a small portion of the private road.
- 3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material. [\[help\]](#)  
None
- 4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. [\[help\]](#)  
Stormwater management per the Drainage Report Dated January 13, 2020, by Dale Herrigstad Herrigstad Engineering PS.
- 5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan. [\[help\]](#)  
No
- 6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge. [\[help\]](#)  
No



## b. Ground Water:

- 1) Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known. [\[help\]](#)

No, the development will be connected to City of Anacortes utilities.

- 2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals. . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve. [\[help\]](#)

None

## c. Water runoff (including stormwater):

- 1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe. [\[help\]](#)

Runoff will be from roof, roads, sidewalks, driveways and landscaped areas and collected with water treatment swales, bioretention cells and storm pipes with a total 100 year volume of 0.59 acre-feet. The water will flow to a detention pond and released back to the wetlands.

- 2) Could waste materials enter ground or surface waters? If so, generally describe. [\[help\]](#)

Best Management Practices (BMPs) will be in place to stop waste materials from entering ground or surface waters.

- 3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

Existing drainage patterns will be maintained.

## d. Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any:

Treatment provided with water quality swales and bioretention treatment cells and the increase in volume will be managed with a detention pond to reduce potential impacts to not exceed the pre-developed storm water impacts.

Conform to  
AMC 19.76 and  
approved  
stormwater site  
plan & DOE  
2014  
SWMMWW  
(LBG 3/20/20)

4. Plants [\[help\]](#)

- a. Check the types of vegetation found on the site: [\[help\]](#)

☒ deciduous tree: alder, maple, aspen, other

☒ evergreen tree: fir, cedar, pine, other

☒ shrubs

☒ grass

☐ pasture

☐ crop or grain

☐ Orchards, vineyards or other permanent crops.

☒ wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other

water plants: water lily, eelgrass, milfoil, other  
  X   other types of vegetation

- b. What kind and amount of vegetation will be removed or altered? [\[help\]](#)

Approximately 3 acres of the 5.2 site will be disturbed during construction to install underground utilities and roads. (Wetland area and pond will not be disturbed)

- c. List threatened and endangered species known to be on or near the site. [\[help\]](#)

None

- d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any: [\[help\]](#)

Plants, grasses and trees native to the area as recommended in the Critical Areas Report dated February 2020 will be used to enhance the wetland buffer area and landscape through out the plat, trail/paths will be chips and gravel. Other native plants and trees are included in the landscape plan and a hedge is planned along the south property line.

- e. List all noxious weeds and invasive species known to be on or near the site.

None known

## 5. Animals

- a. List any birds and other animals which have been observed on or near the site or are known to be on or near the site. Examples include: [\[help\]](#)

birds: [\[hawk\]](#) heron, [\[eagle\]](#) [\[songbirds\]](#), other:

mammals: deer, bear, elk, beaver, other:

fish: bass, salmon, trout, herring, shellfish, other \_\_\_\_\_

- b. List any threatened and endangered species known to be on or near the site. [\[help\]](#)

None known

- c. Is the site part of a migration route? If so, explain. [\[help\]](#)

Not site specific, however Fidalgo Island is part of the North American Bird Migration route.

- d. Proposed measures to preserve or enhance wildlife, if any: [\[help\]](#)

The improvements to the wetland buffer and landscape will create an inviting environment for birds and other wildlife.

- e. List any invasive animal species known to be on or near the site.

None known

## 6. Energy and natural resources

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc. [\[help\]](#)

Homes will use electricity and natural gas for appliances, heating and lighting.

- b. Would your project affect the potential use of solar energy by adjacent properties?

If so, generally describe. [\[help\]](#)

No



- c. What kinds of energy conservation features are included in the plans of this proposal?

List other proposed measures to reduce or control energy impacts, if any: [\[help\]](#)

The project plans are designed with the required State and City energy conservation codes. Use of double pane windows, LED fixtures, energy star appliances, insulation.

## 7. Environmental health

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe. [\[help\]](#)

- 1) Describe any known or possible contamination at the site from present or past uses.

No known contamination on the property.

- 2) Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

None known

- 3) Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

No toxic or hazardous chemicals will be stored onsite, fuel and oil will be used in construction equipment.

- 4) Describe special emergency services that might be required.

None

- 5) Proposed measures to reduce or control environmental health hazards, if any:

Not applicable to the project

## b. Noise

- 1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)? [\[help\]](#)

No known noises that will directly impact the project.

- 2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site. [\[help\]](#)

Short term; noise from equipment during installation of improvements, typical home construction noise and traffic M-F 7am-6pm.  
Long term noise will be that of a typical residential neighborhood.

- 3) Proposed measures to reduce or control noise impacts, if any: [\[help\]](#)

Construction activities will be during the daylight hours 7am - 6pm short term impact

## 8. Land and shoreline use

- a. What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe. [\[help\]](#)

Currently on the property is a single family home with 2 outbuildings, adjacent properties to the North, South and East are residential neighborhoods, the Anacortes Airport is to the west of the property, there is no direct affect to adjacent properties.

- b. Has the project site been used as working farmlands or working forest lands? If so, describe.

How much agricultural or forest land of long-term commercial significance will be converted



to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use? [\[help\]](#)

Not applicable to the property

- 1) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:

No

- c. Describe any structures on the site. [\[help\]](#)

One single family residence, detached garage and outbuildings, approximate date of construction 1984.

- d. Will any structures be demolished? If so, what? [\[help\]](#)

Yes all structures on the property will be removed or demolished.

- e. What is the current zoning classification of the site? [\[help\]](#)

R2 - Residential

- f. What is the current comprehensive plan designation of the site? [\[help\]](#)

R2 Low Density 2

- g. If applicable, what is the current shoreline master program designation of the site? [\[help\]](#)

Not applicable to the property.

- h. Has any part of the site been classified as a critical area by the city or county? If so, specify. [\[help\]](#)

Yes the wetland and pond on the property are classified critical areas.

- i. Approximately how many people would reside or work in the completed project? [\[help\]](#)

The project could potentially house between 30-48 people.

- j. Approximately how many people would the completed project displace? [\[help\]](#)

Three (3) tenants currently reside in the residence.

- k. Proposed measures to avoid or reduce displacement impacts, if any: [\[help\]](#)

The current tenant was aware of our plans to develop the property when leasing the home and has been given advance notice of the project, currently rents month to month.

- l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any: [\[help\]](#)

The project proposal is compatible with the current lands use and designed around the R2 Cottage Housing code AMC19.43.010 (D) and AMC19.43.010(B) Single Family Residence.

- m. Proposed measures to ensure the proposal is compatible with nearby agricultural and forest lands of long-term commercial significance, if any:

Not applicable to the property.

Conformance  
with AMC  
17.70 Critical  
Areas.  
(LBG 3/20/20)

## 9. Housing

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing. [\[help\]](#)

21 Single Family Middle Income Homes.

- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing. [\[help\]](#)

One (1) Single Family Middle Income home will be eliminated.

- c. Proposed measures to reduce or control housing impacts, if any: [\[help\]](#)

We are building 21 homes that will be affordable to middle income individuals and families.

## 10. Aesthetics

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed? [\[help\]](#)

Per the building codes of Anacortes, the cottage homes will have a height restriction of 25', the 3 SFR on Oregon Ave will have a restriction of 35'. Building materials wood, concrete, metal and composition roof.

- b. What views in the immediate vicinity would be altered or obstructed? [\[help\]](#)

None

- c. Proposed measures to reduce or control aesthetic impacts, if any: [\[help\]](#)

The project will be professionally landscaped and maintained, homes will be painted with a predetermined color palette. CC&Rs will have architectural guidelines controlled by an HOA Board.

## 11. Light and glare

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur? [\[help\]](#)

Typical glare from residential lighting and landscape lighting, to eliminate glare the use of dark sky and down lighting is proposed.

- b. Could light or glare from the finished project be a safety hazard or interfere with views? [\[help\]](#)

No safety hazards or interference of view.

- c. What existing off-site sources of light or glare may affect your proposal? [\[help\]](#)

None

- d. Proposed measures to reduce or control light and glare impacts, if any: [\[help\]](#)

Use of dark sky lighting, down lights and low voltage landscape lighting.

## 12. Recreation

- a. What designated and informal recreational opportunities are in the immediate vicinity? [\[help\]](#)

Tursi Park and community trails are within walking distance of the proposed project.

- b. Would the proposed project displace any existing recreational uses? If so, describe. [\[help\]](#)

No displacement of recreational uses.

- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any: [\[help\]](#)

The neighborhood will have common open space with walking trails and open air pavillion.



**13. Historic and cultural preservation**

- a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers located on or near the site? If so, specifically describe. [\[help\]](#)

No

- b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources. [\[help\]](#)

None found per  
Cultural Resources  
Report, Drayton  
Archaeology, Feb. 25,  
2020  
(LBG 3/20/20)

- c. Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc. [\[help\]](#)

- d. Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.

Follow  
recommendations  
in Cultural  
Resources report  
(LBG 3/20/20)

**14. Transportation**

- a. Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any. [\[help\]](#)  
Access via Anacopper to Copper Pond to Meadows Lane, there are several surface streets that access Copper Pond as alternate routes to Meadows Lane, another possible access is West 12th via Oregon Avenue connecting to Meadows Lane.

- b. Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop? [\[help\]](#)

Skagit Transit has pick up locations near Oakes Avenue and Anacopper Rd.

- c. How many additional parking spaces would the completed project or non-project proposal have? How many would the project or proposal eliminate? [\[help\]](#)

The proposed development will add 34 parking spaces.

- d. Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private). [\[help\]](#)

Yes, the project requires improvements to the existing unfinished portion of Oregon Avenue between Meadows Lane and Oregon Avenue. (road, curb, gutter, sidewalks and landscape)

- e. Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe. [\[help\]](#) Anacortes Airport is west of the property.



- f. How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates? [\[help\]](#)

Per traffic report dated December 9, 2019 daily vehicle trips estimated at 151.

- g. Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.

No

- h. Proposed measures to reduce or control transportation impacts, if any: [\[help\]](#)

None

### 15. Public services

- a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe. [\[help\]](#)

Public services are in place for the proposed project, additional population to the area could increase the use of some of the public services .

- b. Proposed measures to reduce or control direct impacts on public services, if any. [\[help\]](#)

None

### 16. Utilities

- a. Circle utilities currently available at the site: [\[help\]](#)

electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system,  
other \_\_\_\_\_

- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed. [\[help\]](#)

Electricity-Puget Sound Energy  
Natural Gas- Cascade Natural Gas  
Water/Sewer/Garbage- City of Anacortes  
Cable-Comcast  
Telephone - Comcast or Other

### C. SIGNATURE [\[HELP\]](#)

I certify (or declare) under penalty of perjury under laws of the State of Washington that the above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make a decision.

Signature: \_\_\_\_\_

Name of signee Nels Strandberg

Position and Agency/Organization Member

Date Submitted: 2/13/2020

Potential recording  
of an avigation  
easement.  
Payment of  
transportation  
impact fees.  
(LBG 3/20/20)

Conformance  
with IFC and  
payment of  
fire/EMS  
impact fees  
(LBG 3/20/20)



February 13, 2018

**Legend**

- |                           |                           |                          |
|---------------------------|---------------------------|--------------------------|
| County Boundary           | Senior Citizen Accounts   | Tax Parcels              |
| <b>Tax Parcel Numbers</b> | Mobile Home Only Accounts | Pre Tax Account Property |
| Land Accounts             | Building Only Accounts    |                          |

1:2,257

0 0.0175 0.035 0.07 mi

0 0.03 0.06 0.12 km

Data Accuracy Warning: All GIS data was created from available public records and existing map sources. Map features have been adjusted to achieve a best-fit registration. While great care was taken in this process, maps from different sources rarely agree as to the precise location of geographic features. Map discrepancies can be as great as 300 feet.

Copyright 2016

Legal Description at time of Assessment:

This is the legal description as of the most recent certification of the assessment roll. The Current Legal Description reflects any changes resulting from boundary modifications after certification.

(5.2000 ac) SW1/4 SW1/4 SW1/4 EXC W 586FT OF S 325F TTHOF & EXC W 20FT & EXC N 33FT THOF TGW PTN S 33FT OF N 693FT DESC AF#887647



Exhibit 11  
Other  
Correspondence



September 15, 2020

Mr. Steve Lange  
Project Manager  
City of Anacortes  
P.O. Box 547  
Anacortes, Washington 98221

SUBJECT: FIFTH STORMWATER PLAN REVIEW, THE CROSSING COTTAGE  
DEVELOPMENT  
CITY OF ANACORTES, SKAGIT COUNTY, WASHINGTON  
G&O #19411.07

Dear Mr. Lange:

We received the revised plans for the project on September 3, 2020.

The proposed project consists of constructing 18 cottage-style homes and 3 standard single-family homes. The proposal also includes a 20-foot wide road with curb, gutter, and sidewalk. Stormwater from the site will be conveyed to either the Rock Ridge drainage system to the east or wetland to the west. Runoff conveyed to the wetland will be treated by dispersing to the 110-foot wetland buffer, a bioswale, or bioretention. Runoff conveyed to the east will be treated by the existing Rock Ridge detention pond. Further discussion regarding the direction of flow in this manner is provided below.

The submittal included:

- Response to Comments
- Civil Engineering Plans

It appears our previous comments have been addressed; however, we would like to present our analysis and understanding of sending runoff from the southeast corner of the plat to the existing Rock Ridge detention pond.

The applicant is proposing to send flows from this corner to the existing Rock Ridge pond for both flow control and treatment purposes. According to the approved Rock Ridge Phases 4/5 Storm Drainage Report (dated April 10, 2018), flow from the southeast corner of The Crossings was intended to be included in the expansion of the Rock Ridge wet pond where the pond berm was raised 1.7 feet to include additional detention storage



Mr. Steve Lange  
September 15, 2020  
Page 2

for Phases 4 and 5 of the Rock Ridge development along with the southeast corner of the future Crossings development. This Phase 4/5 Report addressed flow control only and did not address water quality treatment for at the time, the engineer understood that treatment was being provided in a proprietary system located prior to the wet pond. It has since come to our attention that water quality treatment is actually being provided as dead storage in the wet pond.

The applicant notes within the Stormwater Drainage Report for The Crossings (dated January 13, 2020) that in order to treat this corner of The Crossings, 1,307 cubic feet of dead storage is necessary. A quick analysis leads us to believe that the fully built plat of Rock Ridge (i.e., all 25.3 acres) would need 15,073 cubic feet of dead storage. Combining the full Rock Ridge development with the corner of The Crossings leads to a need for 16,373 cubic feet of dead storage necessary to treat runoff from these areas. The City provided as-built drawings of the Rock Ridge pond where we calculated that approximately 17,445 cubic feet of dead storage exists based upon a depth of 1.85 feet, a bottom area equivalent to that shown on the as-built drawings, and 3:1 side slopes. Therefore, as a paper exercise, the pond appears to have enough storage to provide treatment for the southeast corner of The Crossings.

However, City staff has brought to our attention that this pond likely has not been maintained. Therefore, prior to final acceptance of The Crossings, it is recommended the pond be vactored and that the water quality storage volume of the Rock Ridge pond be verified.

Please contact me if you have any questions on this plan review.

Sincerely,

GRAY & OSBORNE, INC.

Stacey A. Clear, P.E.

SAC/hh  
Encl.



August 4, 2020

Libby Grage  
Planning Manager  
City of Anacortes  
PO Box 547  
Anacortes, WA 98221

**City of Anacortes**  
*Planning, Community &  
Economic Development*

**Date Received:**

8/6/20

Re: LPS-2020-0001-The Crossings Cottage Development  
Technical Review Comments

Dear Libby,

In response to comments from Tess Cooper on Critical Areas, Steve Lange Public Works Engineering and Stormwater review and Jack Kennedy of the Fire Department the following information has been updated.

Enclosed are the updated civil plans, landscape plans and critical areas addendum letter and report from Karla Gallina of ATSI dated July 16, 2020.

The updated civil plans by Dale Herrigstad address comments from PCED review on stormwater, wetland buffers, clearing, sidewalks, mailbox and fire hydrant location and fire apparatus turn around. The comments received for request of materials and patterns for sidewalks and cross walks, no parking plan signs and curb paint and irrigation location will be conditions of the plat.

Landscape plans addresses, buffers, tree preservation, tree and vegetation plantings and fencing.

The addendum letter to the critical area report addresses comments from Tess Coopers review letter dated April 30,2020.

Please let me know if you have questions on the enclosed information.

Thank you,



Debbie Headrick  
Executive Assistant  
[Debbie@Strandbergconstruction.com](mailto:Debbie@Strandbergconstruction.com)

May 25, 2020

Libby Grage  
Planning Manager  
City of Anacortes Planning and Development  
PO Box 547  
Anacortes, WA 98221

Re: LPS-2020-0001-The Crossings Cottage Development

Dear Libby,

In response to public comments received on behalf of the development, The Crossings, clarification below.

Ernie Hayden

1. The project sited on over 5 acres of land; in that particular R2 zoning the density limit is 4 homes per acre. We are within that criteria which is consistent with all the neighbors surrounding the property. These homes are on smaller lots, as the COA Cottage Ordinance allows such, if you count all open space, wetlands and buffers the density is the same. The code allows for double the normal density; we are below that.
2. Please see Wetland report from ATSI and Storm water report from Dale Herrigstad. All applicable code related to storm water and protection of wetlands and buffers have been followed.
3. This development, like almost any development will create more traffic, more cars, as well as construction traffic. Please see Traffic report from TSI, no significant negative impacts are expected.

Kevin Anderson, Port of Anacortes

1. We agree to an avigation easement per Port of Anacortes letter dated April 22<sup>nd</sup>, 2020.

Stephanie Jolivette DAHP

1. We have performed an archeological evaluation as requested and followed appropriate protocols; the report is included in our application.

Erika McPhee-Shaw

1. We agree to use down casting exterior lighting both for the streetlights and the homes.
2. I have responded in a separate email early in the application process to address Ms. McPhee concerns, this information is part of the application records.

#### Carol Bordin

1. "SEPA determination". We agree SEPA is a requirement, we have submitted our application this information is on file with the City of Anacortes.
2. "NEW EIS/EIR"- please see the Addendum to ATSI Wetland Report, the addendum addresses separate Wetlands "A" and "B".
3. "Thorough Investigation of species" A very thorough and comprehensive Wetland study was produced by ATSI, a certified wetland biologist. They have followed all necessary and required protocols required by the Department of Ecology and the City of Anacortes. The City Staff, Council Members, Department of Ecology and the Public can review this report and all other documents that are part of the application, the information is all public record.
4. "Department of Ecology needs to be on location..." Although, we do not report directly to Department of Ecology, we understand the City staff has given a copy of our Wetland Report to Department of Ecology, they have reviewed this document and have made comments.
5. "Removing all the large Douglas Fir and Cedar Trees"... Approximately half of the property is a critical area, the other half has Douglas Fir trees, if we left the trees there would be nearly nowhere to build. Not only does our "Tree Retention Plan" save all the trees necessary by code it doubles the required tree count, we also plan on planting many additional trees including 19 Douglas Firs in the wetland buffer.
6. "Detention Pond has..." We have seriously considered the fact that our detention pond is adjacent to the 110 ft buffer, and then the wetland. This is addressed in our Storm Water Report and our Wetland Report.
7. "The Critical Area Ordinance for this wetland needs..." We are following the codes of the City of Anacortes, which is routinely reviewed by Department of Ecology. We meet the criteria for a 110 ft buffer.
8. "The existing home, garage, and other building should have never been built...." Removing Anacopper Road and replacing it with a bridge would not only cost millions of dollars, it would seriously disrupt the neighborhood and wetland for years. This request seems a bit far-fetched.
9. "A public meeting is..." We will agree to a public hearing or similar as this is part of our application process and will be scheduled when allowed by the City of Anacortes.

#### Eric Adams

Traffic: A traffic study was submitted to the City of Anacortes, and after significant comments were received both at the neighborhood meeting and likely in writing. The city requested I upgrade to my traffic study to include all intersections in the area. The Traffic Study is part of our application.

Mr. Adams has made several recommendations that I as a developer have no control over, all his recommendations would likely first need to be recommended by a traffic engineer and then agreed to by the City of Anacortes. Per Traffic Solutions Inc. report, the amount of increased traffic, does not warrant any of his recommendations, with the exception of one sight line issue where a hedge needs to be trimmed. It is unfortunate that people speed, during construction (where I have some control) we will be diligent with our employees, suppliers, and subcontractors that all should drive the speed limit or below.

#### Shawn and Amy Patrick

Density: The project sited on over 5 acres of land; in this particular R2 zoning the density limit is 4 homes per acre. We are within that criteria which is consistent with all the neighbors surrounding the property. The proposed homes are on smaller lots, this is allowable by the City of Anacortes Cottage Ordinance, if you count all open space, wetlands and buffers the density is really the same.



HOA/CCR'S: In response to Patrick's claim that HOA rules are never enforced. I have formed more than a dozen Homeowners Associations with restrictions and rules. In my experience HOA rules are always followed, especially when an experienced developer writes the rules and sets up the association. CC&Rs are enforced, they are part of the final plat, therefore the City of Anacortes reviews and approves the document prior to final plat. We have adequate parking proposed for "The Crossings" in gross excess of the minimums are to avoid cars from "The Crossings" overflowing into neighboring streets. I cannot say this will never happen, I do not have that type of control, we have done what we can to avoid this negative impact.

Rainwater Runoff: Please see Civil Drawing, Storm Water drawing, and Large Parcel Storm Water Report. We have addressed drainage in detail, especially related to protection of the wetland, and protection to neighboring homes.

#### Jane Brandt

Density: The project sited on over 5 acres of land; in this particular R2 zoning the density limit is 4 homes per acre. We are within that criteria which is consistent with all the neighbors surrounding the property. The proposed homes are on smaller lots, this is allowable by the City of Anacortes Cottage Ordinance, if you count all open space, wetlands and buffers the density is really the same.

Stormwater: Please see Civil Drawing, Storm water drawing, and Large Parcel Storm Water Report. We have addressed drainage in detail, especially related to protection of the wetland, and protection to neighboring homes.

Mature Trees: Almost half of the property is a critical area, the other half has Douglas Fir trees, if we left those trees there would be almost nowhere to build. Not only does our "Tree Retention Plan" save all the trees necessary by code by double, we are also planning on planting many additional trees including 19 Douglas Firs in the wetland buffer.

#### Leonard Kallerson

Some of Mr. Kallerson's non-specific concerns related to traffic and flooding have already been addressed. I concur with Mr. Kallerson that we are just at the beginning of the City review process. I am also certain the City of Anacortes will develop a safe way to handle a public hearing given the current situation with Covid 19.

#### Estelle King

No one is claiming that The Crossings is "affordable" by the HUD definition, only that it may be more affordable than other new home options in Anacortes.

1. There is no plan for a fence around the pond to keep children out.
2. As stated before, our density is similar to the other neighborhoods based on gross acreage. We disagree that "The Crossings" will reduce anyone's property value.
3. We disagree that "The Crossings" will invite "unhealthy living". The intention of a cottage development is to provide a different type of housing options than what has traditionally been available in Anacortes. We believe the approved code and "The Crossings" compliance to this code will result in high quality and attractive addition to the neighborhood.
4. The Crossings proposal has provided far more parking then required by Code.
5. No doubt, living in a cottage will require some creative use of space and storage. The garages are oversized in depth to allow some storage options. The decks are covered so furniture can remain in those areas year-round.
6. Refer to the project traffic study from Traffic Solutions, Inc.

7. We truly hope no one would take a short cut down an alley. I do not see this personally as a time saver or an attractive option, due to the uneven gravel surface and narrowness of an alley, but I can't rule out that this is an occasional possibility.

Cherie Goyer

Traffic concerns and connection of Meadows and Copper Pond. We understand there will be impacts to neighbors related to traffic. It has been estimated that 151 vehicle trips will be generated (75 in and 75 out). We also believe that cars will likely go both ways north past Meadows or South to West 12<sup>th</sup>. Although, I don't want to estimate the percentage of cars going one way or another, using Ms. Goyer's number of 65% of the cars choosing to go North to West 12<sup>th</sup>, that would be (.65x 151=98 trips). If you assume for the sake of argument that no one travels at night, so traffic would start at 6am and end at 10pm, for a total traffic time of 16 hrs or 960 min. If you divide 960 minutes/98 trips that is approximately a trip every 10 min. This in my estimation and does sound like a high impact to any road or neighborhood. The connection of Meadows and West 12<sup>th</sup> was a requirement of this plat, not my choice. Please see Traffic Solutions, Inc. traffic report for concerns related to safety and intersections.

We would like to apologize in advance for our construction noise, there is truly no other way to develop property, this noise would exist no matter the density, we do our best to be sensitive to our neighbors.

Density concerns: The project sited on over 5 acres of land; in this particular R2 zoning the density limit is 4 homes per acre. We are within that criteria which is consistent with all the neighbors surrounding the property. The proposed homes are on smaller lots, this is allowable by The City of Anacortes Cottage Housing Ordinance, if you count all open space, wetlands and buffers the density is really the same. The code allows for double the normal density; the plans show we are below that.

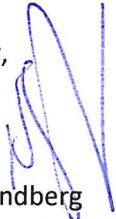
Bud Wescott (DNR)

Our wetland report will be subject not only to City of Anacortes review but review by the Department of Ecology, we have received written comments concerning our wetland report from the City of Anacortes, and we are in the process of creating an addendum with specific sections to address why the two wetlands are actually separate under the code.

Addam Sad )Cascade Natural Gas Corp.)

1" PE Gas Line has been noted.

Sincerely,



Nels Strandberg  
Strandberg Construction, Inc.

Libby Grage  
Planning Manager  
City of Anacortes  
PO Box 547  
Anacortes, WA 98221

Re: LPS-2020-0001-The Crossings Cottage Development

Dear Libby,

In response to comments from Steve Lange, Public Works Engineering and Stormwater review Letter dated May 1<sup>st</sup>, 2020 of The Crossings PW#20-124-DEV. Below and attached is clarification, revised plans, and documents.

Public Works Engineering and Stormwater Review:

**Project Narrative:**

1. It is our understanding the City of Anacortes will be creating a site distance triangle to determine an easement area for trimming of vegetation. The City of Anacortes has agreed to provide this information at a later date.
2. It is the applicants understanding that any road work along Anacopper Mine Road should stay within the existing road prism to avoid impact to adjacent wetlands. Additionally, the section of the road between "The Crossings" and "Keystone Development" was restriped effectively narrowing the lanes of traffic with the intention of creating a larger shoulder in an effort slow traffic. Those Pedestrian improvements were completed in 2011 by the City of Anacortes and have over time degraded, the city agrees the shoulder is in need of typical maintenance.

**SEPA:**

1. SEPA is attached, separate sheet with responses provided in a larger font.

**Storm Water Quality Plan:**

1. Note taken
2. Note taken
3. Note taken
- 4.

Gray & Osborne Inc. (Storm water review #4)

- Please see attached memo from Dale Herrigstad dated 5/14/2020
- Please see attached updated Civils and Storm Plans.

**Traffic Impact Analysis:**

1. Ok, note taken feedback from Public Works at a later date.



**Comments: Tess Cooper 4/29/20**

**(Red from Tess, Black -code language, Orange -ATSI, Blue -applicant comments)**

Applicant

1. Wetland flags were surveyed by a licensed surveyor immediately after their installation by a certified wetland biologist, given the months/years between the wetland delineation and actual city review some of the flags may have gone missing, they are easily replaced.

ATSI

2. *ATSI will provide an addendum related to this comment. From ATSI.... Additionally, in response to Tess's comment on page 43 of our report, per page 57 of the 1987 wetland delineation manual, plot sizes are per those recorded on our data forms (Environmental Laboratory 1987). Therefore, it is our understanding our plot sizes are correct and the norm when collecting associated data.*
3. *ATSI will provide an addendum with the following: ... Wetland A outlets during high water events, southwest off the property via two mapped culverts under Anacopper Road and into Wetland B.*

*One culvert was reviewed in January 2020 and determined to be a 12-inch pipe installed fairly recently, within the last 20 years. Significant rainfall occurred prior to the visit and Wetland A was observed very full with water moving slowing from Wetland A to Wetland B. Additionally, the pipe was observed to be high, with the top approximately 12 inches vertical distance from the road surface. As such, it appears the pipe was installed as an overflow versus a connection. It was approximated that 8 to 10 months a year there is no water in the culvert as water levels in both wetlands have been observed to recede significantly in even slightly drier weather (Strandberg 13 January 2020).*

*Additionally, per Grette Associates 4 September 2015 wetland report, the ponded portion of ATSI/Grette Wetland B is fed by surface water passing under Anacopper Road from the east which is depicted as an inlet in their associated wetland rating figure Sheet 2. In other words, ATSI Wetland A is providing hydrology to Wetland B via culvert. Furthermore, while Grette does not connect Wetland B to ATSI's Wetland A as the same unit, it does include ATSI's Wetland A in Wetland B's contributing basin per their associated wetland rating figure Sheet 11 (Grette 4 September 2015).*

*Finally, per Ecology wetland rating guidance, "When a Depressional wetland is divided by a human-made feature, such as a road embankment, the wetland should not be divided into different units if there is a level surface-water connection between the two parts of the wetland. Water should be able to flow equally well between the two areas. For example, if there is a wetland on either side of a road with a culvert connecting the two, and both sides of the culvert are partially or completely underwater for most of the year, the wetland should be treated as one unit. Make the down gradient wetland a separate unit, however, if the bottom of the culvert is above the high water marks in the receiving wetland, or the high water marks on either side of the road or dike differ by more than 6 in of elevation (Hruby 2014)." As there is not a level surface water connection and water does not flow equally well between Wetland A and Wetland B, they should be*

*considered separate units. In other words, water from Wetland A overflows into Wetland B during wet season high water events and outside of said events, water ponds in Wetland A and Wetland B with no hydrologic connection. The beforementioned said, it is ATSI's best professional judgement*

4. Applicant

*I believe it is completely unfair for the city at this stage in the planning to request a more detail mitigation plan and associated monitoring plan. We have been discussing this in detail for well over 1 year both formally and informally. We have always stated that the field (buffer) would be left to grow and we would supplement with some trees. This is the first we have heard the city is unhappy with the approach. After much consideration, with our biologist, arborist, and considering comments from the neighbors during the neighborhood meeting, we will supplement the mostly treeless eastern buffer, with 19 Douglas Firs. The site currently has about 19 full grown Douglas Fir trees located in the development area, located on approximately an acre of land, which will need to be removed. We are doing our best to replace those trees, we are not replanting a wetland but a raised buffer that is not wet, in fact it is very dry, which is why Douglas fir have typically done well there. 19 Full grown Douglas Fir will do a nice job foresting the area. This buffer has typically been mowed, it can be left unmown in a few weeks, there are plenty of natural areas that have been mowed.*

*Additionally:*

- 1. 110 ft of establish grass is one if not the best way to protect a wetland from water quality issues.*
- 2. If slopes are considered steep, there is no better way to protect a slope from erosion that an existing grass field, that is not and has not eroded.*
- 3. A 2-year maintenance bond is typical for a development in the City of Anacortes, we are more than happy to guarantee the 19 trees planted with in that Bond.*

**AMC 17.70.340.F.1**

The standard buffer widths listed in Table 17.70.340(1) presume the existence of a relatively intact native vegetation community in the buffer zone adequate to protect the wetland functions and values at the time of the proposed activity.

- Tess Cooper

*The buffer zone on the subject site is not currently comprised of a relatively intact native vegetation community. It is mowed field. The report does not explain how the existing buffer zone is adequate to protect the wetland functions and values at the time of the proposed activity.*

- ATSI

*Per our report;*

*Page 12, "Wetland buffer enhancement includes planting 19 Douglas fir trees and allowing the mowed lawn to grow, thus creating an herbaceous meadow with a forested canopy component...to offer green space adjacent the residential development."*



*Page 13, "Although our client is not proposing buffer reduction as part of their project proposal, the following measure to minimize impacts will be adhered to:..."*

*Page 15, "...will be converted from mowed lawn to an herbaceous meadow with a forested canopy component resulting in a net increase in ecological function of both the wetland buffer and wetland...currently vegetated with mowed lawn and therefore offers minimal ecological value...converting from mowed lawn to an herbaceous meadow with a forested component."*

*Furthermore, moving from a mowed lawn to a native forested herbaceous meadow will increase functionality by filtering upgradient runoff pollutants and potential erosive flows (should be none given stormwater management to the site), removing fertilizer and/or pesticides from use, and providing shade, food, shelter, and/or perches from the trees and grown grasses. There is also a "fire break" by not including trees directly adjacent the development and having a general landscaping offset from the development.*

### **AMC 17.70.340.F.3**

3. Increased Wetland Buffer Widths. The administrator shall require increased buffer widths in accordance with the recommendations of an experienced, qualified professional wetland scientist, and the best available science on a case-by-case basis when a larger buffer is necessary to protect wetland functions and values based on site-specific characteristics. This determination shall be based on one or more of the following criteria:

- a. A larger buffer is needed to protect other critical areas;
- b. The buffer or adjacent uplands has a slope greater than fifteen percent or is susceptible to erosion and standard erosion-control measures will not prevent adverse impacts to the wetland; or
- c. The buffer area has minimal vegetative cover. In lieu of increasing the buffer width where existing buffer vegetation is inadequate to protect the wetland functions and values, implementation of a buffer planting plan may substitute. Where a buffer planting plan is proposed, it shall include densities that are not less than three feet on center for shrubs and eight feet on center for trees and require monitoring and maintenance to ensure success. Existing buffer vegetation is considered "inadequate" and will need to be enhanced through additional native plantings and (if appropriate) removal of nonnative plants when: (1) nonnative or invasive plant species provide the dominant cover *Not true for the site*, (2) vegetation is lacking due to disturbance and wetland resources could be adversely affected *Not true for the site*, or (3) enhancement plantings in the buffer could significantly improve buffer functions *What we are proposing will improve buffer functions*.

*The subject buffer has a slope greater than 15% and minimal vegetative cover. The slope is just over 15% at 16% per the project engineer (Herrigstad 2 January 2020) and while there is minimal vegetative cover currently, we propose to add trees, allow the grass to grow, and implement minimizing measures, thus an increase in vegetative cover which will protect the wetland functions and values...Per (c), above, a buffer planting plan may substitute for increasing the buffer width.*



*However, what we propose, is not inadequate to protect wetland functions and values, rather there will be an increase in functionality.*

**AMC 17.70.340** Performance standards—General requirements.

A. Activities may only be permitted in a wetland or wetland buffer if the applicant can show that the proposed activity will not degrade the functions and functional performance of the wetland and other critical areas.

- **Activities are proposed within the wetland buffer (pathway and stormwater facilities), but the report does not discuss how those activities will not degrade the functions and functional performance of the wetland.**

*Regarding the pathway, the voluntary restoration of the road should offset the impacts from the trail, i.e. gravel compacted impervious surface to a slightly more extensive mulched pervious trail. Additionally, we will add split rail fence with signs on either side to keep people and their dogs out? That would ensure the functions of the buffer and wetland would be protected and thus not degraded.*

*Regarding stormwater, per page 15-16 of our report:*

***“5.3 WETLAND BUFFER WIDTH AVERAGING***

*...This project will include wetland buffer averaging that will result in 1,372 square feet of wetland buffer reduction and 1,416 square feet of wetland buffer addition in compliance with COA CAO Chapter 17.70.340.4 as detailed below (Figure 5; COA 2008):*

*a. It will not reduce wetland functions or functional performance;*

*The proposed 1,372 square foot impacted buffer area is currently comprised of mowed lawn. The proposed reduction will still maintain at least a 95 foot wetland buffer (Figure 5). This buffer reduction area will be offset by 1,416 square feet of wetland buffer addition that will be converted from mowed lawn to an herbaceous meadow with a forested canopy component resulting in a net increase in ecological function of both the wetland buffer and the wetland (Figure 5).*

*b. The wetland contains variations in sensitivity due to existing physical characteristics or the character of the buffer varies in slope, soils, or vegetation, and the wetland would benefit from a wider buffer in places and would not be adversely impacted by a narrower buffer in other places; The proposed buffer reduction will decrease the wetland buffer by 15 feet at the most. The entire buffer reduction area is currently vegetated with mowed lawn and therefore offers minimal ecological value. The proposed buffer reduction is necessary in order for the property boundaries to be straight, and for the project to achieve the goal of creating 18 lots within the property. This buffer reduction will not come at the expense of ecological function for the following reasons:*

- *The buffer reduction area will be offset with additional buffer area.*
- *The entire wetland buffer, including the additional buffer area, will be converted from mowed lawn to an herbaceous meadow with a forested canopy component.*

*c. The total area contained in the buffer area after averaging is no less than that which would be contained within the standard buffer;*

*The proposed averaging will result in 1,372 square feet of wetland buffer reduction and 1,416 square feet of wetland buffer addition (Figure 5).*

*d. For Category I and II wetlands the buffer width is not reduced to less than seventy-five percent of the standard width.*

*While not applicable as Wetland A is a Category III wetland, the buffer will only be reduced by a maximum of 86 percent (Figure 5)."*

**Libby Grage 5/1/20 Technical Comments:**  
**PW Engineering and Stormwater Review**

1. Addressed above page 1 of 7.

**PCED Review**

2. Comments From Tess Cooper addressed above pages 2-5.
3. We will provide an addendum to our wetland report addressing stormwater outfall. *storm drain discharge pipe connected to a perforated level spreader discharge pipe on a quarry spill pad, was designed per Ecology and Anacortes standards by Dale Herrigstad, the project stormwater engineer to protect wetlands per Tab 8 on page 36 (Herrigstad 2 January 2020). Additionally, per the current Anacortes code section 17.70.340.F.7.c. "Stormwater Management Facilities. Stormwater management outfall facilities, including LID improvements, are allowed in accordance with an approved critical area report with no net loss of function to the wetland and wetland buffer..." That being said, while the outfall will have minimal square footage of impacts to the buffer, said impacts will be offset through gravel road restoration within the buffer and therefore there will be no net loss of function to the wetland and wetland buffer*

*Reference: Herrigstad, Dale. 2 January 2020. The Crossing. Stormwater Report.*

4. *There is only one (1) phase planned.*
5. *I believe this comment is related to homesite 16,17,18. Given, we have only proposed one schematic architectural cottage design and given the code. We do understand that design would not meet code as it is written related to open space, entry, and porch. At the time of building permit, we will be proposing a unique design for these homesites that will allow for the criteria mentioned in this comment to be addressed. \*\* It is extremely difficult at PRELIMINARY PLAT stage of development to address every architectural detail on every unit in the plat. This should clearly be a deferred submittal at the time of building permit.*
6. *Crosswalks will be poured in "natural plain brushed concrete" the most contrasting color from asphalt which is the criteria.*
7. *I will not submit 18 separate designs at this stage to show you that I have 8% transparency on my front facade, **we agree to this condition**, this can easily be verified at time of building permit, and will need to be. We fully plan to change up the front facades to keep them interesting and unique, figuring this out now at preliminary plat is unreasonable.*

8. *I will not submit 18 separate designs at this stage to show you that there is direct access to private open space, **we agree to this condition** and we have planned for it clearly in our application and in its likely location. This should be reviewed and verified at building permit stage.*
9. *South side buffer is already designed 5ft wide, we plan a Type B buffer, with associated planting schedule per code. We will update landscape plan.*
10. *Noted, we will update our landscape plan*
11. *Noted, we will update landscape plan*
12. *Please see report from Urban Forestry Services*
13. *Noted*
14. *Noted*
15. *Noted*
16. *Noted*

**Water Department**

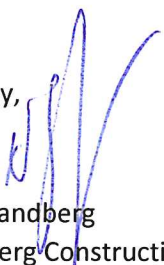
17. *We will make adjustment for the hydrant when we submit Construction Drawings.*

**Fire Department**

18. *Noted*
19. *Per our plans*
20. *Per our plans*
21. *Noted*
22. *Per our plans*
23. *Noted*
24. *Noted*
25. *This is assumed already.*

Please contact me at 360-293-7431 with any questions.

Sincerely,

  
Nels Strandberg  
Strandberg Construction, Inc.

Enclosures:

SEPA Checklist Notes  
Gray & Osborne, Inc. Report  
Drainage Report Dale Herrigstad  
Update Civil and Storm Plans  
Wetland Rating ATSI  
Page C-1 Revised



**HERRIGSTAD ENGINEERING PS**  
**Civil Engineer**

4320 Whistle Lake Road  
Anacortes, WA 98221

Dale Herrigstad, P.E.  
(360) 299-8804

May 14, 2020

Mr. Steve Lange  
Project Manager  
City of Anacortes  
PO Box 547  
Anacortes, WA 98221

Subject: The Crossings Cottage Development, Stormwater Plan Review by Grey and Osborne Inc. dated May 4, 2020.

The following response is for the Stormwater review dated May 4, 2020 by Stacey Clear, of Grey & Osborne, Inc.

**DRAINAGE REPORT**

1. The gravel parking/storage and walking path areas do not appear to be accounted for in the impervious area calculations. Compacted gravel surfacing is considered an impervious surface. These areas must be included in the report and calculations.

**The gravel parking and storage areas will be grasscrete. The walking paths out side of the sidewalks that I show on my plan or proposed as a 5/8" crushed gravel and Oyster shell permeable Walkway or bark chip path in wetland buffer for low impact as identified in the Landscaping Plan.**

2. If the 0.6-acre basin in the southwest corner of the site is to be counted for as concentrated flow dispersion, the downstream vegetated area needs to be planted per BMP T5.13 (post-construction soils).

**The plan is for the buffer to be replanted and BMP T5.13 (post construction soils) will be utilized throughout. Added BMP T5.13 note to sheet C9.**

3. The Rock Ridge Drainage Report states that The Crossing development will provide water quality with a Filterra treatment system. The Rock Ridge Drainage Report does not identify the Rock Ridge Detention Pond as a treatment facility for The Crossing development. Provide additional information and revise as needed.

**The Rock Ridge Drainage Report did not identify the Pond for treatment because treatment was provided further up stream for the portion of Rock Ridge that the report was primarily written for. The addition of this development was an after thought and accounted for detention and not thought through for water quality. It later came to our attention by the city that the Rock Ridge pond had accommodated for water quality and as address in this report should amply account for this small addition of Pollution Generating Surface.**

**Civil Engineering Plans**

Sheet C-7

4. Details must be provided for all erosion control BMPs.

**We added a sheet with BMP details.**

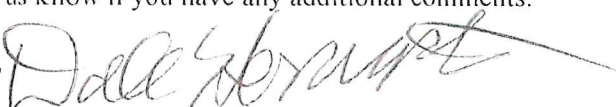
Sheet C-8

5. Additional information (i.e., 2 feet wide, 6 inches deep, type of rock) needs to be added for the rock dispersion trenches located downstream of the concentrated flow dispersion areas adjacent to the wetland buffer.

**Added a note to sheet C9 with 2 foot wide by 6 inch deep, railroad ballast rock trench for added dispersion.**

Please let us know if you have any additional comments.

Sincerely,



Dale Herrigstad PE, PLS



May 4, 2020

Mr. Steve Lange  
Project Manager  
City of Anacortes  
P.O. Box 547  
Anacortes, Washington 98221

SUBJECT: FOURTH STORMWATER PLAN REVIEW, THE CROSSING  
COTTAGE  
CITY OF ANACORTES, SKAGIT COUNTY, WASHINGTON  
G&O #19411.07

Dear Mr. Lange:

We received the revised plans for the project on March 23, 2020.

The proposed project consists of constructing 18 cottage-style homes and 3 standard single-family homes. The proposal also includes a 20-foot wide road with curb, gutter, and sidewalk. Stormwater from the site will be conveyed to either the Meadows drainage system to the east or wetland to the west. Runoff conveyed to the wetland will be treated by dispersing to the 110-foot wetland buffer, a bioswale, or bioretention. Runoff conveyed to the east will be treated by the existing Rockridge detention pond with a permanent wet pool.

The submittal included:

- Master Application
- Narrative
- Critical Areas Report
- Geotechnical Report
- SEPA Checklist
- Drainage Report
- Civil Engineering Plans

We offer the following specific comments to the developer regarding our review of the submitted information.



Mr. Steve Lange  
May 4, 2020  
Page 2

## **DRAINAGE REPORT**

1. The gravel parking/storage and walking path areas do not appear to be accounted for in the impervious area calculations. Compacted gravel surfacing is considered an impervious surface. These areas must be included in the report and calculations.
2. If the 0.6-acre basin in the southwest corner of the site is to be counted for as concentrated flow dispersion, the downstream vegetated area needs to be planted per BMP T5.13 (post-construction soils).
3. The Rock Ridge Drainage Report states that The Crossing development will provide water quality with a Filterra treatment system. The Rock Ridge Drainage Report does not identify the Rock Ridge Detention Pond as a treatment facility for The Crossing development. Provide additional information and revise as needed.

## **CIVIL ENGINEERING PLANS**

### **Sheet C-7**

4. Details must be provided for all erosion control BMPs.

### **Sheet C-8**

5. Additional information (i.e., 2 feet wide, 6 inches deep, type of rock) needs to be added for the rock dispersion trenches located downstream of the concentrated flow dispersion areas adjacent to the wetland buffer.

Please contact me if you have any questions on this plan review.

Sincerely,

GRAY & OSBORNE, INC.

A handwritten signature in black ink that reads "Stacey A. Clear".

Stacey A. Clear, P.E.

SAC/hh  
Encl.





January 30, 2020

Mr. Steve Lange  
Project Manager  
City of Anacortes  
P.O. Box 547  
Anacortes, Washington 98221

SUBJECT: THIRD STORMWATER PLAN REVIEW, THE CROSSING COTTAGE  
CITY OF ANACORTES, SKAGIT COUNTY, WASHINGTON  
G&O #19411.07

Dear Mr. Lange:

We received the revised plans for the project on January 20, 2020.

The proposed project consists of constructing 18 cottage-style homes and 3 standard single-family homes. The proposal also includes a 20-foot wide road with curb, gutter, and sidewalk. Stormwater from the site will be conveyed to either the Meadows drainage system to the east or wetland to the west. Runoff conveyed to the wetland will be treated by either dispersing to the 110-foot wetland buffer, a bioswale, or bioretention. Runoff conveyed to the east will be treated by the existing Rockridge detention pond with a permanent wet pool.

The submittal included:

- Drainage Report
- Rockridge Drainage Report
- Civil Engineering Plans

We offer the following specific comments to the developer regarding our review of the submitted information.

#### **DRAINAGE REPORT**

1. The Rockridge Drainage Report does not identify the Rockridge detention pond as a water quality treatment facility. The report states that the Crossings development will use a Filterra system to achieve the water quality requirement. Runoff treatment must be provided for Basin B1.



Mr. Steve Lange  
January 30, 2020  
Page 2

2. Provide a wetland classification report to the City in accordance with site analysis requirements.

## **CIVIL ENGINEERING PLANS**

### **General**

1. The Basin A1 road area still appears to intrude into the wetland buffer. Wetland buffers must be protected in accordance with Minimum Requirement 8.

### **Sheet C-1**

2. Details must be provided for all erosion control BMPs in the final plan submittal.

Please contact me if you have any questions on this plan review.

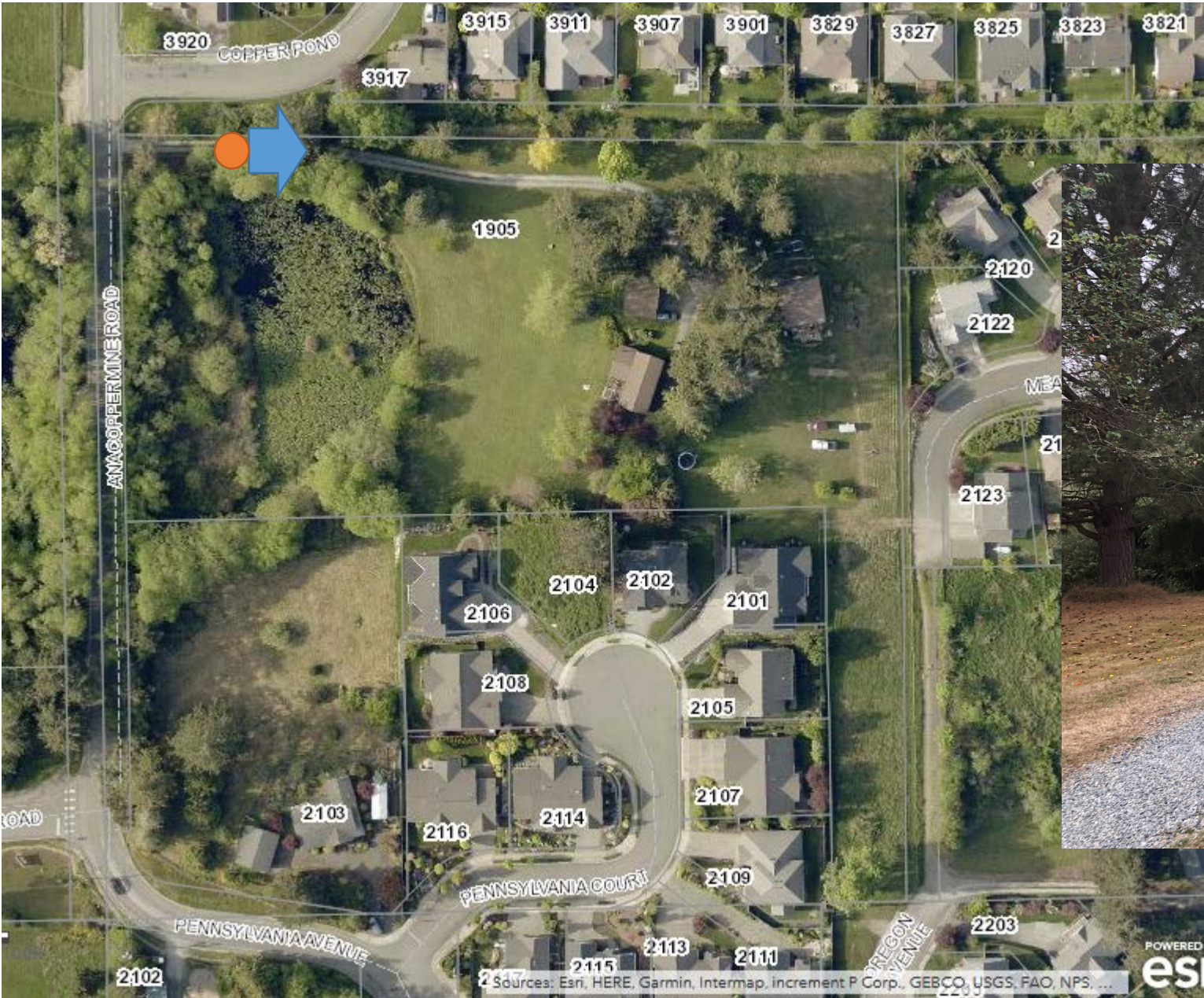
Sincerely,

GRAY & OSBORNE, INC.

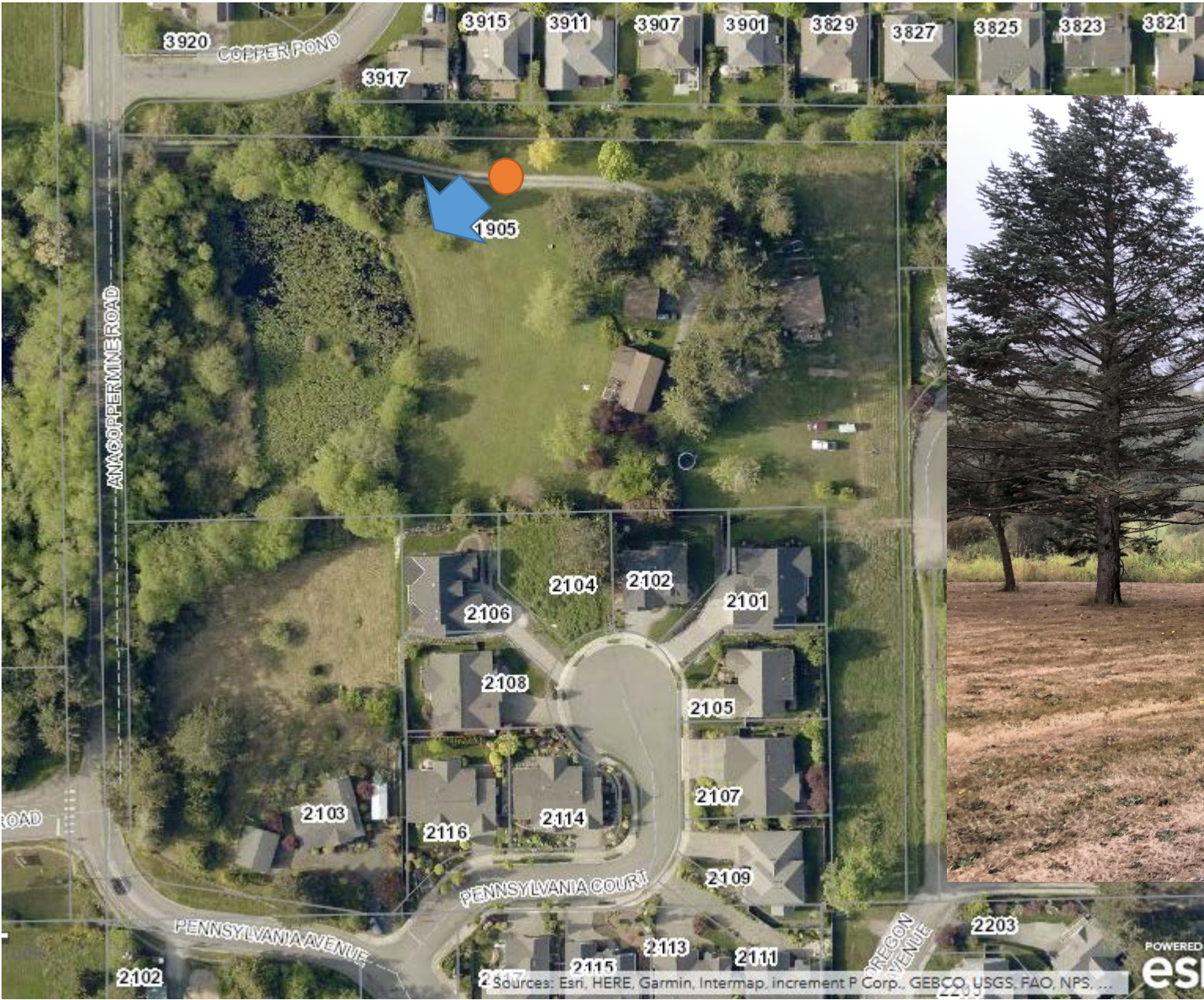
Stacey A. Clear, P.E.

SAC/hh  
Encl.

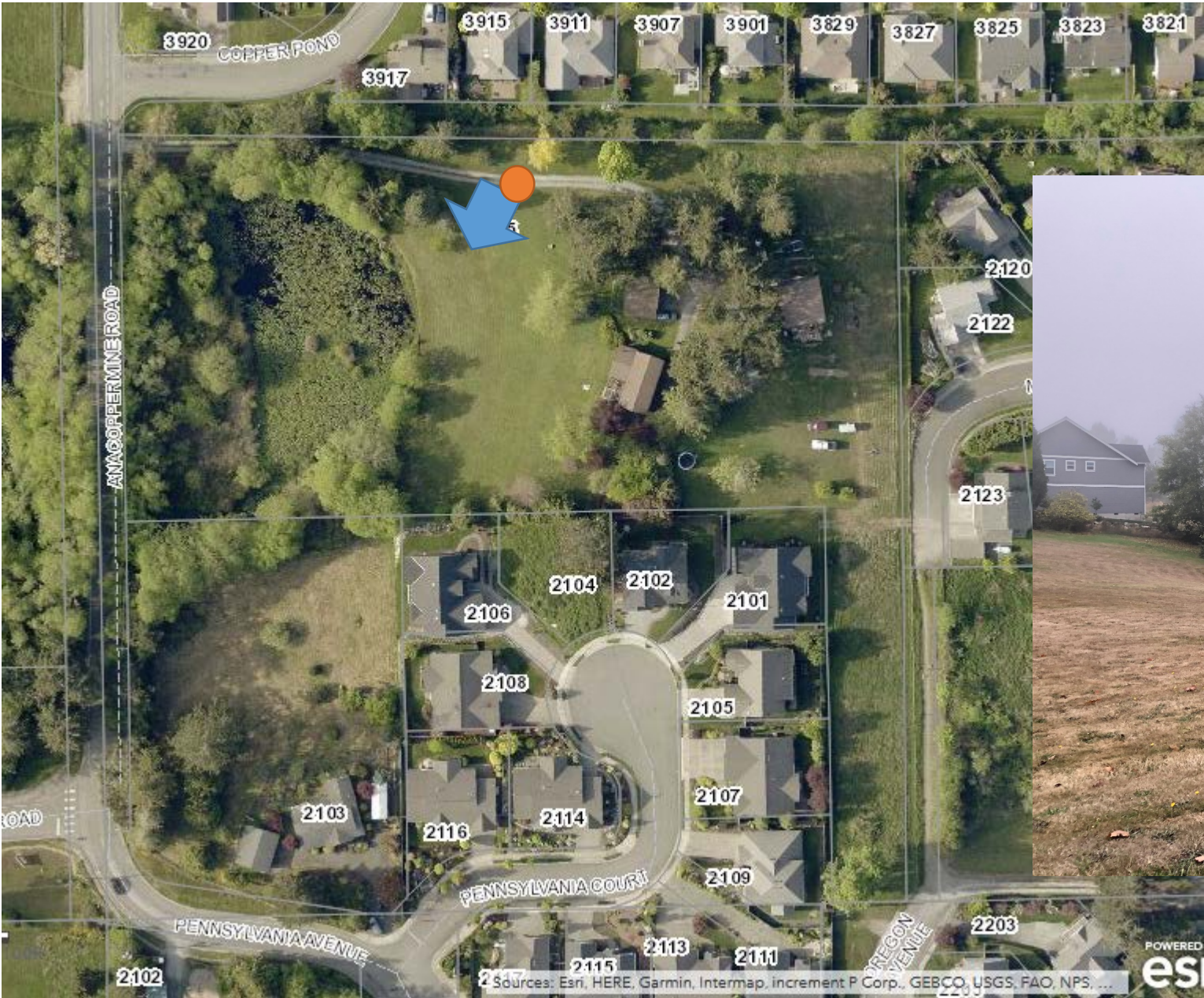




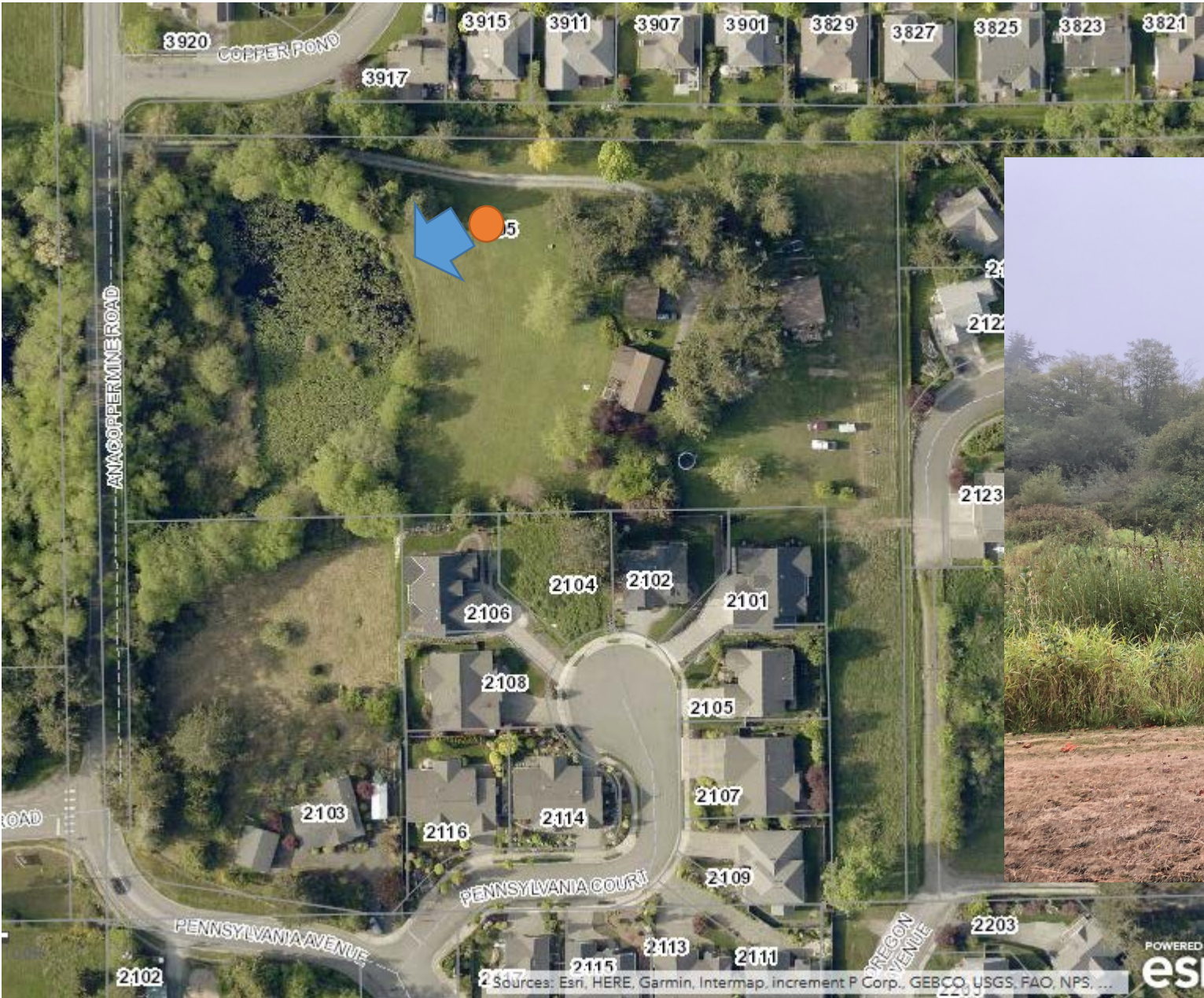




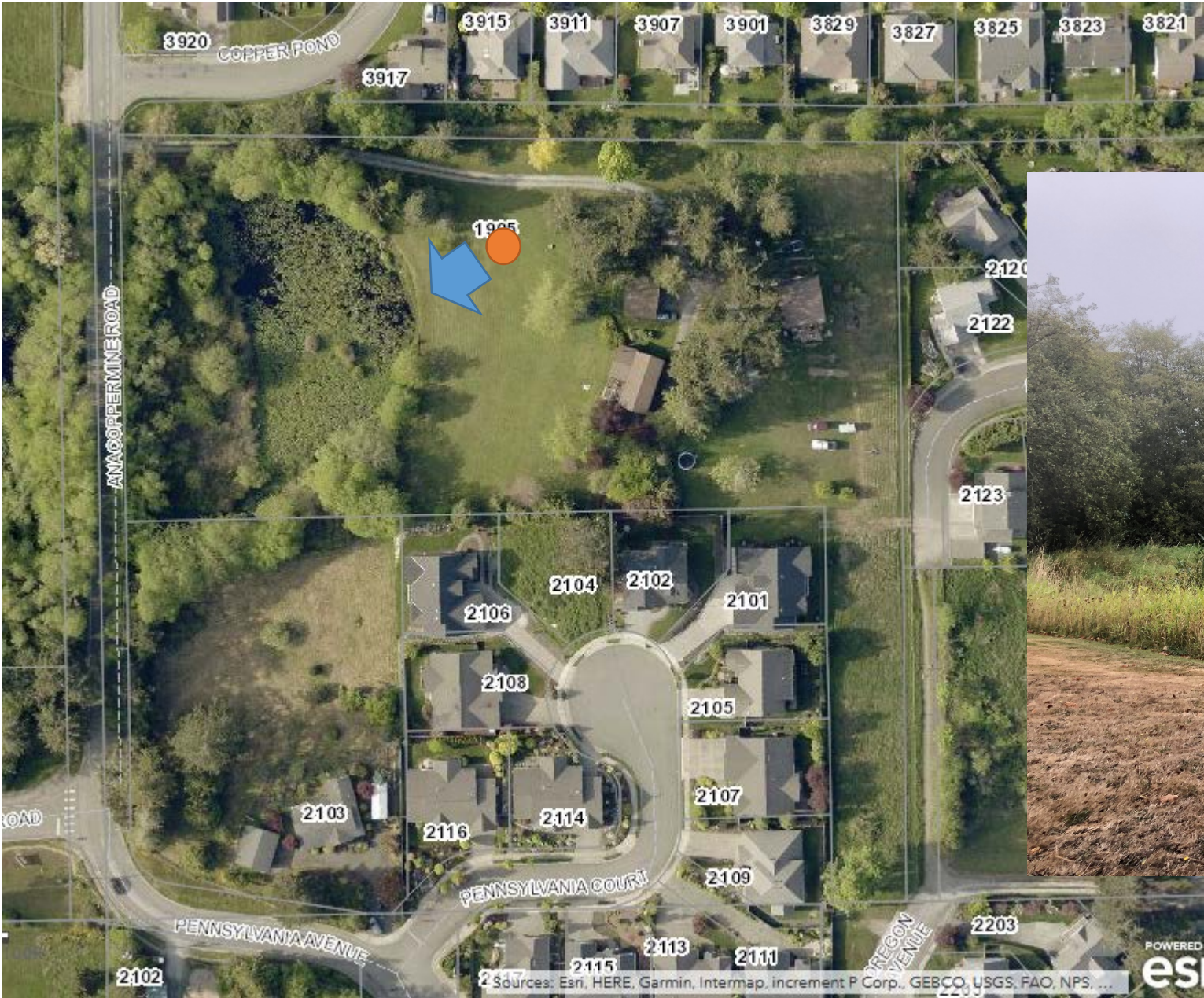
















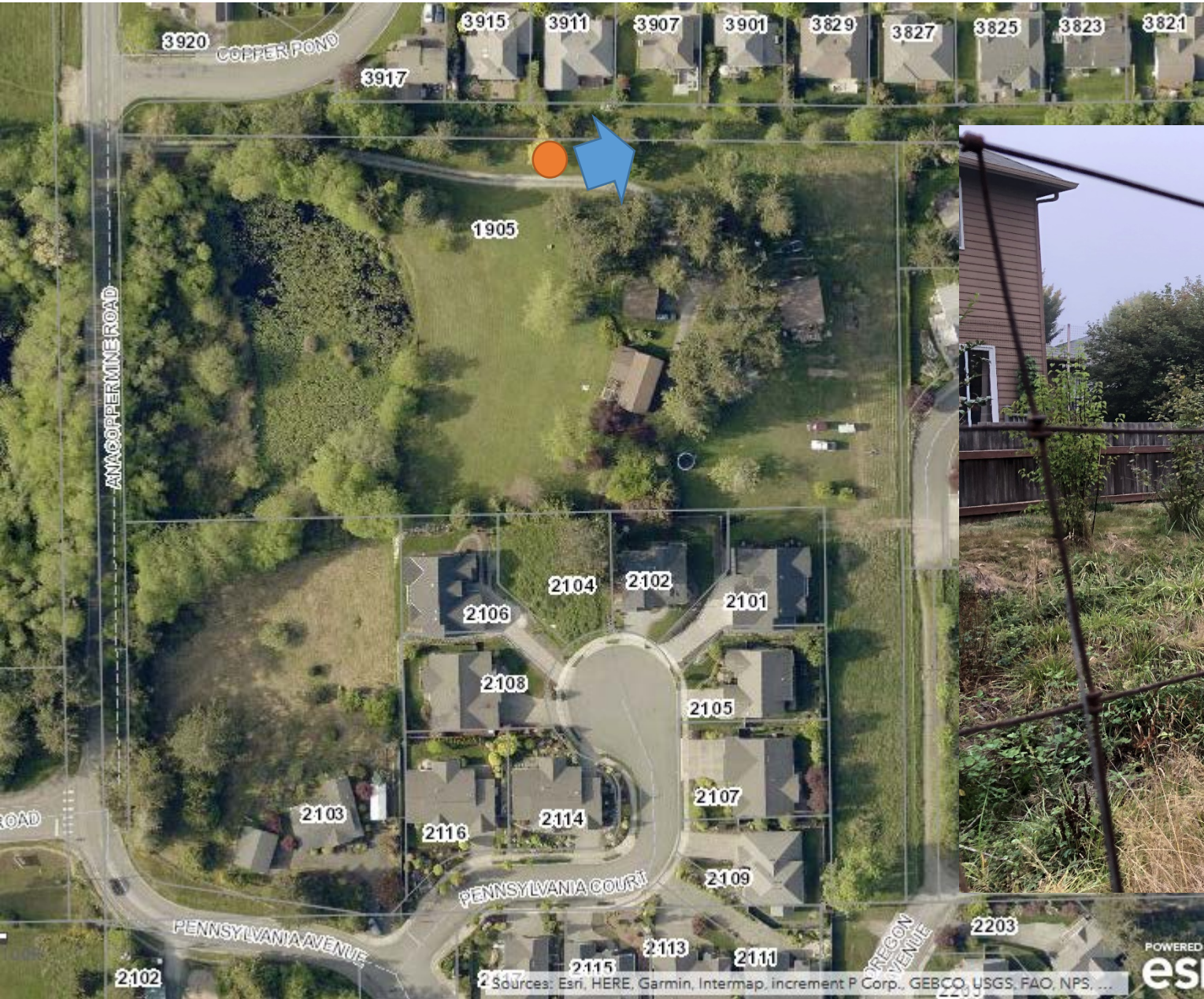




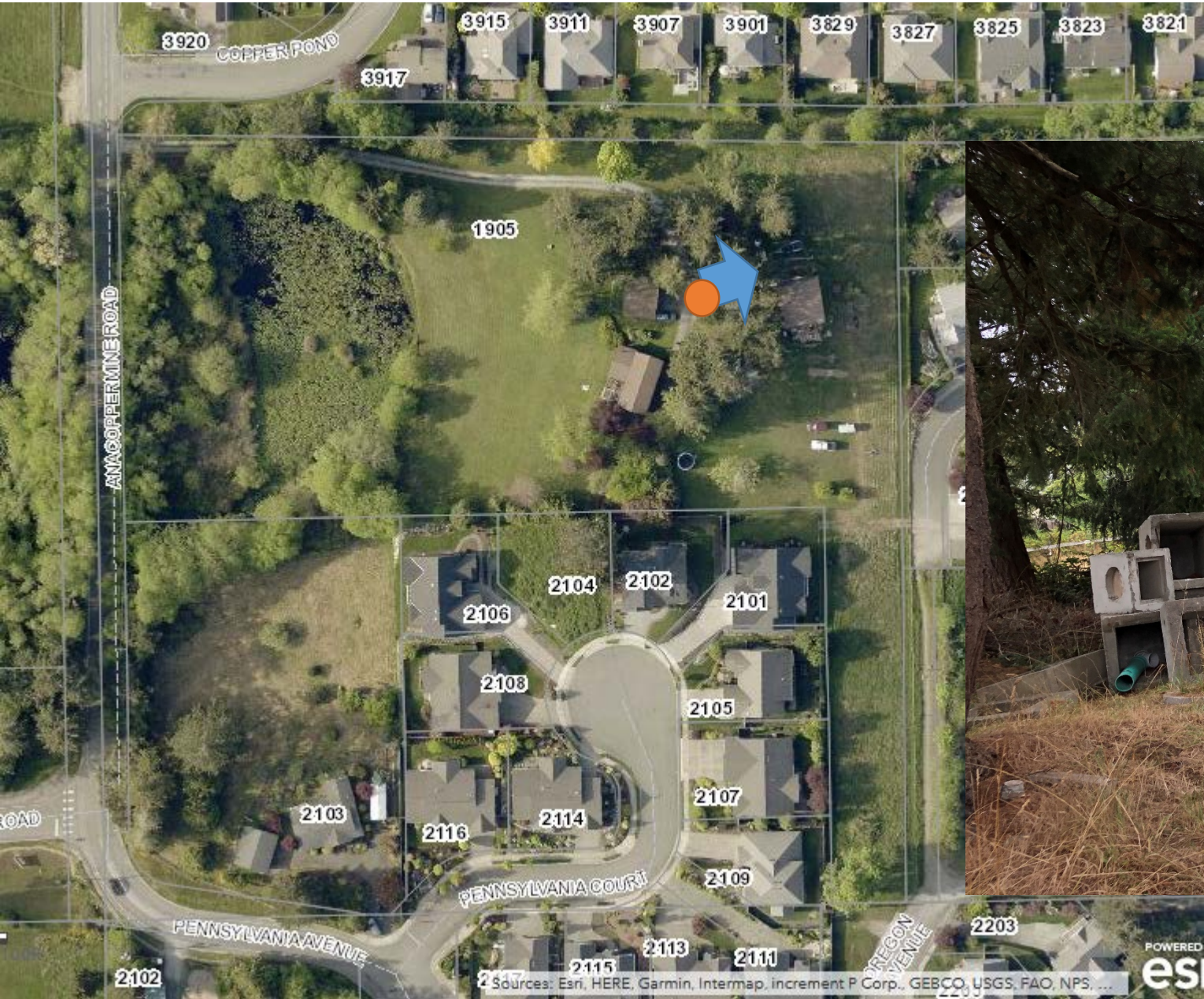




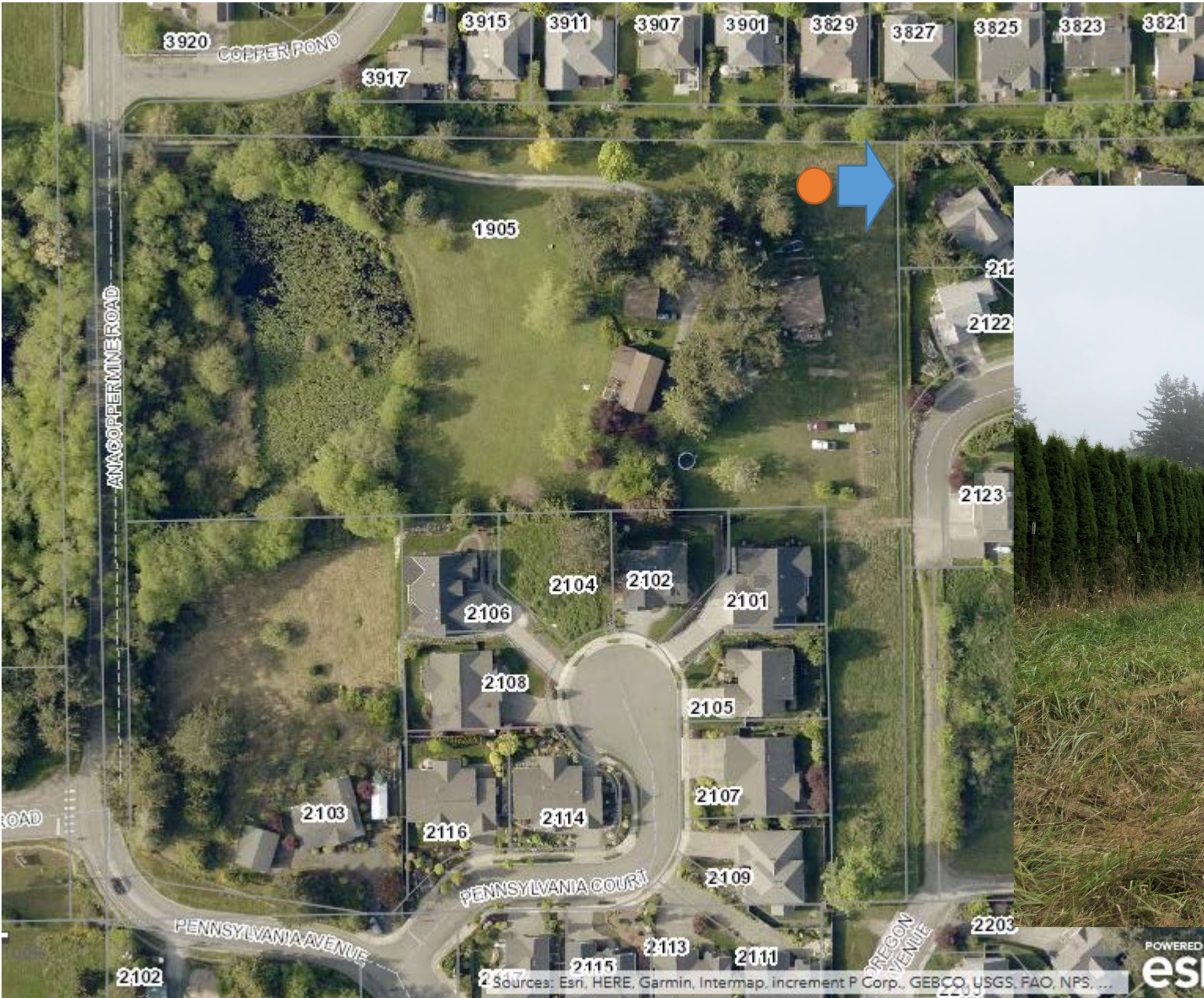




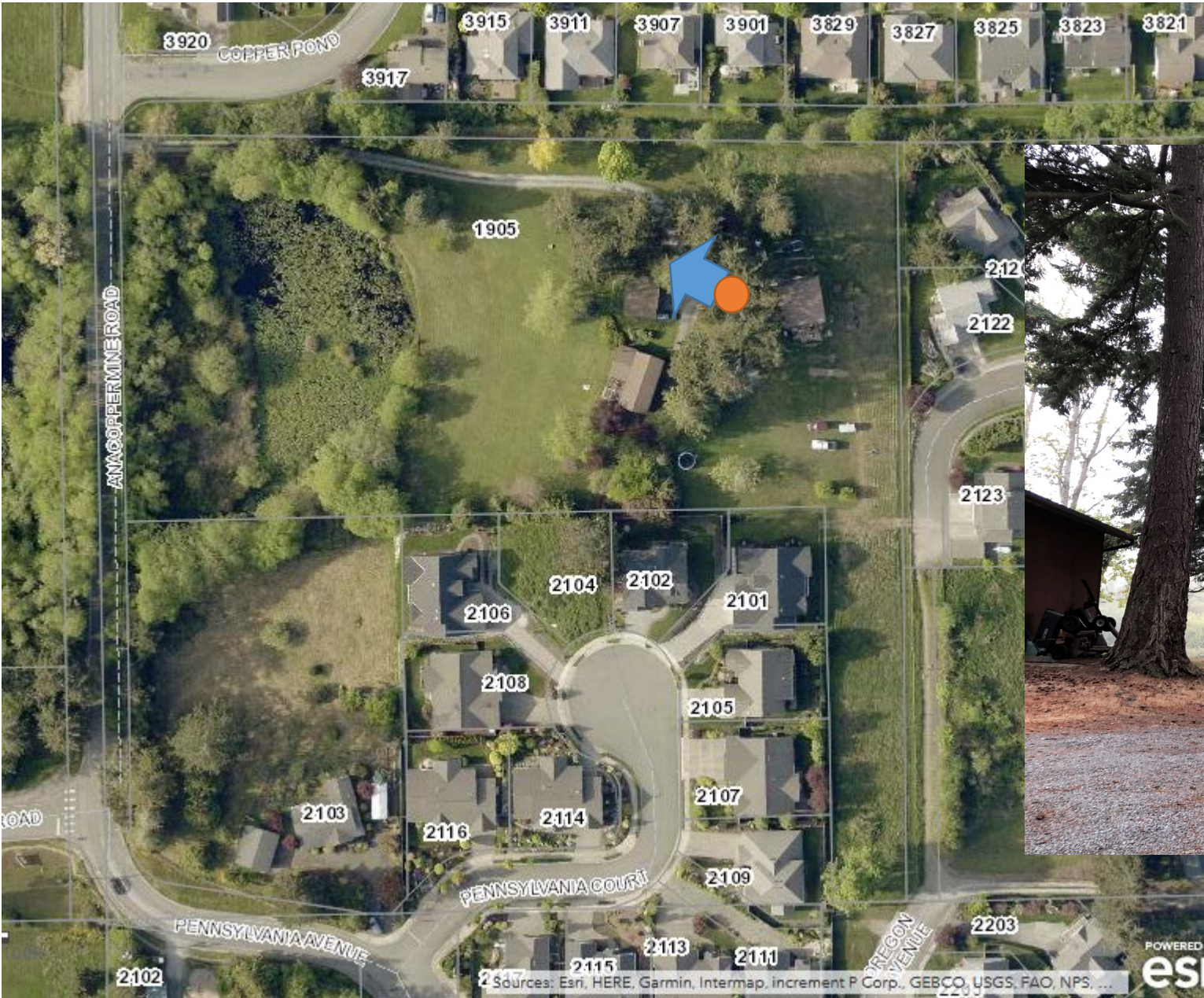




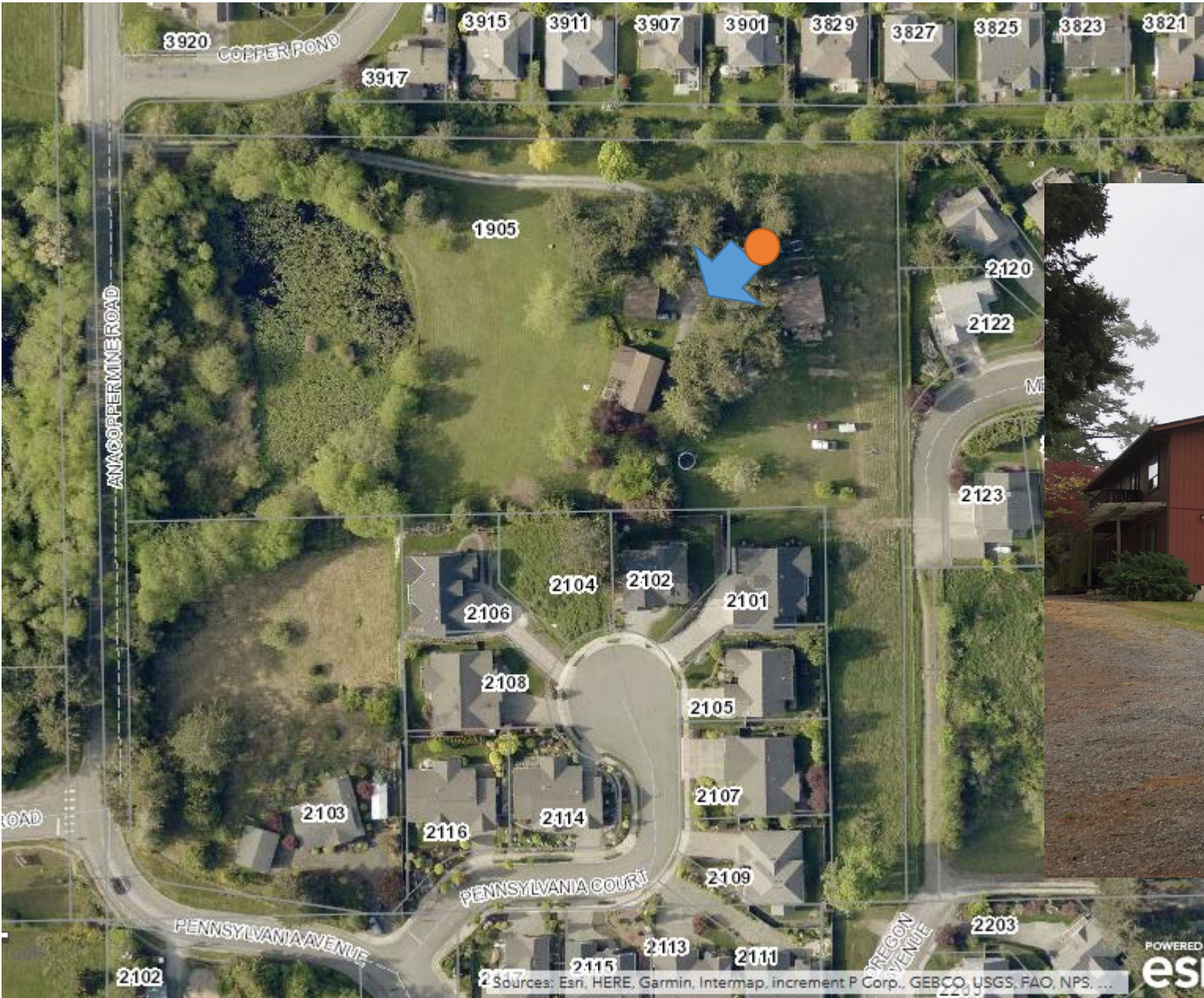




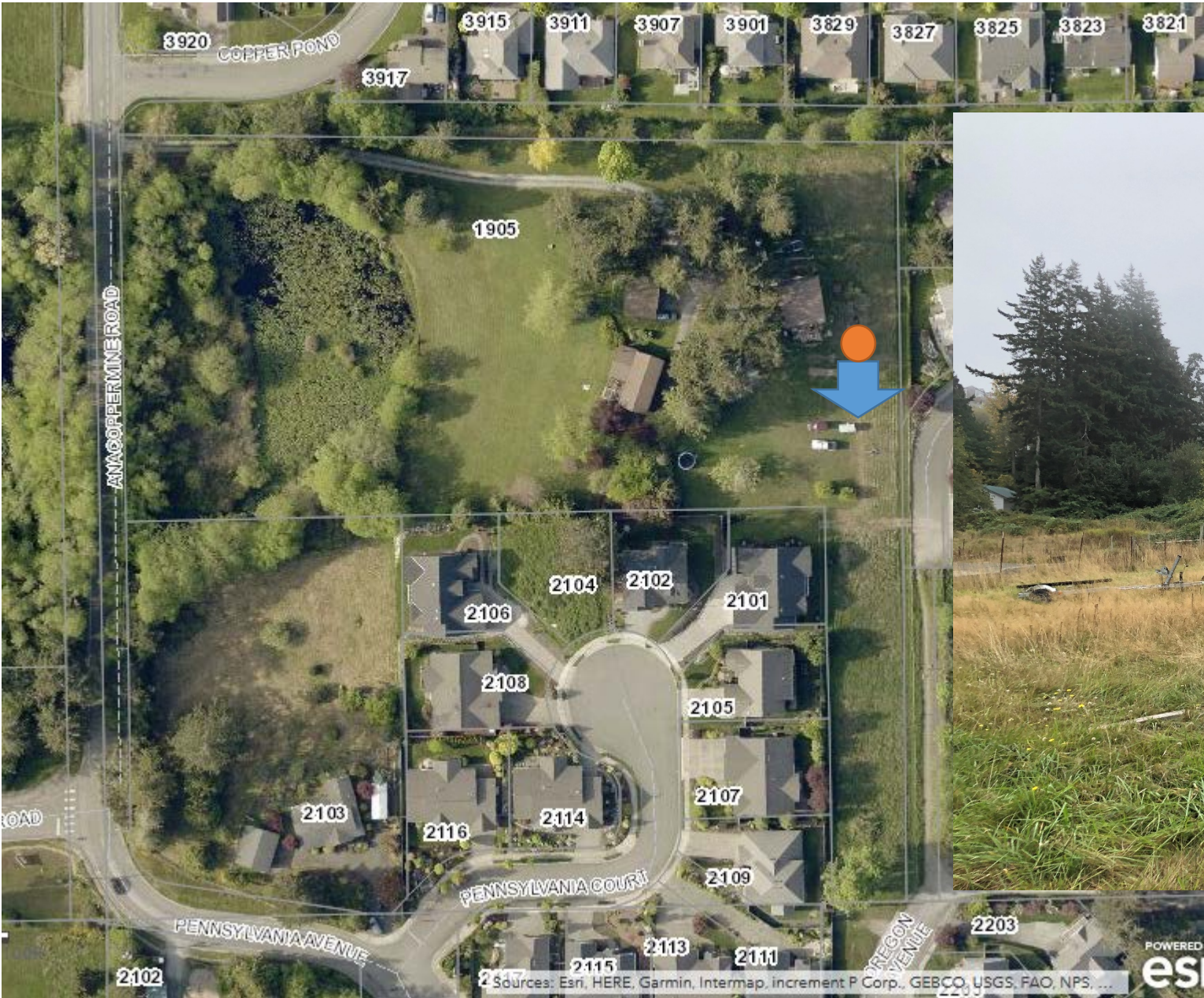




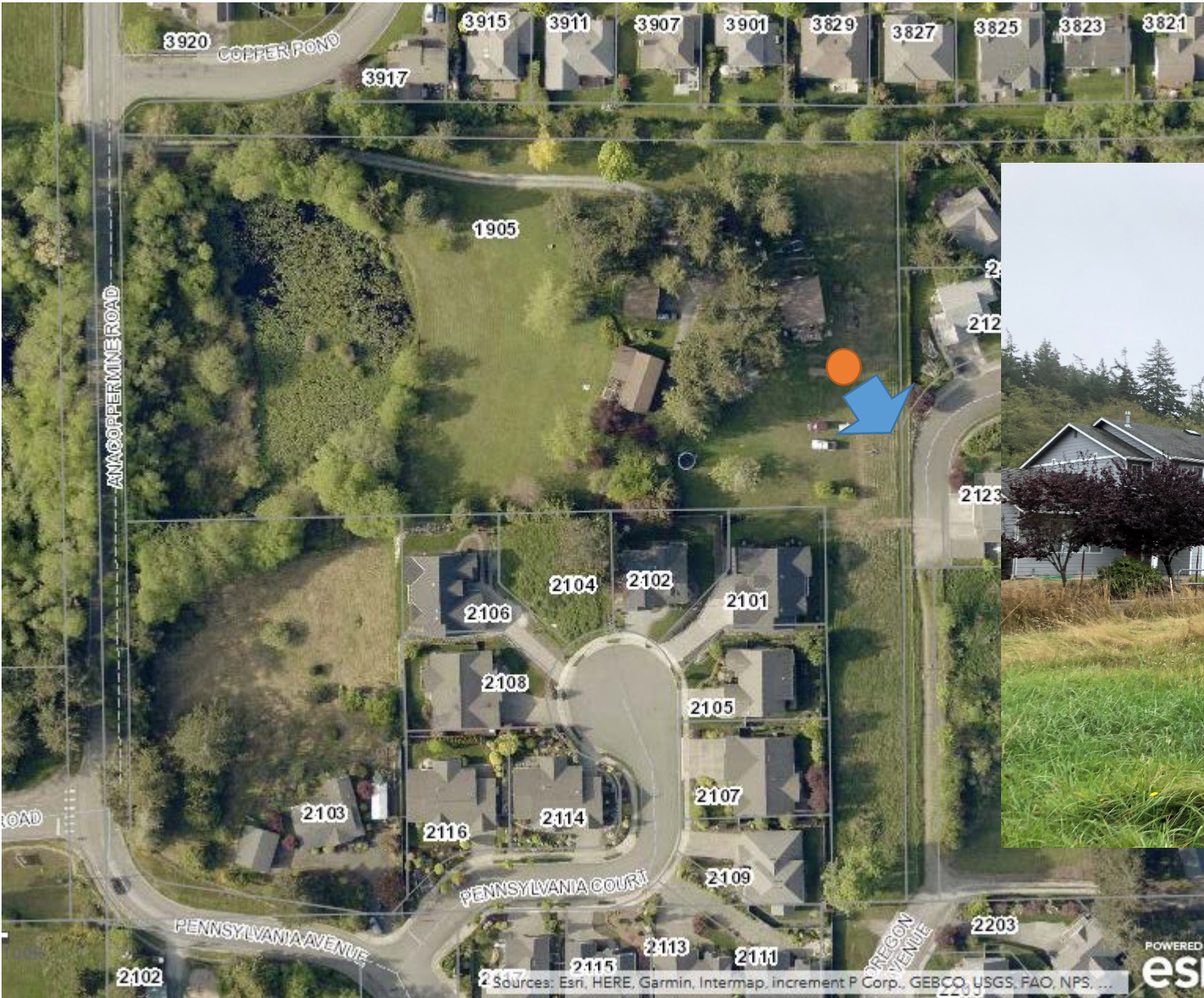




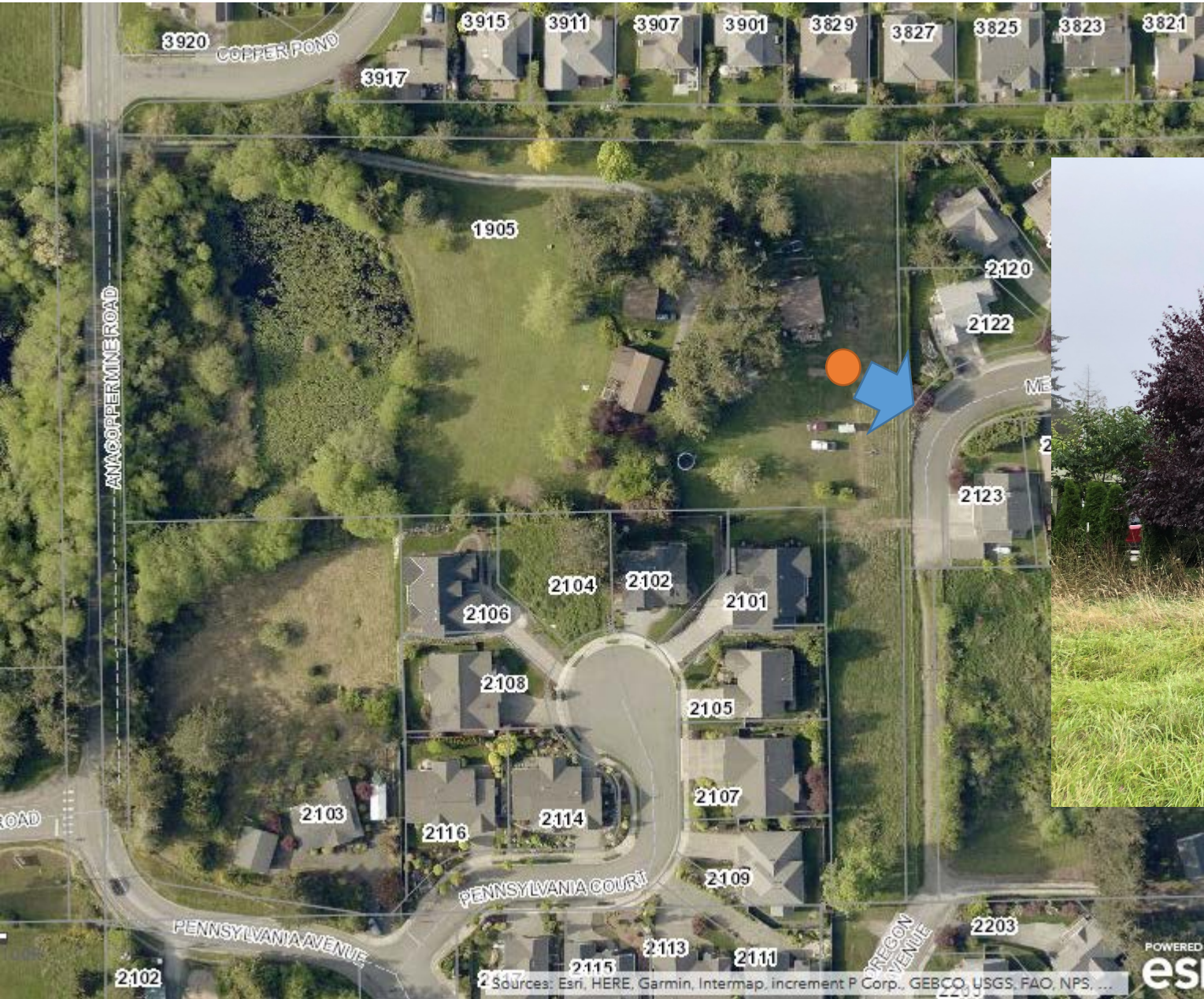




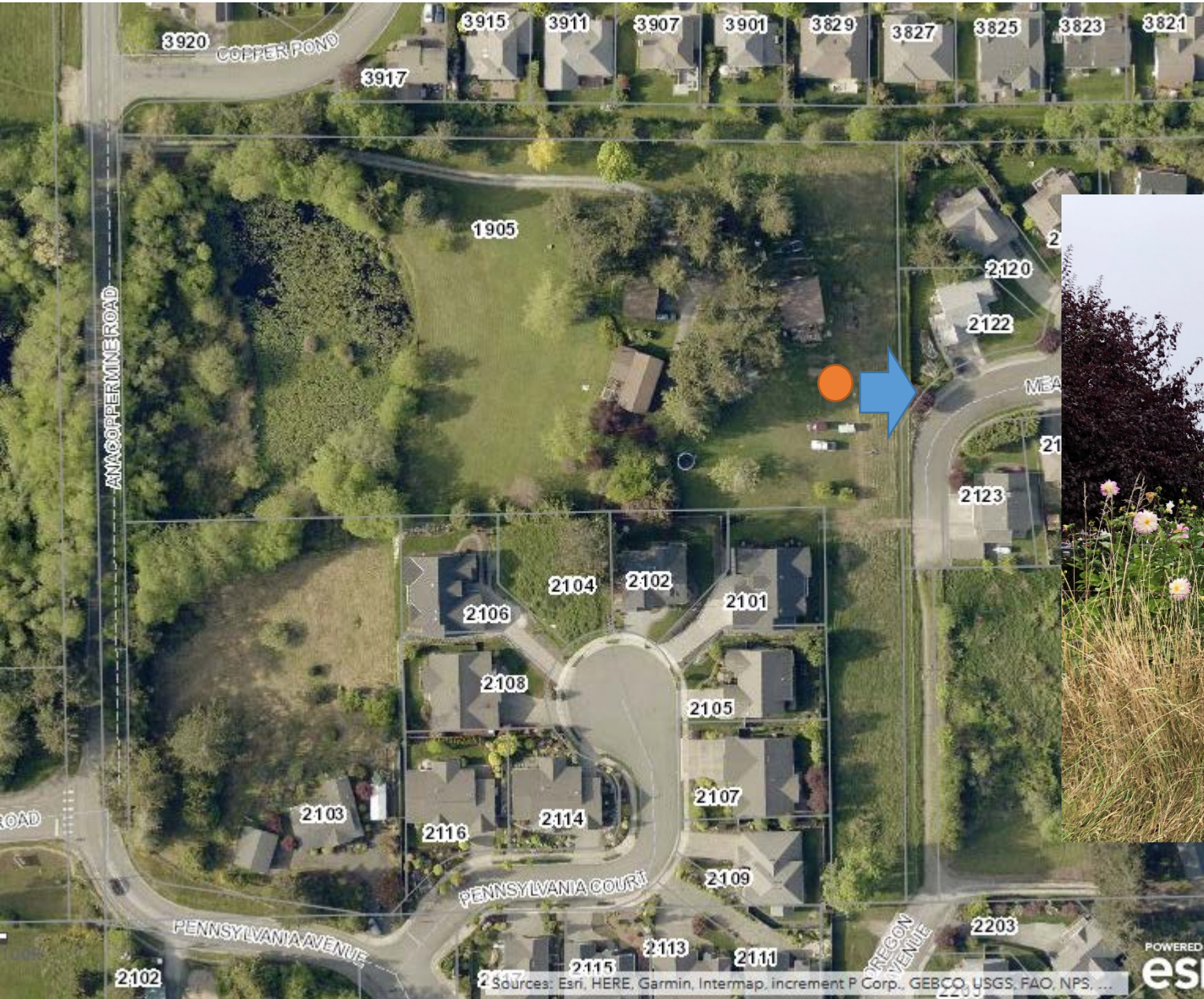




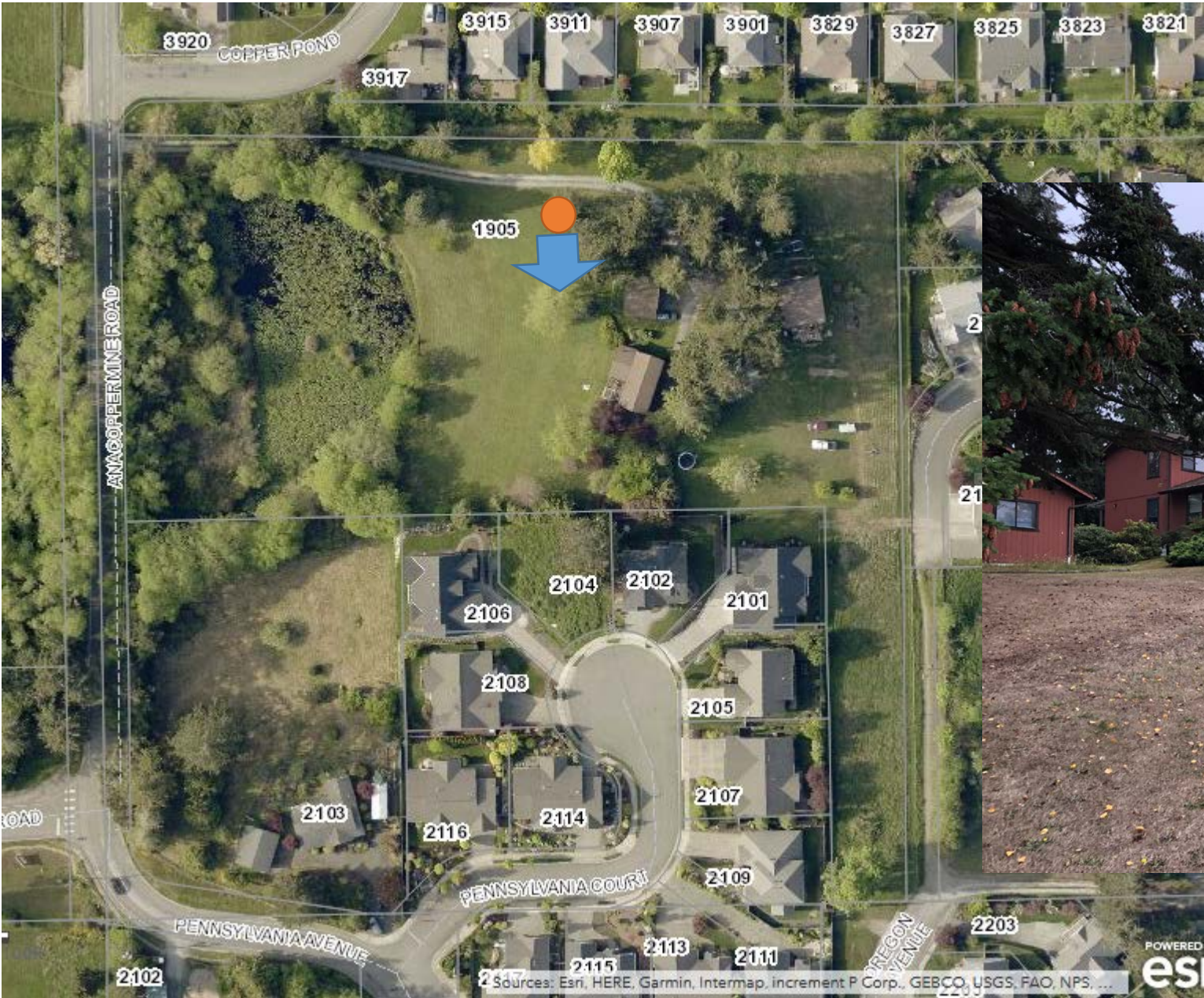




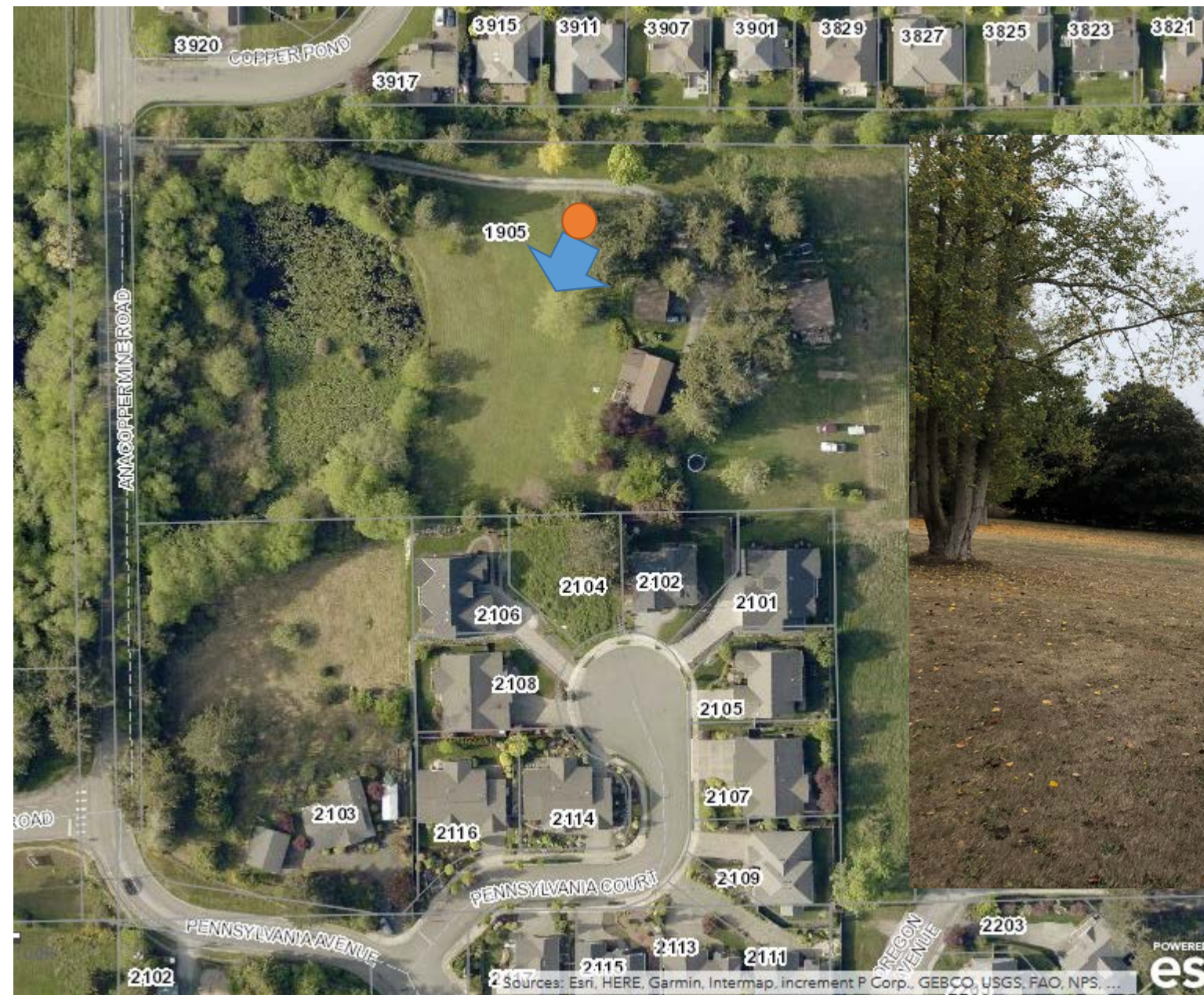




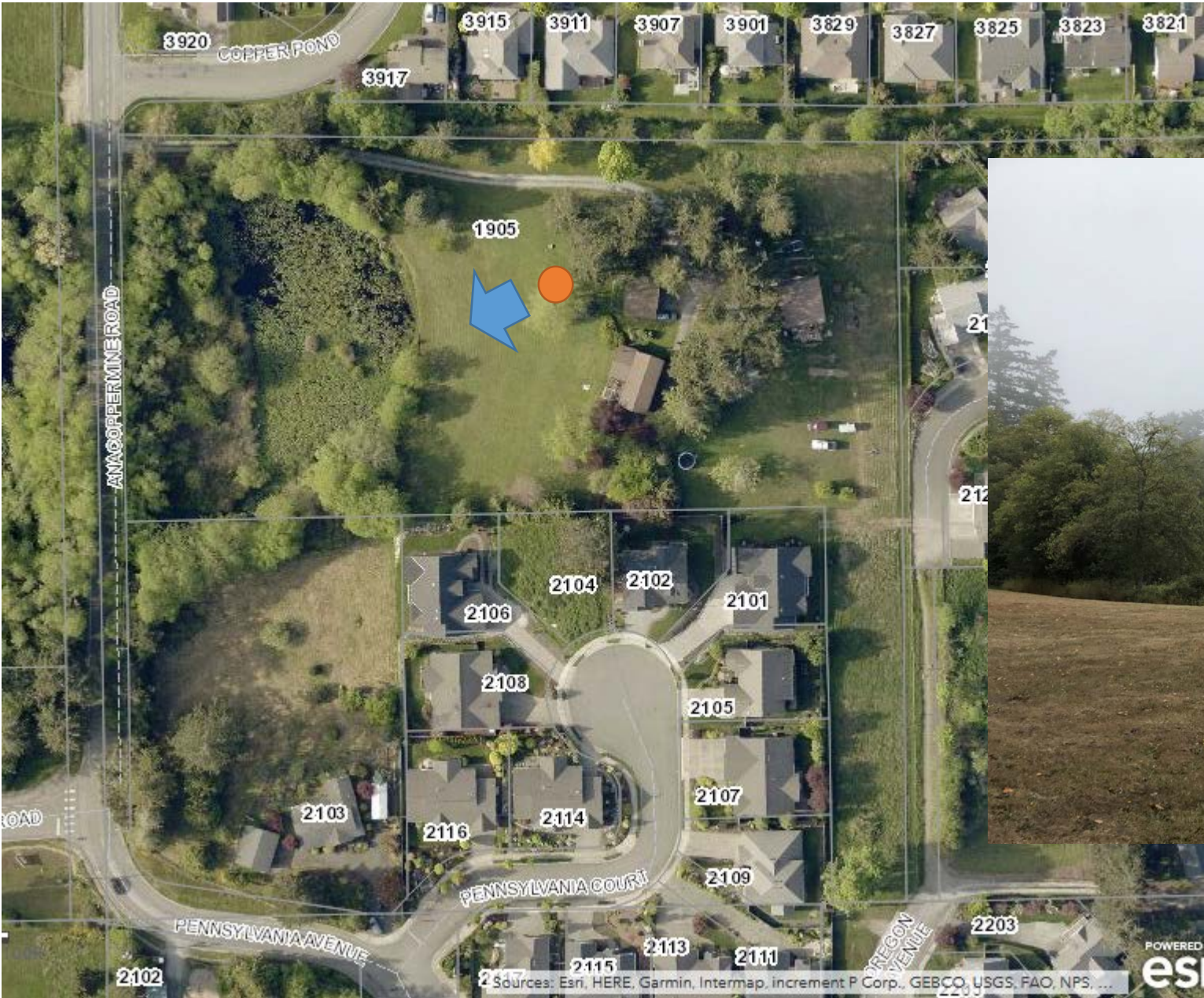




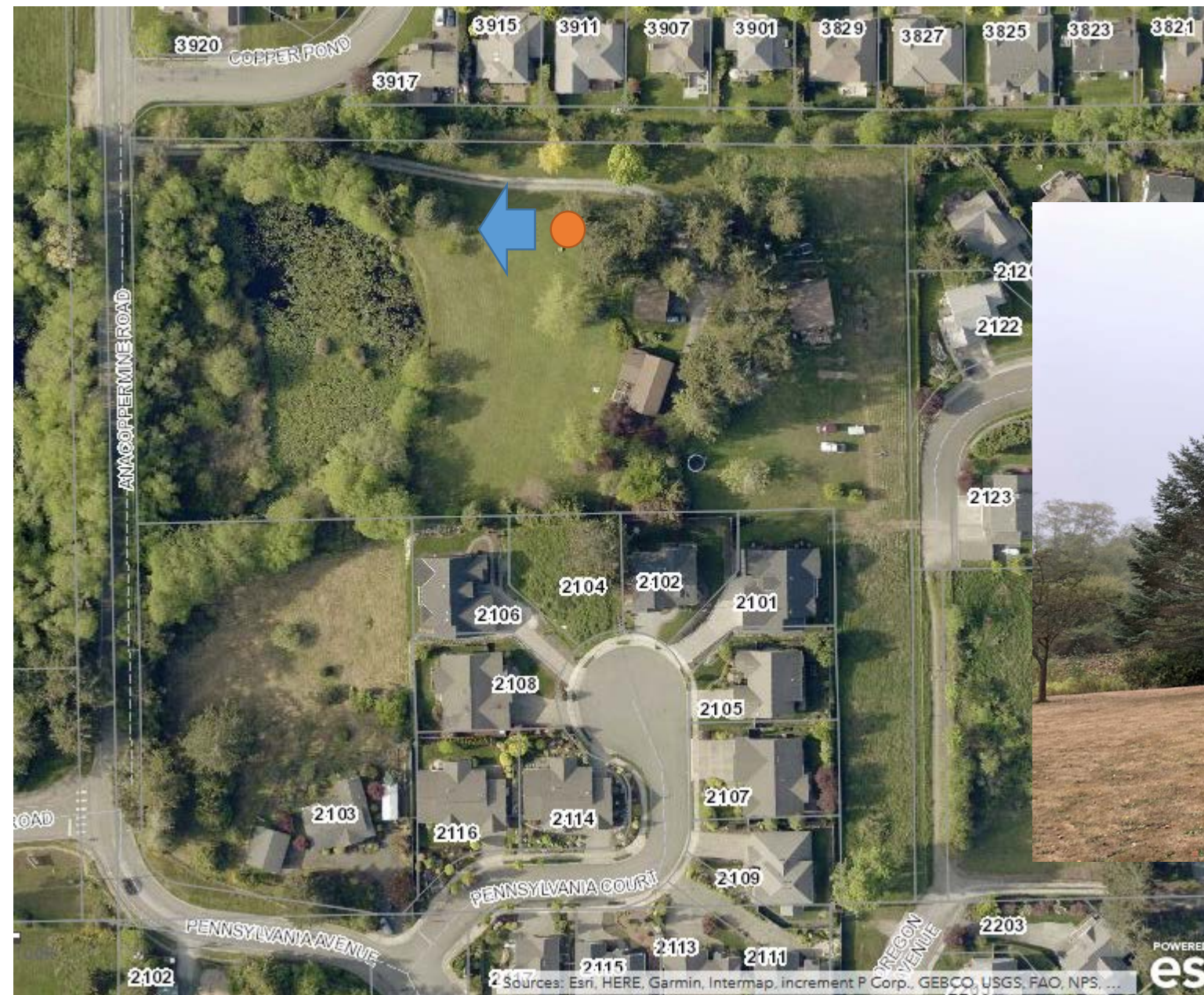




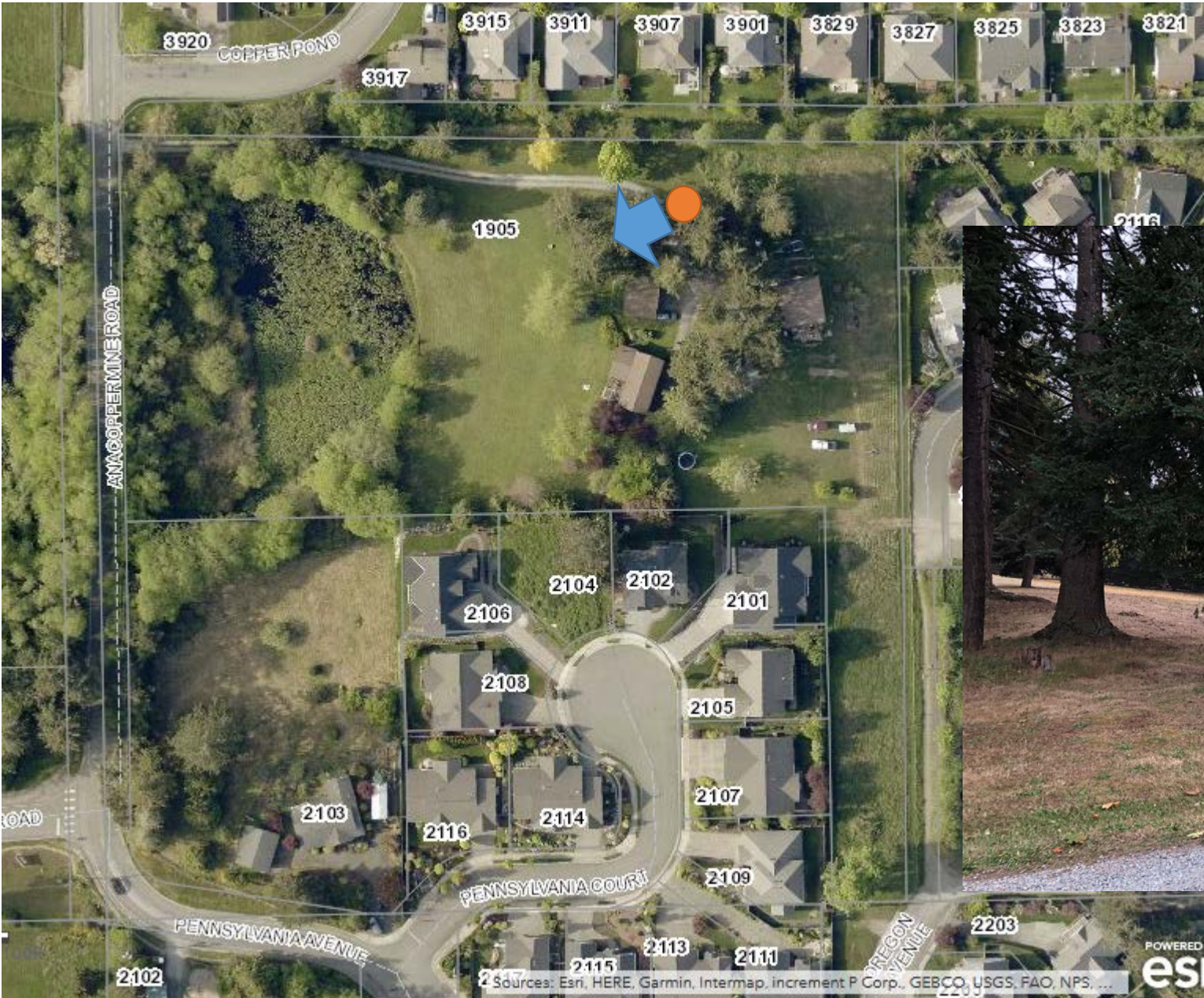




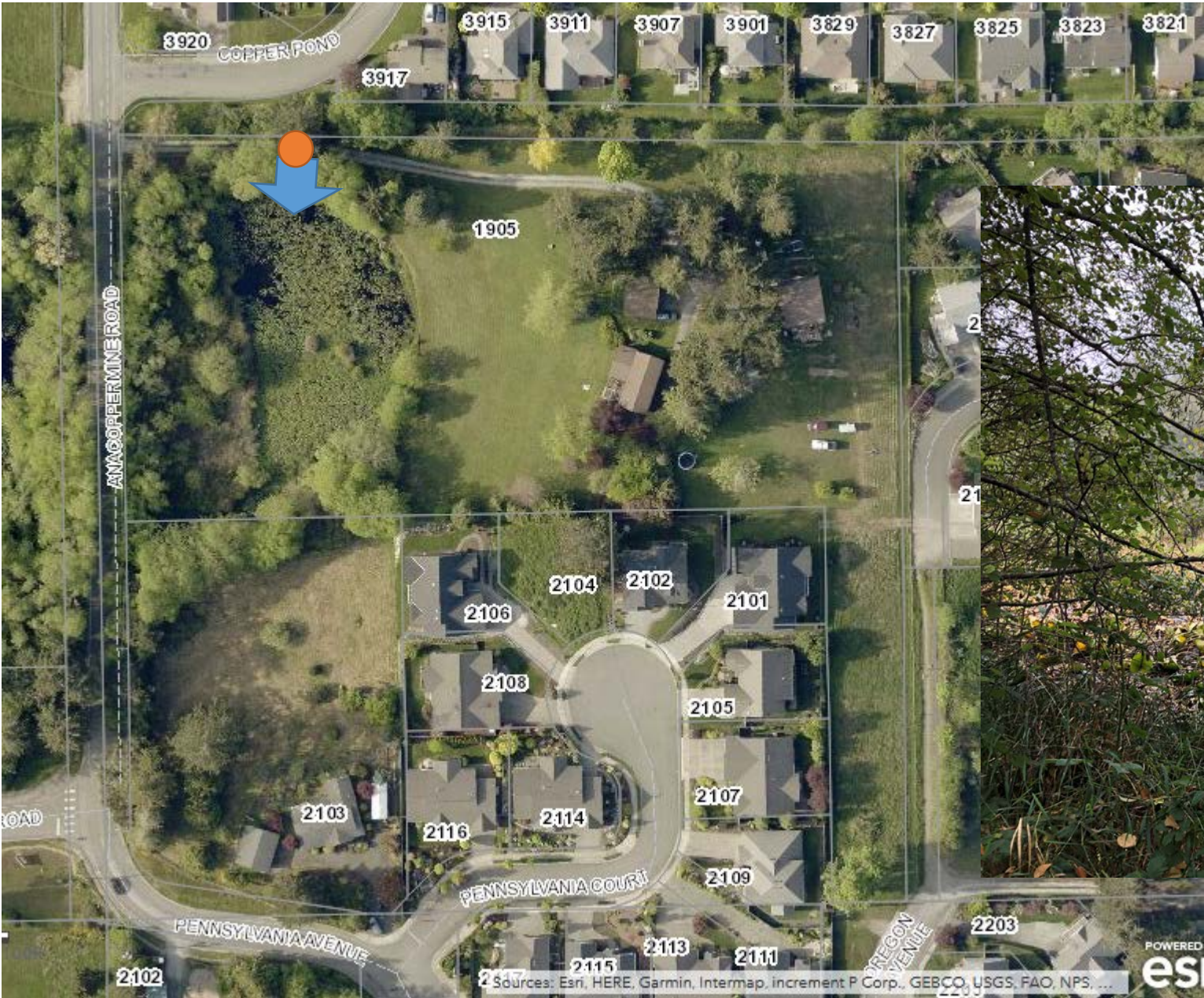




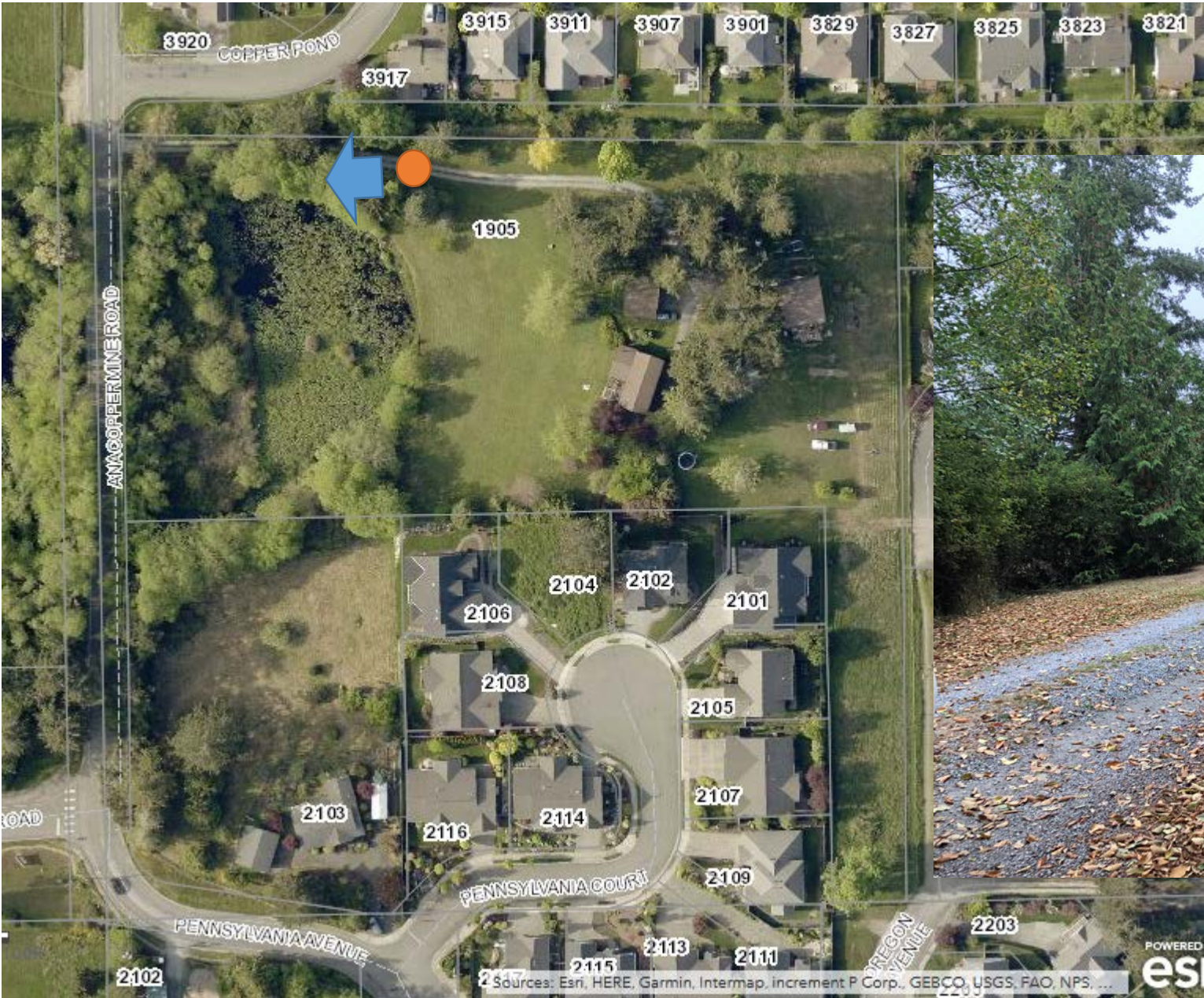




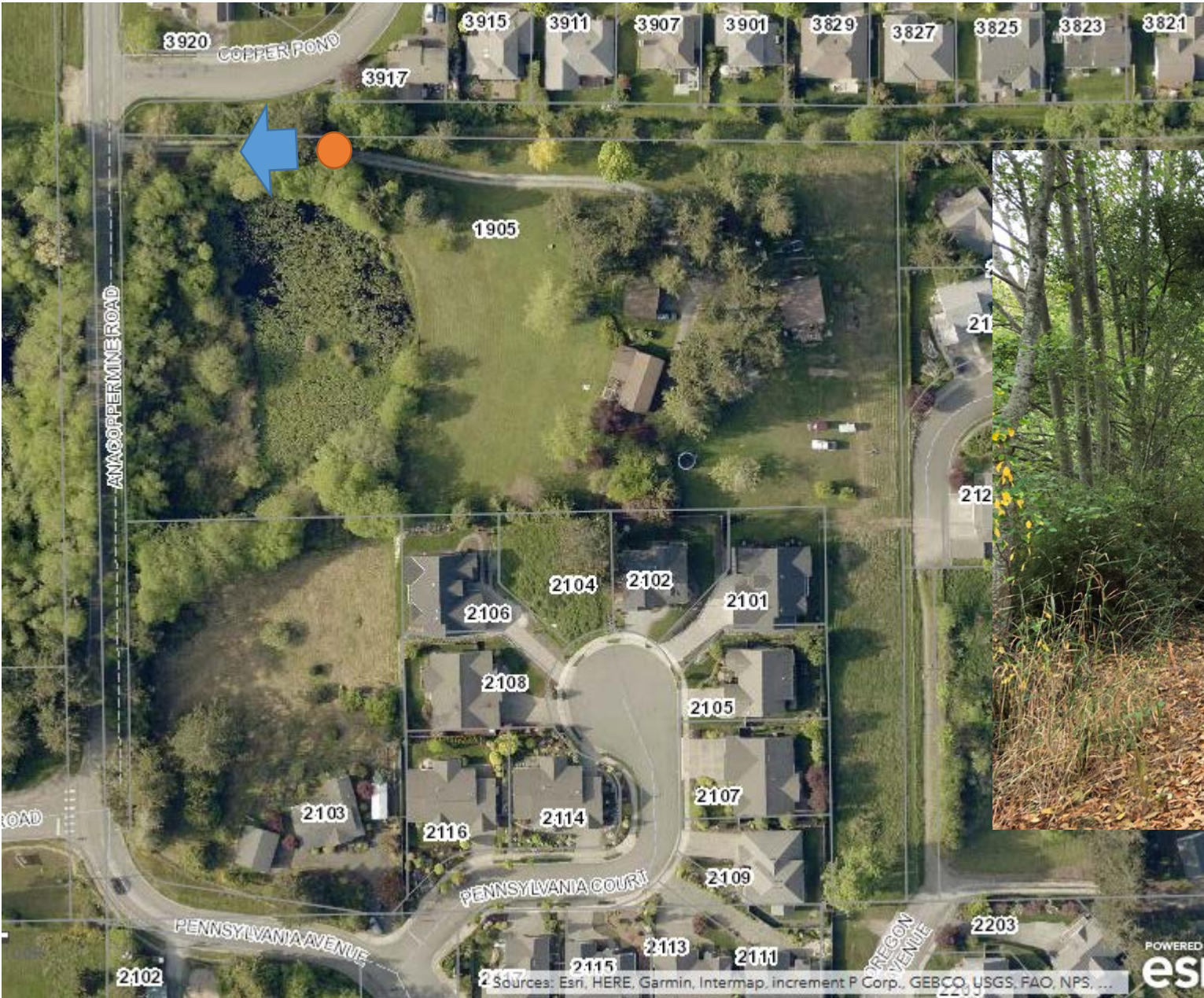




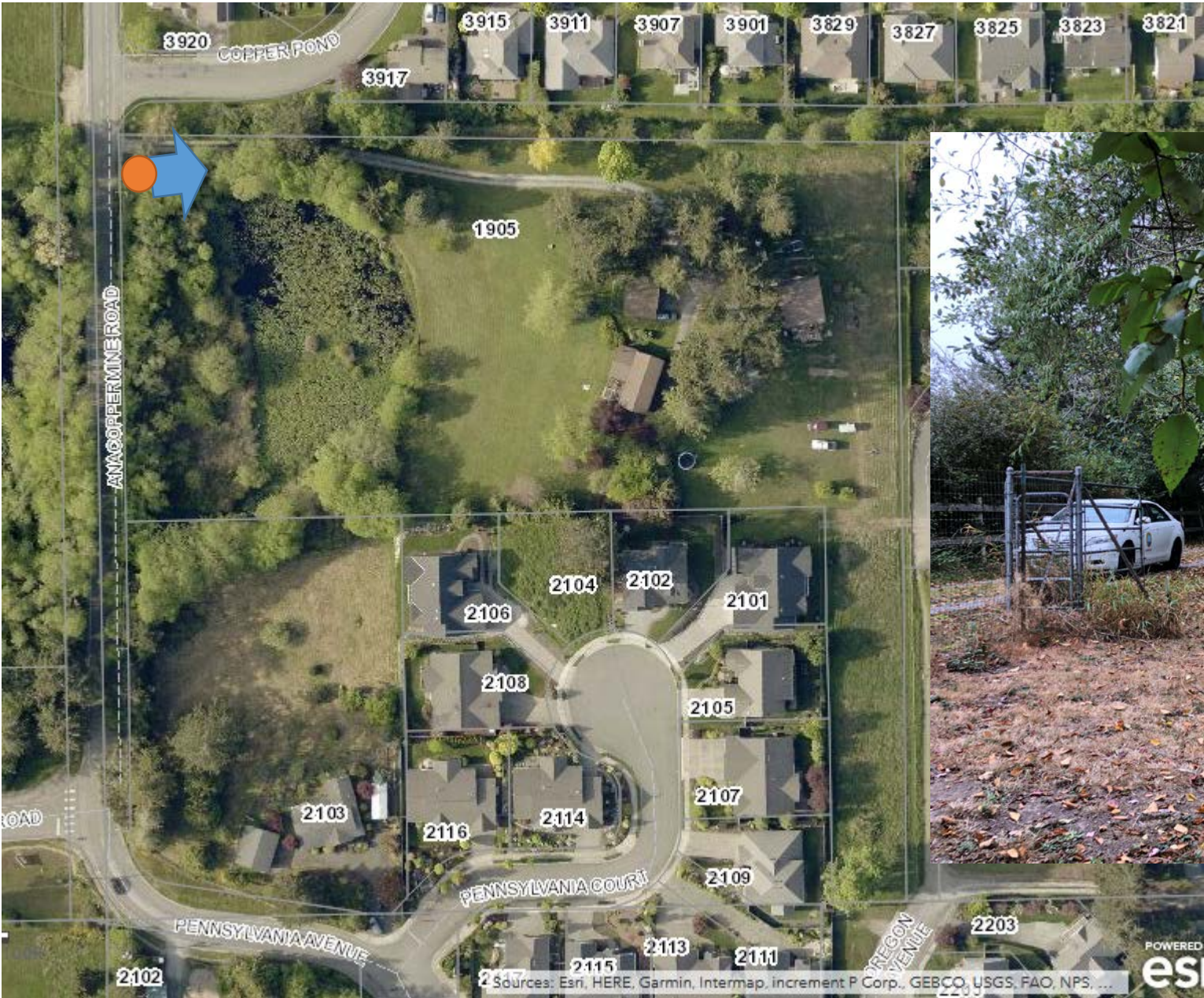




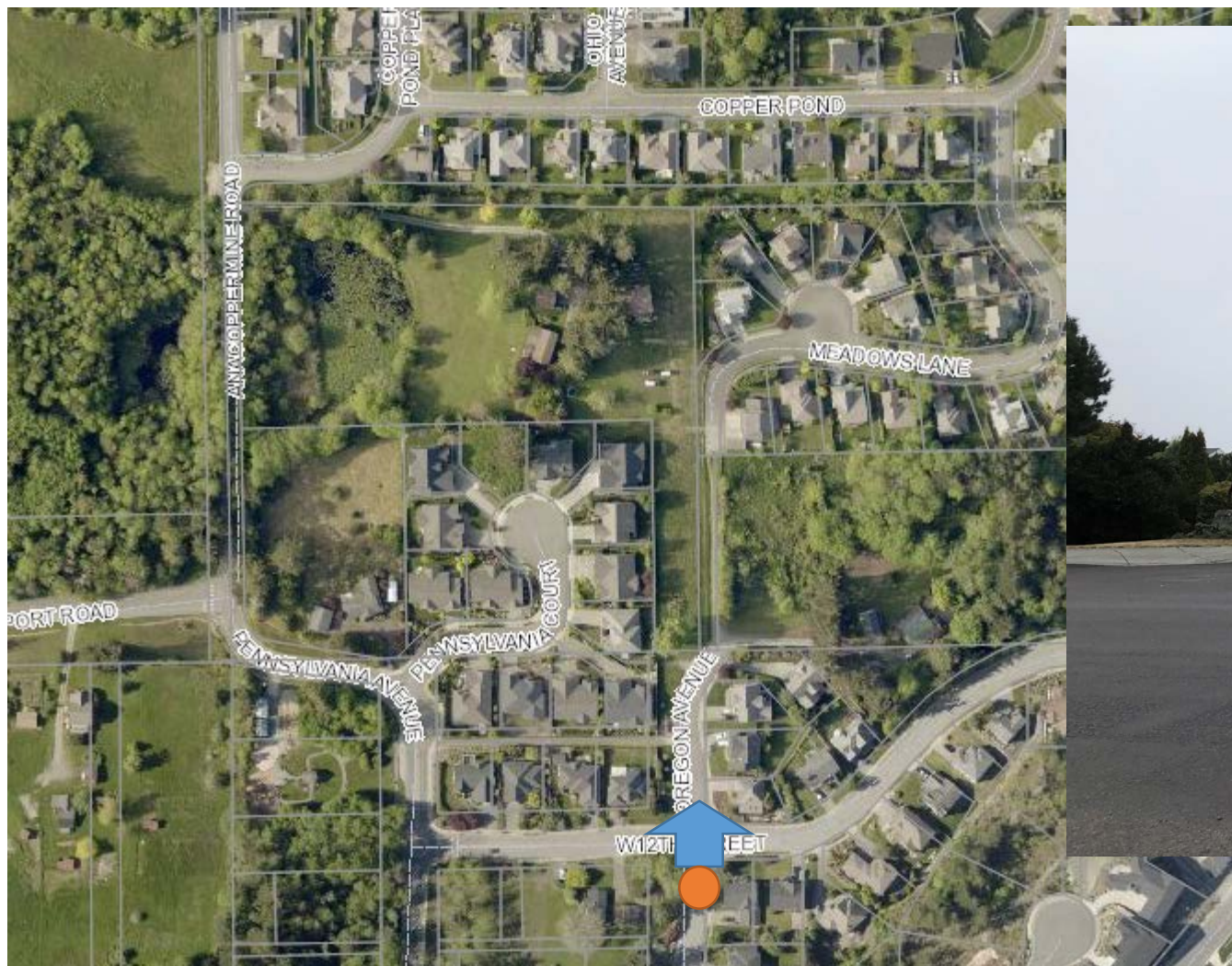




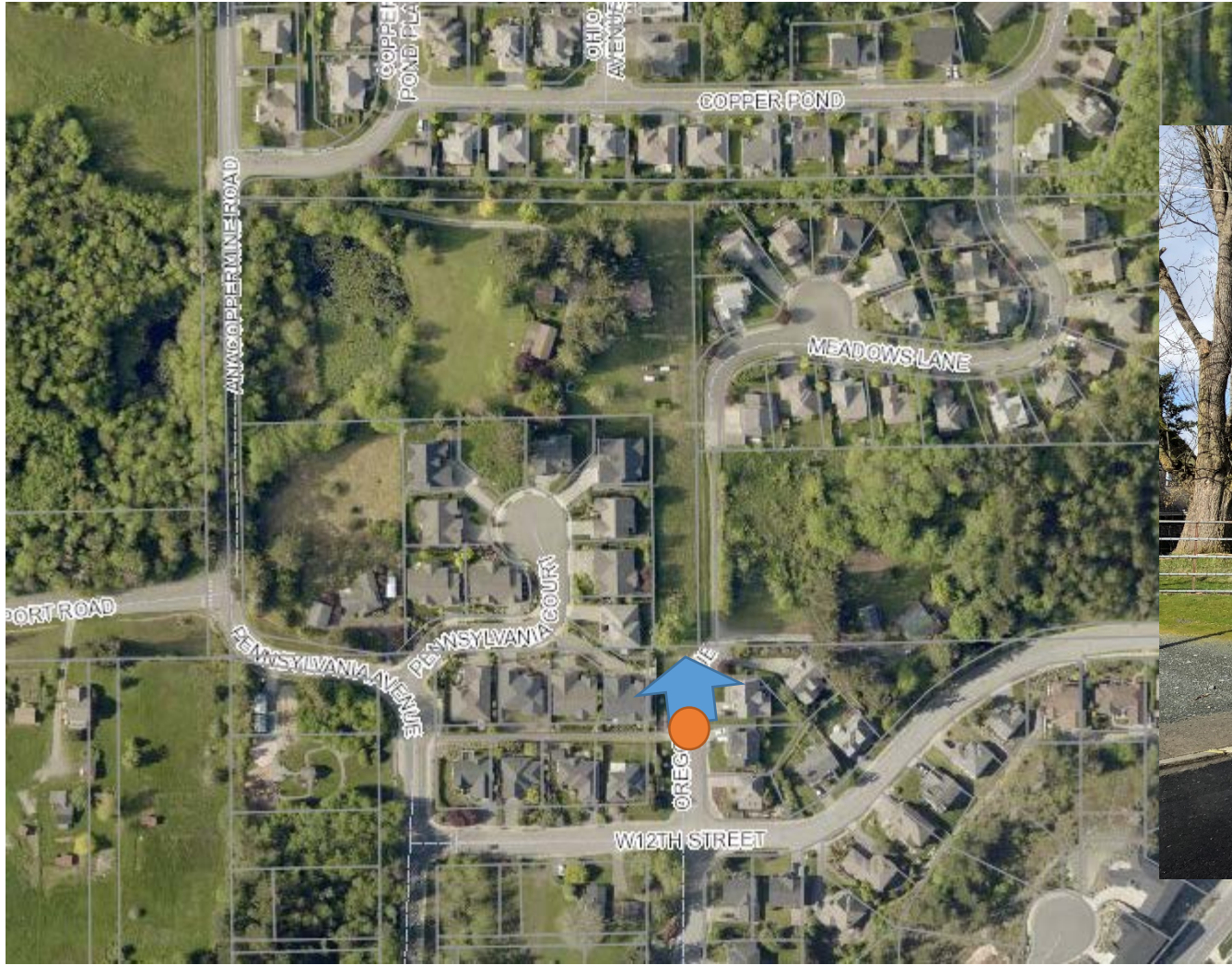




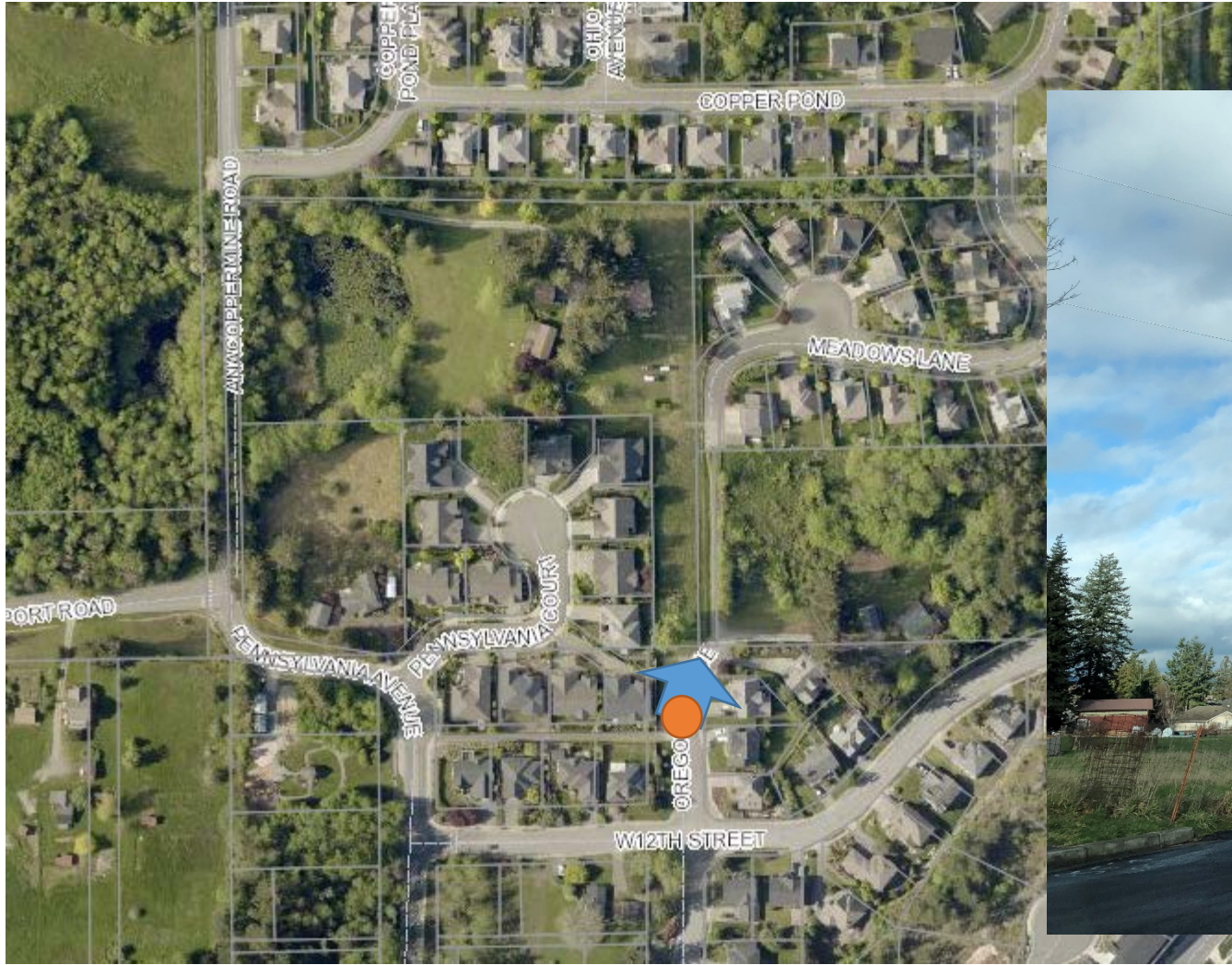




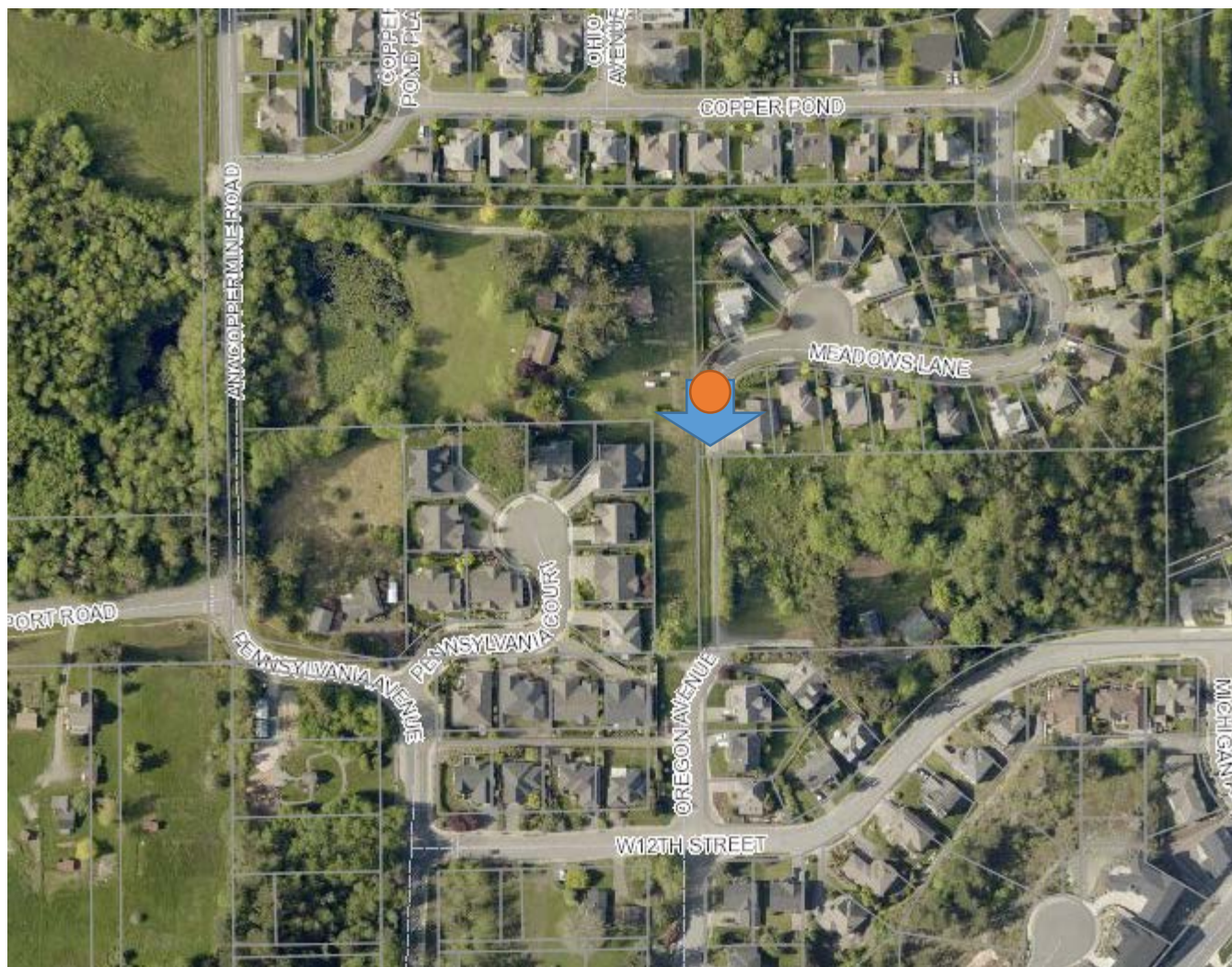




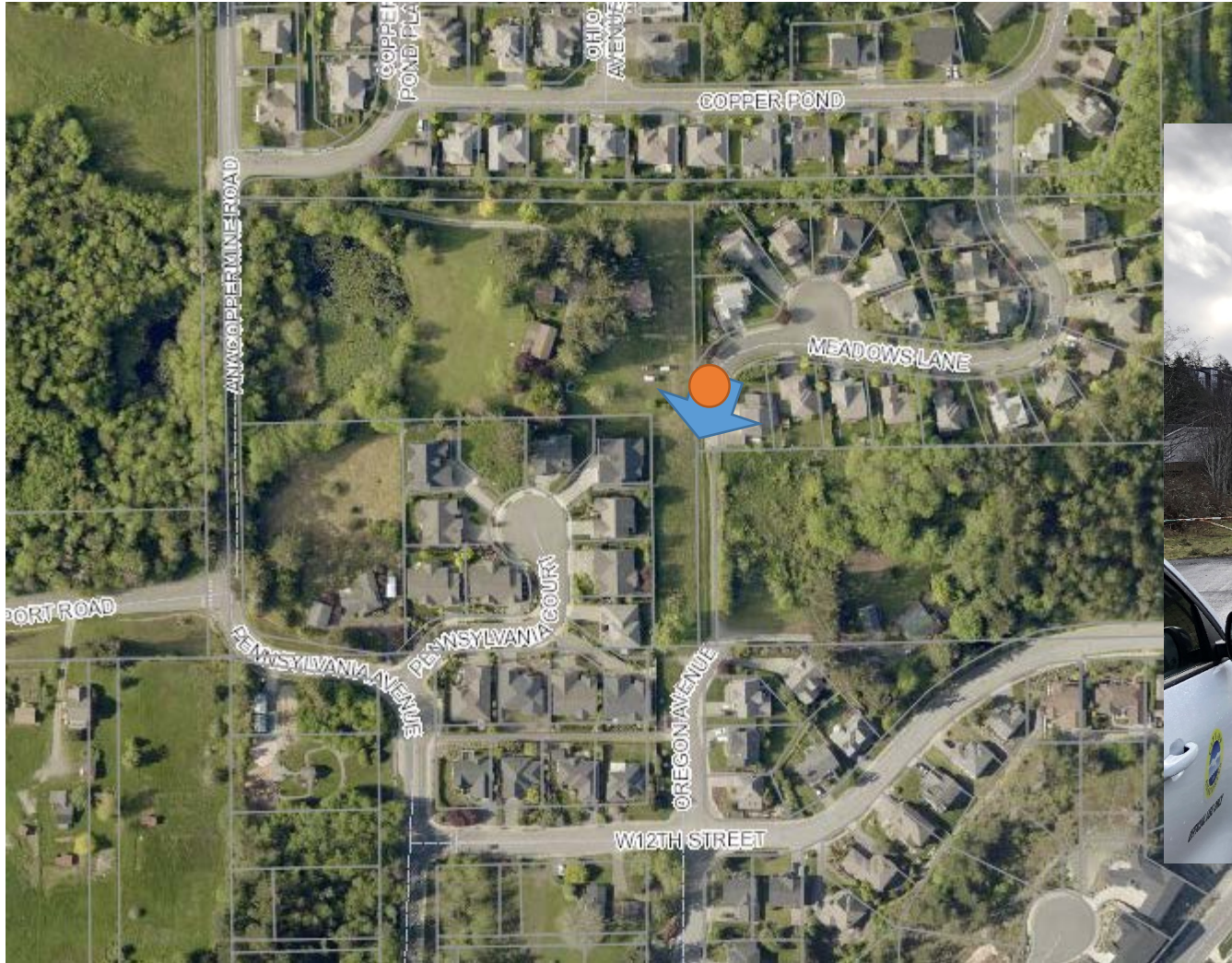




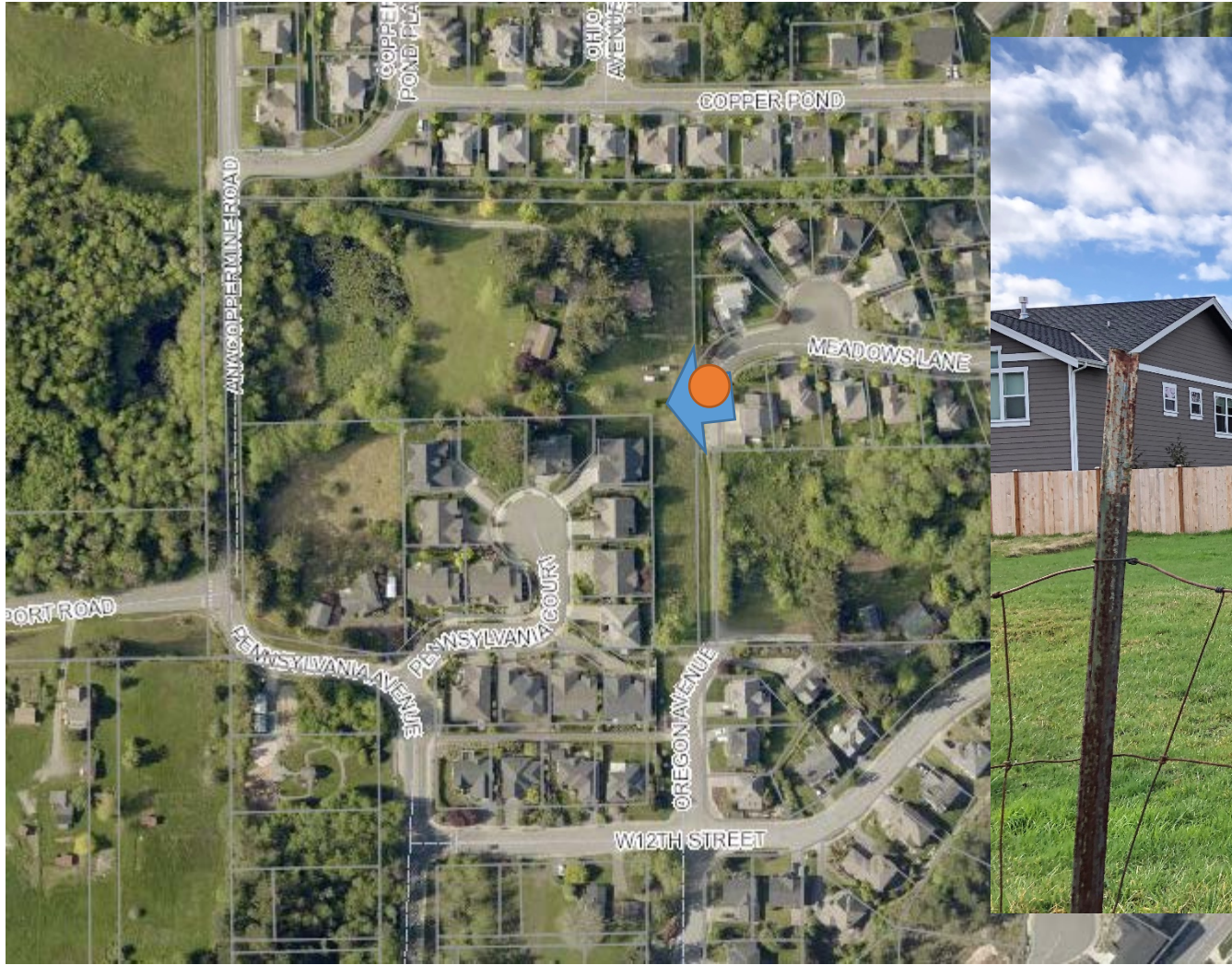




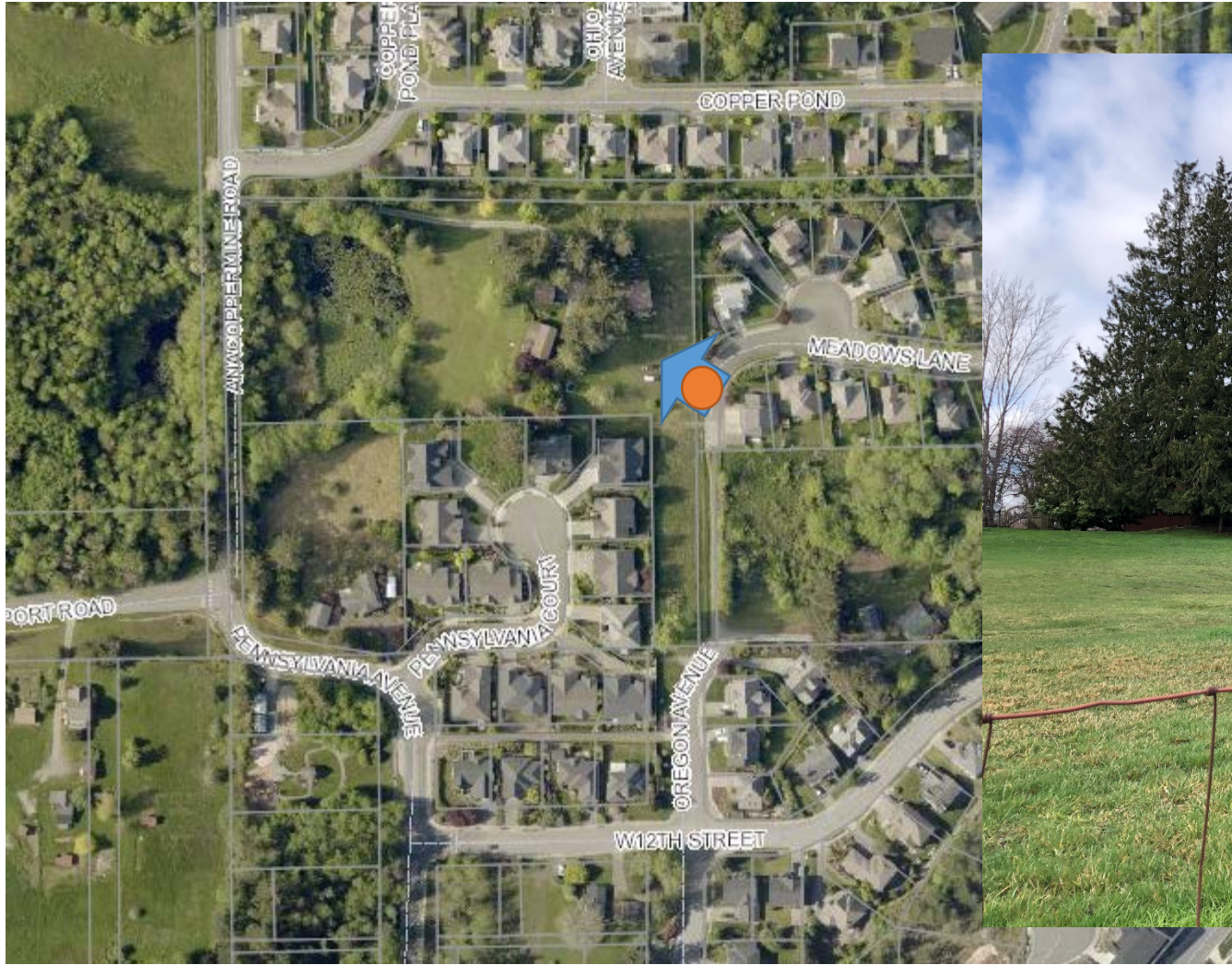




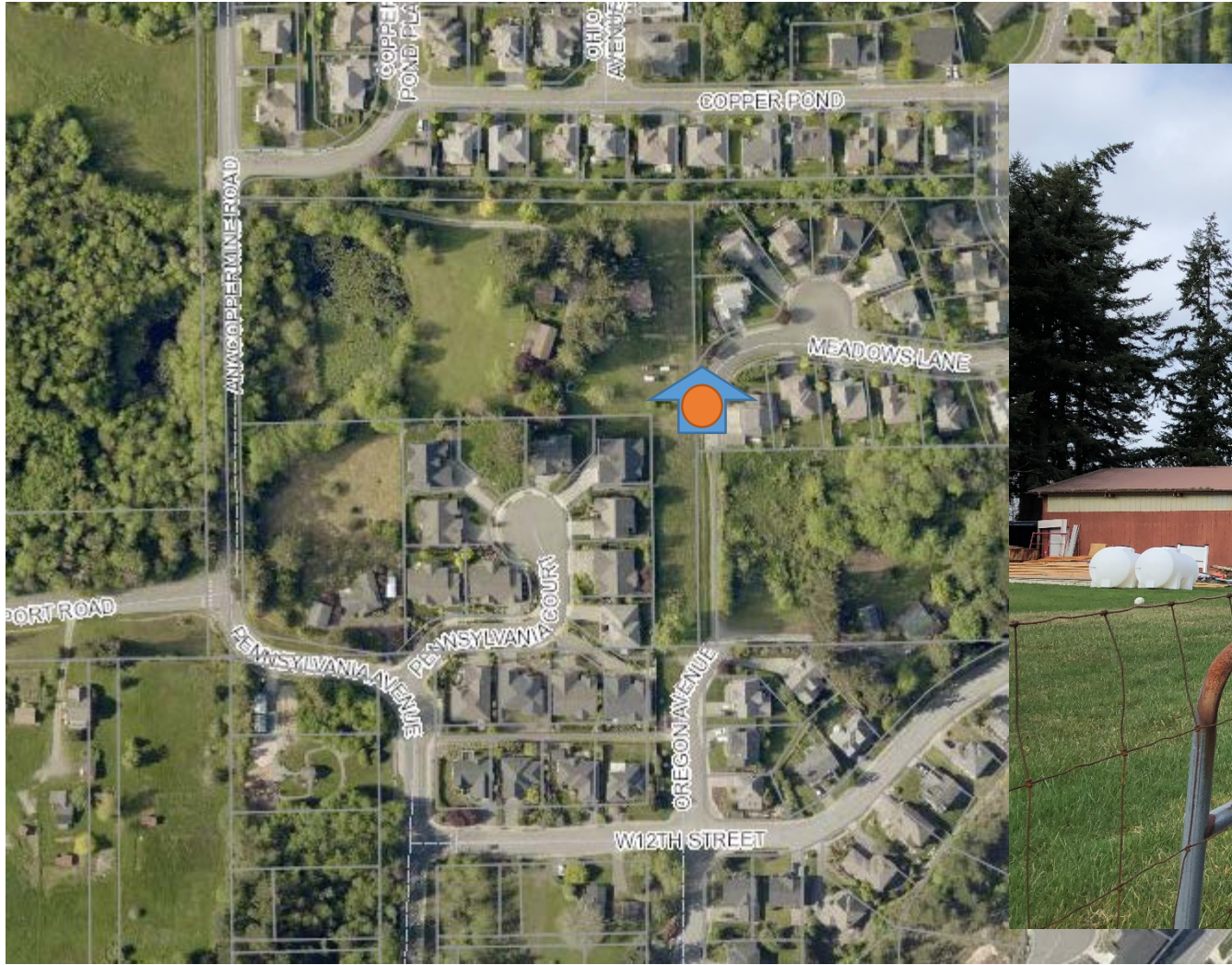




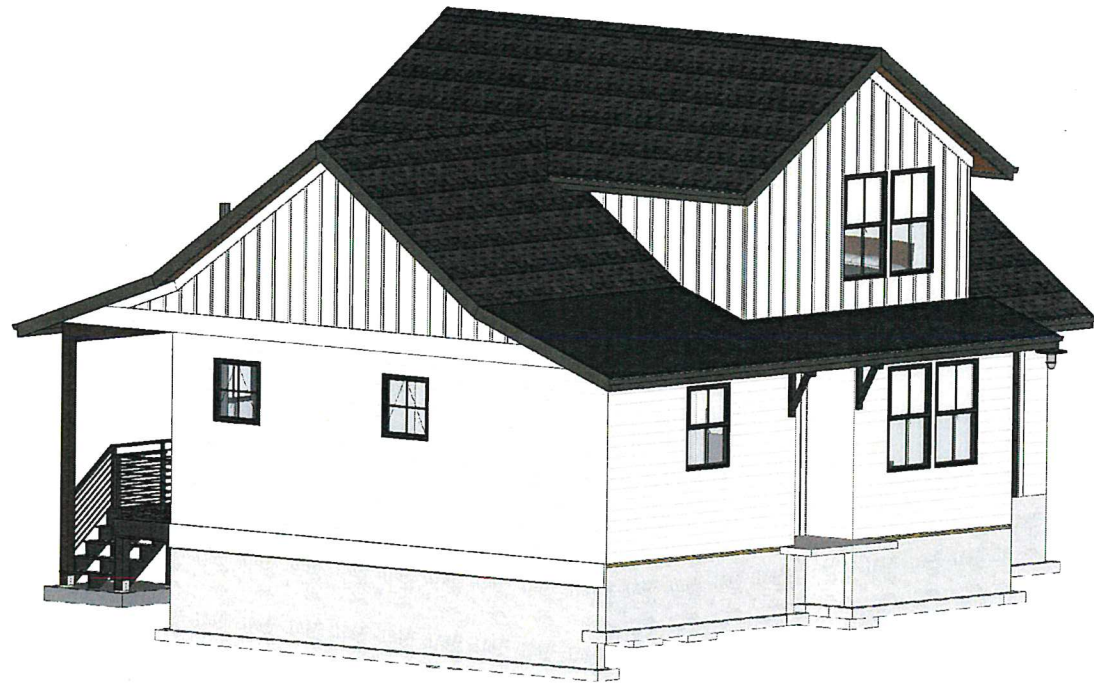












1 South-West Exterior Perspective  
A11 NTS



2 South-East Exterior Perspective  
A11 NTS



3 North-West Exterior Perspective  
A11 NTS



4 North-East Exterior Perspective  
A11 NTS

City of Anacortes  
Received by PCED  
Date: February 21, 2020

DESIGNED BY  
JASON STERLING  
SCALE  
1/4" = 1' U.N.O.  
DATE  
10/18/2019

Strandberg  
DESIGN

BUILDER INFO:  
MAILING ADDRESS:  
P.O. BOX 318  
ANACORTES WA 98221  
PHONE:  
360-293-7431  
WEB:  
www.strandbergconstruction.com

PROJECT / CLIENT INFO

PROJECT NAME

1905 Anacopper Road, Anacortes, WA 98221

EXTERIOR  
PERSPECTIVES

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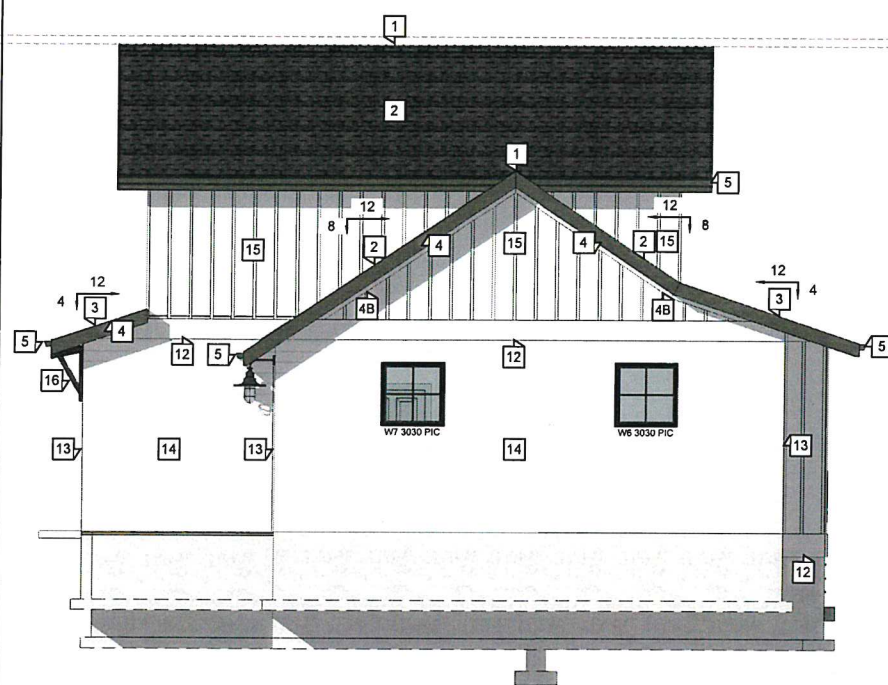
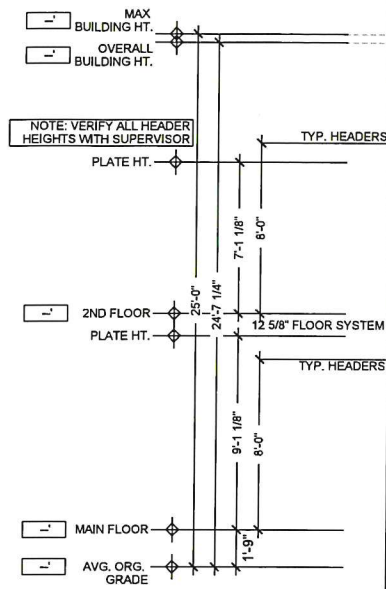
OWNER APPROVAL

DATE:  
PAGE:

A11

PAGE:  
17 of 22

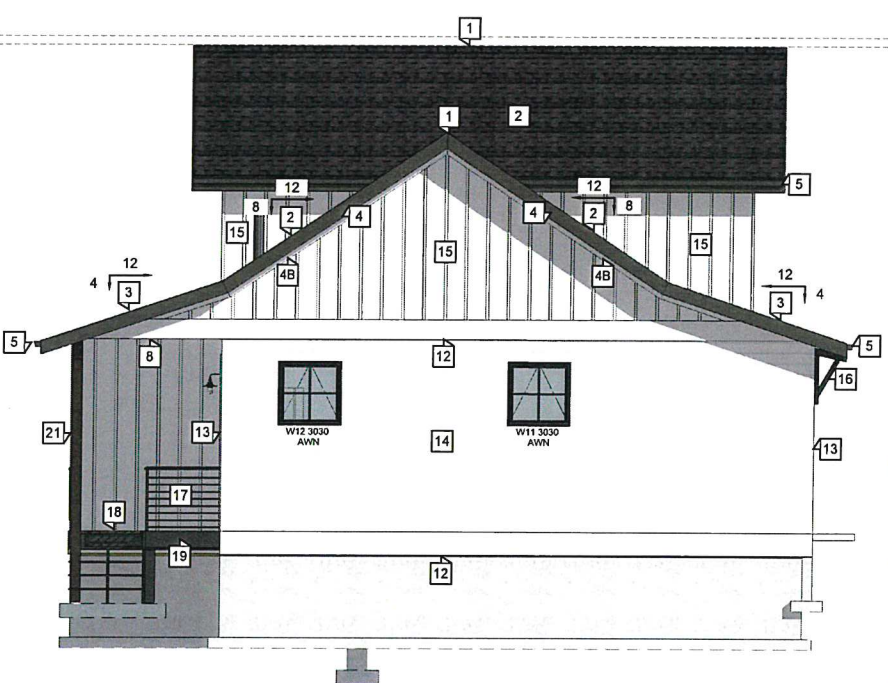
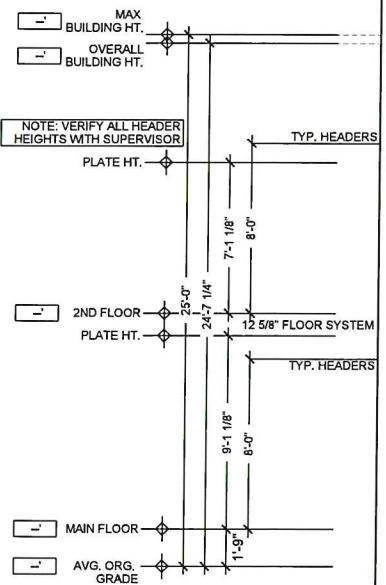




East Elevation  
1/4" = 1'-0"



North Elevation  
1/4" = 1'-0"



West Elevation  
1/4" = 1'-0"



South Elevation  
1/4" = 1'-0"

## SECTIONS NOTES

- 1 RIDGE VENT
- 2 COMPOSITION ROOFING. TYPE AND COLOR TO BE DETERMINED.
- 3 STANDING SEAM METAL ROOFING (COLOR TO BE DETERMINED)
- 4 5/4" X 8" PRE-PRIMED SPRUCE FASCIA. (B) 2 X 6 FRIEZE BOARD
- 5 CONTINUOUS ALUMINUM GUTTERS
- 6 MANUFACTURED TRUSSES - 24" O.C.
- 7 R-49 INSULATION
- 8 T&G MATERIAL - COLOR TO BE DETERMINED.
- 9 5/8" SHEETROCK
- 10 1/2" SHEETROCK
- 11 R-21 INSULATION
- 12 2 X 12 FINGER JOINTED PRE-PRIMED CEDAR BAND - INSTALL W/ SPACERS
- 13 PREFORMED METAL CORNERS
- 14 FIBER CEMENT SIDING INSTALLED WITH 7" OF EXPOSURE - TYPE & COLOR T.B.D.
- 15 BOARD AND BATTEN SIDING - TYPE & COLOR T.B.D.
- 16 DECROTIVE KNEE-BRACE
- 17 RAILING - 36" HIGH TO CODE - FINAL DESIGN T.B.D.
- 18 5/4" X 6" DECK PLANKING - TYPE AND COLOR T.B.D.
- 19 DECK FASCIA 5/4" - COMP. EXT. MATERIAL - INSTALL W/ SPACERS
- 20 2 X 10 PT. JOIST 16" O.C.
- 21 6 X 6 P.T. POST
- 22 11 7/8" BCI 6000 1.8 "I" JOISTS - 16" O.C.
- 23 R-38 INSULATION OVER CRAWL OR CANTILEVER (OPTIONAL OVER CONDITIONED AREA)
- 24 6 X 10 DROPPED BEARING BEAM
- 25 24 X 24 X 8 CONC. FOOTING
- 26 4" CONC. SLAB
- 27
- 28
- 29
- 30

|                                          |                  |
|------------------------------------------|------------------|
| DESIGNED BY                              | JASON STERLING   |
| SCALE                                    | 1/4" = 1' U.N.O. |
| DATE                                     | 10/18/2019       |
| PROJECT / CLIENT INFO                    |                  |
| PROJECT NAME                             |                  |
| 1905 Anacopper Road, Anacortes, WA 98221 |                  |

## EXTERIOR ELEVATIONS

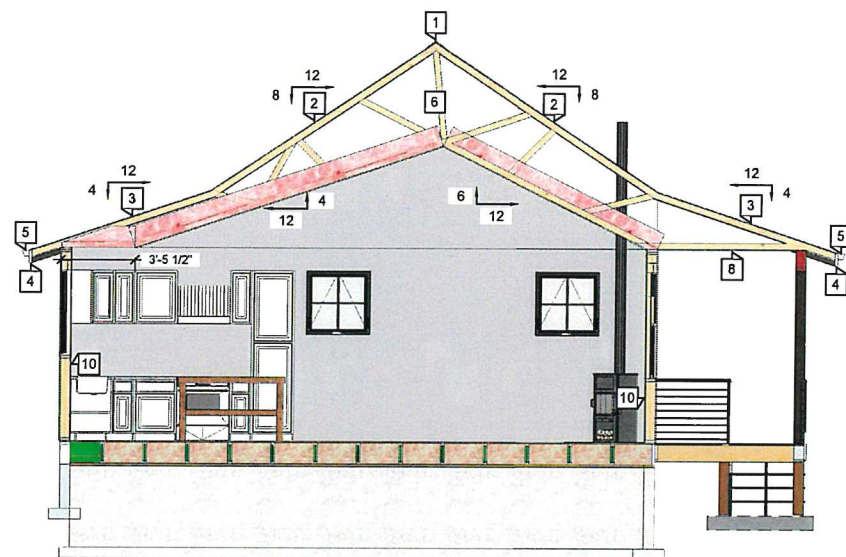
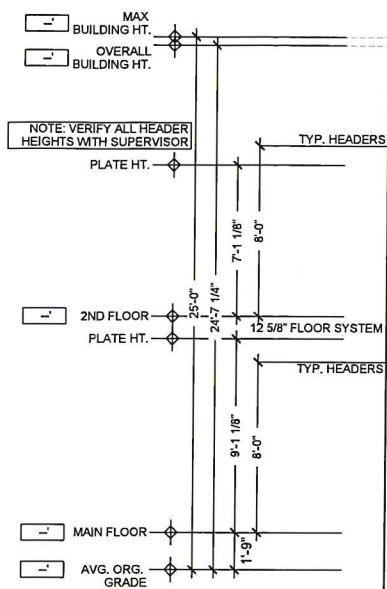
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| OWNER APPROVAL |
| INITIAL PAGE # |
| A10            |
| PAGE           |
| 15 of 22       |

Strandberg  
DESIGN

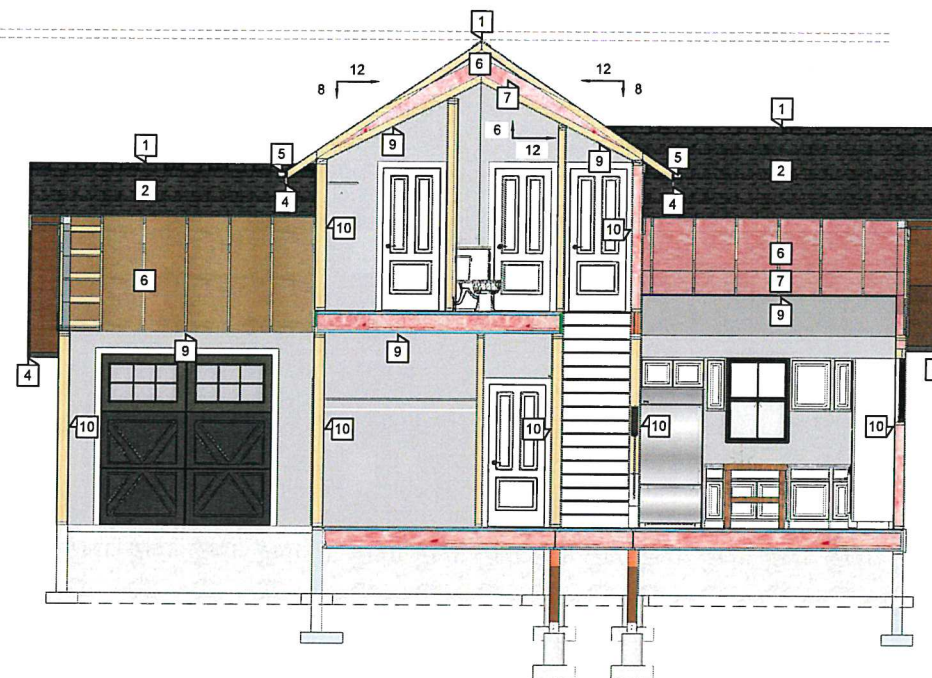
BUILDER INFO:  
MAILING ADDRESS:  
1905 ANACOPPER RD  
ANACORTES WA 98221  
PHONE: 360-293-7431  
WEB: www.strandbergconstruction.com

NOTES: THESE PLANS AND ELEVATIONS ARE PRELIMINARY. ANY CHANGES TO THE DESIGN MUST BE APPROVED BY THE ARCHITECT. THE ARCHITECT IS NOT RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED BY OTHERS.

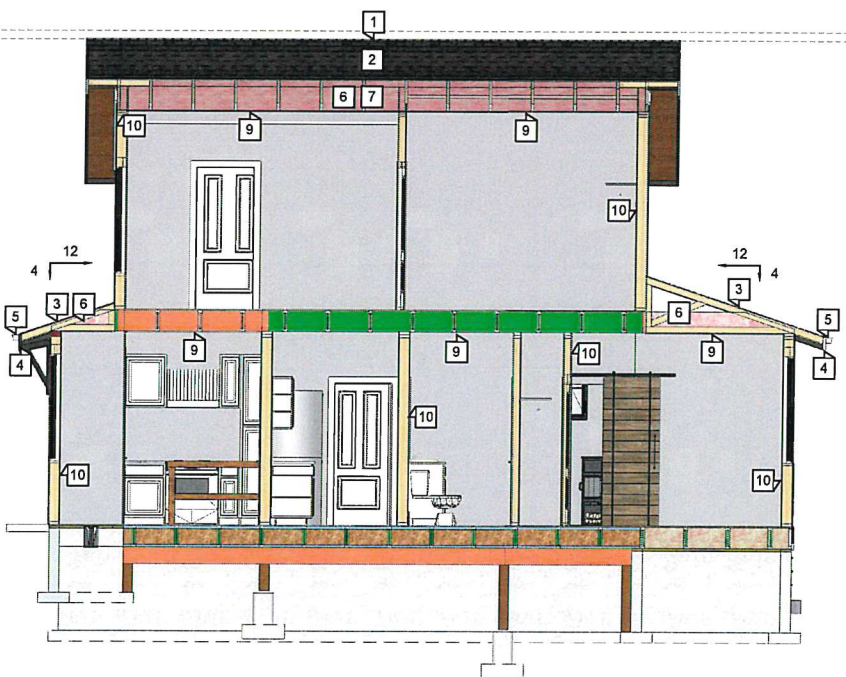
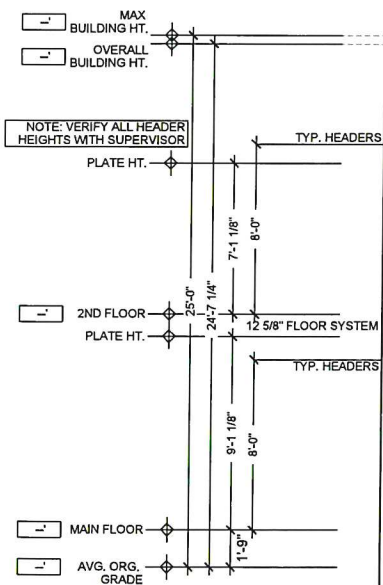




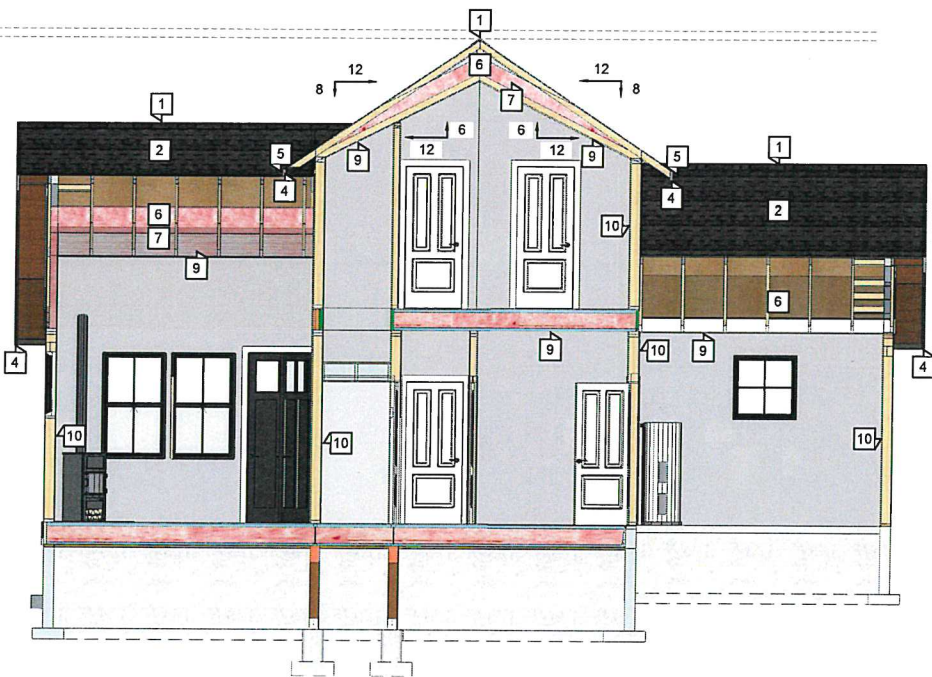
A Section  
A9 1/4" = 1'-0"



C Section  
A9 1/4" = 1'-0"



B Section  
A9 1/4" = 1'-0"



D Section  
A9 1/4" = 1'-0"

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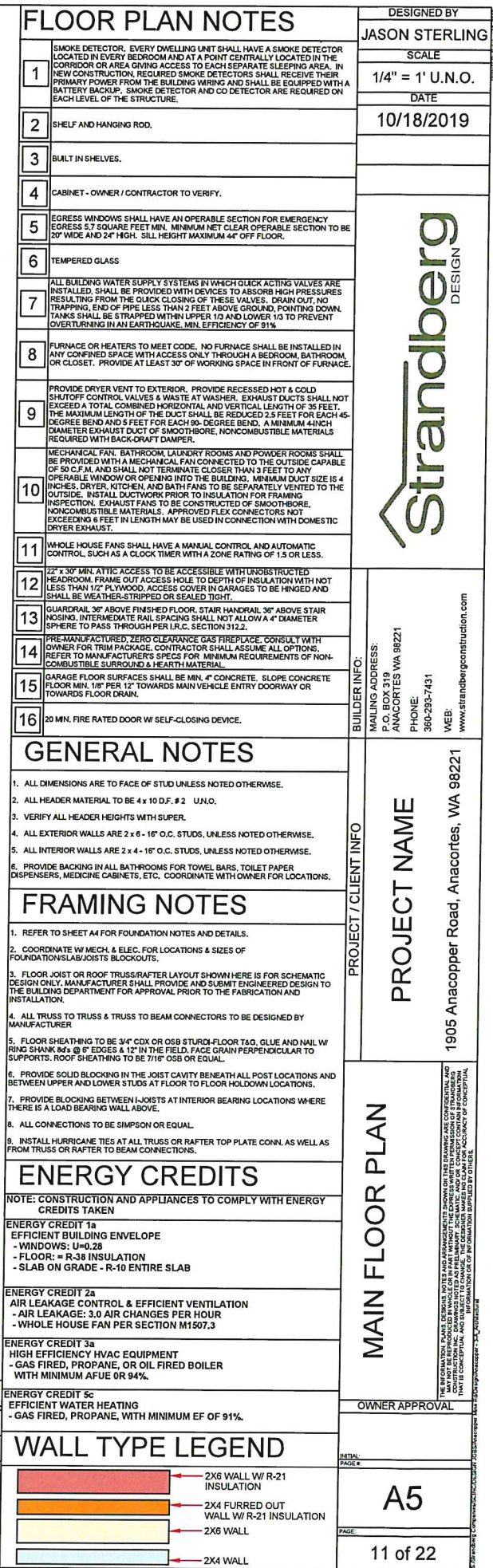
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|-----------------------------------------------------------------------------------|--|
| DESIGNED BY<br>JASON STERLING                                                     |  |
| SCALE<br>1/4" = 1' U.N.O.                                                         |  |
| DATE<br>10/18/2019                                                                |  |
| PROJECT / CLIENT INFO<br>PROJECT NAME<br>1905 Anacopper Road, Anacortes, WA 98221 |  |
| OWNER APPROVAL<br>A9                                                              |  |
| 14 of 22                                                                          |  |

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DESIGN

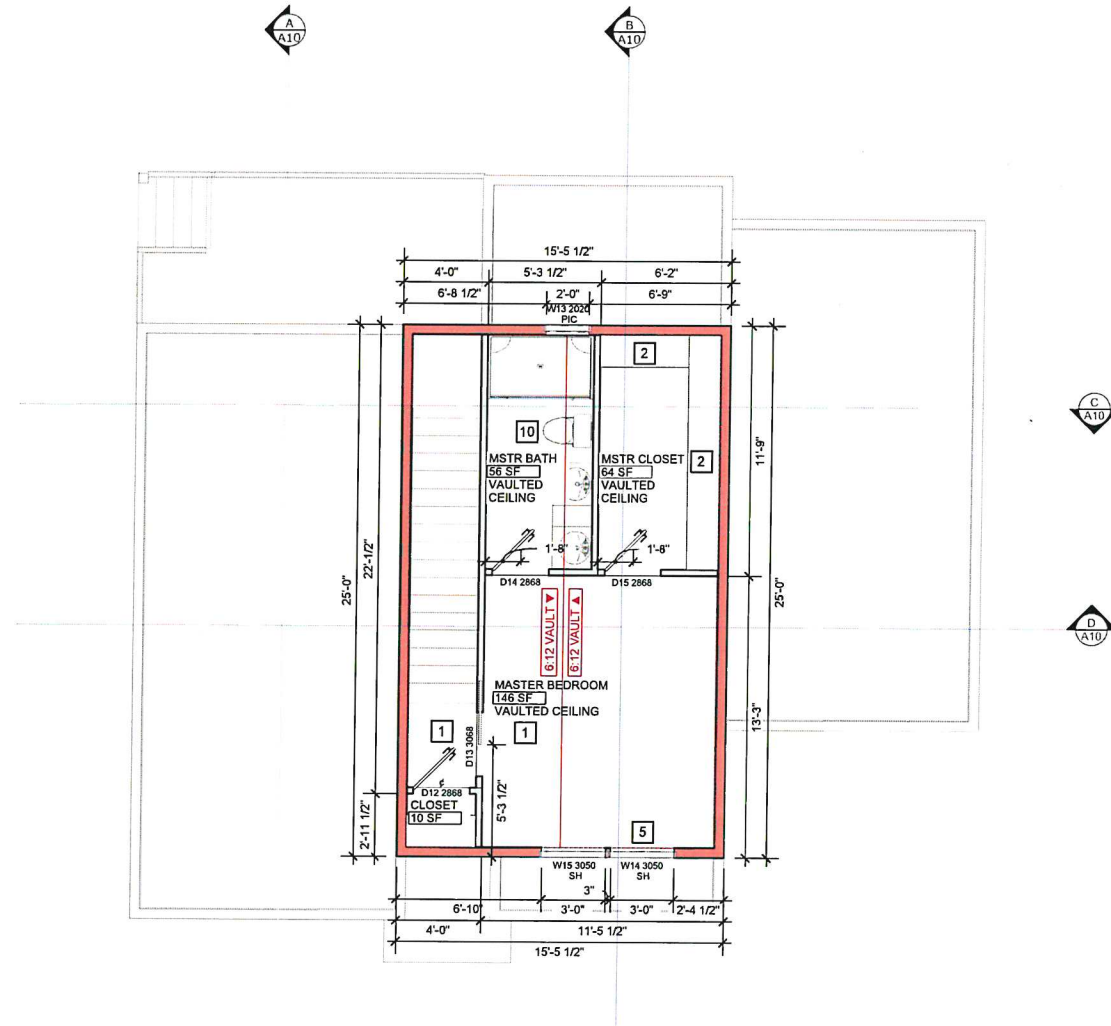
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360-283-7431  
WEB:  
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| FLOOR PLAN NOTES                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | DESIGNED BY                              |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|--|
|                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | JASON STERLING                           |  |
|                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | SCALE                                    |  |
|                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 1/4" = 1' U.N.O.                         |  |
|                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | DATE                                     |  |
|                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 10/18/2019                               |  |
| 1                                                                                                                                                                                                                              | SMOKE DETECTOR. EVERY DWELLING UNIT SHALL HAVE A SMOKE DETECTOR LOCATED IN EVERY BEDROOM AND AT A POINT CENTRALLY LOCATED IN THE CORRIDOR OR AREA GIVING ACCESS TO EACH SEPARATE SLEEPING AREA. IN NEW CONSTRUCTION, REQUIRED SMOKE DETECTORS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING AND SHALL BE EQUIPPED WITH A BATTERY BACKUP. SMOKE DETECTOR AND CO DETECTOR ARE REQUIRED ON EACH LEVEL OF THE STRUCTURE.                                                                                                                                                                     | <div>Strandberg</div> DESIGN             |  |
| 2                                                                                                                                                                                                                              | SHELF AND HANGING ROD.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                          |  |
| 3                                                                                                                                                                                                                              | BUILT IN SHELVES.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                          |  |
| 4                                                                                                                                                                                                                              | CABINET - OWNER / CONTRACTOR TO VERIFY.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                          |  |
| 5                                                                                                                                                                                                                              | EGRESS WINDOWS SHALL HAVE AN OPERABLE SECTION FOR EMERGENCY EGRESS 5.7 SQUARE FEET MIN. MINIMUM NET CLEAR OPERABLE SECTION TO BE 20" WIDE AND 24" HIGH. SILL HEIGHT MAXIMUM 44" OFF FLOOR.                                                                                                                                                                                                                                                                                                                                                                                                            |                                          |  |
| 6                                                                                                                                                                                                                              | TEMPERED GLASS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                          |  |
| 7                                                                                                                                                                                                                              | ALL BUILDING WATER SUPPLY SYSTEMS IN WHICH QUICK ACTING VALVES ARE INSTALLED, SHALL BE PROVIDED WITH DEVICES TO ABSORB HIGH PRESSURES RESULTING FROM THE QUICK CLOSING OF THESE VALVES. DRAIN OUT, NO TRAPPING, END OF PIPE LESS THAN 2 FEET ABOVE GROUND, POINTING DOWN. TANKS SHALL BE STRAPPED WITHIN UPPER 1/3 AND LOWER 1/3 TO PREVENT OVERTURNING IN AN EARTHQUAKE. MIN. EFFICIENCY OF 91%                                                                                                                                                                                                      |                                          |  |
| 8                                                                                                                                                                                                                              | HOUSE TO HAVE MINI-SPLIT UNITS. NO FURNACE SHALL BE INSTALLED IN ANY CONFINED SPACE WITH ACCESS ONLY THROUGH A BEDROOM, BATHROOM, OR CLOSET. PROVIDE AT LEAST 30" OF WORKING SPACE IN FRONT OF FURNACE.                                                                                                                                                                                                                                                                                                                                                                                               |                                          |  |
| 9                                                                                                                                                                                                                              | PROVIDE DRYER VENT TO EXTERIOR. PROVIDE RECESSED HOT & COLD SHUTOFF CONTROL VALVES & WASTE AT WASHER. EXHAUST DUCTS SHALL NOT EXCEED A TOTAL COMBINED HORIZONTAL AND VERTICAL LENGTH OF 35 FEET. THE MAXIMUM LENGTH OF THE DUCT SHALL BE REDUCED 2.5 FEET FOR EACH 45-DEGREE BEND AND 5 FEET FOR EACH 90-DEGREE BEND. A MINIMUM 4-INCH DIAMETER EXHAUST DUCT OF SMOOTHBORE, NONCOMBUSTIBLE MATERIALS REQUIRED WITH BACK-DRAFT DAMPER.                                                                                                                                                                 |                                          |  |
| 10                                                                                                                                                                                                                             | MECHANICAL FAN, BATHROOM, LAUNDRY ROOMS AND POWDER ROOMS SHALL BE PROVIDED WITH A MECHANICAL FAN CONNECTED TO THE OUTSIDE CAPABLE OF 50 CFM, AND SHALL NOT TERMINATE CLOSER THAN 3 FEET TO ANY OPERABLE WINDOW OR OPENING INTO THE BUILDING. MINIMUM DUCT SIZE IS 4 INCHES. DRYER, KITCHEN, AND BATH FANS TO BE SEPARATELY VENTED TO THE OUTSIDE. INSTALL DUCTWORK PRIOR TO INSULATION FOR FRAMING INSPECTION. EXHAUST FANS TO BE CONSTRUCTED OF SMOOTHBORE, NONCOMBUSTIBLE MATERIALS. APPROVED FLEX CONNECTORS NOT EXCEEDING 4 FEET IN LENGTH MAY BE USED IN CONNECTION WITH DOMESTIC DRYER EXHAUST. |                                          |  |
| 11                                                                                                                                                                                                                             | WHOLE HOUSE FANS SHALL HAVE A MANUAL CONTROL AND AUTOMATIC CONTROL, SUCH AS A CLOCK TIMER WITH A ZONE RATING OF 1.5 OR LESS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                          |  |
| 12                                                                                                                                                                                                                             | 22" x 30" MIN. ATTIC ACCESS TO BE ACCESSIBLE WITH UNOBSTRUCTED HEADROOM. FRAME OUT ACCESS HOLE TO DEPTH OF INSULATION WITH NOT LESS THAN 1/2" PLYWOOD. ACCESS COVER IN GARAGES TO BE HINGED AND SHALL BE WEATHER-STRIPPED OR SEALED TIGHT.                                                                                                                                                                                                                                                                                                                                                            |                                          |  |
| 13                                                                                                                                                                                                                             | GUARDRAIL 36" ABOVE FINISHED FLOOR. STAIR HANDRAIL 36" ABOVE STAIR NOSING. INTERMEDIATE RAIL SPACING SHALL NOT ALLOW A 4" DIAMETER SPHERE TO PASS THROUGH PER I.R.C. SECTION 312.2.                                                                                                                                                                                                                                                                                                                                                                                                                   |                                          |  |
| 14                                                                                                                                                                                                                             | PRE-MANUFACTURED, ZERO CLEARANCE GAS FIREPLACE. CONSULT WITH OWNER FOR TRIM PACKAGE. CONTRACTOR SHALL ASSUME ALL OPTIONS. REFER TO MANUFACTURER'S SPECS FOR MINIMUM REQUIREMENTS OF NON-COMBUSTIBLE SURROUND & HEARTH MATERIAL.                                                                                                                                                                                                                                                                                                                                                                       |                                          |  |
| 15                                                                                                                                                                                                                             | GARAGE FLOOR SURFACES SHALL BE MIN. 4" CONCRETE. SLOPE CONCRETE FLOOR MIN. 1/8" PER 12" TOWARDS MAIN VEHICLE ENTRY DOORWAY OR TOWARDS FLOOR DRAIN.                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                          |  |
| 16                                                                                                                                                                                                                             | 20 MIN. FIRE RATED DOOR W/ SELF-CLOSING DEVICE.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                          |  |
| BUILDER INFO:                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | MAILING ADDRESS:                         |  |
|                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | ANACORTES WA 98221                       |  |
|                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | PHONE:                                   |  |
|                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 360-293-7431                             |  |
|                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | WEB:                                     |  |
|                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | www.strandbergconstruction.com           |  |
| GENERAL NOTES                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | PROJECT / CLIENT INFO                    |  |
| 1. ALL DIMENSIONS ARE TO FACE OF STUD UNLESS NOTED OTHERWISE.                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | PROJECT NAME                             |  |
| 2. ALL HEADER MATERIAL TO BE 4 x 10 D.F. #2 U.N.O.                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                          |  |
| 3. VERIFY ALL HEADER HEIGHTS WITH SUPER.                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                          |  |
| 4. ALL EXTERIOR WALLS ARE 2 x 6 - 16" O.C. STUDS, UNLESS NOTED OTHERWISE.                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                          |  |
| 5. ALL INTERIOR WALLS ARE 2 x 4 - 16" O.C. STUDS, UNLESS NOTED OTHERWISE.                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                          |  |
| 6. PROVIDE BACKING IN ALL BATHROOMS FOR TOWEL BARS, TOILET PAPER DISPENSERS, MEDICINE CABINETS, ETC. COORDINATE WITH OWNER FOR LOCATIONS.                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                          |  |
| FRAMING NOTES                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 1905 Anacopper Road, Anacortes, WA 98221 |  |
| 1. REFER TO SHEET A4 FOR FOUNDATION NOTES AND DETAILS.                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                          |  |
| 2. COORDINATE W/ MECH. & ELEC. FOR LOCATIONS & SIZES OF FOUNDATION/SLAB/JOISTS BLOCKOUTS.                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | SECOND FLOOR PLAN                        |  |
| 3. FLOOR JOIST OR ROOF TRUSS/RAFTER LAYOUT SHOWN HERE IS FOR SCHEMATIC DESIGN ONLY. MANUFACTURER SHALL PROVIDE AND SUBMIT ENGINEERED DESIGN TO THE BUILDING DEPARTMENT FOR APPROVAL PRIOR TO THE FABRICATION AND INSTALLATION. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                          |  |
| 4. ALL TRUSS TO TRUSS & TRUSS TO BEAM CONNECTORS TO BE DESIGNED BY MANUFACTURER                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | OWNER APPROVAL                           |  |
| 5. FLOOR SHEATHING TO BE 3/4" CDX OR OSB STURD-FLOOR T&G. GLUE AND NAIL W/ RING SHANK 8ds @ 6" EDGES & 12" IN THE FIELD. FACE GRAIN PERPENDICULAR TO SUPPORTS. ROOF SHEATHING TO BE 7/16" OSB OR EQUAL.                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                          |  |
| 6. PROVIDE SOLID BLOCKING IN THE JOIST CAVITY BENEATH ALL POST LOCATIONS AND BETWEEN UPPER AND LOWER STUDS AT FLOOR TO FLOOR HOLDDOWN LOCATIONS.                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | A7                                       |  |
| 7. PROVIDE BLOCKING BETWEEN JOISTS AT INTERIOR BEARING LOCATIONS WHERE THERE IS A LOAD BEARING WALL ABOVE.                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                          |  |
| 8. ALL CONNECTIONS TO BE SIMPSON OR EQUAL.                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 11 of 22                                 |  |
| 9. INSTALL HURRICANE TIES AT ALL TRUSS OR RAFTER TOP PLATE CONN. AS WELL AS FROM TRUSS OR RAFTER TO BEAM CONNECTIONS.                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                          |  |
| ENERGY CREDITS                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                          |  |
| NOTE: CONSTRUCTION AND APPLIANCES TO COMPLY WITH ENERGY CREDITS TAKEN                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                          |  |
| ENERGY CREDIT 1a<br>EFFICIENT BUILDING ENVELOPE<br>- WINDOWS: U=0.28<br>- FLOOR: R=38 INSULATION<br>- SLAB ON GRADE - R-10 ENTIRE SLAB                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                          |  |
| ENERGY CREDIT 2a<br>AIR LEAKAGE CONTROL & EFFICIENT VENTILATION<br>- AIR LEAKAGE: 3.0 AIR CHANGES PER HOUR<br>- WHOLE HOUSE FAN PER SECTION M1507.3                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                          |  |
| ENERGY CREDIT 3a<br>HIGH EFFICIENCY HVAC EQUIPMENT<br>- GAS FIRED, PROPANE, OR OIL FIRED BOILER<br>WITH MINIMUM AFUE OF 94%.                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                          |  |
| ENERGY CREDIT 5c<br>EFFICIENT WATER HEATING<br>- GAS FIRED, PROPANE, WITH MINIMUM EF OF 91%.                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                          |  |
| WALL TYPE LEGEND                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                          |  |
| <div></div> 2X6 WALL W/ R-21 INSULATION                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                          |  |
| <div></div> 2X4 FURRED OUT WALL W/ R-21 INSULATION                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                          |  |
| <div></div> 2X6 WALL                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                          |  |
| <div></div> 2X4 WALL                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                          |  |

THIS DRAWING IS THE PROPERTY OF STRANDBERG DESIGN. IT IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREON. IT IS NOT TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF STRANDBERG DESIGN.

**DECLARATION  
OF  
COVENANTS, CONDITIONS, RESTRICTIONS  
AND RESERVATIONS FOR**

**Exhibit 14**

**“THE CROSSINGS”  
Lots 19-20-21**

**THIS DECLARATION AND COVENANTS, CONDITIONS, RESTRICTIONS, EASEMENTS AND RESERVATIONS** (this “Declaration”) is made by ANNACOPPER LLC, (Declarant) as of the \_\_\_\_\_ day of \_\_\_\_\_ 2020.

**RECITALS**

Declarant is the owner of certain real property that is the subject matter of these Restrictive Covenants, property is situate in Anacortes, Skagit County, Washington, legally described on Exhibit “A” hereto.

The Property is subdivided as “The Crossings”, according to the plat thereof recorded under Auditor’s File No. \_\_\_\_\_ records of Skagit County, Washington.

Declarant wishes to subject the Property to this Declaration.

**NOW, THEREFORE**, Declarant declares that the Property is subject to all restrictions and easements of said plat, shall be held, transferred, sold, conveyed, leased, used and occupied subject to the covenants, conditions, restrictions, easements, assessments and liens hereinafter set forth which are for the purpose of protecting the value and desirability of and which shall touch and concern and run with title to the Property and which shall be binding on all parties having any right, title, or interest in the Property or any portion thereof, and their respective heirs, successors and assigns, and shall inure to the benefit of each owner thereof.

**ARTICLE 1  
DEFINITIONS**

Section 1.1 Words Defined. For the purpose of this Declaration and any amendments hereto, the following terms shall have the following meanings and all definitions shall be applicable to the singular and plural forms of such terms:

- 1.1.1 “Construction” and “Constructed” shall mean any construction, reconstruction, erection or alteration of an improvement, except wholly interior alterations to a then existing Structure.
- 1.1.2 “Declarant” shall mean Anacopper LLC., a Washington Limited Liability Company.
- 1.1.3 “Declaration” shall mean this Declaration of Covenants, Conditions, Restrictions, Easements and Reservations for The Crossings Lots 19-20-21 as it may from time to time be amended.
- 1.1.4 “First Mortgage” and “First Mortgagee” shall mean, respectively, The mortgage or deed of trust on the Lot that has legal priority over all other mortgages and deeds of trust thereon, and the holder of a First Mortgage. For purposes of determining the percentage of First Mortgagees approving a proposed decision or course of action in cases where a Mortgagee



holds First Mortgages on more than one Lot, such Mortgagee shall be deemed a separate Mortgagee for each such First Mortgage so held.

- 1.1.5 “Lot” shall mean any one of the lots numbered Lots 19 through 21 together with structures and improvements thereon, as designated in the plat of “The Crossings” on recorded under Auditors File No. \_\_\_\_\_ the plat map of records of Skagit County.
- 1.1.6 “Mortgage” shall mean a recorded mortgage or deed of trust that creates a lien against a Lot and shall also mean a real estate contract for the sale of a Lot.
- 1.1.7 “Mortgagee” shall mean the beneficial owner, or the designee of the beneficial owner, of an encumbrance on a Lot created by a mortgage or deed of trust and shall also mean the vendor, or the designee of a vendor, of a real estate contract for the sale of a Lot.
- 1.1.8 “Owner” shall mean the record owner, whether one or more persons, of fee simple title to a Lot within the Property, including a contract seller except those having such interest merely for the performance of an obligation.
- 1.1.9 “Person” shall mean an individual, corporation, partnership, association, trustee or other legal entity.
- 1.1.10 “Plat” shall mean the recorded plat of “The Crossings” and any amendments, corrections or addenda thereto subsequently recorded.
- 1.1.11 “Property” shall mean the land described on “Exhibit A” and such additions thereto as may hereafter be subjected to the terms of the Declaration, and all improvements and structures now or hereafter placed on the land.
- 1.1.12 “Structure” shall mean any building, fence, wall, patio, swimming pool, or the like.
- 1.1.13 “Participating Builder” shall mean and refer to a person or entity that acquires a portion of The Crossings Short Plat for the purpose of improving such portion or portions in accordance with and subject to these Declarations.
- 1.1.14 “Development Period” shall mean the period of time from the recording of this Declaration and including any and all time prior to such recording that development has commenced, or until all of the Lots and or Homes within this project have been sold by the Declarant.

Section 1.2 Form of Words. The singular form of words shall include the plural and the plural shall include the singular. Masculine, feminine and neuter pronouns shall be used interchangeably.

## **ARTICLE 2 COMMON AREAS AND EASEMENTS**

Section 2.4 Easements for Utilities and Drainage. Declarant does hereby establish, create and reserve for the benefit of itself, the Owners, and their respective heirs and assigns, an easement (the “Utilities and Drainage Easement”) for the installation and maintenance of cable systems, security and similar systems, and all utilities, including, but not limited to, storm sewers and drainage systems and electrical, gas, telephone, water and sewer drainage systems and electrical, gas, telephone, water and sewer lines over the area designated for easements and shown on the plat map for The Crossings. No Lot Owner shall allow or permit any structure or landscaping to be located, installed or grow upon the area subject to the Utilities and Drainage Easement which might in any way damage or interfere with the installation and operation of such utilities and systems. Each person utilizing the Utilities and Drainage Easement areas located on another’s Lot shall promptly restore such area to a condition as close to its original condition as reasonably practical after making such use. Each Lot Owner shall maintain the area of his Lot subject to the Utilities and Drainage Easement in a condition which will not interfere with the operation and maintenance of said utilities and systems.

Section 2.5            Maintenance of Street Trees Between Sidewalk and Lots.    It will be the responsibility of the lot owner(s) directly adjacent to said planting strips to maintain trees, shrubs and plants in a professional manner, in accordance to the landscape plan “Exhibit B” hereto. Declarant shall maintain the planting strips during the Development Period. At the end of the Development Period or transfer of ownership of lots, the responsibility of maintenance of the planting areas will transfer to the owners of lots 19,20 and 21.

### **ARTICLE 3**

#### **CONSTRUCTION ON LOTS AND USE OF LOTS**

Section 3.1            Uniformity of Use and Appearance. One of the purposes of this Declaration is to assure within the Property a uniformity of use and quality of workmanship, materials, design, maintenance and location of Structures with respect to topography and finish grade elevation. It is in the best interest of each Owner that such uniformity of use be maintained as herein provided. No building, except for “Accessory Structures” shall be erected, altered, placed or permitted to remain on any Lot other than one single family dwelling. For purposes of the Declaration, “Accessory Structure” shall mean and include only an “Accessory Dwelling Unit” (guest house, studio, garden shed or detached garage) as defined and permitted by the City of Anacortes Land use and or development code(s) and any or all of which are subject to all other requirements of this Article 3. If allowed by the provisions contained herein. Notwithstanding anything herein set forth, the Construction of any Structure shall comply with the more restrictive of either

- (a) the terms and conditions of this Declaration or
- (b) the laws, codes, ordinances and regulations of any governmental entity having jurisdiction.

Section 3.2            Design Guidelines. Design shall be generally consistent with the theme of the Community established by the Declarant. Structures to be painted or stained in colors consistent with the existing individual residential dwelling in the immediate areas, no residence or other structure shall be erected on a Lot which contains synthetic siding such as fiberglass, aluminum or vinyl; provided, however, that modern siding materials generally acceptable and used in high-quality residential construction shall be allowed, provided it is consistent with the general architecture and high-quality residence located in the surrounding area. Acceptable roofing materials shall consist of architectural composition or metal; provided however, that modern roofing materials generally acceptable and used in high quality residential construction shall be allowed provided it is consistent with the general architecture of the surrounding homes. The Declarant shall have the authority to implement the basic theme contained herein.

Section 3.3            Minimum Size. The floor area of the main house Structure, exclusive of open porches and garages shall be not less than

- (a) 1,800 square feet for a dwelling

Each home is required to have a garage which shall be of such size as to accommodate at least two full size automobiles.

Section 3.4            Maximum Height. Height restriction per the Building Codes of City of Anacortes.



Section 3.5            Use Restrictions.

3.5.1        “Residential Use”. The dwellings within the Structures are intended for and restricted to use as single-family residences only, on an ownership, rental, or lease basis, and for social, recreational or other reasonable activities normally incident to such use. In addition to the foregoing, the Declarant may use dwellings it owns as sales offices and models for sales of other Lots.

3.5.2        “Maintenance of Buildings and Lots”. Each Owner shall, at the Owner’s sole expense, keep the interior and exterior of the Structure on the Owner’s Lot, as well as the Lot, in a clean and sanitary condition, free of rodents and pests, and in good order, condition and repair and shall do all redecorating, painting, landscaping and maintenance at any time necessary to maintain the appearance and condition of the Structure and the Lot. The landscaping shall be maintained to the curb on the edge of the street.

3.5.3        “Completion of Construction”. Any Structure erected or placed on any Lot shall be completed as to external appearance within twelve (12) months from the date Construction is started. Any ADU to be erected or placed on any lot shall be completed within six (6) months from the date of construction is started. All yards and landscaping must be installed prior to receiving the building occupancy certificate from the City of Anacortes Building Department. Lots shall be maintained in a neat and orderly condition during Construction.

3.5.4        “Parking”. All motor vehicles authorized in the Declaration shall be parked in the applicable Lot Owners garage, garage apron or private driveway. Garages are to be kept free of storage to allow for the parking of 2 full size cars. The intent here is to minimize any street parking. No trucks, campers, trailers, boats, motorcycles, inoperable vehicle, or part thereof, shall be parked or permitted to remain on any Lot, unless the same is stored or placed in a garage or in the rear or side yard area and screened from sight. No such vehicles shall be parked on any street adjoining any Lot. The exception shall short term parking of vehicles belonging to guests; provided, however, the owner shall make reasonable attempts to park and locate such vehicles in a manner to provide the least interference of street and pedestrian traffic. The Declarant may establish such other parking regulations as it may deem necessary and appropriate.

3.5.5        “Signs”. No sign of any kind shall be displayed to the public view on or from any Lot except “For Rent”, “For Sale” or “Open House”, signs stating the name of the occupant, address of the residence or a name given the unit by the owner. This Section shall not apply to the Declarant or any Participating Builder.

3.5.6        “Animals”. Animals, including horses, livestock, poultry, reptiles or pigs, shall not be kept on any lot. Household pets shall not exceed four (4) in number, provided that unweaned puppies or kittens may be kept. All animal enclosures must be kept in a clean, neat and odor free condition at all times. Notwithstanding anything set forth herein all Owners shall comply with all applicable governmental laws, codes, ordinances and regulations pertaining to animals.

3.5.7 “Temporary Structures”. No Structure of a temporary character, trailer, tent, shack, garage, barn or other outbuilding shall be installed, placed or used on any Lot as a residence, either temporarily or permanently.

3.5.8 “Clothes Lines”. No washing, rugs, clothing apparel or any other article shall be hung from the exterior of any Structure or on a Lot so as to be visible from the streets and roadways adjoining the Lots.

3.5.9 “Television, HDTV, Antennas and Satellite Dishes”. No exposed exterior radio or television transmission or receiving antennas, except for “mini” satellite TV and HDTV antenna/dishes (approximately 18”) in diameter or less may be installed within a Lot. Any “mini” satellite dish antenna located on the lot must be located and erected so as to minimize its visibility from adjoining lots and street view and be painted a color to blend with the surface to which it is attached.

3.5.10 “Solar Panels”. Solar Panels are allowed, all solar panel systems are to be integrated into the home architecture. Solar system panels must be integrated with the roof color palette. Equipment, exterior lines and pipes shall be painted to blend with the surrounding area as much as possible, placement of the panels shall take into consideration the glare impact on adjacent properties. Only professionally designed systems will be allowed.

3.5.11 “Heating Ventilation and Air Conditioning Equipment”. All heating, ventilation and air conditioning equipment (HVAC), wherever located, shall be screened from view by an appropriate fence or plantings. Plantings must be of sufficient size to screen equipment from view at the time of planting. Further, location of the HVAC equipment shall be placed so as to provide the least noise and interference with the neighboring Lot Owner.

3.5.12 “Trash Containers and Debris”. Trash shall be placed in sanitary containers and screened so as not to be visible from adjoining structures, streets or roadways. No Lot or any portion thereof shall be used as a dumping ground for trash or rubbish of any kind. Yard rakings, dirt and debris resulting from landscaping work or construction shall not be dumped onto adjoining lots, streets or roadways. Compost piles may be kept upon the lots provided they are kept in an enclosure, and clean, neat and in sanitary condition free of rodents, pests and screened from view of adjoining Lots. No vacant lot shall be permitted or allowed to accumulate tall grass, leaves, limbs, branches and other vegetation as to be a detriment to the neighborhood or become a fire hazard.

3.5.13 “Offensive Activity”. No trade, craft, business, profession, commercial or manufacturing enterprise or business or commercial activity of any kind, including day schools, nurseries or church schools shall be conducted or permitted on any Lot, nor shall goods, equipment, vehicles or materials used in connection therewith be kept, parked, stored, dismantled or repaired outside of any Lot or any street with the Property. No noxious or offensive activity, including but not limited to the creation of excess levels of noise, shall be carried on in any Lot, nor shall anything be done therein which may be or become an annoyance or nuisance to other Owners or tenants.



3.5.14 “Setbacks”. All Structures shall be constructed in accordance with all ordinances, rules and building regulations of the City of Anacortes, without limitations, as well as land use, zoning and other setback requirements as identified on the face of the Final Plat Map of “The Crossings”.

3.5.15 “Fences”. All fences shall be constructed in a good and workman-like manner and shall be architectural in design. No chain link or vinyl fencing will be allowed. The fence shall not detract from the appearance of the adjacent structure or obstruct the view of the lots. No fencing in front yard setbacks unless the structure is less than 3 ft in height. All fences shall comply with the constructed from pressure treated posts and Cedar fence boards and shall be artistic in design and shall not detract from the appearance of any adjacent Structures.

3.5.16 “Underground Utilities”. All utility lines located outside a dwelling unit shall be in conduit attached to such units or underground.

3.5.17 “No Lot shall be improved in such a way as to cause excess surface water run-off that may cause erosion, damage or inconvenience to other Lots or Owners thereof. All drainage from a Lot shall be piped at the Lot Owner’s expense to the nearest underground public storm sewer line, street ditch or dry well. All roof drains shall be connected to public storm sewer system. Absolutely no dumping of any pollutants into the storm sewer systems shall be permitted.

3.5.18 “Tree Cutting”. The cutting of trees within the planting strip is strictly prohibited without the written approval from the City of Anacortes planning department. Trees within the planting strips are required by the City of Anacortes Code, Chapter 16.50 Tree Preservation.

3.5.19 “Damage”. Any damage to streets, plat improvements, entry structure, fences, landscaping, mailboxes, lights and lighting standards by Lot Owners, their children, contractors, agents, visitors, friends, relatives or service personnel shall be repaired by such Owner within twelve (12) days from the occurrence of such damage.

3.5.20 “Mailboxes.” All mailboxes must be of a standard accepted by the U.S. Postal Authorities and must be located in those areas so designated by the U.S. Postal Department.

3.5.21 “Compliance with Laws.” Notwithstanding anything to the contrary set forth herein, each Owner shall comply with the more restrictive of either

- (a) the terms and conditions of this Declaration, or
- (b) the laws, codes, ordinances, and regulations of any governmental entity having jurisdiction.

## **ARTICLE 4**

This Declaration may be amended if such amendment is approved by owners of the Lots 19,20 and 21 within the Plat or by Declarant under Article 7 herein.

## **ARTICLE 5 DURATION**

The covenants, conditions and restrictions of this Declaration shall run with and bind the Property and shall inure to the benefit of and be enforceable by the Owners, their respective legal representatives, heirs, successors and assigns, for a period of thirty (30) years from the date this Declaration is recorded, after which time the covenants, conditions and restrictions shall be automatically extended for successive periods of ten (10) years each unless an instrument signed by a majority of the Lot Owners has been recorded agreeing to terminate the covenants, conditions and restrictions.

## **ARTICLE 6 RESERVATION OF DECLARANT'S RIGHT TO AMEND TO COMPLY WITH FNMA, FHLMC OR FHA REQUIREMENTS**

Section 6.1        Amendment by Declarant. Declarant reserves the right to amend the Declaration as may be necessary to comply with Federal Home Loan Mortgage Corporation (FHLMC) or Federal National Mortgage Association (FNMA) or Federal Housing Administration (FHA) regulations or requirements as necessary to enable the holders of first mortgages or deeds of trust to sell first mortgages or deeds of trust to FHLMC or FNMA or if such amendment is necessary to secure funds or financing provided by, through or in conjunction with FHLMC, FNMA or FHA.

Section 6.2        Authorization to Amend. If Declarant, at its option, determines that it is necessary to so amend the Declaration, then Declarant, on behalf of all Lot Owners is hereby authorized to execute and to have recorded (or filed, in the case of the Articles) said required amendment or amendments. All Lot Owners hereby grant to Declarant a full and complete power of attorney to take any and all actions necessary to effectuate and record said amendment or amendments and agree that said amendment or amendments shall be binding upon their respective Lots and upon them and their heirs, personal representatives, successors and assigns to the same extent as if they had personally executed said amendment or amendments. All Lot Owners hereby acknowledge and agree that the power of attorney granted herein shall be deemed coupled with an interest and shall be irrevocable.

Section 6.3        Duration. Declarant's rights under this Article shall exist only until Declarant has transferred ownership of lots 19,20 and 21 within "The Crossings".

## **ARTICLE 7 SEVERABILITY**

The provisions of this Declaration shall be independent and severable, and the unenforceability of any one provision shall not affect the enforceability of any other provision, if the remainder affects the common plan.



**ARTICLE 8**  
**EFFECTIVE DATE**

This Declaration shall be effective upon recording.

**ARTICLE 9**  
**ASSIGNMENT**

The Declarant, Anacopper LLC and members reserve the right to assign, transfer, sell, lease or rent all or any portion of the Property owned by them and reserves the right to assign all or any of its rights, duties and obligations created under this Declaration.

DATED this \_\_\_\_\_ day of \_\_\_\_\_, 2020

Anacopper LLC  
a Limited Liability Company

By: \_\_\_\_\_  
NELS STRANDBERG, member

2/18/2020 2:53 PM



Urban Forestry Services, Inc.  
15119 McLean Road, Mount Vernon, WA 98273  
360-426-5810

Tree Assessment Matrix  
Project Title: The Crossings Cottage Development  
Site Address: 1905 Anacopper Mine Road, Anacortes, Washington

Inspector: P. Thompson  
ISA Certified Arborist, PH-1638A  
ISA Tree Risk Assessment Qualified

## STRANDBERG - Crossings Cottage Development SUMMARY

|                                                                           |         |                               |     |                                |     |
|---------------------------------------------------------------------------|---------|-------------------------------|-----|--------------------------------|-----|
| Approximate Net Area:                                                     | 207,545 | Tree Unit Credit Requirement: | 208 | Tree Unit Credits Inventoried: | 234 |
| (Approximate Net Area; equals gross area minus public and private roads.) |         |                               |     |                                |     |

## MATRIX

| Tree Number | Common Name          | Botanical Name           | DBH (in.) | Multiple Stems DBH (in.)                                                            | Adjusted DBH (in.) | Tree Unit Credit | Critical Root Zone (Ft.) | Interior Critical Root Zone (Ft.) | Vigor        | Structure    | Risk of Failure | Comments                                                                                                                                                                                                                                                                     | Preservation Value |
|-------------|----------------------|--------------------------|-----------|-------------------------------------------------------------------------------------|--------------------|------------------|--------------------------|-----------------------------------|--------------|--------------|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| 41          | Scouler's willow     | <i>Salix scouleriana</i> | 7.8       | 7.8, 6.5, 2.3, 3.2, 3.7, 5.3, 3.5, 3.3, 5.7, 6.7, 7, 8, 7, 5.5, 7, 5.5, 3           | 23.26843           | 5                | 23.3                     | 11.6                              | Fair         | Fair to Good | Medium          | This tree is growing on the bank of the existing pond. This tree consists of a cluster of trunks, all grouped together and originating from a single tree. The base of the tree is slightly under, ones by wave action, with the tree leaning slightly toward the northwest. | High               |
| 42          | Red alder            | <i>Alnus rubra</i>       | 11.7      |                                                                                     | 11.7               | 5                | 11.7                     | 5.9                               | Fair         | Fair to Good | Medium          | This tree leans toward the northeast. This tree currently appears stable, with surface roots visible up on the bank above the pond. Pond wave actions has slightly eroded the soil under this tree.                                                                          | Medium             |
| 43          | Red alder            | <i>Alnus rubra</i>       | 24        | 24, 13.6, 9, 10                                                                     | 30.69137           | 8                | 30.7                     | 15.3                              | Fair         | Fair to Good | Medium          | This tree is relatively large for the species. This tree has four primary codominant trunks, with included bark between the trunk. Currently this tree appears stable. The roots are visible on the surface above the pond area and along its bank.                          | Medium             |
| 44          | Willow               | <i>Salix species</i>     | 3         | 3, 2, 2.3, 2.5, 2.1, 3.2, 4.5, 2.5, 3, 2.3, 3.5, 2.5, 3, 3, 2.5, 2.3, 3.7, 3.3, 2.3 | 12.56543           | 5                | 12.6                     | 6.3                               | Fair         | Fair         | Low             | This tree has a form that is typical of the species on the edge of riparian pond. This tree has multiple trunks that have partially failed to form an open and spread crown. This tree is located on the edge of the pond.                                                   | Medium             |
| 45          | Red alder            | <i>Alnus rubra</i>       | 9.9       | 9.9, 10.8                                                                           | 14.65094           | 5                | 14.7                     | 7.3                               | Fair         | Fair         | Medium          | This tree consists of two codominant trunks which are currently stable. I noticed the movement of both trunks is causing injury between the trunks.                                                                                                                          | Medium             |
| 46          | Red alder            | <i>Alnus rubra</i>       | 8.5       |                                                                                     | 8.5                | 2                | 8.5                      | 4.3                               | Fair         | Fair to Good | Medium          | This tree leans toward the north-northwest. Currently this lean appears stable.                                                                                                                                                                                              | Medium             |
| 47          | Red alder            | <i>Alnus rubra</i>       | 2.8       |                                                                                     | 2.8                | 1                | 2.8                      | 1.4                               | Fair         | Poor         | Low             | This tree is suppressed.                                                                                                                                                                                                                                                     | Low                |
| 48          | Red alder            | <i>Alnus rubra</i>       | 9.5       |                                                                                     | 9.5                | 2                | 9.5                      | 4.8                               | Fair to Good | Fair         | Low             |                                                                                                                                                                                                                                                                              | Medium             |
| 49          | Red alder            | <i>Alnus rubra</i>       | 12.3      |                                                                                     | 12.3               | 5                | 12.3                     | 6.2                               | Fair to Good | Fair to Good | Low             |                                                                                                                                                                                                                                                                              | Medium             |
| 50          | Red alder            | <i>Alnus rubra</i>       | 10.5      | 10.5, 8.4                                                                           | 13.44656           | 5                | 13.4                     | 6.7                               | Fair to Good | Fair         | Low             |                                                                                                                                                                                                                                                                              | Medium             |
| 51          | Red alder            | <i>Alnus rubra</i>       | 6.7       |                                                                                     | 6.7                | 2                | 6.7                      | 3.4                               | Fair         | Fair         | Medium          | This tree has a stable lean toward the east.                                                                                                                                                                                                                                 | Low                |
| 52          | Red alder            | <i>Alnus rubra</i>       | 8.6       |                                                                                     | 8.6                | 2                | 8.6                      | 4.3                               | Fair         | Fair         | Low             | This tree leans toward the southeast.                                                                                                                                                                                                                                        | Medium             |
| 53          | Cypress              | <i>Cupressus</i>         | 32        |                                                                                     | 32                 | 8                | 32.0                     | 16.0                              | Fair         | Fair to Good | Low             |                                                                                                                                                                                                                                                                              | Medium             |
| 54          | White poplar         | <i>Populus alba</i>      | 13.2      | 13.2, 14.3, 12.4, 12.3                                                              | 26.14919           | 0                | 26.1                     | 13.1                              | Fair         | Fair to Good | Medium          | This tree has staining and a seam at the bifurcation point from grade level up to a height of 3-feet. Remove for development.                                                                                                                                                | Medium             |
| 55          | Red alder            | <i>Alnus rubra</i>       | 12.2      | 12.2, 11.8                                                                          | 16.97292           | 5                | 17.0                     | 8.5                               | Poor to Fair | Fair         | Medium          | This tree has trunk decay at mid height, with a longitudinal cavity and multiple cavities with decay on the trunk. Codominant trunk at the base also contains a cavity.                                                                                                      | Low                |
| 56          | Red alder            | <i>Alnus rubra</i>       | 12.5      |                                                                                     | 12.5               | 5                | 12.5                     | 6.3                               | Fair to Good | Fair         | Low             |                                                                                                                                                                                                                                                                              | Medium             |
| 57          | Flowering crab apple | <i>Malus species</i>     | 4.7       | 4.7, 3.4                                                                            | 5.800862           | 2                | 5.8                      | 2.9                               | Fair         | Fair to Good | Low             |                                                                                                                                                                                                                                                                              | Medium             |





Urban Forestry Services, Inc.  
15119 McLean Road, Mount Vernon, WA 98273  
360-428-5810

Tree Assessment Matrix  
Project Title: The Crossings Cottage Development  
Site Address: 1905 Anacopper Mine Road, Anacortes, Washington

Inspector: P. Thompson  
ISA Certified Arborist: PH-1836A  
ISA Tree Risk Assessment Qualified

| Tree Number | Common Name          | Botanical Name                | DBH (In.) | Multiple Stems DBH (In.) | Adjusted DBH (In.) | Tree Unit Credit | Critical Root Zone (Ft.) | Interior Critical Root Zone (Ft.) | Vigor        | Structure    | Risk of Failure | Comments                                                                                                                                                                                             | Preservation Value |
|-------------|----------------------|-------------------------------|-----------|--------------------------|--------------------|------------------|--------------------------|-----------------------------------|--------------|--------------|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| 58          | White fir            | <i>Abies concolor</i>         | 12.1      |                          | 12.1               | 5                | 12.1                     | 6.1                               | Fair         | Poor to Fair | Low             | This tree has a crack in the bark from ground level up to a height of 7-feet. I noticed a minor amount of sap flow at the base of this crack. The foliage density is slightly thin.                  | Low                |
| 59          | Austrian pine        | <i>Pinus nigra</i>            | 24.7      |                          | 24.7               | 5                | 24.7                     | 12.4                              | Fair to Good | Fair to Good | Low             |                                                                                                                                                                                                      | Medium             |
| 60          | Flowering plum form  | <i>Prunus cerisifera form</i> | 3.7       |                          | 3.7                | 1                | 3.7                      | 1.9                               | Poor to Fair | Fair to Good | Low             | This tree has copious basal shoots, likely resulting from a response to lawn maintenance injuries. Crown has poor to fair structure.                                                                 | Low                |
| 61          | Flowering crab apple | <i>Malus species</i>          | 7.3       |                          | 7.3                | 2                | 7.3                      | 3.7                               | Fair         | Fair to Good | Low             | This tree has a dramatic lean toward the north. Currently this tree is stable.                                                                                                                       | Medium             |
| 62          | Douglas fir          | <i>Pseudotsuga menziesii</i>  | 17.2      |                          | 17.2               | 5                | 17.2                     | 8.6                               | Fair to Good | Fair         | Low             |                                                                                                                                                                                                      | Medium             |
| 63          | Western red cedar    | <i>Thuja plicata</i>          | 6.5       | 6.5, 7.4                 | 9.849365           | 2                | 9.8                      | 4.9                               | Fair to Good | Fair         | Low             |                                                                                                                                                                                                      | Medium             |
| 64          | Western red cedar    | <i>Thuja plicata</i>          | 7.4       |                          | 7.4                | 2                | 7.4                      | 3.7                               | Fair to Good | Fair         | Low             |                                                                                                                                                                                                      | Medium             |
| 65          | Western red cedar    | <i>Thuja plicata</i>          | 9.3       |                          | 9.3                | 2                | 9.3                      | 4.7                               | Fair to Good | Fair         | Low             |                                                                                                                                                                                                      | Medium             |
| 66          | Western red cedar    | <i>Thuja plicata</i>          | 11.3      |                          | 11.3               | 5                | 11.3                     | 5.7                               | Fair to Good | Fair         | Low             |                                                                                                                                                                                                      | Medium             |
| 67          | European white birch | <i>Betula pendula</i>         | 2.6       |                          | 2.6                | 1                | 2.6                      | 1.3                               | Poor to Fair | Fair         | Low             | This tree leans toward the north. I noticed that this tree is moderately suppressed, with a low rate of trunk taper making it susceptible to failure in high                                         | Low                |
| 68          | European white birch | <i>Betula pendula</i>         | 6.5       |                          | 6.5                | 2                | 6.5                      | 3.3                               | Poor to Fair | Fair         | Low             | This tree leans toward the north. I noticed that this tree is moderately suppressed, with a low rate of trunk taper making it susceptible to failure in high                                         | Low                |
| 69          | European white birch | <i>Betula pendula</i>         | 13.7      |                          | 13.7               | 5                | 13.7                     | 6.9                               | Fair         | Fair to Good | Medium          |                                                                                                                                                                                                      | Medium             |
| 70          | Douglas fir          | <i>Pseudotsuga menziesii</i>  | 23.5      |                          | 23.5               | 5                | 23.5                     | 11.8                              | Fair to Good | Fair to Good | Low             |                                                                                                                                                                                                      | Medium             |
| 71          | Willow               | <i>Salix species</i>          | 3.2       |                          | 3.2                | 1                | 3.2                      | 1.6                               | Poor to Fair | Fair to Good | Low             | Tree is regenerated from a failed willow. Tree leans toward the east-southeast, with a scar on the lower trunk.                                                                                      | Medium             |
| 72          | Red alder            | <i>Alnus rubra</i>            | 11.8      |                          | 11.8               | 5                | 11.8                     | 5.9                               | Fair to Good | Fair to Good | Low             |                                                                                                                                                                                                      | Medium             |
| 73          | Scouler's willow     | <i>Salix scouleriana</i>      | 5.8       | 5.8, 5.3, 4.7, 2.7, 2.3  | 9.81835            | 2                | 9.8                      | 4.9                               | Fair         | Fair         | Medium          | Located on the shoreline of the pond. Multi-trunked willow.                                                                                                                                          | Medium             |
| 74          | Red alder            | <i>Alnus rubra</i>            | 6.4       |                          | 6.4                | 2                | 6.4                      | 3.2                               | Fair         | Fair         | Medium          | This tree is moderately suppressed by the crown of the adjacent multi-trunks tree.                                                                                                                   | Low                |
| 75          | Red alder            | <i>Alnus rubra</i>            | 8.7       | 8.7, 10.6, 7.7, 2.7, 3.2 | 16.27483           | 5                | 16.3                     | 8.1                               | Fair to Good | Fair to Good | Low             |                                                                                                                                                                                                      | Medium             |
| 76          | Red alder            | <i>Alnus rubra</i>            | 10.3      | 10.3, 10.4               | 14.63728           | 5                | 14.6                     | 7.3                               | Fair         | Fair to Good | Medium          |                                                                                                                                                                                                      | Medium             |
| 77          | Red alder            | <i>Alnus rubra</i>            | 9.2       |                          | 9.2                | 2                | 9.2                      | 4.6                               | Fair         | Fair to Good | Medium          |                                                                                                                                                                                                      | Medium             |
| 78          | Red alder            | <i>Alnus rubra</i>            | 13.6      |                          | 13.6               | 5                | 13.6                     | 6.8                               | Fair         | Fair to Good | Medium          |                                                                                                                                                                                                      | Medium             |
| 79          | Red alder            | <i>Alnus rubra</i>            | 7.6       | 7.6, 14.3, 9.7, 4.8      | 19.47768           | 5                | 19.5                     | 9.7                               | Fair         | Fair         | Medium          | This tree has multiple trunks originating from the same point, with included bark between the trunk. Also, the lower trunk has had a large branch removed leading to the development of basal decay. | Medium             |
| 80          | Red alder            | <i>Alnus rubra</i>            | 9.8       |                          | 9.8                | 2                | 9.8                      | 4.9                               | Fair to Good | Fair to Good | Low             |                                                                                                                                                                                                      | Medium             |
| 81          | Red alder            | <i>Alnus rubra</i>            | 9.3       |                          | 9.3                | 2                | 9.3                      | 4.7                               | Fair to Good | Fair to Good | Low             |                                                                                                                                                                                                      | Medium             |
| 82          | Red alder            | <i>Alnus rubra</i>            | 8.1       | 8.1, 7.9                 | 11.31459           | 5                | 11.3                     | 5.7                               | Fair         | Fair         | Low             | South trunk and associated crown bows over the pond.                                                                                                                                                 | Medium             |
| 83          | Willow               | <i>Salix species</i>          | 3.3       |                          | 3.3                | 1                | 3.3                      | 1.7                               | Fair         | Fair         | Low             |                                                                                                                                                                                                      | Medium             |
| 84          | Red alder            | <i>Alnus rubra</i>            | 10.1      |                          | 10.1               | 5                | 10.1                     | 5.1                               | Fair         | Fair to Good | Low             |                                                                                                                                                                                                      | Medium             |
| 85          | Red alder            | <i>Alnus rubra</i>            | 4.9       |                          | 4.9                | 1                | 4.9                      | 2.5                               | Fair         | Fair         | Low             |                                                                                                                                                                                                      | Medium             |
| 86          | Willow               | <i>Salix species</i>          | 11.8      |                          | 11.8               | 5                | 11.8                     | 5.9                               | Fair         | Fair to Good | Medium          | This tree leans toward the southwest, over the pond. Currently this tree appears stable.                                                                                                             | Medium             |



Urban Forestry Services, Inc.  
15119 McLean Road, Mount Vernon, WA 98273  
360-428-5810

Tree Assessment Matrix  
Project Title: The Crossings Cottage Development  
Site Address: 1905 Anacopper Mine Road, Anacortes, Washington

Inspector: P. Thompson  
ISA Certified Arborist: PH-1836A  
ISA Tree Risk Assessment Qualified

| Tree Number | Common Name   | Botanical Name               | DBH (In.) | Multiple Stems DBH (In.) | Adjusted DBH (In.) | Tree Unit Credit | Critical Root Zone (Ft.) | Interior Critical Root Zone (Ft.) | Vigor        | Structure    | Risk of Failure | Comments                                                                                                                                                                                                    | Preservation Value |
|-------------|---------------|------------------------------|-----------|--------------------------|--------------------|------------------|--------------------------|-----------------------------------|--------------|--------------|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| 87          | Red alder     | <i>Alnus rubra</i>           | 9.3       | 9.3, 6.8, 8.4            | 14.25798           | 5                | 14.3                     | 7.1                               | Fair         | Fair         | Medium          |                                                                                                                                                                                                             | Medium             |
| 88          | Red alder     | <i>Alnus rubra</i>           | 11.4      |                          | 11.4               | 5                | 11.4                     | 5.7                               | Fair to Good | Fair to Good | Low             |                                                                                                                                                                                                             | Medium             |
| 89          | Willow        | <i>Salix species</i>         | 2.7       | 2.7, 2.5, 2.2, 3.1, 3.5  | 6.343501           | 2                | 6.3                      | 3.2                               | Fair         | Fair         | Low             | Located on the pond edge, with a lean toward the south.                                                                                                                                                     | Medium             |
| 90          | Red alder     | <i>Alnus rubra</i>           | 12.7      | 12.7, 8.8, 10.3          | 18.56933           | 5                | 18.6                     | 9.3                               | Poor to Fair | Fair         | Medium          | This tree has had the upper trunk and fail out of one of the leaders in the past. The remaining two leaders have fair structure. In the lower trunk, I noticed seams between the leaders and included bark. | Low                |
| 91          | Red alder     | <i>Alnus rubra</i>           | 6.8       |                          | 6.8                | 2                | 6.8                      | 3.4                               | Fair         | Fair to Good | Medium          | This tree leans toward the northwest. Currently this lean is stable.                                                                                                                                        | Medium             |
| 92          | Red alder     | <i>Alnus rubra</i>           | 4.7       |                          | 4.7                | 1                | 4.7                      | 2.4                               | Poor to Fair | Fair         | Low             | Remaining leader following the removal of two larger leaders. Poor to fair structure, with malformed trunk lack strong single leader.                                                                       | Low                |
| 93          | Willow        | <i>Salix species</i>         | 7.4       |                          | 7.4                | 2                | 7.4                      | 3.7                               | Poor to Fair | Fair         | Medium          | Strong offset crown toward the northwest, with a sharply bent and bowed trunk aligned in the same direction.                                                                                                | Low                |
| 94          | Red alder     | <i>Alnus rubra</i>           | 9.7       |                          | 9.7                | 2                | 9.7                      | 4.9                               | Poor         | Fair         | Low             | This tree has been topped, with the remaining branching and crown offset toward and over the pond.                                                                                                          | Low                |
| 95          | Red alder     | <i>Alnus rubra</i>           | 3.7       |                          | 3.7                | 1                | 3.7                      | 1.9                               | Poor         | Poor to Fair | Low             | This tree has a dramatic bow over the pond.                                                                                                                                                                 | Low                |
| 96          | Red alder     | <i>Alnus rubra</i>           | 7.1       |                          | 7.1                | 2                | 7.1                      | 3.6                               | Fair         | Fair         | Low             |                                                                                                                                                                                                             | Medium             |
| 97          | Red alder     | <i>Alnus rubra</i>           | 6.5       |                          | 6.5                | 2                | 6.5                      | 3.3                               | Fair         | Fair         | Low             |                                                                                                                                                                                                             | Medium             |
| 98          | Red alder     | <i>Alnus rubra</i>           | 3.1       |                          | 3.1                | 1                | 3.1                      | 1.6                               | Poor to Fair | Fair         | Low             | This tree is slightly suppressed.                                                                                                                                                                           | Medium             |
| 99          | Red alder     | <i>Alnus rubra</i>           | 5.3       |                          | 5.3                | 2                | 5.3                      | 2.7                               | Fair         | Fair         | Low             |                                                                                                                                                                                                             | Medium             |
| 100         | Red alder     | <i>Alnus rubra</i>           | 9.2       | 9.2, 7.7                 | 11.99708           | 5                | 12.0                     | 6.0                               | Fair         | Fair         | Low             |                                                                                                                                                                                                             | Medium             |
| 901         | Red alder     | <i>Alnus rubra</i>           | 7.3       |                          | 7.3                | 2                | 7.3                      | 3.7                               | Fair         | Fair         | Low             |                                                                                                                                                                                                             | Medium             |
| 902         | Red alder     | <i>Alnus rubra</i>           | 3.9       |                          | 3.9                | 1                | 3.9                      | 2.0                               | Fair         | Poor to Fair | Low             | The tree is slightly suppressed, with a lean toward the southeast.                                                                                                                                          | Medium             |
| 903         | Red alder     | <i>Alnus rubra</i>           | 3.8       |                          | 3.8                | 1                | 3.8                      | 1.9                               | Fair         | Poor to Fair | Low             | The tree leans toward the southeast. Currently this lean is stable.                                                                                                                                         | Medium             |
| 904         | Red alder     | <i>Alnus rubra</i>           | 2.5       |                          | 2.5                | 1                | 2.5                      | 1.3                               | Fair         | Poor to Fair | Low             | The tree leans toward the northwest. Currently this lean is stable. This tree is suppressed.                                                                                                                | Medium             |
| 905         | Red alder     | <i>Alnus rubra</i>           | 2.7       |                          | 2.7                | 1                | 2.7                      | 1.4                               | Fair         | Poor to Fair | Low             | The tree leans toward the northwest. Currently this lean is stable. This tree is suppressed, with dieback in the upper crown.                                                                               | Medium             |
| 906         | Red alder     | <i>Alnus rubra</i>           | 5.3       |                          | 5.3                | 2                | 5.3                      | 2.7                               | Fair         | Fair         | Low             |                                                                                                                                                                                                             | Medium             |
| 907         | Red alder     | <i>Alnus rubra</i>           | 3.8       |                          | 3.8                | 1                | 3.8                      | 1.9                               | Fair         | Fair         | Low             | This tree leans toward the northwest.                                                                                                                                                                       | Medium             |
| 908         | Red alder     | <i>Alnus rubra</i>           | 3.3       |                          | 3.3                | 1                | 3.3                      | 1.7                               | Fair         | Fair         | Low             | This tree leans toward the northwest, and is suppressed.                                                                                                                                                    | Medium             |
| 909         | Red alder     | <i>Alnus rubra</i>           | 2         |                          | 2                  | 1                | 2.0                      | 1.0                               | Fair         | Poor to Fair | Low             | This tree leans toward the south over the pond edge. This tree is suppressed.                                                                                                                               | Medium             |
| 910         | Red alder     | <i>Alnus rubra</i>           | 3.3       |                          | 3.3                | 1                | 3.3                      | 1.7                               | Fair         | Poor to Fair | Low             | This tree leans toward the southeast over the pond edge. This tree is suppressed.                                                                                                                           | Medium             |
| 911         | Douglas fir   | <i>Pseudotsuga menziesii</i> | 19.3      |                          | 19.3               | 5                | 19.3                     | 9.7                               | Fair         | Fair to Good | Medium          |                                                                                                                                                                                                             | Medium             |
| 912         | Austrian pine | <i>Pinus nigra</i>           | 17        |                          | 17                 | 5                | 17.0                     | 8.5                               | Fair         | Fair to Good | Medium          |                                                                                                                                                                                                             | Medium             |
| 913         | Red alder     | <i>Alnus rubra</i>           | 7.4       | 7.4, 5.7                 | 9.340771           | 2                | 9.3                      | 4.7                               | Fair         | Fair to Good | Low             |                                                                                                                                                                                                             | Medium             |
| 914         | Red alder     | <i>Alnus rubra</i>           | 5.3       |                          | 5.3                | 2                | 5.3                      | 2.7                               | Fair         | Fair         | Low             | This tree is moderately suppressed.                                                                                                                                                                         | Medium             |
| 915         | Red alder     | <i>Alnus rubra</i>           | 6.4       |                          | 6.4                | 2                | 6.4                      | 3.2                               | Fair         | Fair         | Low             |                                                                                                                                                                                                             | Medium             |





Urban Forestry Services, Inc.  
15119 McLean Road, Mount Vernon, WA 98273  
360-428-5810

Tree Assessment Matrix  
Project Title: The Crossings Cottage Development  
Site Address: 1905 Anacopper Mine Road, Anacortes, Washington

Inspector: P. Thompson  
ISA Certified Arborist: PH-1638A  
ISA Tree Risk Assessment Qualified

| Tree Number             | Common Name | Botanical Name     | DBH (In.) | Multiple Stems DBH (In.) | Adjusted DBH (In.) | Tree Unit Credit | Critical Root Zone (Ft.) | Interior Critical Root Zone (Ft.) | Vigor        | Structure    | Risk of Failure | Comments                                                                                             | Preservation Value |
|-------------------------|-------------|--------------------|-----------|--------------------------|--------------------|------------------|--------------------------|-----------------------------------|--------------|--------------|-----------------|------------------------------------------------------------------------------------------------------|--------------------|
| 916                     | Red alder   | <i>Alnus rubra</i> | 4.3       |                          | 4.3                | 1                | 4.3                      | 2.2                               | Fair         | Poor to Fair | Low             | This tree is moderately suppressed.                                                                  | Medium             |
| 917                     | Red alder   | <i>Alnus rubra</i> | 5.8       |                          | 5.8                | 2                | 5.8                      | 2.9                               | Poor to Fair | Fair         | Medium          | This tree has multiple scars on the lower trunk, with initial stages of decay development occurring. | Medium             |
| 918                     | Red alder   | <i>Alnus rubra</i> | 2.7       | 2.7, 7.9                 | 8.348653           | 2                | 8.3                      | 4.2                               | Fair         | Fair         | Low             |                                                                                                      | Medium             |
| 919                     | Red alder   | <i>Alnus rubra</i> | 5.4       |                          | 5.4                | 2                | 5.4                      | 2.7                               | Fair         | Fair         | Low             |                                                                                                      | Medium             |
| Total Tree Unit Credits |             |                    |           |                          |                    | 234              |                          |                                   |              |              |                 |                                                                                                      |                    |

Exhibit 12  
Public Comments  
submitted after  
9/17/20



**From:** [Shawn Patrick](#)  
**To:** [Grage, Libby](#)  
**Subject:** Re: Public Comment on LPS-2020-0001  
**Date:** Friday, September 18, 2020 4:33:07 PM  
**Attachments:** [Development Letter.pdf](#)

---

**City of Anacortes**  
*Planning, Community &  
Economic Development*

**Date Received:**

9/18/20

Ms. Grage,

I received written notice in the mail of the September 23rd Planning Commission public hearing regarding LPS-2020-0001 (The Crossings Cottages) and just wanted to make absolutely certain that my opposition letter which was sent as a pdf attachment with my original email on April 20th will be distributed to the Planning Commission? I am re-attaching it to this email just in case.

As a small addendum to my original letter, changes brought about by Covid-19 have resulted in heavy parking congestion in my neighborhood which is at the entrance of the proposed project. Both of my college students are now home attending virtual classes and I'm assuming that is the case with everyone else's children. The net result is there are more cars than space on Meadows Lane and I am already having trouble finding a place to park near my home. That will only get much worse if LPS-2020-0001 is approved. I already have to place my garbage bins in my own driveway so they can be emptied by the garbage trucks.

Thank you,  
Shawn Patrick

On Apr 21, 2020, at 11:56 AM, Grage, Libby <[LibbyB@cityofanacortes.org](mailto:LibbyB@cityofanacortes.org)> wrote:

Hello Mr. Patrick,

Thank you for your comments. They will be added to the project record and provided to the Planning Commission and City Council when this application goes before them. Your email submittal of these comments is sufficient – there is no need to mail a hard copy.

Best regards,

**Libby Grage** | City of Anacortes  
Planning, Community & Economic Development Department  
Planning Manager  
P.O. Box 547 | 904 6<sup>th</sup> Street | Anacortes, WA 98221  
360.299.1986 (work) | 360-661-3505 (work cell)  
[libbyb@cityofanacortes.org](mailto:libbyb@cityofanacortes.org) | [www.cityofanacortes.org](http://www.cityofanacortes.org)

My incoming and outgoing email messages are subject to public disclosure requirements per RCW 42.56.

-----Original Message-----

From: Shawn Patrick <[shawnpatrick@gmail.com](mailto:shawnpatrick@gmail.com)>

Sent: Monday, April 20, 2020 5:50 PM

To: Grage, Libby <[LibbyB@cityofanacortes.org](mailto:LibbyB@cityofanacortes.org)>

Subject: RE: Public Comment on LPS-2020-0001

Ms. Grage,

Attached please find a pdf letter with our comment on the proposed development project at 1905 Anacopper Mine RD.

I was going to drop this in the mail at the Post Office, but was hoping that email submission would be okay?

Please let me know that you have received it.

Thank you,  
Shawn Patrick



**From:** [Measamer, Don](#)  
**To:** [Grage, Libby](#)  
**Subject:** FW: The Crossings Cottage Development  
**Date:** Friday, September 18, 2020 7:08:29 AM

**City of Anacortes**  
*Planning, Community &  
Economic Development*

**Date Received:**

9/18/20

FYI



## DON MEASAMER

### Director of the Planning, Community & Economic Development Department

City of Anacortes

904 6<sup>th</sup> Street & Q Avenue | Anacortes, WA 98221

p: 360-299-1942

[don@cityofanacortes.org](mailto:don@cityofanacortes.org) | [www.anacorteswa.gov](http://www.anacorteswa.gov)

**From:** Cynthia Richardson <[richrson@cnw.com](mailto:richrson@cnw.com)>

**Sent:** Thursday, September 17, 2020 11:05 PM

**To:** Measamer, Don <[don@cityofanacortes.org](mailto:don@cityofanacortes.org)>

**Subject:** The Crossings Cottage Development

This letter is to urge the Anacortes Planning Commission to recommend approval of, and for the Anacortes City Council to approve, the application for LPS-2020-0001, The Crossings Cottage Development, by Strandberg Construction.

For many years the Anacortes zoning code favored the building of medium and large sized homes on generous size lots, and there was no provision in the code for small homes on small lots. During the development of the current Comprehensive Plan, it was shown that there is a documented need in our city for smaller homes with less yard to care for. For older folks wishing to downsize, young single people and couples, small families, and anyone who can't afford to buy and maintain a large home, a multifamily unit is often the only choice, and those are in short supply.

The Comprehensive Plan supports the concept of small homes on small lots as a housing type that meets the needs of many people who prefer a single family home rather than unit in a multifamily building. Allowing smaller homes on smaller lots also helps to meet the City's goals for accommodating an increasing population. The new zoning code allows such "cottage housing" to be built in existing neighborhoods if it meets certain requirements. This project does meet

those requirements, and will be a welcome addition to the variety of housing types available to Anacortes residents.

Think about future residents of these cottages: A single father who can walk with his child to Tursi Park and the nearby forestlands; a grandmother who enjoys living near her daughter's family in Copper Pond; an older couple who no longer needs their large home in Rock Ridge but wants to stay near their neighborhood friends; a young school teacher who likes living in the same community as his students; a worker at the airport who can walk or bike to work.

Obviously, a cottage-size home is not suitable for everyone, but for those of our citizens who need a modest size home in a cozy neighborhood, this development can be just what they have been looking for. Please vote "yes".

Cynthia Richardson

315 V Avenue  
Anacortes, WA 98221

**Date Received:**

9/21/20

**From:** [Jane Brandt](#)  
**To:** [Grage, Libby](#)  
**Subject:** Public comment for Planning Commission Meeting September 23, 2020  
**Date:** Monday, September 21, 2020 1:14:13 PM

---

File #LPS-2020-001

The Crossings Cottages

Dear Planning Commissioners

I reside at 3936 W. 12<sup>th</sup> Street. I purchased my home ten and a half years ago.

I am not a scientist nor engineer but a retired medical professional who thought that I had moved to a place where concern for the population and the environment was utmost. I cannot address the details intelligently regarding mitigation of the environment nor the drainage. I do appreciate that the lighting is addressed. I also appreciate that mitigation regarding the wetlands has been attempted in spite of the removal of the large conifers to make room for hardscape in the form of houses and asphalt.

I will address the issue of the increase in traffic as it negatively impacts the surrounding established lower density neighborhoods. I attended the public meeting this winter when the developer presented his proposal and local residents expressed concerns regarding drainage and traffic. He minimized the impact that traffic would have on the neighborhoods. It is stated in the SEPA Review Staff Report that there is no significant adverse environmental impacts that cannot be mitigated and the drainage has been addressed. I do not see mitigation nor concern for the decline in the quality of life for those of us who reside on the streets that will be impacted by the increased traffic. 151 daily trips is a huge impact on the surrounding established neighborhoods for those of us who have been unlucky enough to have trusted the previous zoning and the city. West 12<sup>th</sup> street has been the arterial for construction traffic for the last five years or longer with the construction traffic starting around 6:30 in the morning. This high density development in the midst of established lower density residences will increase the traffic considerably. This does not impact the developer nor I imagine those of you making the decisions, but it does have a negative impact on the quality of life for those of us who have invested in the neighborhood. If this higher density development in this neighborhood is approved it will confirm to me that there is lack of concern for those of us who have invested in our homes with the hopes of a good quality of life.

Sincerely  
V Jane Brandt

Sent from [Mail](#) for Windows 10



**From:** [Cherie Goyer](#)  
**To:** [Grage, Libby](#)  
**Cc:** [Justin Goyer](#); [jcbatten@gmail.com](mailto:jcbatten@gmail.com); [Baldwijn@gmail.com](mailto:Baldwijn@gmail.com); [Geno Spatafore](#); [tdmaynorpt@gmail.com](mailto:tdmaynorpt@gmail.com)  
**Subject:** Public Comment for Planning Commission Meeting on September 23, 2020  
**Date:** Monday, September 21, 2020 10:43:17 AM

**City of Anacortes**  
*Planning, Community &  
Economic Development*

**Date Received:**

9/21/20

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My name is Cherie Goyer. I live at 2203 Oregon Ave.

I am very concerned about the safety of the roads based on the development Mr. Strandberg is proposing at The Crossings. I question how many people have been to this part of town, know the families in the neighborhoods, and are actually concerned about what the people currently living there want.

I attended as many of the meetings as possible, but I am a parent with two young children and an active duty Service Member, which makes it extremely difficult for me to make many of the meetings.

I do NOT want Oregon Ave and Meadows Lane to connect! First and foremost, the increased traffic that Mr. Strandberg severely underestimated that will utilize Oregon Ave to cut through would make the intersection at W 12<sup>th</sup> and Oregon Ave EXTREMELY UNSAFE. It is already a blind intersection for all residents living on Oregon Ave, and I constantly see people speeding up and down W 12<sup>th</sup>. I have actually almost been hit on more than one occasion! The blind intersection, combined with inconsiderate speeders, makes trying to cross the intersection on foot for the bus stop extremely dangerous especially with two little kids! Come see this blind four-way for yourself.

I recommend that IF the road MUST be completed that there MUST be Bollards installed solely for Fire and Emergency Vehicles ONLY, in order to limit traffic on Oregon Ave. I recommend the bollards be placed at the North End of Oregon Ave, allowing access for the single family homes only. With increased traffic, and 5 years of construction that Mr. Strandberg specifically said that it would take to complete, severely reduce quality of life for all of the Rock Ridge and Copper Pond neighborhoods! This is one of the few flat roads in Rock Ridge where many young families from Oregon Ave, W 12<sup>th</sup>, and Meadows Lane come to ride their bikes and play worry free in the street. Currently, this is the absolute safest place for the children to play in our neighborhood!

I still believe that because Mr. Strandberg is only allowed to build on 2 acres of the property, the maximum number of Cottage homes he should be allowed to build is 16, IF ANY. I think that just because the land is there, it does not mean this is the correct location for this type of housing. This is R2 LOW DENSITY housing. How does 18 homes on 2 acres consider itself LOW DENSITY?! This is a clear example of the City Council wanting this type of housing built to show diversification, as long as it is not in their neighborhood! The residents of Rock Ridge and Copper Pond DO NOT want this development!

I would like to hear from someone who lives in Copper Pond, or Oregon Ave that is pushing for this to actually happen. I also feel like the city is not listening to the people. They are listening to the tax dollars they will get from ALL of these houses being built. We are the people. The Crossings are literally ruining our little piece of happiness!

Your concerned residents,  
Cherie & Justin Goyer



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# EVERGREEN ISLANDS

PO Box 223, Anacortes, WA 98221

September 22, 2020

**City of Anacortes**  
*Planning, Community &  
Economic Development*

**Date Received:**

9/22/20

To: Anacortes Planning Commission  
(Sarah Ruether, Geoffrey Mount, Jeffrey Graf, Ward McKee,  
Mike Cortright, Frank Jeretzky)

cc: Don Measamer, Director of Planning and Community Dev  
Libby Grage, Planning Manager

cc: Evergreen Islands Board of Directors

## Re: The Crossings Cottages Development (LPS-2020-0001)

## INTRODUCTION

Evergreen Islands is very concerned that the proposed Crossings Cottages Development, located in the middle of a neighborhood completely zoned Residential R2, will seriously degrade not only the neighbors' quality of life but also their property values.

## DISCUSSION

### THE CROSSINGS COTTAGE DEVELOPMENT - PART 1

[https://anacortes.granicus.com/MetaViewer.php?view\\_id=2&event\\_id=100998&meta\\_id=30016](https://anacortes.granicus.com/MetaViewer.php?view_id=2&event_id=100998&meta_id=30016)

The following statements were excerpted from the Staff Report, Part1

Comprehensive Plan Designation: Residential Low Density Zoning: R2

### SITE & SURROUNDING USES:

Comprehensive Plan Zoning Land Use

|       |                         |    |                         |
|-------|-------------------------|----|-------------------------|
| Site  | Residential Low Density | R2 | Single-family residence |
| North | Residential Low Density | R2 | Single-family residence |
| East  | Residential Low Density | R2 | Single-family residence |
| South | Residential Low Density | R2 | Single-family residence |
| West  | Aeronautical Zone       | AZ | Anacortes Airport       |



### **Zoning and Form /Intensity Standards**

6. The site is zoned R2, Residential Low Density 2.

The maximum density allowed in R2 is 4 dwelling units per gross acre.

The maximum number of standard single family dwelling units allowed for the project site is 21 (5.2 gross acres x 4 dwelling units per gross acre).

Per AMC 19.43.010.D.3.b, **each cottage unit may be counted as one-half a dwelling unit** for the purpose of calculating density (because of their relative smaller size).

Therefore, 18 cottages are equivalent to 9 dwelling units.

The 3 standard SFR lots are added to this for a total of 12 dwelling units.

The proposed density of the subject development is 2.31 dwelling units per gross acre (12 dwelling units / 5.2 acres = 2.31 dwelling units per acre).

## ***ANACORTES COMPREHENSIVE PLAN 2016***

<https://www.anacorteswa.gov/DocumentCenter/View/4406/2016-Comprehensive-Plan-PDF>

Table LU-1. Land use designations of the Anacortes Comprehensive Plan includes the following description of the R2 residential zone:

### **Residential Low Density 2**

Purpose: This (R2) designation provides for low density residential development in mostly established neighborhoods throughout the City. These areas are inappropriate for more intensive urban development due to the established character of the area and/or due to the area's separation from transit uses and commercial services.

Principal uses & density: Single-family detached dwellings are the predominant dwelling type.

Other dwelling types, such as duplexes, accessory dwellings and cottage housing may be allowed under certain circumstances. The permitted density is between 4 and 8 dwelling units per gross acre, depending upon the established development pattern and character of the area.

Special topics to explore: Accommodate affordable housing and tiny houses (see Housing Element).

Explore option for 6,000 sf lots where compatible with existing development (east of Anacopper Mine Rd.).

## **Short Term Vacation Rentals by Owners**

The 18 cottages on 4  $\frac{3}{4}$  acres of land (~4 dwelling units per acre) are ideally suited for short term vacation rentals. If the cottages are used for vacation rental, the character of the neighborhoods will fundamentally change from residential to commercial.

## **CONCLUSION**

If this project is approved as proposed, the City will drop a bombshell on the area similar to the housing density bombshell that the City of Anacortes dropped on the 18th Street neighborhood when the Fidalgo Flats, a five or six story, 25+-unit apartment building was approved

The Commission should at least add conditions that require the property owners reside in the cottages.

Respectfully yours,



Tom Glade

Evergreen Islands Board of Directors

## **Attachment 1**

**Evergreen Islands Comment Letter, September 16, 2020**





**Evergreen Islands  
Board of Directors**

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# EVERGREEN ISLANDS

PO Box 223, Anacortes, WA 98221

September 16, 2020

To: Don Measamer, Anacortes Director of Planning, Community & Economic Dev.  
cc: Mayor Gere and the Anacortes City Council  
(Ryan Walters, Brad Adams, Jeremy Carter, Matt Miller,  
Bruce McDougall, Carolyn Moulton, Anthony Young)  
Libby Grage, Planning Manager  
cc: Evergreen Islands Board of Directors

Re: The Crossings Cottages, LPS-2020-0001

Dear Mr. Measamer:

Evergreen Islands is concerned about the protection of the cojoined Wetland B (Airport) and the 'Adjacent' Copper Pond) as defined in the current Critical Areas Ordinance(CAO) 17.70.320 Designation, rating, and mapping wetlands:

E. Locally Significant Wetlands. Pursuant to subsection (B)(1)(b)(iv) of this section, the following wetlands are designated as Category II wetlands:

1. **The wetlands on or adjacent to the Port of Anacortes owned property** at the Anacortes Airport except as to buffer widths which shall be as required for Category III. (Ord. 2794 § 1 (Att. A), 2008; Ord. 2702 § 3, 2005)

## Anacortes Airport Wetland Delineation Report, Grette Associates

Anacortes Airport Wetland Delineation report prepared by Grette Associates  
Figure 1 is an aerial photograph and diagram of these two wetlands that were extracted from the 2015 Port of Anacortes, Anacortes Airport Wetland Delineation report prepared by Grette Associates (the Grette Report).

The Grette Report's Wetland Summary states (emphasis added):

**The pond is located in the eastern portion of Wetland B and connects to a larger ponded area outside of the study area to the east via a culvert under Anacopper Road** (Sheet 2). The pond appears to contain naturally-occurring groundwater and likely receives surface-water runoff from the surrounding uplands. **At the time of the site visit, surface water was present in the pond and flow was observed entering the pond through the culvert under Anacopper Road.** In addition to the surface water features listed above, a culvert is present to the west of Wetland B, between the margin of the airport property and the edge of the runway (Sheet 2). This culvert appears to run underneath the runway and taxiway and is expected to provide a surface-water outlet to the pond located in Wetland B. At the time of the site visit, no flow was observed through to the west side of the culvert

Section 5.10 WETLANDS OUTSIDE THE STUDY AREA of the Grette Report states (emphasis added):  
Per Anacortes Municipal Code (AMC) 17.70.330(B)(2), critical area reports should consider wetlands and other critical areas within three hundred feet of the project area, due to the maximum potential buffer size for wetlands. Based on recent aerial photography and a previous delineation of wetlands at the Anacortes Airport (Pentec Environmental 2001), one wetland area was identified within three hundred feet of the study area boundary. **This wetland connects to Wetland B via a culvert running underneath Anacopper Road. Although the buffer surrounding this wetland is likely to extend into the study area, it would lie entirely within the buffer surrounding Wetland B. In respect to the study area, the buffer surrounding Wetland B is inclusive and protective of the offsite wetland.**

### ***Critical Areas Assessment Report***

The Critical Areas Assessment Report, February 2020, prepared by AquaTerr Systems, Inc; states:

This project will include wetland buffer averaging that will result in 1,372 square feet of wetland buffer reduction and 1,416 square feet of wetland buffer addition in compliance with COA CAO Chapter 17.70.340.4 (Figure 5; COA 2008). The proposed 1,372 square foot impacted buffer area is currently comprised of mowed lawn. The proposed reduction will still maintain at least a 95 foot wetland buffer (Figure 5). This buffer reduction area will be offset by 1,416 square feet of wetland buffer addition that will be converted from mowed lawn to an herbaceous meadow with a forested canopy component.

Figure 3 from the Assessment Report illustrates the wetland adjustments.

## **CONCLUSION**

In conclusion Evergreen Islands requests

- that the proposed nature trail be eliminated
- a Sidewalk road improvement be required along the west property line which is adjacent to the Anacopper Mine.
- Evergreen Islands disputes ATSI conclusion that Wetlands A and Wetlands B have no hydraulic connection.

Respectfully yours,



Tom Glade  
Evergreen Islands Board of Directors



**Figure 1. 'Wetland B' across Anacopper Mine Road on the Anacortes Airport.**





**Figure 2. Aerial Photograph, Existing Conditions, & Data Plots 1-4**

Strandberg-The Crossing

Parcel Number: P31752

1905 Anacopper Road, Anacortes, Washington

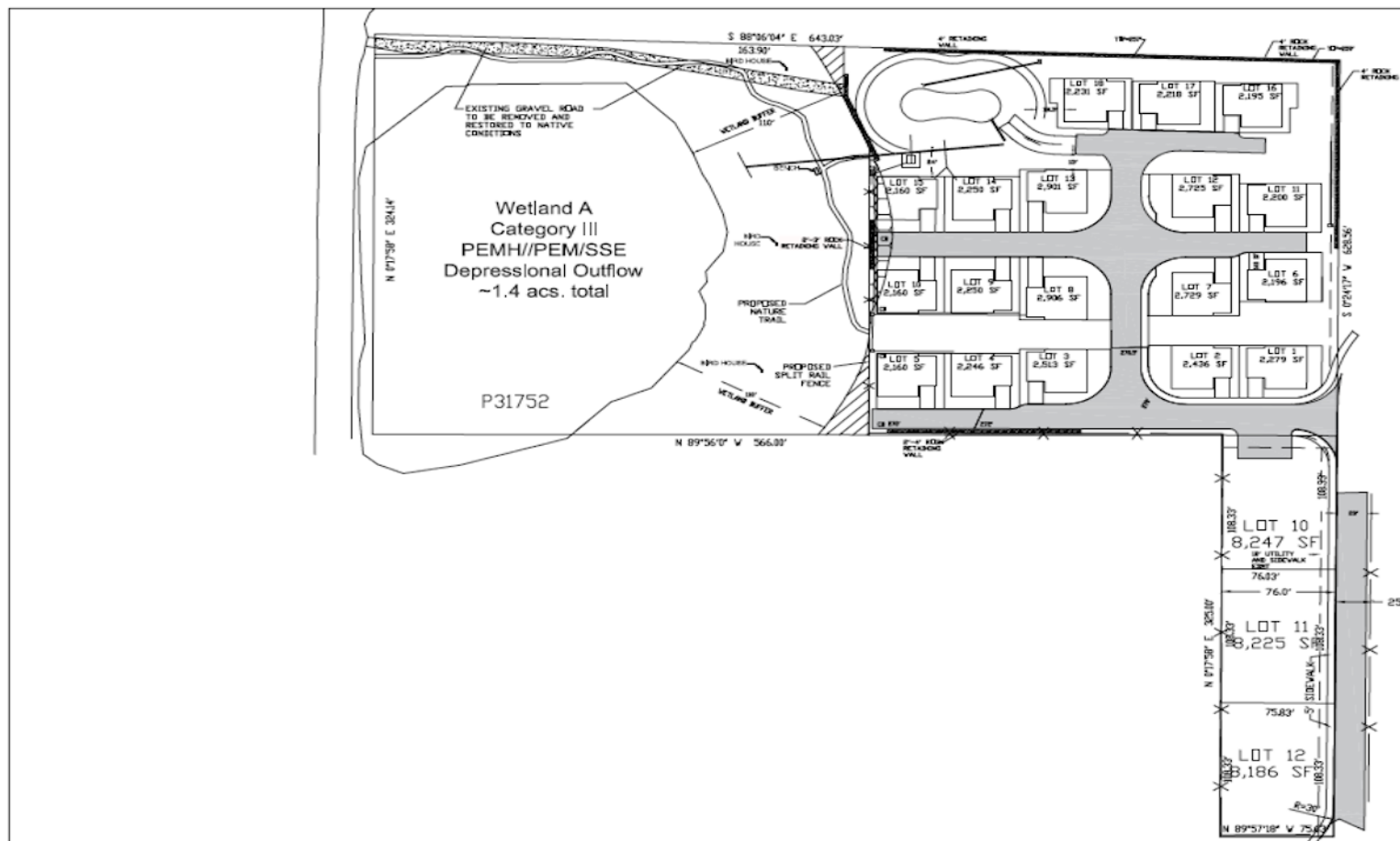
Section 3, Township 35 N, Range 01 E, WM

February 2020

-  Wetland
-  Culvert Outlet
-  Data Plot

**Note:** Basemap obtained from Google Earth (Imagery Date: 2 May 2015). Wetland B location and information obtained from Grette Associates LLC (4 September 2015) with alterations by ATSI. Wetland B is not described as part of this rating. The wetland boundaries and locations are approximate and do not constitute a legal land survey. Wetland buffers do not cross roads per AMC 17.70.340.G.4 (16 December 2019).

## Figure 2. ATSI Wetland Delineation



**Figure 5. Proposed Conditions, Wetland Buffer Enhancement, & Restoration**

Strandberg - The Crossing

Parcel Number: P31752

1905 Anacopper Road, Anacortes, Washington

Section 3, Township 35 N, Range 01 E, WM

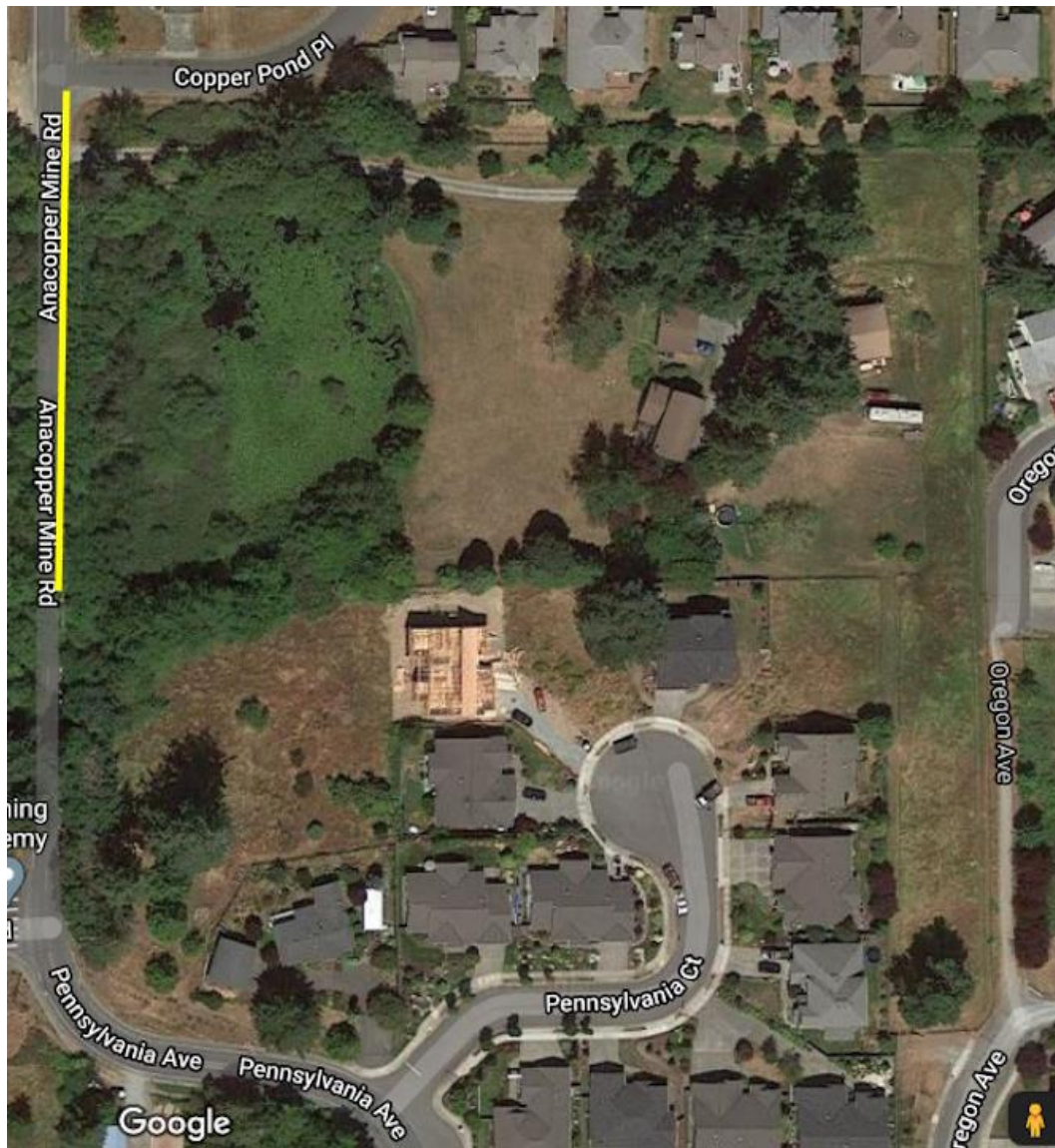
February 2020

|  |                                            |
|--|--------------------------------------------|
|  | Buffer Averaging Addition (1,416 sq. ft.)  |
|  | Buffer Averaging Reduction (1,372 sq. ft.) |
|  | Buffer Restoration (2,488 sq. ft.)         |

**Note:** Basemap obtained from Dale Herrigstad, Professional Engineer with edits by ATSI.

**Figure 3. ATSI Map of Proposed Conditions, Wetland Buffer Enhancement & Restoration**





***Figure 4. Sidewalk Added to Anacopper Mine Road to Allow Public Viewing of the Copper Pond Wetland***



## **ANACORTES COMPREHENSIVE PLAN 2016**

<https://www.anacorteswa.gov/DocumentCenter/View/4406/2016-Comprehensive-Plan-PDF>

### **Residential Low Density 2**

**Purpose: This (R2) designation provides for low density residential development in mostly established neighborhoods throughout the City.**

These areas are inappropriate for more intensive urban development due to the established character of the area and/or due to the area's separation from transit uses and commercial services.

Principal uses & density: Single-family detached dwellings are the predominant dwelling type.

Other dwelling types, such as duplexes, accessory dwellings and cottage housing may be allowed under certain circumstances.

The permitted density is between 4 and 8 dwelling units per gross acre, depending upon the established development pattern and character of the area.

Special topics to explore: Accommodate affordable housing and tiny houses (see Housing Element).

**Explore option for 6,000 sf lots where compatible with existing development (east of Anacopper Mine Rd.).**

9/23/20

**City of Anacortes**  
*Planning, Community &  
Economic Development*

**Date Received:**

9/23/20

TO:

Libby Grage, Don Measamer, Planning Dept.  
Anacortes Planning Commission

FROM:

Ross O. Barnes, PhD

**RE: The Crossing – Response to LPS-2020-0001 Project File and Hearings.**

This is a response to the project file for 'The Crossings' 21 unit R2 residential development on Lot #P31752 at 1905 Anacopper Mine Road.

This comment letter relates only to non-wetland issues and questions concerning The Crossings development proposal which are governed by **AMC Title 19**. Further comments may be submitted specific to wetland related issues which are governed by **AMC Title 17**.

Note and complaint:

The applicant unnecessarily changed the Plan Sheet designations (letter and number) between the final copy in the hearings file (plans dated 7/23/20) and the original application file (plans dated 1/31/20) which can cause confusion during the many months long process of drafting and submitting comments on the record that refer to specific plan sheets. I have spent hours re-designating plan sheet references from earlier drafts to this final letter, but I may have missed something.

**'A' for effort, 'F' for success.**

I commend Mr. Strandberg for what is obviously a sincere, diligent and strenuous effort to shoehorn 21 units of housing onto a property supposedly able to accommodate 25 such units on the non-critical area portion of the property under allowed maximum density calculations. However, the grossly unrealistic code allowing double normal density for cottage housing ultimately defeats the effort, since other applicable code standards cannot be met as discussed below.

**Are the new Title 19 quantitative standards actually feasible, realistic, or desirable?**

The new quantitative standards of **AMC Title 19** were not tested with any kind of “reality analysis” before adoption. The numerous warnings from community members at the beginning of the process of re-writing the Anacortes Comprehensive Plan and development code were ignored by the Planning Department, Planning Commission, City Council and their hired-gun consultant, and adopted with grossly insufficient analysis of what kind of development they would actually produce.

It is obvious that whoever proposed and accepted the doubling of normal density standards for cottage housing specified in **AMC 19.43.010 D.3.b.** never actually tried to lay out a code compliant cottage development at that density, as The Crossings attempt demonstrates. Nor did they bother to read the rest of **Title 19** code, since R3 and R4 zones have no specified maximum density and thus nothing to ‘double’.

The Crossings cottage housing proposal demonstrates that doubling normal R2 zoning density for cottage housing is incompatible with the other **Title 19** numerical and dimensional standards and other code requirements specified for cottage housing. It is not physically possible to place 18 cottage units on this property and meet all dimensional, access, and other code requirements, let alone the 22 unit ‘permitted’ cottage housing density. Title 19 implies that you could also design cottage housing at ‘doubled’ densities for R2A, R3 and higher which is geometrically and factually absurd.

It is essential at this initial stage to develop and enforce precedents of grammatically consistent interpretation of code language, or the resulting development will bear little relationship to the intentions of the Comprehensive Plan and development code, or to the qualitative intentions of the officials who designed and approved these plans and codes with so little thoughtful analysis of the consequences.

### **When should ½ of adjacent ROWs be included in allowed density calculations?**

**AMC 19.42.100 B.2.** – *"Gross acreage of the site may be used in the calculation of the maximum allowed residential density (including half of existing street right-of-way around the perimeter of the site and any new street right-of-way internal to the site)."*

The development code allows ½ of retained non-vacated perimeter right-of-ways to be included in the maximum density calculation because these ROWs typically provide part of the lot access requirements and/or transportation grid associated with the development. The City should clarify the code on these points to allow this inclusion only if said ROW meets applicable minimum City ROW standards as specified in **AMC 19.52.040** and required improvements already exist or will be provided by the development.



**(1)** This clarification would help Mr. Strandberg understand the intentions of the code because The Crossings proposes (a.) no frontage improvements on Anacopper Mine Road (AMR) which is an obvious pedestrian safety hazard, and (b.) proposes to provide a substandard width so-called public ROW adjacent to the 3 southern panhandle Lots 19 to 21.

Neither (a.) nor (b.) meet code requirements for ROWs or frontage improvements, are not in the public interest, and should not be permitted. Pedestrian improvements on AMR are essential for public safety, and the City should not accept dedications of sub-standard ROW. See items (4), (5) and (6) below for further discussion.

**(2) Comments.**

The lot areas stated for Lots 20 and 21 do not correspond with the lot side dimensions given for those lots on Plan Sheets **C3** and **C5**.

The piecemeal here-but-not-there cottage development sidewalk plan, appears to meet code specifications, but demonstrates the dysfunctional design illogic spawned by the poorly thought out **Title 19** design standards.

**Road and ROW issues.**

**(3)** Private driveway to 18 cottage units exceeds maximum code allowance of 12 cottage units and does not meet required dimensional standards.

- Cottage housing: **AMC 19.43.010 D.3.I.-i.** – "Driveway and access requirements are in AMC Chapter 19.53." requires that cottage shared access driveways meet the standards of **AMC 19.53.040** and **.050** as applicable.
- **AMC Table 19.53.040(B)** specifically includes cottage units in Note 1, and limits shared access driveways to 12 cottage units with a minimum 20' wide driveway tract or easement; Note 2 does not allow Fire Department discretion on either the maximum number of units or the easement/tract width. **AMC 19.50.050 A.** reinforces the 20' wide easement/tract width. **AMC Table 19.53.040(B)** makes no provision for subdividing the private driveway based on internal branching or for reducing the driveway tract below 20' width--the shared private 20' wide driveway tract starts at the entrance to the cottage development regardless of how many internal side branches it contains.
- However, the proposed cottage development shared access driveway serves up to 18 cottage units, 50% more than Title 19 specifications.

- All private shared driveways must be in a 20' easement or tract. The driveway tract at Lots 4, 5, 6, 11, 16, and 17 is less than 20' wide. Required or guest parking spaces for Lots 4 and 17 intrude thru the driveway of the adjacent Lots 5 and 16—thus the driveway space at Lots 5 and 16 is 'shared' not private single use and must be a 20' wide tract or easement.
- The 20' minimum driveway length to the garage from the shared private driveway tract or easement required by **AMC 19.54.040 E.3.b.** is only provided for 6 cottage units, and for 2 of those (Lots 1 and 2) the required 20' overhangs the sidewalk by 3½ feet.
- Cottage housing: **AMC 19.43.010 D.3.I.-iii.** – *"Parking areas must be located to the side or rear of cottage clusters. Parking must not be located between the street and cottages nor between cottages and common open space."*  
Parking areas in front of and between Lots 13 & 18 and 11 & 16 and in what would otherwise be common open space do not meet this requirement.

Variances or specified 'director's discretion' typically require specific justification and findings of consistency and equivalence to all of the above items. If a variance is requested, what are the justifications, if any, for granting a variance that meet the requirements of **AMC 19.38**? What undesirable precedents would be set by granting such a variance?

**(4) Issues with the southern panhandle 3 lot shared access driveway/road.**

- The location of this driveway/road within the 25' wide tract is inconsistently shown on various plan sheets.
- Is this a shared access private driveway or a public ROW sub-standard pseudo-street? Are shared access driveway or public ROW standards applicable? Will this 'driveway' be limited to access use for the 3 lots, or open to the public as a neighborhood transportation connector? If it is proposed as a public ROW, how does it meet minimum public ROW standards?
- **AMC 19.51.050 – Dedication of right of way.**  
*"A. Existing ROW. If an existing right-of-way abutting the subject property is not wide enough to contain the required improvements, the applicant must dedicate as right-of-way a strip of land adjacent to the existing right-of-way wide enough to encompass the required improvements.*  
*B. New ROW. The Public Works Director may require the applicant to make land available, by dedication, for new right-of-way and utility infrastructure if it is necessary as a result of the proposed development activity."*  
**AMC 19.52.040 – Street geometric design and streetscape.**

*"A. Applicability. Required street improvements must meet the standards herein except when either of the following apply:*

*1. Capital Improvement Projects. In cases where the City Council has approved a capital improvements plan for a particular public right-of-way, that plan will govern the improvements required for the right-of-way and the provisions of this section do not apply.*

*2. Modified and Special Standards. In cases where a modified standard for a particular street or neighborhood has been approved by City Council per AMC 19.51.060(C)(5), or where special design standards are otherwise identified in the engineering design standards, those standards will govern the improvements required for the right-of-way and the provisions of this section do not apply."*

I believe neither **1.** nor **2.** above apply to this site.

- The proposed 'road' serving the 3 panhandle lots appears to be in a narrow 25' restricted access fire lane in an easement or tract on adjacent property. If Mr. Strandberg does not own this proposed road tract (it is nowhere shown as part of the development property) what legal basis does he have to use it for his residential lot access. What legal and code basis does he have to dedicate it as a public sub-standard pseudo-street as proposed?
- The proposed so-called 25' wide public ROW adjacent to the 3 southern lots does not meet City public ROW standards. Mr. Strandberg proposes to "dedicate this tract as a public ROW". If Mr. Strandberg has to purchase or negotiate and dedicate a 25' tract from the adjacent landowner as a public pseudo-street, why can't he just negotiate and dedicate the full minimum ROW tract needed to provide a legal public street meeting the requirements of **AMC 19.51.050** and **AMC 19.52.040**?
- I believe this substandard narrow fire lane was intended to be expanded into a full standard public ROW connecting Meadows Lane and Oregon Ave. when the adjacent properties were developed. If not now, how and when will this 'driveway' or fire lane be expanded to a full public ROW meeting minimum ROW standards as originally intended? How long will it exist as a sub-standard pseudo-street?
- The proposed sidewalk is located in an easement on the adjacent lots rather than in the proposed ROW tract and intrudes into the 20' front setback for these lots. Is this sidewalk private access or a public access connector corridor? Mr. Standberg's application cover letter of 1/20/20 on page 1 says the adjacent substandard road will be public access, but the sidewalk is on private Lots, not the adjacent so-called ROW.
- How does the proposed development of the 3 lot panhandle area restrict or accommodate the vehicle and pedestrian interconnections of existing and future subdivisions in the area as intended by **AMC 19.53.040 A.3. & 4.** and the Anacortes Comprehensive Plan?



**(5)** Lack of public access vehicle and non-motorized connections between neighborhoods. The Crossings proposes 21 lots accessed solely by substandard non-code compliant private shared access driveways, or sub-standard so-called public ROW (adjacent to 3 lot southern panhandle). No standard public right-of-way interconnections are proposed between adjacent sub-divisions or properties or internal to the project. How does this meet the connectivity and access goals and policies of the Anacortes Comprehensive Plan?

**(6)** The Crossings proposes to provide none of the required frontage improvements to **Anacopper Mine Road (AMR)** and meets none of the required specifications of **AMC 19.51.060** for alternatives or modifications to City road standards. Mr Strandberg wrote the following on page 2 of his 1/20/20 introduction letter to The Crossings: --

**Pedestrian Traffic:** Many neighbors have brought up their concern with how dangerous Anacopper road is. While it may appear dangerous, as there is no curb and gutter, sidewalks, very little shoulder, and apparently many “speeders” racing to town, historically it has fewer accidents than most streets in Anacortes. Below is a link that shows how many historical accidents have happened in that area and other parts of town, since 1998. Per the map it can be inferred that Anacopper is no more dangerous than just about any other road in town, and much safer than most.

<https://anacortesgis.maps.arcgis.com/apps/View/index.html?appid=edd6f3665a2f49799a41b6732eacbaa4>

The construction of The Crossings is a huge improvement in pedestrian safety: with the connection of Oregon Avenue and Meadows Lane with a full city sidewalk, there is no reason for anyone to walk on Anacopper Road in the area around the Crossings. Pedestrians and cars can simply by-pass Anacopper and stay on the low volume safer streets that have sidewalks.

Per AMC 19.51.060- The Crossing will seek a waiver to street improvements upgrades along Anacopper Road due to several reasons:

1. The necessity of filling, modifying, and significantly changing the wetland/ buffers and other critical areas that are directly adjacent to Anacopper Road. 19.51.060 E. (1) and 19.54.020 B. 2. (b)
2. The Crossing is installing other significant pedestrian paths and sidewalks, increasing pedestrian safety significantly from its current state. 19.54.020 A. 3.
3. The Crossing development is actually adjacent a 2-acre critical area wetland and buffers, the 2-acre wetland is adjacent to Anacopper Road. The Crossings lots do not abut Anacopper nor is any access taken from Anacopper.
4. All required ROW improvements are being made on the east side of The Crossing where our access is taken, and our lots abut the actual city ROW.

However, The Crossings does not meet the waiver requirements of **AMC 19.51.060** for the following reasons.

- The irrelevant argument about “fewer historical accidents” would apply to many if not most street segments in Anacortes and has nothing whatsoever to do with the application of Anacortes street development standards or **AMC 19.51.060** modifications to those standards.
- Anacopper Mine Road (AMR) is a grossly substandard collector arterial that handles multi-modal transportation access and connections to and between numerous residential sub-divisions, the airport, Tursi Park, and the ACFL. It has not been upgraded since it ended in an essentially rural undeveloped area with gravel/dirt roads and driveways to a few large acreage lots. Who eventually is forced to pay for frontage road and pedestrian/non-motorized improvements on AMR?
- The Crossings fronts on an especially dangerous section of AMR with lots of fast vehicle and slow pedestrian traffic which is forced to intermix on narrow road shoulders or vehicle traffic lanes. The traffic lanes have even been reduced in width adjacent to The Crossings from what is present further north on AMR. The road shoulders outside of the narrowed vehicle lanes adjacent to The Crossings are narrow, obstructed by debris and vegetation or with steeply dipping and unstable gravel and dirt side slope. By my observation, pedestrians prefer to compete with vehicles in the narrowed traffic lanes while continually watching out for fast moving vehicle traffic from two directions rather than negotiate the difficult unfriendly nature of the road shoulders.
- Whenever I am walking in this area of AMR I have to continuously look in front and behind for vehicles that are moving fast enough to quickly bear down on me, so I can move as far off the traffic lane as possible within the limited width unstable road shoulders. Vehicles drive close to the white fog line because of the narrowed lanes, especially if vehicles are passing in opposite directions and move out to increase distance between the passing vehicles. Mr. Strandberg’s contention that this is a safe area for pedestrians is absurd! It meets none of the standards for safe pedestrian use.
- All of AMR ROW in this area is located in wetland buffers, but that does not cancel the obligation to upgrade unsafe conditions with appropriate mitigation of wetland impacts. **There is no doubt that a curb and grade separated pedestrian path could be constructed on one side of the road within the existing ROW and on the existing disturbed road shoulder that is already degraded and non-functional as wetland buffer.** The west side of AMR in this area has a wider shoulder than The Crossings east side frontage and appears to be the most feasible location to tie into eventual pathway continuations north and south as proposed by the Port of Anacortes Comprehensive Plan/Airport Master Plan. Moving the required pedestrian improvements to the west side of AMR would be a justified modification under **AMC 19.51.060 C.**

- Pedestrians and cars who wish to pass directly thru this area of AMR (blue line below, about **600'** long) are not going to take the shortest possible but still very long 'detour' thru multiple residential subdivisions on Pennsylvania Ave., W. 12<sup>th</sup> St., Oregon Ave., Meadows Lane, and Copper Pond Rd. (red line below, about **3630'** long) as Mr. Strandberg ludicrously suggests on page 2 of his application cover letter--see above pasted quote.

(distances scaled on Skagit County iMap)



- As currently proposed, Mr. Strandberg's "wetland buffer trail" following the existing gravel access driveway at 1905 Anacopper Mine Road provides unsafe dangerous pedestrian access to and from the development since the proposed trail exits onto a pedestrian unfriendly/dangerous road where there are no follow-on pedestrian amenities. Mr. Strandberg says his residents will not use Anacopper Mine Road, but only roads on the east side of The Crossings. If The Crossings residents are not going to use this trail to access an unsafe AMR, then why is this long trail a few feet from the wetland pond necessary or desirable for any purpose?
- Mr. Strandberg has no problem with creating recreational paths for his residents that intrude into the wetland buffer, including a long stretch within a few feet of the pond, but objects to providing safe public pedestrian access on his AMR frontage because of "wetland impacts"--a self-serving illogical contradiction!



- Mr. Strandberg argues against AMR frontage improvements because his residents will exclusively use roads on the east side of The Crossings. If this is true, and if the City does not require AMR frontage improvements, then logic, consistency and the CAO code require that the proposed wetland buffer trail accessing AMR be eliminated as an unnecessary non-functional intrusion into the wetland buffer.
- The Crossings internal pathways are private paths on private land and private streets which are not “public infrastructure” as required by **AMC 19.51.060 F.3.** and thus cannot substitute for required public ROW improvements on AMR.

### **Common Open Space and unit design issues.**

#### **(7) Issues with Common Open Space.**

I believe The Crossings proposal pushes the concept of shared common open space outside the bounds of what was intended in **AMC 19.43.010 D.3.i.** as outlined below. The City needs to be very careful at this initial stage of Title 19 to create reasonable precedents and bounds in how the code will be interpreted and applied, or developments will have little relationship to the intentions of the code.

- Common Open Space is inconsistently shown and designated on various plan sheets. 20' perimeter setback of development north and east of cottage Lots 16, 17 & 18 labeled 'common open space' on Plan Sheet **A1** does not meet cottage common open space requirements of **AMC 19.43.010 D.3.i. - iii.** (must be shared central open space), and overlaps the separate swale tract shown on other Plan Sheets **C7** and **C9**.
- The so called common open space east of Lot 16 shaded in blue on Plan sheet **A3** erroneously includes part of the storm drainage/pond Tract B. **This is just one of the numerous examples of overlapping use designations caused by trying to illegally cram too much into too little space.**
- The community garden area east of Lot 16 shown on various Plan Sheets in the **A** and **L** series does not meet common open space requirements of **AMC 19.43.010 D.3.i. - iii. & iv.** (must be shared central open space with units on 2 sides) and appears to overlap with some of the storm drainage/pond Tract B (there are no dimensions given on the Plan Sheets).
- The so-called common open space for Lots 11 to 18 looks and functions nothing like what is intended by **Title 19** code. 6 of these 8 lots also exceed the maximum service number (12 cottage units) for a shared private driveway (see discussion above).

- **AMC 19.43.010 D.3.i. - iii.** says *"Parking areas must be located to the side or rear of cottage clusters. Parking must not be located between the street and cottages nor between cottages and common open space."*

The parking spaces in front of Lots 13, 16 and 18 violate the code by being located in front of the cottages rather than at the required side or rear, and subvert the intent of code by intruding into what would otherwise be common central open space for these cottage units.

- Most of the designated so-called common open space in front of Lots 11 and 12 is not shared central open space because its north side is bordered by driveway and parking, not cottage units. The only shared central open space there starts east of the driveway and parking stalls, not including the garden space (see item above). Lot 17 is separated from so-called common central open space by a driveway tract with no separate direct pedestrian pathway as required by **AMC 19.43.010 D.3.i. - v.**
- Common open space for Lots 13, 14, 15 and 18 does not meet requirements of **AMC 19.43.010 D.3. i. - iii. & iv.** (must be shared central open space with units on 2 sides)--the vast majority of the 2<sup>nd</sup> side is adjacent to the detention pond, not a cottage unit. And Lot 18 is separated by parking spaces and the steep grades of the detention pond access ramp. Much of this open space appears to be non-functional because of steep developed slopes around the detention pond and pond access ramp that intrude into the so-called common open space (see Plan Sheets **C3** and **C4**). Precise elevation contours consistent with adjacent spaces and features should be shown on the plan detail requested in Item (10) below.
- All areas that do not meet AMC common open space requirements per AMC code as listed above should not be so shown (in blue) on Open Space Plan Sheet **A3**.

**(8) Are primary entries of units facing shared central open spaces as required?**

Site plan does not show locations of primary entries. What internal unit design qualifies an entry as a primary entry? Is a primary entry required to open into common internal space shared by residents and with typical primary entry facilities like "coat closet", etc.?

**Storm Drainage.**

**(9)** The catch basins at the west end of the southwest driveway serving Lots 3, 4 and 5 do not appear to be connected to any detention/water quality facility, but discharge directly into the wetland buffer (see Plan Sheet **C3**) contradicting Mr. Strandberg's statement on page 3 of his 1/20/20 application cover letter.

**(10)** The boundaries of the detention pond tract near Lot 18 are inconsistently shown on various plan sheets--this inconsistency should be corrected. There appears to be insufficient

space in this area to accommodate all that is supposed to be in this area as shown on various plan sheets--

- the precise boundaries of the detention pond/swale tract, Tract D, and Lot 18,
- the 6' wide top berm of the detention pond,
- the eastern and southern rock walls outside of the detention pond berm,
- the detention pond flow control structure,
- a 5'(?) wide corridor of Open Space Tract D,
- the adjacent 200 sq. feet of private open space for Lot 18,
- a tool shed for unspecified purpose,
- the steep grade cuts for the detention pond access ramp,
- functional residential 'common open space' for Lots 13, 14, 15 and 18 as intended by code.

A plan detail should be provided that shows precisely where and how all these features are to be located in this area. The plan detail should correctly locate tract boundaries for the detention pond/swale tract, Common Area Tract D, proposed Common Open Space, and Lot 18, and include precise and consistent elevation contours.

### **Park/open space requirements?**

**(11) AMC 19.54.030** specifies parks/open space requirements for development. The Crossings application says their parks/open space requirement is shown on Plan Sheet **C12** (now **C7**). However, Plan Sheet **C7** provides no such specification since the Open Space Tract D contains significant areas that do not meet the requirements of **AMC 19.54.030**. Mr. Strandberg should specifically delineate which part of his proposed common open space is compliant with **AMC 19.54.030**.

What code compliant parks/open space provisions are made for the 3 panhandle Lots 19, 20, 21? Are these lots considered part of the cottage housing common open space provisions?--if so, what is the code basis for attaching non-cottage lots to the cottage open space?

(quote AMC?--as to accessibility, utility and function required for 19.54.030 parks/open space)

**(12)** On various plan sheets the designated private open space for Lots 16 and 18 appears to be located on Tract D or the Common Open Space, and part of the community garden area appears to be located on Lot 16 (see Plan Sheets **A1** versus **C7** and **C9**). Lot boundaries, Open Space Tract D boundaries, and Common Open Space areas are inconsistently drawn or labeled on various plan sheets.



**(13)** I note that **AMC 19.43.010 D.3.k.-iv.** 'encourages' private open space to be located between the residential unit and common open space, but **none** of the 18 private open spaces are so located.

**In summary,** both the City and the developer share responsibility for the many problems with the current The Crossings proposal. The developer has tried to squeeze more onto the property than the code dimensional specifications intend or permit. And the City wrote poorly analyzed incautious code specifications that suggest that even more could be squeezed onto the site—the doubling of site density for cottage housing is obviously unrealistic.

Ross O. Barnes, PhD  
1004 7<sup>th</sup> St., #202,  
Anacortes, WA 98221  
(360) 488-2347



**Evergreen Islands  
Board of Directors**

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# EVERGREEN ISLANDS

PO Box 223, Anacortes, WA 98221

September 23, 2020

To: Anacortes Planning Commission  
(Sarah Ruether, Geoffrey Mount, Jeffrey Graf, Ward McKenzie,  
Mike Cortright, Frank Jeretzky)  
cc: Don Measamer, Director of Planning and Community Development  
Libby Grage, Planning Manager  
cc: Evergreen Islands Board of Directors

**City of Anacortes**  
*Planning, Community &  
Economic Development*

**Date Received:**

9/23/20

**Re: The Crossings Cottages Development (LPS-2020-0001), Rev. A**

## INTRODUCTION

Evergreen Islands is very concerned that the proposed Crossings Cottages Development, located in the middle of a neighborhood completely zoned Residential R2, will seriously degrade not only the neighbors' quality of life but also their property values.

## DISCUSSION

### ***THE CROSSINGS COTTAGE DEVELOPMENT - PART 1***

[https://anacortes.granicus.com/MetaViewer.php?view\\_id=2&event\\_id=100998&meta\\_id=30016](https://anacortes.granicus.com/MetaViewer.php?view_id=2&event_id=100998&meta_id=30016)

The following statements were excerpted from the Staff Report, Part1

Comprehensive Plan Designation: Residential Low Density Zoning: R2

#### **SITE & SURROUNDING USES:**

Comprehensive Plan Zoning Land Use

|       |                         |    |                         |
|-------|-------------------------|----|-------------------------|
| Site  | Residential Low Density | R2 | Single-family residence |
| North | Residential Low Density | R2 | Single-family residence |
| East  | Residential Low Density | R2 | Single-family residence |
| South | Residential Low Density | R2 | Single-family residence |
| West  | Aeronautical Zone       | AZ | Anacortes Airport       |

### **Zoning and Form /Intensity Standards**

6. The site is zoned R2, Residential Low Density 2.

The maximum density allowed in R2 is 4 dwelling units per gross acre.

The maximum number of standard single family dwelling units allowed for the project site is 21 (5.2 gross acres x 4 dwelling units per gross acre).

Per AMC 19.43.010.D.3.b, **each cottage unit may be counted as one-half a dwelling unit** for the purpose of calculating density (because of their relative smaller size).

Therefore, 18 cottages are equivalent to 9 dwelling units.

The 3 standard SFR lots are added to this for a total of 12 dwelling units.

The proposed density of the subject development is 2.31 dwelling units per gross acre (12 dwelling units / 5.2 acres = 2.31 dwelling units per acre).

## ***ANACORTES COMPREHENSIVE PLAN 2016***

<https://www.anacorteswa.gov/DocumentCenter/View/4406/2016-Comprehensive-Plan-PDF>

Table LU-1. Land use designations of the Anacortes Comprehensive Plan includes the following description of the R2 residential zone:

### **Residential Low Density 2**

Purpose: This (R2) designation provides for low density residential development in mostly established neighborhoods throughout the City. These areas are inappropriate for more intensive urban development due to the established character of the area and/or due to the area's separation from transit uses and commercial services.

Principal uses & density: Single-family detached dwellings are the predominant dwelling type.

Other dwelling types, such as duplexes, accessory dwellings and **cottage housing may be allowed under certain circumstances**. The permitted density is between 4 and 8 dwelling units per gross acre, depending upon the established development pattern and character of the area.

Special topics to explore: Accommodate affordable housing and tiny houses (see Housing Element).

Explore option for 6,000 sf lots where compatible with existing development (east of Anacopper Mine Rd.).

**What are the 'certain circumstances' that allow this proposal to be permitted?**



## **Short Term Vacation Rentals by Owners**

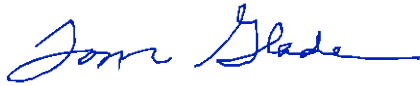
The 18 cottages on 4  $\frac{3}{4}$  acres of land (~4 dwelling units per acre) are ideally suited for short term vacation rentals. If the cottages are used for vacation rental, the character of the neighborhoods will fundamentally change from residential to commercial. In reality, the Cottages could easily become a small, commercial motel complex in the middle of a R2 Residential zone.

## **CONCLUSION**

If this project is approved as proposed, the City will drop a bombshell on the Copper Pond neighborhood similar to the housing density bombshell that the City of Anacortes dropped on the 18th Street neighborhood (R3/R4) when the Fidalgo Flats, a five or six story, 25+-unit apartment building was approved

The Commission should at least add conditions that require the property owners reside in the cottages.

Respectfully yours,



Tom Glade

Evergreen Islands Board of Directors

## **Attachment 1**

**Evergreen Islands Comment Letter, September 16, 2020**



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Vice President

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# EVERGREEN ISLANDS

PO Box 223, Anacortes, WA 98221

September 16, 2020

To: Don Measamer, Anacortes Director of Planning, Community & Economic Dev.  
cc: Mayor Gere and the Anacortes City Council  
(Ryan Walters, Brad Adams, Jeremy Carter, Matt Miller,  
Bruce McDougall, Carolyn Moulton, Anthony Young)  
Libby Grage, Planning Manager  
cc: Evergreen Islands Board of Directors

Re: The Crossings Cottages, LPS-2020-0001

Dear Mr. Measamer:

Evergreen Islands is concerned about the protection of the cojoined Wetland B (Airport) and the 'Adjacent' Copper Pond) as defined in the current Critical Areas Ordinance(CAO) 17.70.320 Designation, rating, and mapping wetlands:

E. Locally Significant Wetlands. Pursuant to subsection (B)(1)(b)(iv) of this section, the following wetlands are designated as Category II wetlands:

1. **The wetlands on or adjacent to the Port of Anacortes owned property** at the Anacortes Airport except as to buffer widths which shall be as required for Category III. (Ord. 2794 § 1 (Att. A), 2008; Ord. 2702 § 3, 2005)

## **Anacortes Airport Wetland Delineation Report, Grette Associates**

Anacortes Airport Wetland Delineation report prepared by Grette Associates  
Figure 1 is an aerial photograph and diagram of these two wetlands that were extracted from the 2015 Port of Anacortes, Anacortes Airport Wetland Delineation report prepared by Grette Associates (the Grette Report).

The Grette Report's Wetland Summary states (emphasis added):

**The pond is located in the eastern portion of Wetland B and connects to a larger ponded area outside of the study area to the east via a culvert under Anacopper Road** (Sheet 2). The pond appears to contain naturally-occurring groundwater and likely receives surface-water runoff from the surrounding uplands. **At the time of the site visit, surface water was present in the pond and flow was observed entering the pond through the culvert under Anacopper Road.** In addition to the surface water features listed above, a culvert is present to the west of Wetland B, between the margin of the airport property and the edge of the runway (Sheet 2). This culvert appears to run underneath the runway and taxiway and is expected to provide a surface-water outlet to the pond located in Wetland B. At the time of the site visit, no flow was observed through to the west side of the culvert



Section 5.10 WETLANDS OUTSIDE THE STUDY AREA of the Grette Report states (emphasis added):  
Per Anacortes Municipal Code (AMC) 17.70.330(B)(2), critical area reports should consider wetlands and other critical areas within three hundred feet of the project area, due to the maximum potential buffer size for wetlands. Based on recent aerial photography and a previous delineation of wetlands at the Anacortes Airport (Pentec Environmental 2001), one wetland area was identified within three hundred feet of the study area boundary. **This wetland connects to Wetland B via a culvert running underneath Anacopper Road. Although the buffer surrounding this wetland is likely to extend into the study area, it would lie entirely within the buffer surrounding Wetland B. In respect to the study area, the buffer surrounding Wetland B is inclusive and protective of the offsite wetland.**

### ***Critical Areas Assessment Report***

The Critical Areas Assessment Report, February 2020, prepared by AquaTerr Systems, Inc; states:

This project will include wetland buffer averaging that will result in 1,372 square feet of wetland buffer reduction and 1,416 square feet of wetland buffer addition in compliance with COA CAO Chapter 17.70.340.4 (Figure 5; COA 2008). The proposed 1,372 square foot impacted buffer area is currently comprised of mowed lawn. The proposed reduction will still maintain at least a 95 foot wetland buffer (Figure 5). This buffer reduction area will be offset by 1,416 square feet of wetland buffer addition that will be converted from mowed lawn to an herbaceous meadow with a forested canopy component.

Figure 3 from the Assessment Report illustrates the wetland adjustments.

## **CONCLUSION**

In conclusion Evergreen Islands requests

- that the proposed nature trail be eliminated
- a Sidewalk road improvement be required along the west property line which is adjacent to the Anacopper Mine.
- Evergreen Islands disputes ATSI conclusion that Wetlands A and Wetlands B have no hydraulic connection.

Respectfully yours,

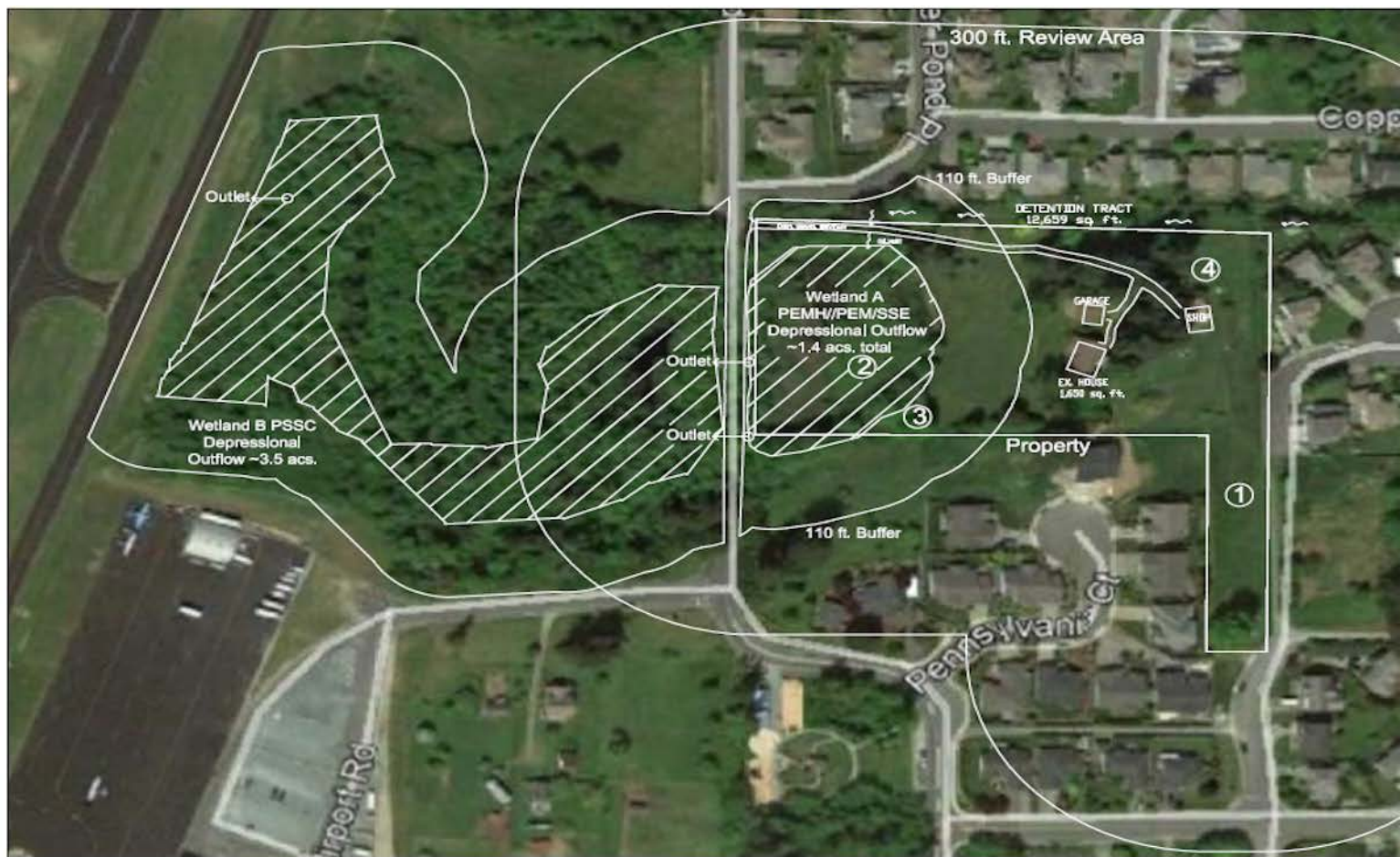


Tom Glade  
Evergreen Islands Board of Directors



**Figure 1. 'Wetland B' across Anacopper Mine Road on the Anacortes Airport.**





**Figure 2. Aerial Photograph, Existing Conditions, & Data Plots 1-4**

Strandberg-The Crossing

Parcel Number: P31752

1905 Anacopper Road, Anacortes, Washington

Section 3, Township 35 N, Range 01 E, WM

February 2020

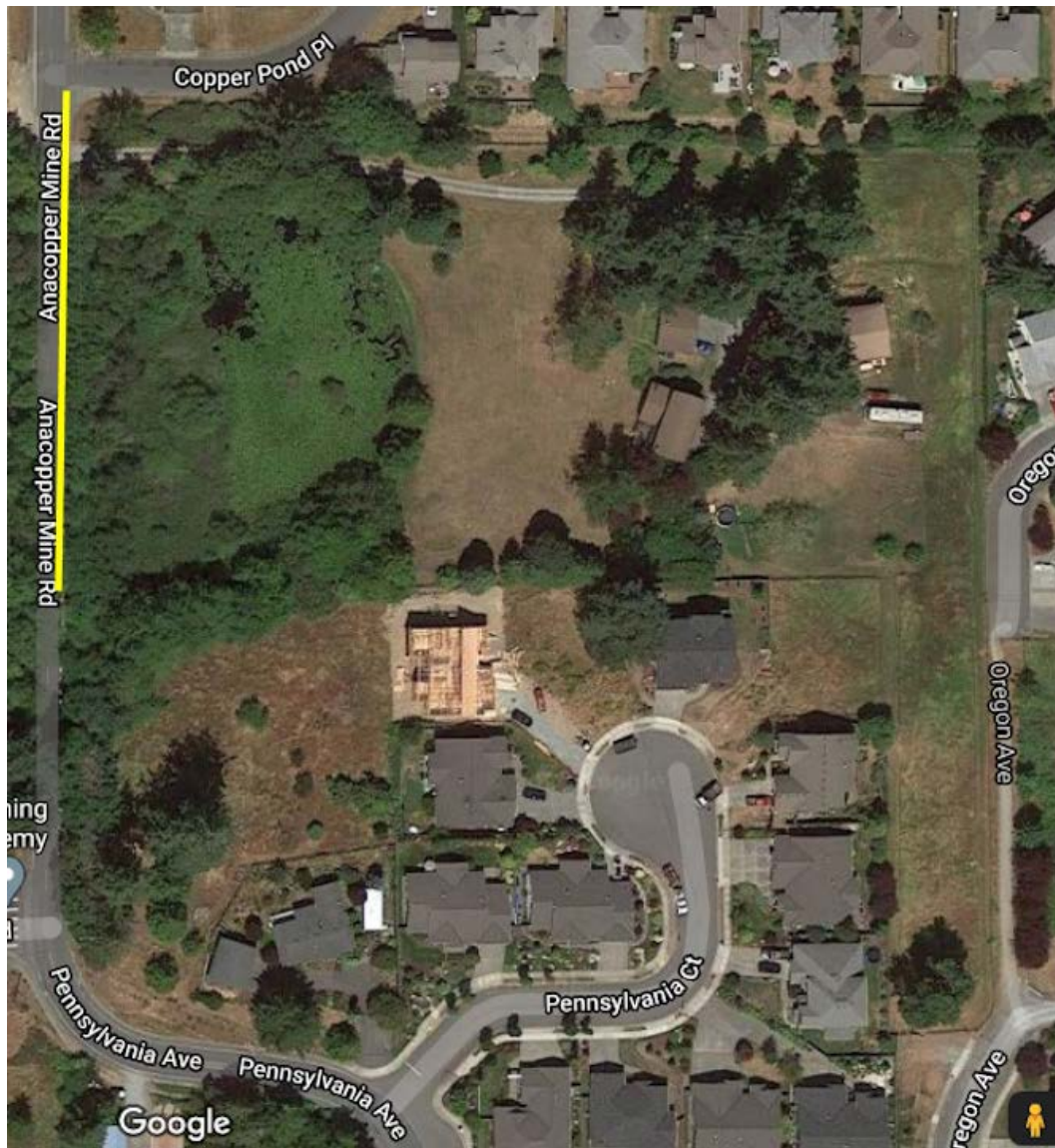


**Note:** Basemap obtained from Google Earth (Imagery Date: 2 May 2015). Wetland B location and Information obtained from Grette Association LLC (4 September 2015) with alterations by ATSI. Wetland B is not described as part of this rating. The wetland boundaries and locations approximate and do not constitute a legal land survey. Wetland buffers do not cross roads per AMC 17.70.340.G.4 (16 December 2019).

## Figure 2. ATSI Wetland Delineation







***Figure 4. Sidewalk Added to Anacopper Mine Road to Allow Public Viewing of the Copper Pond Wetland***

## **ANACORTES COMPREHENSIVE PLAN 2016**

<https://www.anacorteswa.gov/DocumentCenter/View/4406/2016-Comprehensive-Plan-PDF>

### **Residential Low Density 2**

**Purpose: This (R2) designation provides for low density residential development in mostly established neighborhoods throughout the City.**

These areas are inappropriate for more intensive urban development due to the established character of the area and/or due to the area's separation from transit uses and commercial services.

Principal uses & density: Single-family detached dwellings are the predominant dwelling type.

Other dwelling types, such as duplexes, accessory dwellings and cottage housing may be allowed under certain circumstances.

The permitted density is between 4 and 8 dwelling units per gross acre, depending upon the established development pattern and character of the area.

Special topics to explore: Accommodate affordable housing and tiny houses (see Housing Element).

**Explore option for 6,000 sf lots where compatible with existing development (east of Anacopper Mine Rd.).**



9/22/2020

We the neighbors on Oregon Ave & W 12<sup>th</sup> St. Do not want Oregon Ave & Meadows Lane to be connected and used as a through street for The Crossings development Mr. Strandberg is proposing.

The intersection at Oregon Ave & W 12<sup>th</sup> is already a safety concern as it is a blind intersection. Adding more traffic at the proposed location would make the area very dangerous for both vehicle and foot traffic.

If the road must be completed, we ask that they place retractable bollards for Fire & Emergency vehicle use only, placed on the north end of Oregon Ave past 2201 Oregon Ave, but before Meadows Lane to eliminate the traffic from The Crossing to the intersection at Oregon Ave & W 12<sup>th</sup> St.

Thank you,

City of Anacortes  
Planning, Community &  
Economic Development

Date Received:

9/23/20

Paul 2507 Oregon Ave  
 Shaw 2301 Oregon Avenue  
 Charles 2203 Oregon Avenue  
 Emily Hylton 2305 Oregon Avenue  
 Paul Hylton 2305 Oregon Ave  
 Peggy, Don 2319 Oregon Ave  
 Maria S. Greene 2319 Oregon Ave  
 Janney E. Pen 2405 Oregon Ave  
 KARA BACOWIN 2503 Oregon Ave  
 Keny Osperen 2506 Oregon Ave  
 2506 Oregon Ave  
 Janney Osperen 2513 Oregon Ave  
 Paul Vacanti 2513 Oregon Ave  
 James Connel 2510 Oregon Ave  
 2514 Oregon Ave  
 2514 Oregon Ave  
 2520 Oregon Ave.  
 2511 Oregon Ave.  
 2311 Oregon Ave  
 U. Stovel  
 Roger B. Paul  
 Janeth Thom

3924 W 12<sup>th</sup> St  
 Tamara Giannello

Target May 2205 Oregon Ave  
 3927 W 12<sup>th</sup> St  
 Ashley Blue  
 Chulsea Strandberg 3921 W 12<sup>th</sup> St  
 3920 W 12<sup>th</sup> St  
 Lowell Warren  
 Susan Lowell Warren

## Grage, Libby

---

**From:** tom.glade@comcast.net  
**Sent:** Wednesday, September 23, 2020 3:00 PM  
**To:** Grage, Libby  
**Cc:** Evergreen Islands Board  
**Subject:** FW: Public Comment for Planning Commission meeting on 9/23/20 for The Crossings hearing.....  
**Attachments:** The Crossing-Strandberg-Pt I non-wtld final.pdf

Hi Libby,  
Evergreen Islands adopts Ross Barnes's excellent letter regarding The Crossings.

Regards,  
Tom Glade  
Evergreen Islands Board of Directors

---

**From:** Ross O. Barnes <[georbarnes@hotmail.com](mailto:georbarnes@hotmail.com)>  
**Sent:** Wednesday, September 23, 2020 2:35 PM  
**To:** tom.glade@comcast.net; Marlene Finley - Evergreen Islands <[Marlene\\_Finley@yahoo.com](mailto:Marlene_Finley@yahoo.com)>; Carol Bordin (AnacortesCAO) <[wetlands2save@frontier.com](mailto:wetlands2save@frontier.com)>; Nancy Oemick <[NancyOemick@gmail.com](mailto:NancyOemick@gmail.com)>; Gene Derig <[gderig@me.com](mailto:gderig@me.com)>; Marilyn Derig <[mderig@me.com](mailto:mderig@me.com)>  
**Subject:** Fw: Public Comment for Planning Commission meeting on 9/23/20 for The Crossings hearing.....

FYI. This is the final submitted to the City which may be referenced and forwarded to others.

Ross

---

**From:** Ross O. Barnes <[georbarnes@hotmail.com](mailto:georbarnes@hotmail.com)>  
**Sent:** Wednesday, September 23, 2020 2:24 PM  
**To:** Libby Grage (Planning Manager) <[libbyb@cityofanacortes.org](mailto:libbyb@cityofanacortes.org)>; Don Measamer (Planning Director) <[don@cityofanacortes.org](mailto:don@cityofanacortes.org)>  
**Subject:** Public Comment for Planning Commission meeting on 9/23/20 for The Crossings hearing

Libby,

Attached are public comments for The Crossings Planning Commission hearing on 9/23/20.

Ross O. Barnes

(required contact information included in the attached PDF letter)



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PO Box 223, Anacortes, WA 98221

September 23, 2020

To: Anacortes Planning Commission  
(Sarah Ruether, Geoffrey Mount, Jeffrey Graf, Ward McKenzie,  
Mike Cortright, Frank Jeretzky)  
cc: Don Measamer, Director of Planning and Community Development  
Libby Grage, Planning Manager  
cc: Evergreen Islands Board of Directors

**City of Anacortes**  
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Economic Development*

**Date Received:**

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The following statements were excerpted from the Staff Report, Part1

Comprehensive Plan Designation: Residential Low Density Zoning: R2

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Comprehensive Plan Zoning Land Use

|       |                         |    |                         |
|-------|-------------------------|----|-------------------------|
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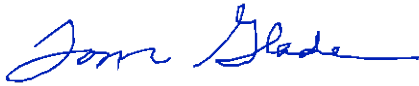
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Respectfully yours,



Tom Glade

Evergreen Islands Board of Directors

## **Attachment 1**

**Evergreen Islands Comment Letter, September 16, 2020**





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Libby Grage, Planning Manager  
cc: Evergreen Islands Board of Directors

Re: The Crossings Cottages, LPS-2020-0001

Dear Mr. Measamer:

Evergreen Islands is concerned about the protection of the cojoined Wetland B (Airport) and the 'Adjacent' Copper Pond) as defined in the current Critical Areas Ordinance(CAO) 17.70.320 Designation, rating, and mapping wetlands:

E. Locally Significant Wetlands. Pursuant to subsection (B)(1)(b)(iv) of this section, the following wetlands are designated as Category II wetlands:

1. **The wetlands on or adjacent to the Port of Anacortes owned property** at the Anacortes Airport except as to buffer widths which shall be as required for Category III. (Ord. 2794 § 1 (Att. A), 2008; Ord. 2702 § 3, 2005)

## **Anacortes Airport Wetland Delineation Report, Grette Associates**

Anacortes Airport Wetland Delineation report prepared by Grette Associates  
Figure 1 is an aerial photograph and diagram of these two wetlands that were extracted from the 2015 Port of Anacortes, Anacortes Airport Wetland Delineation report prepared by Grette Associates (the Grette Report).

The Grette Report's Wetland Summary states (emphasis added):

**The pond is located in the eastern portion of Wetland B and connects to a larger ponded area outside of the study area to the east via a culvert under Anacopper Road** (Sheet 2). The pond appears to contain naturally-occurring groundwater and likely receives surface-water runoff from the surrounding uplands. **At the time of the site visit, surface water was present in the pond and flow was observed entering the pond through the culvert under Anacopper Road.** In addition to the surface water features listed above, a culvert is present to the west of Wetland B, between the margin of the airport property and the edge of the runway (Sheet 2). This culvert appears to run underneath the runway and taxiway and is expected to provide a surface-water outlet to the pond located in Wetland B. At the time of the site visit, no flow was observed through to the west side of the culvert

Section 5.10 WETLANDS OUTSIDE THE STUDY AREA of the Grette Report states (emphasis added):  
Per Anacortes Municipal Code (AMC) 17.70.330(B)(2), critical area reports should consider wetlands and other critical areas within three hundred feet of the project area, due to the maximum potential buffer size for wetlands. Based on recent aerial photography and a previous delineation of wetlands at the Anacortes Airport (Pentec Environmental 2001), one wetland area was identified within three hundred feet of the study area boundary. **This wetland connects to Wetland B via a culvert running underneath Anacopper Road. Although the buffer surrounding this wetland is likely to extend into the study area, it would lie entirely within the buffer surrounding Wetland B. In respect to the study area, the buffer surrounding Wetland B is inclusive and protective of the offsite wetland.**

### ***Critical Areas Assessment Report***

The Critical Areas Assessment Report, February 2020, prepared by AquaTerr Systems, Inc; states:

This project will include wetland buffer averaging that will result in 1,372 square feet of wetland buffer reduction and 1,416 square feet of wetland buffer addition in compliance with COA CAO Chapter 17.70.340.4 (Figure 5; COA 2008). The proposed 1,372 square foot impacted buffer area is currently comprised of mowed lawn. The proposed reduction will still maintain at least a 95 foot wetland buffer (Figure 5). This buffer reduction area will be offset by 1,416 square feet of wetland buffer addition that will be converted from mowed lawn to an herbaceous meadow with a forested canopy component.

Figure 3 from the Assessment Report illustrates the wetland adjustments.

## **CONCLUSION**

In conclusion Evergreen Islands requests

- that the proposed nature trail be eliminated
- a Sidewalk road improvement be required along the west property line which is adjacent to the Anacopper Mine.
- Evergreen Islands disputes ATSI conclusion that Wetlands A and Wetlands B have no hydraulic connection.

Respectfully yours,

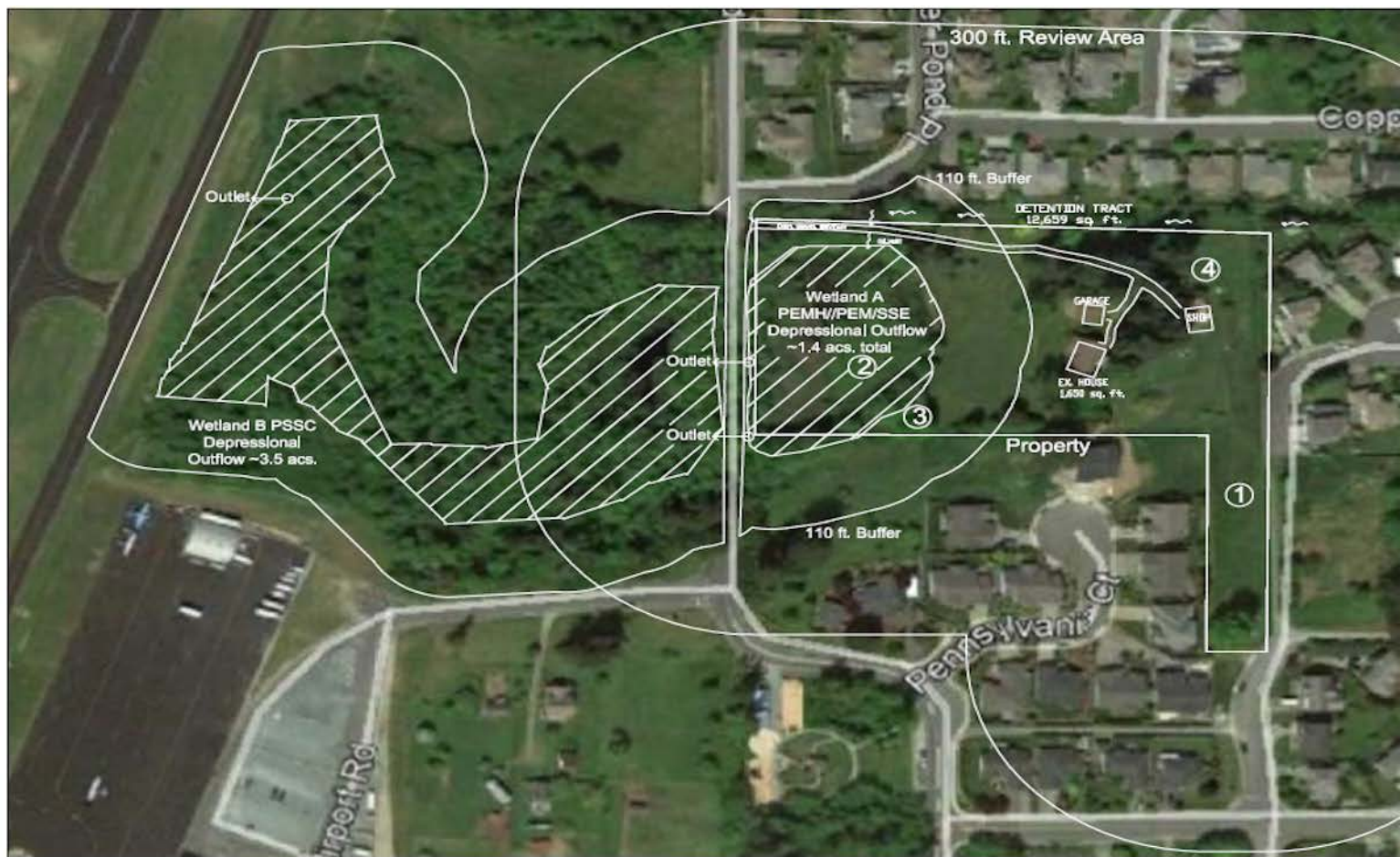


Tom Glade  
Evergreen Islands Board of Directors



**Figure 1. ‘Wetland B’ across Anacopper Mine Road on the Anacortes Airport.**





**Figure 2. Aerial Photograph, Existing Conditions, & Data Plots 1-4**

Strandberg-The Crossing

Parcel Number: P31752

1905 Anacopper Road, Anacortes, Washington

Section 3, Township 35 N, Range 01 E, WM

February 2020

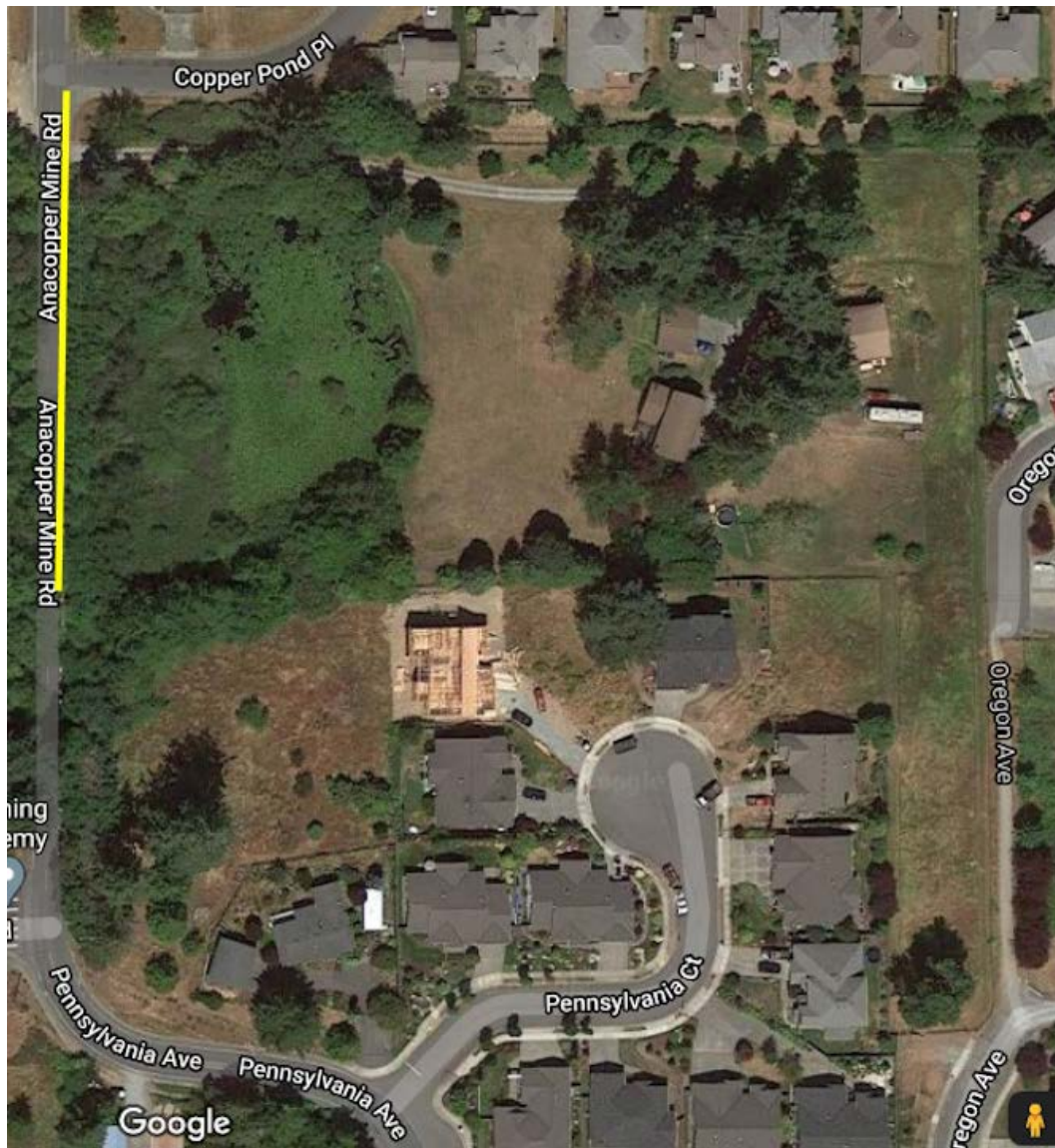


**Note:** Basemap obtained from Google Earth (Imagery Date: 2 May 2015). Wetland B location and Information obtained from Grette Association LLC (4 September 2015) with alterations by ATSI. Wetland B is not described as part of this rating. The wetland boundaries and locations approximate and do not constitute a legal land survey. Wetland buffers do not cross roads per AMC 17.70.340.G.4 (16 December 2019).

## Figure 2. ATSI Wetland Delineation







***Figure 4. Sidewalk Added to Anacopper Mine Road to Allow Public Viewing of the Copper Pond Wetland***



## **ANACORTES COMPREHENSIVE PLAN 2016**

<https://www.anacorteswa.gov/DocumentCenter/View/4406/2016-Comprehensive-Plan-PDF>

### **Residential Low Density 2**

**Purpose: This (R2) designation provides for low density residential development in mostly established neighborhoods throughout the City.**

These areas are inappropriate for more intensive urban development due to the established character of the area and/or due to the area's separation from transit uses and commercial services.

Principal uses & density: Single-family detached dwellings are the predominant dwelling type.

Other dwelling types, such as duplexes, accessory dwellings and cottage housing may be allowed under certain circumstances.

The permitted density is between 4 and 8 dwelling units per gross acre, depending upon the established development pattern and character of the area.

Special topics to explore: Accommodate affordable housing and tiny houses (see Housing Element).

**Explore option for 6,000 sf lots where compatible with existing development (east of Anacopper Mine Rd.).**

# DRAFT



## Planning Commission Public Hearing Minutes for September 23, 2020

*This is not a verbatim transcript of the meeting and is written in an attempt to capture the general spirit of the discussion based upon notes and video observation by the author. To view the video recording of this meeting, click [here](https://www.anacorteswa.gov/700/Watch-Meetings), or go to <https://www.anacorteswa.gov/700/Watch-Meetings>.*

Chair MacKenzie called the virtual Public Meeting of September 23, 2020, to order at 6:00 p.m.

### **Roll Call**

Members Present: Commissioners Mount, Jeretzky, MacKenzie, Cortright, Graf, and Ruether

Absent: (one vacate position)

Staff Present: Don Measamer, Libby Grage, Dave Oicles, Tess Cooper, Steve Lange

**Minutes** From August 26, 2020 and September 9, 2020 will be presented at a later date.

**Correspondence** None

### **New Business**

**CUP-2020-0001:** Chair MacKenzie opened the Public Hearing at 6:01pm for the Conditional Use Permit CUP-2020-0001 concerning a proposal for a parking lot on 18<sup>th</sup> St. Libby Grage, Planning Manager, gave a presentation for this private parking lot proposal. City Staff recommended approval with conditions, to the Planning Commission and City Council. Brad Augustine, owner of the parcels and applicant, mentioned the many complaints he has received over the years on the need for additional parking for the retail center he owns across the street of the proposed parking lot. Chair MacKenzie opened the floor to additional public comments. One more was received from Katharine Shirey of 1015 19<sup>th</sup> St. With no more public comments, Chair MacKenzie closed the floor to public comment at 6:46pm. Discussion ensued. A motion to approve was given by Commissioner Mount, with a second by Commissioner Cortright. The CUP-2020-0001 was approved by a 4-2 vote. Commissioners Ruether and Jeretzky voted "nay".

**LPS-2020-0001:** Chair MacKenzie opened the Public Hearing at 7:11pm for the Long Plat Subdivision permit LPS-2020-0001 concerning a proposal called The Crossings Cottage Development, a 21-lot plat with 18 cottages and 3 standard single family residences. Libby Grage, Planning Manager, gave a presentation of the proposal. Staff recommended approval with a multitude of conditions, to the Planning Commission and City Council. Chair MacKenzie opened the floor to additional public comments at 7:58pm. Two additional comments were received from Tom Glade of 210 Mansfield Ct, and Carol Bordin of 3934 W 12<sup>th</sup> St. With no more public comments, Chair MacKenzie closed the floor to public comment at 8:12pm. Discussion ensued. Additional information was provided by the applicant, Nels Strandberg and a wetland specialist Karla Galline. A motion to approve was given by Commissioner Jeretzky, and a second by Commissioner Cortright. All voted in favor 6-0 to approve LPS-2020-0001.

With no further discussion, Chair MacKenzie concluded the meeting at approximately 8:39 p.m.



## City Council Agenda Item Summary

**Meeting Date:** 10/12/2020

**Agenda Item Number:** 5b

**Agenda Item Title:** Ordinance 3076: Extending Moratorium on height bonus in R4 zone

**Staff Contact(s):** Darcy Swetnam; Don Measamer

**Action Type:** Ordinance 3076

**Item Summary:** This is a second read after a public hearing on proposed Ordinance 3076, which would extend the moratorium on projects using the height bonus in the R4 zone west of the Commercial zone for an additional six months.

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### Budget Impact

**Amount Budgeted:**

**Proposed Expenditure:**

**Budget Amendment Required?**

---

**Previous Action:** [September 28, 2020](#): First read on Ordinance 3076

**Recommended Motion:** I move we adopt Ordinance 3076, extending the moratorium on applications using the height bonus in the R4 zone west of the Commercial Zone.

**Alternative Actions:** Don't adopt.

**Attachments** In order presented:

- Ordinance 3076.



## **Ordinance No. 3076**

### **An Interim Ordinance Extending Ordinance 3054 and Ordinance 3069, a Moratorium on the Acceptance of Certain Land Use Applications in the R4 Zone**

**Whereas** the City of Anacortes adopted new development regulations (Ordinance 3040) that, among other things, created new regulations governing the height limit in the R4 zone;

**Whereas** the bonus height provisions of AMC 19.42.050., which allow for an additional 10 feet of height over the standard height limit of 40 feet, have been the subject of community concerns and comments;

**Whereas** the City Council desires to review the maximum building height in the R4 zone;

**Whereas** the City Council adopted Ordinance 3054 on October 21, 2019, declaring a moratorium on the acceptance of land use applications in the R4 Zone that seek to allow the height bonus provided in Section 19.42.050 AMC; and

**Whereas** the City Council adopted Resolution 2068 on December 2, 2019, which affirmed the moratorium and adopted a work plan for evaluating bonus height provisions in the R4 Zone west of the Commercial Zone; and

**Whereas** the City Council adopted Ordinance 3069 on April 20, 2020, which affirmed the moratorium and extended it for an additional six months, through October 21, 2020; and

**Whereas** RCW 35A.63.220 and AMC 19.16.110 authorize the City Council to renew moratoriums, interim zoning ordinances, and interim official controls as a recognized technique to preserve the status quo while new plans and regulations are developed; and

**Whereas** the work plan adopted in Resolution 2068 has been interrupted by the current COVID 19 emergency; and

**Whereas** the moratorium extension adopted in Ordinance 3069 is set to expire on October 21, 2020, if it is not extended prior to that date; and

**Whereas** the City Council now finds that additional time is required to complete the actions in the work plan adopted by Resolution 2068; and

**Whereas**, as an interim ordinance, pursuant to WAC 197-11-880, the adoption of this ordinance is not subject to review under the State Environmental Policy Act;

**Now, therefore, the City Council of the City of Anacortes does ordain as follows and adopts the following as findings of fact:**

- Section 1. The above recitals are adopted as findings of fact.
- Section 2. The City Council finds that an emergency exists under RCW 35A.12.130 and this ordinance is necessary for the protection of public health, public safety, public property or the public peace, and with adoption by a majority plus one of the entire membership of the City Council (i.e., 5 members) is effective immediately.
- Section 3. The moratorium declared by Ordinance 3054 and extended by Ordinance 3069 is hereby renewed for an additional six months on the acceptance of any land use or building permit application within the R4 zone west of Commercial Avenue that proposes to utilize the bonus height provisions of AMC 19.42.050.C.
- Section 4. Pursuant to RCW 36.70A.390, the City Council held a public hearing on this interim ordinance extension on October 12, 2020 by accepting both in-person participation via the Zoom video platform and written comment due to the COVID 19 emergency.
- Section 5. This moratorium is effective through April 21, 2021, but may be renewed for an additional six-month period if a subsequent public hearing is held and findings of fact are made prior to renewal.
- Section 6. The City Council supports review and consideration of alternatives to the bonus height provisions of AMC 19.42.050 in the R4 Use Zone west of Commercial Use Zone.

**PASSED and APPROVED this 12<sup>th</sup> day of October, 2020.**

**APPROVED:**

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Laurie Gere, Mayor

**Attest:**

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Steve Hoglund, City Clerk-Treasurer

**Approved as to Form:**

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Darcy Swetnam, City Attorney



## City Council Agenda Item Summary

**Meeting Date:** 10/12/2020

**Agenda Item Number:** 6a

**Agenda Item Title:** Resolution 3005: updating a work plan for height bonus in R4 zone  
**Staff Contact(s):** Darcy Swetnam; Don Measamer

**Approved by:** Marcia Hunt, Marcia Hunt

**Action Type:** Resolution 3005

**Item Summary:** Resolution 3005 is related to Ordinance 3076, which extends for an additional six months the moratorium on new applications using the height bonus provisions at Section 19.42.050 AMC for an additional six months. Resolution 3005 updates the work plan for Council to work through the issues regarding the height bonus, which was originally adopted by Resolution 2068.

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### Budget Impact

**Amount Budgeted:**

**Proposed Expenditure:**

**Budget Amendment Required?**

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**Previous Action:** Ordinance [3054](#) adopting the moratorium adopted on [October 21](#), 2019

Resolution [2068](#) adopting a work plan adopted on [December 2](#), 2019

Ordinance [3069](#) extending the moratorium for six more months adopted on [April 20](#), 2020

First read of proposed Ordinance [3076](#) on [September 28](#), 2020

**Recommended Motion:** I move we adopt Resolution 3005, updating the work plan for the height bonus in the R4 zone west of the commercial zone.

**Alternative Actions:** Don't adopt

**Attachments** In order presented:

- Proposed Resolution 3005
- Proposed work plan



## **RESOLUTION 3005**

### **A RESOLUTION UPDATING THE WORK PLAN ADOPTED IN RESOLUTION 3068 REGARDING BONUS HEIGHT PROVISIONS IN THE R4 ZONE WEST OF THE COMMERCIAL ZONE RELATED TO ORDINANCE 3076**

**WHEREAS**, the Anacortes City Council adopted Ordinance 3054 October 21, 2019 a Moratorium on accepting certain land use permits in the R4 Use Zone west of the Commercial Use Zone that proposes to utilize the bonus height provisions of AMC 19.42.050; and

**WHEREAS**, the City Council adopted Resolution 2068 on December 2, 2019, adopting a work plan for evaluating bonus height provisions in the R4 Zone west of the Commercial Zone; and

**WHEREAS**, the City Council adopted Ordinance 3069 on April 20, 2020, which affirmed the moratorium and extended it for an additional six months through October 21, 2020; and

**WHEREAS**, the City Council considered Ordinance 3076 at the September 28, 2020 meeting, which would extend the moratorium for an additional six months; and

**WHEREAS**, the City Council held a public hearing on Ordinance 3076 on October 12, 2020; and

**WHEREAS**, the City Council desires to continue working to review the maximum building height in the R4 Use Zone west of the Commercial Use Zone with public input;

**WHEREAS**, a moratorium is a recognized technique to preserve the status quo while new plans and regulations are developed and avoid a rush for permits whenever a community desires to change its planning ordinances; and

**WHEREAS**, RCW 36.70A.390 and AMC 19.16.110 authorize the City Council to adopt moratoriums, interim zoning ordinances, and interim official controls; and

**WHEREAS**, RCW 36.70A.390 and RCW 35A.63.220 require cities to hold a public hearing within sixty (60) days of the adoption of such moratoria to develop a work plan; and

### **NOW THEREFORE, BE IT RESOLVED BY THE ANACORTES CITY COUNCIL:**

Section 1. Findings of Fact. The City of Anacortes City Council makes the following findings:

- A. The above recitals are adopted as findings of fact.
- B. The City Council reaffirms Ordinances 3054, 3069, and 3076 establishing and extending a Moratorium on accepting land use or building permit applications in the R4 Use Zone west of the Commercial Use Zone that proposes to use the bonus height provisions of AMC 19.42.050.

- C. The City Council supports review and consideration of alternatives to the bonus height provisions of AMC 19.42.050 in the R4 Use Zone west of the Commercial Use Zone.
- D. A public hearing was held on October 12, 2020 to adopt Ordinance 3076 consistent with RCW 36.70A.390.
- E. The City Council deems it necessary to prohibit the receipt and processing of new applications that propose to use the bonus height provisions of AMC 19.42.050 in the R4 Use Zone west of the Commercial Use Zone while alternatives are considered.

Section 2. Work Plan.

- A. The attached updated work plan is hereby adopted.

**PASSED AND APPROVED** by the City Council this \_\_\_\_ day of October, 2020.

CITY OF ANACORTES

\_\_\_\_\_  
Laurie Gere, Mayor

ATTEST:

\_\_\_\_\_  
Steve D. Hoglund, City Clerk/Treasurer

APPROVED AS TO FORM:

By:\_\_\_\_\_  
Darcy Swetnam, WSBA# 40530  
City Attorney

**Work Plan –Regulations Regarding Bonus Height Provisions,  
AMC 19.42.050 In The R4 Zone West Of The Commercial  
Zone—Moratorium Ordinance 3076**

|    | Task                                                                                                      | Schedule                   |
|----|-----------------------------------------------------------------------------------------------------------|----------------------------|
| 1. | Review with the public draft concepts from workshops in February 2020 via virtual meeting public workshop | October 2020               |
| 2  | Draft concepts to Planning Commission                                                                     | November 2020              |
| 3. | Draft concepts to Planning Commission to identify preferred concepts, Issue SEPA                          | November 2020              |
| 4. | Planning Commission Public Hearing on preferred concepts                                                  | December 2020              |
| 5. | Planning Commission Recommendation on preferred concept to City Council                                   | December/January 2020-2021 |
| 6. | City Council Review of preferred concept                                                                  | January/February 2021      |
| 7. | City Council Public Hearing/Adoption                                                                      | February/March 2021        |

Note: Ordinance # 3054 terminates April 21, 2020.





# Grand View Cemetery Expansion

CONTRACT AWARD

PHASE 1 # 19-092-PRK-002



- Neighborhood Mtg.  
March 2019

- Conditional Use Permit  
Approved July 2020

- Low Bid: Tiger Construction  
\$214,304,34





# Phase One Details...

- Site Clearing (Removal of Poplar Trees)
- Tree Conservation(Keeping trees at south end of expansion)
- Removal of old access road (leaving the road in crushed rock)
- Installing initial stormwater systems for collection (Clear Trees near Hillcrest Drive)
- Installing a conveyance ditch and treatment of road & site run off
- Soil & Hydroseeding the area







# QUESTIONS?





# City Council Contract Agenda Bill

**Meeting Date:** 10/12/2020      **Agenda Item:** 6b

**Subject:** Contract Award – Grandview Cemetery Expansion - Phase 1 #19-092-PRK-002

**Staff Contact:** Jonn Lunsford

**Approved for Submittal to Council by:**  
Darcy Swetnam, City Attorney

**Action Type:** Contract Award

**Summary Statement:** City staff seeks City Council consent to award a contract in the amount of \$214,304.34 to Tiger Construction, LTD to perform the Grandview Cemetery Expansion - Phase 1. This project provides for infrastructure improvements to the Grandview Cemetery. Work includes installing temporary erosion control measures; removing existing site features; tree removal and land clearing; minor grading (excavation and embankment) of new roadway corridors; placement of gravel borrow; installing stormwater systems for collection, conveyance, and treatment of road and site runoff; restoring disturbed areas; construction surveying; and other work

**Background:**

1. **History:** City staff has been working with an engineering firm on the Grand View Cemetery expansion since last year. Now that the Conditional Use Permit has been issued, those plans have been finalized and bid documents sent out for the first phases of the project which include tree removal and site clearing on the west side of the existing cemetery. This work plan reflects the goals of the 2006 Grand View Cemetery Master Plan. Grand View currently has approximately 90 full burial lots for sale and 120 urn burial lots.
2. **Key Terms:**
  - Contract is for a fixed price of \$214,304.34.
  - Work will be physically completed within 40 Working days after the work commence.
3. **Competitive Bidding:** On September 16, 2020 the City [solicited bids](#) for the subject project and on October 1, 2020 a bid opening was conducted and 7 bids were received. Tiger Construction, LTD was determined to be the lowest responsible bidder. The Engineer's Estimate for this project was \$200,000.00. Bid results are provided as an attachment hereto.

**Previous Council/Committee Action:** N/A

**Competing Viewpoints Considered:** N/A

**Recommended Motion:** I move that City Council authorize the Mayor to sign contract 19-092-PRK-002 with Tiger Construction, LTD in the amount of \$214,304.34 to perform the Grandview Cemetery Expansion - Phase 1.

**Alternative Actions:** Not award the contract

**Attachments:** Bid Results, Contract 19-092-PRK-002, Tiger Construction, LTD's bid proposal



|                            |                         |
|----------------------------|-------------------------|
| Contractor                 | Tiger Construction, LTD |
| Contract Amount            | \$214,304.34            |
| Earmarked Funds            | \$250,000.00            |
| BARS #                     | 108.410.594.76.60       |
| Budget Amendment Required? | No                      |
| Start Date                 | Notice to Proceed       |
| End Date                   | 40 working days         |



**CITY OF ANACORTES**  
WASHINGTON

PUBLIC WORKS CONSTRUCTION PROJECT BID TABULATION - BID DATE 10/1/20

| GRANDVIEW CEMETERY EXPANSION - PHASE 1 #19-092-PRK-002 |                                                                                   |              | Tiger Construction, LTD |               | Williamson Construction LLC |               | Colacurcio Brothers, Inc. |               | PNW Civil Inc.  |               | Tastad Construction, Inc. |               | CF Excavting, LLC. |               | SRV Construction Inc. |               |
|--------------------------------------------------------|-----------------------------------------------------------------------------------|--------------|-------------------------|---------------|-----------------------------|---------------|---------------------------|---------------|-----------------|---------------|---------------------------|---------------|--------------------|---------------|-----------------------|---------------|
| ITEM                                                   | DESCRIPTION                                                                       | QTY          | UNIT \$                 | TOTAL \$      | UNIT \$                     | TOTAL \$      | UNIT \$                   | TOTAL \$      | UNIT \$         | TOTAL \$      | UNIT \$                   | TOTAL \$      | UNIT \$            | TOTAL \$      | UNIT \$               | TOTAL \$      |
| 1                                                      | MOBILIZATION<br>1-09.7                                                            | 1<br>LS      | \$ 13,500.00            | \$ 13,500.00  | \$ 35,000.00                | \$ 35,000.00  | \$ 20,000.00              | \$ 20,000.00  | \$ 24,000.00    | \$ 24,000.00  | \$ 12,000.00              | \$ 12,000.00  | \$ 20,000.00       | \$ 20,000.00  | \$ 24,000.00          | \$ 24,000.00  |
| 2                                                      | CLEARING, AND GRUBBING<br>2-01.5                                                  | 0.9<br>ACRE  | \$ 39,000.00            | \$ 35,100.00  | \$ 30,000.00                | \$ 27,000.00  | \$ 40,000.00              | \$ 36,000.00  | \$ 31,000.00    | \$ 27,900.00  | \$ 88,000.00              | \$ 79,200.00  | \$ 97,222.00       | \$ 87,499.80  | \$ 177,000.00         | \$ 159,300.00 |
| 3                                                      | SITE MOWING, GRUBBING, AND RAKING<br>INCL. HAUL<br>2-01.5SP                       | 4.1<br>ACRE  | \$ 1,600.00             | \$ 6,560.00   | \$ 6,500.00                 | \$ 26,650.00  | \$ 6,800.00               | \$ 27,880.00  | \$ 11,000.00    | \$ 45,100.00  | \$ 8,000.00               | \$ 32,800.00  | \$ 33,765.00       | \$ 33,765.00  | \$ 14,800.00          | \$ 60,680.00  |
| 4                                                      | REMOVING ASPHALT CONC. PAVEMENT<br>2-02.5SP                                       | 1,170<br>SY  | \$ 6.30                 | \$ 7,371.00   | \$ 4.00                     | \$ 4,680.00   | \$ 4.00                   | \$ 4,680.00   | \$ 5.00         | \$ 5,850.00   | \$ 7.00                   | \$ 8,190.00   | \$ 3.80            | \$ 4,446.00   | \$ 6.15               | \$ 7,195.50   |
| 5                                                      | ROADWAY EXCAVATION INCL. HAUL<br>2-03.5                                           | 520<br>CY    | \$ 19.15                | \$ 9,958.00   | \$ 16.00                    | \$ 8,320.00   | \$ 22.00                  | \$ 11,440.00  | \$ 44.00        | \$ 22,880.00  | \$ 38.00                  | \$ 19,760.00  | \$ 22.00           | \$ 11,440.00  | \$ 34.50              | \$ 17,940.00  |
| 6                                                      | GRAVEL BARROW INCL. HAUL<br>2-03.5                                                | 156<br>TONS  | \$ 30.80                | \$ 4,804.80   | \$ 20.00                    | \$ 3,120.00   | \$ 25.00                  | \$ 3,900.00   | \$ 16.00        | \$ 2,496.00   | \$ 35.00                  | \$ 5,460.00   | \$ 35.00           | \$ 5,460.00   | \$ 27.50              | \$ 4,290.00   |
| 7                                                      | CONVEYANCE SWALE WITH<br>EMBANKMENT<br>2-03.5SP                                   | 1<br>LS      | \$ 8,600.00             | \$ 8,600.00   | \$ 12,200.00                | \$ 12,200.00  | \$ 22,500.00              | \$ 22,500.00  | \$ 12,000.00    | \$ 12,000.00  | \$ 11,000.00              | \$ 11,000.00  | \$ 9,400.00        | \$ 9,400.00   | \$ 15,100.00          | \$ 15,100.00  |
| 8                                                      | DRAIN PIPE 8 IN. DIAM.<br>7-01.5SP                                                | 286<br>LF    | \$ 50.35                | \$ 14,400.10  | \$ 94.00                    | \$ 26,884.00  | \$ 40.00                  | \$ 11,440.00  | \$ 65.00        | \$ 18,590.00  | \$ 60.00                  | \$ 17,160.00  | \$ 36.00           | \$ 10,296.00  | \$ 42.00              | \$ 12,012.00  |
| 9                                                      | CATCH BASIN TYPE 1L<br>7-05.5                                                     | 4<br>EA      | \$ 1,825.00             | \$ 7,300.00   | \$ 1,850.00                 | \$ 7,400.00   | \$ 2,500.00               | \$ 10,000.00  | \$ 1,500.00     | \$ 6,000.00   | \$ 2,000.00               | \$ 8,000.00   | \$ 3,500.00        | \$ 14,000.00  | \$ 2,225.00           | \$ 8,900.00   |
| 10                                                     | CATCH BASIN TYPE 2 48 IN. DIAM.<br>7-05.5                                         | 1<br>EA      | \$ 3,100.00             | \$ 3,100.00   | \$ 2,900.00                 | \$ 2,900.00   | \$ 4,000.00               | \$ 4,000.00   | \$ 2,900.00     | \$ 2,900.00   | \$ 3,500.00               | \$ 3,500.00   | \$ 5,500.00        | \$ 5,500.00   | \$ 5,200.00           | \$ 5,200.00   |
| 11                                                     | CATCH BASIN TYPE 2 54 IN. DIAM. WITH<br>DEEP SUMP AND OVERFLOW WINDOW<br>7-05.5SP | 1<br>EA      | \$ 4,600.00             | \$ 4,600.00   | \$ 4,900.00                 | \$ 4,900.00   | \$ 5,000.00               | \$ 5,000.00   | \$ 3,700.00     | \$ 3,700.00   | \$ 4,400.00               | \$ 4,400.00   | \$ 7,500.00        | \$ 7,500.00   | \$ 6,315.00           | \$ 6,315.00   |
| 12                                                     | CRUSH SURFACING BASE COURSE                                                       | 315<br>TON   | \$ 47.00                | \$ 14,805.00  | \$ 23.00                    | \$ 7,245.00   | \$ 28.00                  | \$ 8,820.00   | \$ 64.00        | \$ 20,160.00  | \$ 37.00                  | \$ 11,655.00  | \$ 42.00           | \$ 13,230.00  | \$ 40.00              | \$ 12,600.00  |
| 13                                                     | ESC LEAD<br>8-01.5                                                                | 25<br>DAY    | \$ 91.50                | \$ 2,287.50   | \$ 100.00                   | \$ 2,500.00   | \$ 10.00                  | \$ 250.00     | \$ 100.00       | \$ 2,500.00   | \$ 100.00                 | \$ 2,500.00   | \$ 200.00          | \$ 5,000.00   | \$ 120.00             | \$ 3,000.00   |
| 14                                                     | INLET PROTECTION<br>8-01.5                                                        | 6<br>EA      | \$ 37.00                | \$ 222.00     | \$ 100.00                   | \$ 600.00     | \$ 50.00                  | \$ 300.00     | \$ 50.00        | \$ 300.00     | \$ 70.00                  | \$ 420.00     | \$ 90.00           | \$ 540.00     | \$ 70.00              | \$ 420.00     |
| 15                                                     | STABILIZED CONSTRUCTION ENTRANCE<br>8-01.5                                        | 185<br>SY    | \$ 23.00                | \$ 4,255.00   | \$ 15.00                    | \$ 2,775.00   | \$ 30.00                  | \$ 5,550.00   | \$ 36.00        | \$ 6,660.00   | \$ 12.00                  | \$ 2,220.00   | \$ 29.00           | \$ 5,365.00   | \$ 22.00              | \$ 4,070.00   |
| 16                                                     | STREET CLEANING<br>8-01.5                                                         | 15<br>HR     | \$ 140.00               | \$ 2,100.00   | \$ 105.00                   | \$ 1,575.00   | \$ 150.00                 | \$ 2,250.00   | \$ 175.00       | \$ 2,625.00   | \$ 165.00                 | \$ 2,475.00   | \$ 150.00          | \$ 2,250.00   | \$ 140.00             | \$ 2,100.00   |
| 17                                                     | EROSION/WATER POLLUTION CONTROL<br>8-01.5                                         | EST.<br>DOL. | \$ 1,400.00             | \$ 1,400.00   | \$ 1,400.00                 | \$ 1,400.00   | \$ 1,400.00               | \$ 1,400.00   | \$ 1,400.00     | \$ 1,400.00   | \$ 1,400.00               | \$ 1,400.00   | \$ 1,400.00        | \$ 1,400.00   | \$ 1,400.00           | \$ 1,400.00   |
| 18                                                     | SEEDING, FERTILIZING AND MULCHING<br>8-01.5                                       | 4.9<br>ACRE  | \$ 4,325.00             | \$ 21,192.50  | \$ 4,300.00                 | \$ 21,070.00  | \$ 1,900.00               | \$ 9,310.00   | \$ 1,900.00     | \$ 9,310.00   | \$ 4,200.00               | \$ 20,580.00  | \$ 2,280.00        | \$ 11,172.00  | \$ 1,380.00           | \$ 6,762.00   |
| 19                                                     | HIGH VISIBILITY SILT FENCE<br>8-01.5                                              | 1,600<br>LF  | \$ 4.00                 | \$ 6,400.00   | \$ 3.50                     | \$ 5,600.00   | \$ 4.50                   | \$ 7,200.00   | \$ 5.00         | \$ 8,000.00   | \$ 6.00                   | \$ 9,600.00   | \$ 6.00            | \$ 9,600.00   | \$ 4.50               | \$ 7,200.00   |
| 20                                                     | TEMPORARY SEDIMENT POND<br>8-01.5 SP                                              | 1<br>LS      | \$ 8,225.00             | \$ 8,225.00   | \$ 6,500.00                 | \$ 6,500.00   | \$ 7,000.00               | \$ 7,000.00   | \$ 6,000.00     | \$ 6,000.00   | \$ 8,500.00               | \$ 8,500.00   | \$ 7,500.00        | \$ 7,500.00   | \$ 6,050.00           | \$ 6,050.00   |
| 21                                                     | PROJECT TEMPORARY<br>TRAFFIC CONTROL<br>1-10.5(1)                                 | 1<br>LS      | \$ 920.00               | \$ 920.00     | \$ 1,250.00                 | \$ 1,250.00   | \$ 2,000.00               | \$ 2,000.00   | \$ 500.00       | \$ 500.00     | \$ 1,200.00               | \$ 1,200.00   | \$ 2,500.00        | \$ 2,500.00   | \$ 4,400.00           | \$ 4,400.00   |
| 22                                                     | STRUCTURE EXCAVATION CL. B<br>INCL. HAUL<br>2-09.5                                | 175<br>CY    | \$ 37.00                | \$ 6,475.00   | \$ 15.00                    | \$ 2,625.00   | \$ 22.00                  | \$ 3,850.00   | \$ 25.00        | \$ 4,375.00   | \$ 50.00                  | \$ 8,750.00   | \$ 35.00           | \$ 6,125.00   | \$ 35.50              | \$ 6,212.50   |
| 23                                                     | SHORING OR EXTRA EXCAVATION<br>CLASS B<br>2-09.5SP                                | 1<br>LS      | \$ 275.00               | \$ 275.00     | \$ 1,500.00                 | \$ 1,500.00   | \$ 100.00                 | \$ 100.00     | \$ 1,000.00     | \$ 1,000.00   | \$ 1.00                   | \$ 1.00       | \$ 3,500.00        | \$ 3,500.00   | \$ 1,035.00           | \$ 1,035.00   |
| 24                                                     | CONSTRUCTION SURVEYING<br>1-05.4SP                                                | 1<br>LS      | \$ 4,100.00             | \$ 4,100.00   | \$ 500.00                   | \$ 500.00     | \$ 10,000.00              | \$ 10,000.00  | \$ 5,000.00     | \$ 5,000.00   | \$ 5,500.00               | \$ 5,500.00   | \$ 7,500.00        | \$ 7,500.00   | \$ 4,300.00           | \$ 4,300.00   |
| 25                                                     | FORCE ACCOUNT-<br>UNANTICIPATED SITE WORK<br>1-09.6SP                             | EST.<br>DOL. | \$ 6,000.00             | \$ 6,000.00   | \$ 6,000.00                 | \$ 6,000.00   | \$ 6,000.00               | \$ 6,000.00   | \$ 6,000.00     | \$ 6,000.00   | \$ 6,000.00               | \$ 6,000.00   | \$ 6,000.00        | \$ 6,000.00   | \$ 6,000.00           | \$ 6,000.00   |
| 26                                                     | S.P.C.C PLAN<br>1-07.15                                                           | 1<br>LS      | \$ 450.00               | \$ 450.00     | \$ 250.00                   | \$ 250.00     | \$ 500.00                 | \$ 500.00     | \$ 200.00       | \$ 200.00     | \$ 200.00                 | \$ 200.00     | \$ 800.00          | \$ 800.00     | \$ 285.00             | \$ 285.00     |
| 27                                                     | CONSTRUCTION GEOTEXTILE FOR<br>SOIL STABILIZATION<br>2-12.5                       | 1400<br>SY   | \$ 1.35                 | \$ 1,890.00   | \$ 2.50                     | \$ 3,500.00   | \$ 2.00                   | \$ 2,800.00   | \$ 1.00         | \$ 1,400.00   | \$ 1.00                   | \$ 1,400.00   | \$ 3.25            | \$ 4,550.00   | \$ 2.50               | \$ 3,500.00   |
| 28                                                     | CONNECTION TO DRAINAGE STRUCTURE<br>7-05.5SP                                      | 1<br>EA      | \$ 680.00               | \$ 680.00     | \$ 1,500.00                 | \$ 1,500.00   | \$ 3,500.00               | \$ 3,500.00   | \$ 500.00       | \$ 500.00     | \$ 1,400.00               | \$ 1,400.00   | \$ 4,500.00        | \$ 4,500.00   | \$ 2,570.00           | \$ 2,570.00   |
|                                                        |                                                                                   |              | Subtotal:               | \$ 196,970.90 | Subtotal:                   | \$ 225,444.00 | Subtotal:                 | \$ 227,670.00 | Subtotal:       | \$ 247,346.00 | Subtotal:                 | \$ 285,271.00 | Subtotal:          | \$ 300,838.80 | Subtotal:             | \$ 392,837.00 |
|                                                        |                                                                                   |              | 8.8% sales tax:         | \$ 17,333.44  | 8.8% sales tax:             | \$ 19,839.08  | 8.8% sales tax:           | \$ 20,034.96  | 8.8% sales tax: | \$ 21,766.45  | 8.8% sales tax:           | \$ 25,103.85  | 8.8% sales tax:    | \$ 26,473.81  | 8.8% sales tax:       | \$ 34,569.66  |
| 214304.34                                              |                                                                                   |              | TOTAL BID:              | \$ 214,304.34 | TOTAL BID:                  | \$ 245,283.08 | TOTAL BID:                | \$ 247,704.96 | TOTAL BID:      | \$ 269,112.45 | TOTAL BID:                | \$ 310,374.85 | TOTAL BID:         | \$ 327,312.61 | TOTAL BID:            | \$ 427,406.66 |

Denotes correction from Contractor's bid proposal based on unit prices.

**Item 3 Note:** Per sections 2-01.4 and 2-01.5 in the Special Provisions "Site Mowing, Grubbing, and Raking Incl. Haul" is measured and paid by the Acre. The Unit Price description on the proposal should have read "Per Acre". As directed by the specification section listed in the Item Description on the Proposal the bid should have been entered the way that it was intended.



## CONTRACT 19-092-PRK-002

This Contract is between the City of Anacortes, Washington, a Municipal Corporation (herein after referred to as "City") and Tiger Construction, LTD, a private contractor at PO BOX 368, Everson WA 98247 (herein after referred to as "Contractor").

### WITNESSETH:

That in consideration of the terms and conditions contained herein and attached and made a part of this agreement, the OWNER and CONTRACTOR hereto covenant and agree as follows:

#### I. WORK.

The Contractor shall do all work and furnish all tools, materials, equipment, and transportation required for the construction of **GRANDVIEW CEMETERY EXPANSION - PHASE 1, Project No. 19-092-PRK-002** in accordance with and as described in the City of Anacortes document entitled "**Plans, Specifications, and Contract Documents – GRANDVIEW CEMETERY EXPANSION - PHASE 1**" which is hereby incorporated by reference and made a part hereof, and shall perform any changes to the work in accord with the Contract Documents.

#### II. ENGINEER.

Unless otherwise specifically stated, the word "Engineer" shall be understood to mean the OWNER'S Project Manager or the OWNER'S authorized representative who will perform the Contract Administration and field inspection responsibilities.

#### III. CONTRACT TIMES AND LIQUIDATED DAMAGES.

##### A. Contract Times:

1. Unless modified by the proposal, work shall start within **Ten (10) Calendar** days from the date of the Notice to Proceed. Physical Completion as defined in section 1-08.5 of the Special Provisions shall be achieved within **Forty (40) Working days** after the work commences. The Contract Time shall commence upon issuance of the Notice to Proceed.

##### B. Liquidated Damages:

1. If said work is not completed within the time specified for Physical Completion, the Contractor agrees to pay the Owner the sum specified in Section 1-08.9 of the Standard Specifications for each and every working day said work remains incomplete after expiration of the specified time, as liquidated damages.

#### IV. CONTRACT PRICE.

The OWNER, hereby promises and agrees with the Contractor to retain and does retain the Contractor to provide the materials and to do and cause to be done the above-described work and to complete and finish the same according to the plans and specifications contained in document entitled "**Plans, Specifications, and Contract Documents – GRANDVIEW CEMETERY EXPANSION - PHASE 1**", and the terms and conditions herein contained, and hereby the OWNER contracts to pay CONTRACTOR for completion of the Work and in accordance to the same and the attached bid schedule, which is included as an Exhibit to this Agreement based upon the Unit Prices shown. The total contract price is **Two Hundred Fourteen Thousand Three Hundred Four Dollars and Thirty-Four Cents (\$214,304.34)**.

##### A. Interest:

1. Moneys not paid when due as provided in the General Conditions shall bear interest at the maximum rate allowed by law at the place of the Project.



## V. CONTRACTOR REPRESENTATIONS.

In order to induce OWNER to enter in this Agreement, CONTRACTOR'S representations are as set forth as follows:

- A. CONTRACTOR has familiarized him/herself with the nature and extent of the Contract Document, scope of Work, site conditions, locality, general nature of work to be performed by OWNER or others at the site that relates to Work required by the Contract Documents and local conditions and federal, state, and local laws and Regulations that in any manner may affect cost, progress, performance, or furnishing of Work.
- B. CONTRACTOR has carefully studied and examined the supplement, referred to above, which pertain to the conditions (subsurface or physical) to or contiguous to the site which may affect cost, progress, performance, or furnishing of said Work as CONTRACTOR deems necessary for the performance and furnishing of the Work at the Contract Price, within the Contract Times, and in accordance with other terms and conditions of the Contract Documents, including specifically the provisions of the 2018 WSDOT Specifications; and no additional or supplementary examinations, investigations, explorations, tests, reports, or similar information or data are or will be required by CONTRACTOR for such purposes.
- C. CONTRACTOR has reviewed and checked information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the site and has included costs as defined by WSDOT Specifications.
- D. CONTRACTOR has correlated information known to CONTRACTOR and results of such observations, familiarizations, examination, investigations, explorations, tests, and studies with Contract Documents.
- E. CONTRACTOR has given OWNER written notice of conflicts, errors, ambiguities or discrepancies that it has discovered in the Contract Documents and the written resolution thereof by OWNER is acceptable to CONTRACTOR, and the Contract Documents are generally sufficient to indicate and convey understanding of terms and conditions for performing and furnishing Work.

## VI. CONTRACT DOCUMENTS.

- A. Contract Documents that comprise the entire Agreement between OWNER and CONTRACTOR concerning Work are defined in the WSDOT Specifications.
- B. Exhibits to this Agreement include:
  - 1. Conformed Bid Form signed by CONTRACTOR.
  - 2. Executed Performance Bond
  - 3. Executed Payment Bond.
  - 4. Required documents submitted by the CONTRACTOR prior to the execution of Agreement as identified in the "Instruction to Bidders".

## VII. MISCELLANEOUS

- A. No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound, and specifically but without limitation moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment. No assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.
- B. OWNER and CONTRACTOR each binds itself, its partners, successors, assigns, and legal representatives to the other party hereto, its partners, successors, assigns, and legal representatives in respect of all covenants, agreements, and obligations contained in the Contract Documents.
- C. It is further provided that no liability shall attach to the City of Anacortes, Washington, by reason of entering into this contract, except as expressly provided herein.

**The parties acknowledge** that there has been an opportunity to negotiate the terms and conditions of this Agreement and agree to each bind itself, its partners, successors, assigns, and legal representatives to the other party hereto, in respect of all covenants, agreements, and obligations contained in the Contract Documents. Each of the persons signing below on behalf of any party hereby represents and warrants that s/he or it is signing with full and complete authority to bind the party on whose behalf of whom s/he or it is signing, to each and every term of this Agreement.

**Owner:**

CITY OF ANACORTES

\_\_\_\_\_  
Mayor

\_\_\_\_\_  
Date

**Contractor:**

TIGER CONSTRUCTION, LTD

\_\_\_\_\_

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

## BIDDER RESPONSIBILITY STATEMENT

The City must award the bid to the "lowest responsible bidder," or reject all bids. It may not negotiate with any of the bidders. The following guidelines, in addition to price, may be taken into account by the City in determining the lowest responsible bidder

1. Name of Bidder: Tiger Construction, LTD
2. Business Address: PO BOX 368, Everson WA 98247
3. Business Phone/Email: 360-966-7252
4. How many years have you been in business under the present firm name? 32
5. Character of work performed by your company as it directly relates to this project: civil site improvements, underground utilities
6. List contracts for similar work completed by your company within the past three years. Include approximate contract amounts and the name and telephone number of a contact person. A project currently in progress may be listed. 1. Roosevelt Stormwater Project - City of Bellingham ~ \$500K - Craig Mueller -  
360-778-7922 2. WCC Student Housing Sitework/Utilities ~\$3 Million - Whatcom  
Community College - Brian Keeley - 360-383-3375 3. Whatcom Crisis Center Sitework/  
Utilities - Rod Lamb 360-778-5850
7. Name, address, and telephone number of bonding and insurance company, and name and telephone number of local contact person: Parker Smith Feek  
2233 112th Ave NE, Bellevue WA 98004  
Roger Kaltenback 800-457-0220
8. The Project Field Supervisor will be: Scott Davies  
This person will be on the job full time and directly supervising the work. Any change will require written approval by the Owner.  
Project Field Supervisor experience:
  - a) Years of experience in this type of construction: 30 Yrs  Months
  - b) Years of supervisory experience: 20 Yrs  Month
  - c) Years employed with current firm: 30 Yrs  Months
  - d) Years employed with previous firm: 0 Yrs  Months
  - e) List References (include name, title, city or district, phone number):  
Josh Neyman - City of Bellingham - 360-410-1787  
Craig Mueller - City of Bellingham - 360-798-7922

NOTICE TO BIDDERS: IN ACCORDANCE WITH THE ADVERTISED INVITATION TO BID, BIDDERS ARE DIRECTED TO [WWW.BXWA.COM](http://WWW.BXWA.COM) TO ENSURE RECEIPT OF ENTIRE SOLICITATION.



- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
9. List your major equipment: \_\_\_\_\_  
Dump Trucks, Excavators, Grading Equipment, pumps, generators, backhoes  
\_\_\_\_\_  
\_\_\_\_\_
10. Bank references with contact name and telephone number: \_\_\_\_\_  
Peoples Bank, Liz Deerin 360-966-5884  
\_\_\_\_\_  
\_\_\_\_\_
11. State of Washington Registration No. TIGERCL121MA
12. Federal IRS Identification No. 91-1413916
13. List your other projects currently in progress along with other bids or contracts awarded but not yet started:  
Island County Stabilization, Whatcom County Stabilization, Bellingham Public Library Elevator and  
Central Remodel, Hoags Creek, Town of Concrete- Water Tank improvements, Squalicum Creek  
Reroute, Ferndale SD Vestibule, Shuksan Aux Gym, Lake Samish Sewer, Berthusen Park Restrooms,  
Nooksack and Everson Elementary addition, Port of Bellingham Ballroom  
\_\_\_\_\_
14. Will contracts currently in progress, or hereafter obtained interfere with the timely performance of the City of  
Anacortes project? ☐ YES ☒ NO

TO: City of Anacortes  
City Hall  
904 Sixth Street  
Anacortes, WA 98221

Attention: Nicole Johnston – City Project Manager

The undersigned, hereinafter called the bidder, declares that the only persons or parties interested in this proposal are those named herein; that this proposal is in all respects fair and without fraud; that it is made without collusion with any official of the City of Anacortes; and that the proposal is made without any connection or collusion with any person making another proposal of this contract. **Moreover, the Bidder declares by signing the signature page of this Proposal that the following statement is true and correct:**

**My firm, association or corporation has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with the project for which this proposal is submitted.**

The bidder declares that he/she has carefully examined the contract documents for the construction of the project; that he/she has personally inspected the site; that he/she has satisfied him or herself as to the quantities involved, including materials and equipment and conditions of work involved, including the fact that the description of the quantities of work and materials, as included herein, is brief and is intended only to indicate the general nature of the work and to identify the said quantities with the detailed requirements of the contract documents and that this proposal is made according to the provisions and under the terms of the contract documents, which documents are hereby made a part of this proposal.

The bidder declares that he/she has exercised his/her own judgment regarding the interpretation of subsurface information and has utilized all data, which he/she believes pertinent from the Engineer, Owner and other sources in arriving at his/her conclusions.

The bidder agrees that if this proposal is accepted, he/she will, within **Ten (10) Calendar** days after Notification of Award, execute the contract with the City of Anacortes in the form of contract included in the contract documents, and will, prior to the time of execution of the contract, deliver to the City of Anacortes the Performance and Payment Bond, all Certificates of Insurance and proof of a City of Anacortes Business License required therein and will, to the extent of his/her proposals, furnish all necessary labor, tools, materials, equipment, and services required to do the work in the manner, in the time, and according to the methods as specified in the contract documents and required by the Engineer or other designated project representative there under.

The bidder further agrees, if awarded the contract, to begin work within **Ten (10) Working** days after the date of the Notice to Proceed and to achieve Physical Completion within **Forty (40) Working** days, in accordance with the Notice to Proceed.

In the event the bidder is awarded the contract and shall fail to complete the work within the time limit agreed upon as more particularly set forth in the contract documents, liquidated damages shall be paid to the owner per the Standard Specifications contained in the contract documents.

The bidder proposes to accept as full payment for the work proposed herein the amount computed under the provisions of the contract documents and based upon the unit price, it being expressly understood that the unit price is independent of the exact quantities involved. Bidder agrees that the unit prices shown represent a true measure of the labor and materials required to perform the work, including all allowances for overhead and profit for each type of work called for in these contract documents.

NOTICE TO BIDDERS:

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The undersigned bids for complete construction of the following described project:

This project provides for infrastructure improvements to approximately 5 acres of an existing 11.5-acre cemetery owned and operated by the City of Anacortes. Work to be performed by contractors includes installing temporary erosion control measures; removing existing site features; tree removal and land clearing; minor grading (excavation and embankment) of new roadway corridors; placement of gravel borrow; installing stormwater systems for collection, conveyance, and treatment of road and site runoff; restoring disturbed areas; construction surveying; and other work, all in accordance with the attached Contract Plans, City Development Standards, and the WSDOT's Standard Specifications.

Project is located at 411 Hillcrest Drive, Anacortes, WA.

The bid price shall include everything necessary for the prosecution and completion of the services as detailed in the specifications including but not limited to furnishing all materials, equipment, supplies, tools, plant and other facilities and all management, supervision, labor and service, except as may be provided otherwise in this bid.

**CITY OF ANACORTES GRANDVIEW CEMETERY EXPANSION - PHASE 1**

| NO. | PLAN QUANTITY | ITEM DESCRIPTION                                                | UNIT PRICE (Figures)                                       | TOTAL AMOUNT (Figures)        |
|-----|---------------|-----------------------------------------------------------------|------------------------------------------------------------|-------------------------------|
| 1   | 1<br>LS       | <b>MOBILIZATION</b><br>1-09.7                                   | At<br>\$ <u>13,500<sup>00</sup></u><br>Per Lump Sum        | \$ <u>13,500<sup>00</sup></u> |
| 2   | 0.9<br>ACRE   | <b>CLEARING AND GRUBBING</b><br>2-01.5                          | At<br>\$ <u>39,000<sup>00</sup></u><br>Per Acre            | \$ <u>35,100<sup>00</sup></u> |
| 3   | 4.1<br>ACRE   | <b>SITE MOWING, GRUBBING, AND RAKING INCL. HAUL</b><br>2-01.5SP | At<br>\$ <u>1,600<sup>00</sup></u><br>Per Lump Sum<br>ACRE | \$ <u>6560<sup>00</sup></u>   |
| 4   | 1,170<br>SY   | <b>REMOVING ASPHALT CONC. PAVEMENT</b><br>2-02.5SP              | At<br>\$ <u>6.30</u><br>Per Square Yard                    | \$ <u>7371<sup>00</sup></u>   |
| 5   | 520<br>CY     | <b>ROADWAY EXCAVATION INCL. HAUL</b><br>2-03.5                  | At<br>\$ <u>19.15</u><br>Per Cubic Yard                    | \$ <u>9,958<sup>00</sup></u>  |
| 6   | 156<br>TONS   | <b>GRAVEL BARROW INCL. HAUL</b><br>2-03.5                       | At<br>\$ <u>30.80</u><br>Per Ton                           | \$ <u>4804.80</u>             |
| 7   | 1<br>LS       | <b>CONVEYANCE SWALE WITH EMBANKMENT</b><br>2-03.5SP             | At<br>\$ <u>8600<sup>00</sup></u><br>Per Lump Sum          | \$ <u>8600<sup>00</sup></u>   |

NOTICE TO BIDDERS: IN ACCORDANCE WITH THE ADVERTISED INVITATION TO BID, BIDDERS ARE DIRECTED TO [WWW.BXWA.COM](http://WWW.BXWA.COM) TO ENSURE RECEIPT OF ENTIRE SOLICITATION.



**GRANDVIEW CEMETERY EXPANSION - PHASE 1**  
**BID PROPOSAL**  
**PAGE 3 OF 6**

| NO. | PLAN<br>QUANTITY | ITEM DESCRIPTION                                                                          | UNIT PRICE<br>(Figures)                            | TOTAL AMOUNT<br>(Figures)     |
|-----|------------------|-------------------------------------------------------------------------------------------|----------------------------------------------------|-------------------------------|
| 8   | 286<br>LF        | <b>DRAIN PIPE 8 IN. DIAM.</b><br>7-01.5SP                                                 | At<br>\$ <u>50.35</u><br>Per Linear Foot           | \$ <u>14,400.10</u>           |
| 9   | 4<br>EA          | <b>CATCH BASIN TYPE 1L</b><br>7-05.5                                                      | At<br>\$ <u>1825<sup>00</sup></u><br>Per Each      | \$ <u>7300<sup>00</sup></u>   |
| 10  | 1<br>EA          | <b>CATCH BASIN TYPE 2 48 IN. DIAM.</b><br>7-05.5                                          | At<br>\$ <u>3100<sup>00</sup></u><br>Per Each      | \$ <u>3100<sup>00</sup></u>   |
| 11  | 1<br>EA          | <b>CATCH BASIN TYPE 2 54 IN. DIAM. WITH<br/>DEEP SUMP AND OVERFLOW WINDOW</b><br>7-05.5SP | At<br>\$ <u>4600<sup>00</sup></u><br>Per Each      | \$ <u>4600<sup>00</sup></u>   |
| 12  | 315<br>TON       | <b>CRUSH SURFACEING BASE COURSE</b>                                                       | At<br>\$ <u>47<sup>00</sup></u><br>Per Ton         | \$ <u>14,805<sup>00</sup></u> |
| 13  | 25<br>DAY        | <b>ESC LEAD</b><br>8-01.5                                                                 | At<br>\$ <u>91.50</u><br>Per Day                   | \$ <u>2,287.50</u>            |
| 14  | 6<br>EA          | <b>INLET PROTECTION</b><br>8-01.5                                                         | At<br>\$ <u>37.00</u><br>Per Each                  | \$ <u>222<sup>00</sup></u>    |
| 15  | 185<br>SY        | <b>STABILIZED CONSTRUCTION ENTRANCE</b><br>8-01.5                                         | At<br>\$ <u>23<sup>00</sup></u><br>Per Square Yard | \$ <u>4255<sup>00</sup></u>   |
| 16  | 15<br>HR         | <b>STREET CLEANING</b><br>8-01.5                                                          | At<br>\$ <u>140<sup>00</sup></u><br>Per Hour       | \$ <u>2100<sup>00</sup></u>   |
| 17  | EST.<br>DOL.     | <b>EROSION/WATER POLLUTION CONTROL</b><br>8-01.5                                          | At<br>\$ 1400.00<br>Per Force Account              | \$1400.00                     |
| 18  | 4.9<br>ACRE      | <b>SEEDING, FERTILIZING AND MULCHING</b><br>8-01.5                                        | At<br>\$ <u>4325<sup>00</sup></u><br>Per Acre      | \$ <u>21,192.50</u>           |
| 19  | 1,600<br>LF      | <b>HIGH VISIBILITY SILT FENCE</b><br>8-01.5                                               | At<br>\$ <u>4<sup>00</sup></u><br>Per Linear Foot  | \$ <u>6400<sup>00</sup></u>   |

NOTICE TO BIDDERS: IN ACCORDANCE WITH THE ADVERTISED INVITATION TO BID, BIDDERS ARE DIRECTED TO  
[WWW.BXWA.COM](http://WWW.BXWA.COM) TO ENSURE RECEIPT OF ENTIRE SOLICITATION.

**GRANDVIEW CEMETERY EXPANSION - PHASE 1**  
**BID PROPOSAL**  
**PAGE 4 OF 6**

| NO.                                                                                                          | PLAN<br>QUANTITY | ITEM DESCRIPTION                                                    | UNIT PRICE<br>(Figures)                           | TOTAL AMOUNT<br>(Figures)   |
|--------------------------------------------------------------------------------------------------------------|------------------|---------------------------------------------------------------------|---------------------------------------------------|-----------------------------|
| 20                                                                                                           | 1<br>LS          | <b>TEMPORARY SEDIMENT POND</b><br>8-01.5 SP                         | At<br>\$ <u>8225<sup>00</sup></u><br>Per Lump Sum | \$ <u>8225<sup>00</sup></u> |
| 21                                                                                                           | 1<br>LS          | <b>PROJECT TEMPORARY<br/>TRAFFIC CONTROL</b><br>1-10.5(1)           | At<br>\$ <u>920<sup>00</sup></u><br>Per Lump Sum  | \$ <u>920<sup>00</sup></u>  |
| 22                                                                                                           | 175<br>CY        | <b>STRUCTURE EXCAVATION CL. B<br/>INCL. HAUL</b><br>2-09.5          | At<br>\$ <u>37<sup>00</sup></u><br>Per Cubic Yard | \$ <u>6475<sup>00</sup></u> |
| 23                                                                                                           | 1<br>LS          | <b>SHORING OR EXTRA EXCAVATION<br/>CLASS B</b><br>2-09.5SP          | At<br>\$ <u>275<sup>00</sup></u><br>Per Lump Sum  | \$ <u>275<sup>00</sup></u>  |
| 24                                                                                                           | 1<br>LS          | <b>CONSTRUCTION SURVEYING</b><br>1-05.4SP                           | At<br>\$ <u>4100<sup>00</sup></u><br>Per Lump Sum | \$ <u>4100<sup>00</sup></u> |
| 25                                                                                                           | EST.<br>DOL.     | <b>FORCE ACCOUNT-<br/>UNANTICIPATED SITE WORK</b><br>1-09.6SP       | At<br>\$6,000<br>Per Force Account                | \$6,000                     |
| 26                                                                                                           | 1<br>LS          | <b>S.P.C.C PLAN</b><br>1-07.15                                      | At<br>\$ <u>450<sup>00</sup></u><br>Per Lump Sum  | \$ <u>450<sup>00</sup></u>  |
| 27                                                                                                           | 1400<br>SY       | <b>CONSTRUCTION GEOTEXTILE FOR<br/>SOIL STABILIZATION</b><br>2.12.5 | At<br>\$ <u>1.35</u><br>Per Square Yard           | \$ <u>1890<sup>00</sup></u> |
| 28                                                                                                           | 1<br>EA          | <b>CONNECTION TO DRAINAGE STRUCTURE</b><br>7-05.5SP                 | At<br>\$ <u>690<sup>00</sup></u><br>Per Each      | \$ <u>690<sup>00</sup></u>  |
| <p>Rule 170 applies to all bid items in this project. See special provision 1-07.2(2) for clarification.</p> |                  |                                                                     | <b>Sub-Total:</b>                                 | \$ <u>196,970.90</u>        |
|                                                                                                              |                  |                                                                     | <b>Sales Tax (8.8%):</b>                          | \$ <u>17,333.44</u>         |
|                                                                                                              |                  |                                                                     | <b>Total Bid:</b>                                 | \$ <u>214,304.34</u>        |

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**ACKNOWLEDGEMENT OF RECEIPT OF ADDENDA**

Addendum 1, Initial SGE

Addendum \_\_\_\_\_, Initial \_\_\_\_\_

Addendum \_\_\_\_\_, Initial \_\_\_\_\_

Addendum \_\_\_\_\_, Initial \_\_\_\_\_

**NOTE:** Failure to acknowledge any issued Addenda may render proposal non-responsive and therefore void. It is the sole responsibility of the Bidder to learn of Addendum, if any. Such information may be obtained from the Builders Exchange website at [www.bxwa.com](http://www.bxwa.com).

**BID DEPOSIT**

A proposal deposit in an amount of five percent (5%) of the total bid is attached here in the form indicated below:

☒ Bid Bond

☐ Cashier's Check

☐ Certified Check

☐ Cash

**NOTICE TO ALL BIDDERS**

To report bid rigging activities call: **1-800-424-9071**

The U.S. Department of Transportation (USDOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m., Eastern time. Anyone with knowledge of possible bid rigging, Bidder collusion, or other fraudulent activities should use the "hotline" to report activities. The "hotline" is part of USDOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the USDOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

**BIDDER CERTIFIES**

- They have examined the work site and all existing conditions;
- They fully understand the manner in which payment is proposed;
- They propose to furnish all labor, equipment, and materials required to perform and complete specified work within the time fixed, and for the price proposed;
- They will observe the national, Washington State, and local codes; and
- They have the insurance coverage required for this Contract, which includes: Commercial General Liability Insurance, Business Auto Liability, Worker's Comp



Name of Bidder: Tiger Construction, Ltd  
Contact Name: Scott Isenhart  
Mailing Address: PO BOX 368  
City, State, Zip: Everson WA 98247  
Business Telephone: 360-966-7252 Cell Phone: 360-410-7361  
Email Address: Scott@tigerconstruction.us  
Contractor's State License No: TIGERCL121MA  
UBI Number: 601-090-108

By signing this proposal, the bidder agrees to all requirements contained in the contract documents.

(Corporate Seal) Tiger Construction Ltd, President  
Name of Bidder Title  
  
10/1/2020  
Date Signature of Bidder  
Scott Isenhart  
Print Name



## Certification of Compliance with Wage Payment Statutes

The bidder hereby certifies that, within the three-year period immediately preceding the bid solicitation date (September 16, 2020), the bidder is not a "willful" violator, as defined in RCW 49.48.082, of any provision of chapters 49.46, 49.48, or 49.52 RCW, as determined by a final and binding citation and notice of assessment issued by the Department of Labor and Industries or through a civil judgment entered by a court of limited or general jurisdiction.

I declare under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct.

Tiger Construction, LTD  
Bidder's Business Name

Signature of Authorized Official\*

Scott Isenhart  
Printed Name

President  
Title

10/1/2020  
Date

Everson  
City

WA  
State or country

Check One:

Sole Proprietorship ☐ Partnership ☐ Joint Venture ☐ Corporation ☒

State of Incorporation, or if not a corporation, State where business entity was formed:

Washington

If a co-partnership, give firm name under which business is transacted:

*\* If a corporation, proposal must be executed in the corporate name by the president or vice-president (or any other corporate officer accompanied by evidence of authority to sign). If a co-partnership, proposal must be executed by a partner.*

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# City Council Contract Agenda Bill

**Meeting Date:** 10/12/2020    **Agenda Item:** 6c

**Subject:** Contract Award – 2020 Asphalt Overlay Project #20-192-TRN-001

**Staff Contact:** Fred Buckenmeyer

**Approved for Submittal to Council by:**  
Darcy Swetnam, City Attorney

**Action Type:** Contract Award

**Summary Statement:** City staff seeks City Council consent to award a contract in the amount of \$446,190.00 to Granite Construction Company to perform the 2020 Asphalt Overlay Project. The project provides for improvements within the right-of-way of the following streets including but not limited to asphalt planning, pavement repair, asphalt paving, painted and plastic traffic markings and other work. The project is located:

- K Avenue – 12th Street to 20th Street
- 20th Street - K Avenue to I Avenue
- Dakota Avenue from West 2<sup>nd</sup> to north of Oakes Ave; including the Oakes Avenue (SR 20 Spur) intersection.

**Background:**

1. **History:** These roadways were selected for overlay based on the City Pavement Management Plan. The Pavement Condition Index (PCI) ratings along this corridor range from 64 to 6. All waterline, storm water, sidewalk, and ADA ramp work has already been completed to prepare for the paving project. The project will include planing existing asphalt, pavement repair of damaged pavement sections, placing pavement fabric to reinforced portions of the roadway and asphalt overlay of existing pavement. New paint striping will be installed including crosswalks, stop bars, centerline and lane edge striping.
2. **Key Terms:**
  - Contract price is \$446,190.00.
  - The Contractor is to begin work within 10 working days following the date of the Notice to Proceed, and achieve Physical Completion within 20 working days from the date work begins.
2. **Competitive Bidding:** On September 16, 2020 the City issued an [Invitation to Bid](#) for the subject project and on October 1, 2020 a bid opening was conducted and 4 bids were received. Granite Construction Company was determined to be the lowest responsible bidder. The Engineer's Estimate for this project was \$530,024.00. Bid results are provided as an attachment hereto.

**Previous Council/Committee Action:** N/A

**Competing Viewpoints Considered:** N/A

**Recommended Motion:** I move that City Council authorize the Mayor to sign contract 20-192-TRN-001 with Granite Construction Company in the amount of \$446,190.00 to perform the 2020 Asphalt Overlay Project.

**Alternative Actions:** Not award the contract

**Attachments:** Bid Results, Vicinity Map, Contract 20-192-TRN-001



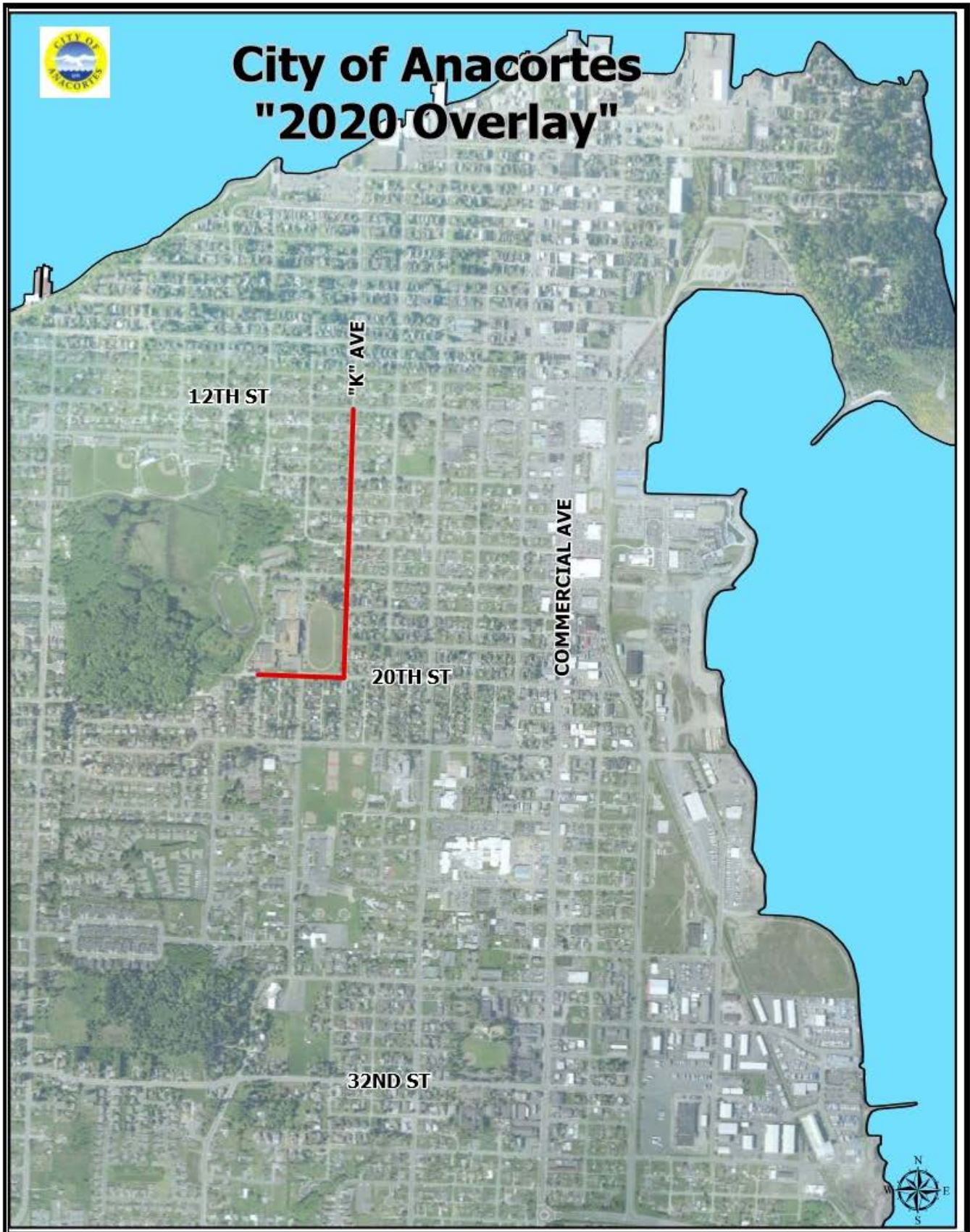
|                            |                              |
|----------------------------|------------------------------|
| Contractor                 | Granite Construction Company |
| Contract Amount            | \$446,190.00                 |
| Earmarked Funds            | \$1,800,000.00               |
| BARS #                     | 104.720.542.30.41            |
| Budget Amendment Required? | No                           |
| Start Date                 | Notice to Proceed            |
| End Date                   | 20 working days              |

**2020 ASPHALT OVERLAY PROJECT  
(PW20-192-TRN-001)  
BID OPENING DATE: OCTOBER 1, 2020**

|           |       |      |                                              | ENGINEERS ESTIMATE |               | Low Bid Received From    |               | 2nd                       |               | 3rd                    |               | 4th                   |               |
|-----------|-------|------|----------------------------------------------|--------------------|---------------|--------------------------|---------------|---------------------------|---------------|------------------------|---------------|-----------------------|---------------|
|           |       |      |                                              |                    |               | GRANITE CONSTRUCTION CO. |               | LAKESIDE INDUSTRIES, INC. |               | COLACURCIO BROS., INC. |               | SRV CONSTRUCTION INC. |               |
| Item No.  | Qty   | Unit | Description                                  | Unit Price         | Amount        | Unit Price               | Amount        | Unit Price                | Amount        | Unit Price             | Amount        | Unit Price            | Amount        |
|           |       |      |                                              |                    |               |                          |               |                           |               |                        |               |                       |               |
| 1         | 1     | LS   | Mobilization                                 | \$ 48,184.00       | \$ 48,184.00  | \$ 44,000.00             | \$ 44,000.00  | \$ 20,000.00              | \$ 20,000.00  | \$ 35,000.00           | \$ 35,000.00  | \$ 22,650.00          | \$ 22,650.00  |
| 2         | EST.  | DOL  | Force Account - Unanticipated Site Work      | \$ 7,500.00        | \$ 7,500.00   | \$ 7,500.00              | \$ 7,500.00   | \$ 7,500.00               | \$ 7,500.00   | \$ 7,500.00            | \$ 7,500.00   | \$ 7,500.00           | \$ 7,500.00   |
| 3         | 1     | LS   | SPCC Plan                                    | \$ 1,000.00        | \$ 1,000.00   | \$ 2,500.00              | \$ 2,500.00   | \$ 800.00                 | \$ 800.00     | \$ 500.00              | \$ 500.00     | \$ 290.00             | \$ 290.00     |
| 4         | 1     | LS   | Project Temporary Traffic Control            | \$ 100,000.00      | \$ 100,000.00 | \$ 104,100.00            | \$ 104,100.00 | \$ 60,500.00              | \$ 60,500.00  | \$ 45,000.00           | \$ 45,000.00  | \$ 88,750.00          | \$ 88,750.00  |
| 5         | 25    | EA   | Inlet Protection                             | \$ 100.00          | \$ 2,500.00   | \$ 100.00                | \$ 2,500.00   | \$ 70.00                  | \$ 1,750.00   | \$ 50.00               | \$ 1,250.00   | \$ 79.00              | \$ 1,975.00   |
| 6         | 1     | LS   | Roadway Grading and Paving Preparation       | \$ 1,500.00        | \$ 1,500.00   | \$ 7,500.00              | \$ 7,500.00   | \$ 3,400.00               | \$ 3,400.00   | \$ 2,400.00            | \$ 2,400.00   | \$ 3,330.00           | \$ 3,330.00   |
| 7         | 650   | SY   | 2 Inch Depth Planing Repair                  | \$ 20.00           | \$ 13,000.00  | \$ 9.00                  | \$ 5,850.00   | \$ 18.00                  | \$ 11,700.00  | \$ 10.00               | \$ 6,500.00   | \$ 22.00              | \$ 14,300.00  |
| 8         | 8,500 | SY   | Planing Bituminous Pavement                  | \$ 5.00            | \$ 42,500.00  | \$ 4.50                  | \$ 38,250.00  | \$ 4.40                   | \$ 37,400.00  | \$ 4.00                | \$ 34,000.00  | \$ 4.10               | \$ 34,850.00  |
| 9         | 80    | TON  | HMA CL. 1/2 In. PG58H-22 for Pavement Repair | \$ 150.00          | \$ 12,000.00  | \$ 123.00                | \$ 9,840.00   | \$ 210.00                 | \$ 16,800.00  | \$ 225.00              | \$ 18,000.00  | \$ 465.00             | \$ 37,200.00  |
| 10        | 550   | TON  | HMA CL. 1/2 In. PG58H-22 for Prelevel        | \$ 125.00          | \$ 68,750.00  | \$ 80.00                 | \$ 44,000.00  | \$ 120.00                 | \$ 66,000.00  | \$ 128.00              | \$ 70,400.00  | \$ 138.00             | \$ 75,900.00  |
| 11        | 1,900 | TON  | HMA CL. 1/2 In. PG58H-22                     | \$ 100.00          | \$ 190,000.00 | \$ 80.00                 | \$ 152,000.00 | \$ 104.00                 | \$ 197,600.00 | \$ 115.00              | \$ 218,500.00 | \$ 123.60             | \$ 234,840.00 |
| 12        | 20    | EA   | Adjust Manhole                               | \$ 1,000.00        | \$ 20,000.00  | \$ 550.00                | \$ 11,000.00  | \$ 175.00                 | \$ 3,500.00   | \$ 660.00              | \$ 13,200.00  | \$ 382.00             | \$ 7,640.00   |
| 13        | 1     | EA   | Adjust Valve Casing to Grade                 | \$ 600.00          | \$ 600.00     | \$ 550.00                | \$ 550.00     | \$ 350.00                 | \$ 350.00     | \$ 600.00              | \$ 600.00     | \$ 1,000.00           | \$ 1,000.00   |
| 14        | 6     | EA   | Circular Frame and Cover                     | \$ 750.00          | \$ 4,500.00   | \$ 550.00                | \$ 3,300.00   | \$ 1,050.00               | \$ 6,300.00   | \$ 1,000.00            | \$ 6,000.00   | \$ 980.00             | \$ 5,880.00   |
| 15        | 3,500 | LF   | Paint Line                                   | \$ 0.50            | \$ 1,750.00   | \$ 0.68                  | \$ 2,380.00   | \$ 0.75                   | \$ 2,625.00   | \$ 0.65                | \$ 2,275.00   | \$ 0.70               | \$ 2,450.00   |
| 16        | 1,360 | SF   | Plastic Crosswalk Line                       | \$ 8.00            | \$ 10,880.00  | \$ 5.10                  | \$ 6,936.00   | \$ 5.50                   | \$ 7,480.00   | \$ 4.80                | \$ 6,528.00   | \$ 5.25               | \$ 7,140.00   |
| 17        | 330   | LF   | Plastic Stop Line                            | \$ 10.00           | \$ 3,300.00   | \$ 6.80                  | \$ 2,244.00   | \$ 7.40                   | \$ 2,442.00   | \$ 6.40                | \$ 2,112.00   | \$ 7.00               | \$ 2,310.00   |
| 18        | 3     | EA   | Plastic Shared Lane Marker                   | \$ 500.00          | \$ 1,500.00   | \$ 400.00                | \$ 1,200.00   | \$ 430.00                 | \$ 1,290.00   | \$ 370.00              | \$ 1,110.00   | \$ 400.00             | \$ 1,200.00   |
| 19        | 0.8   | HUN  | Raised Pavement Marker Type 2                | \$ 700.00          | \$ 560.00     | \$ 675.00                | \$ 540.00     | \$ 750.00                 | \$ 600.00     | \$ 650.00              | \$ 520.00     | \$ 700.00             | \$ 560.00     |
| TOTAL BID |       |      |                                              |                    | \$530,024.00  |                          | \$446,190.00  |                           | \$448,037.00  |                        | \$471,395.00  |                       | \$549,765.00  |



# City of Anacortes "2020 Overlay"



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## CONTRACT 20-192-TRN-001

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This Contract is between the City of Anacortes, Washington, a Municipal Corporation (herein after referred to as "City") and Granite Construction Company, a private contractor at 1525 E Marine View Dr., Everett WA 98201 (herein after referred to as "Contractor").

### WITNESSETH:

That in consideration of the terms and conditions contained herein and attached and made a part of this agreement, the OWNER and CONTRACTOR hereto covenant and agree as follows:

#### I. WORK.

The Contractor shall do all work and furnish all tools, materials, equipment, and transportation required for the construction of **2020 Asphalt Overlay, Project No. 20-192-TRN-001** in accordance with and as described in the City of Anacortes document entitled "**Plans, Specifications, and Contract Documents – 2020 Asphalt Overlay**" which is hereby incorporated by reference and made a part hereof, and shall perform any changes to the work in accord with the Contract Documents.

#### II. ENGINEER.

Unless otherwise specifically stated, the word "Engineer" shall be understood to mean the OWNER'S Project Manager or the OWNER'S authorized representative who will perform the Contract Administration and field inspection responsibilities.

#### III. CONTRACT TIMES AND LIQUIDATED DAMAGES.

##### A. Contract Times:

1. Unless modified by the proposal, work shall start within **Ten (10) Calendar** days from the date of the Notice to Proceed. Physical Completion as defined in section 1-08.5 of the Special Provisions shall be achieved within **Twenty (20) Working days** after the work commences. The Contract Time shall commence upon issuance of the Notice to Proceed.

##### B. Liquidated Damages:

1. If said work is not completed within the time specified for Physical Completion, the Contractor agrees to pay the Owner the sum specified in Section 1-08.9 of the Standard Specifications for each and every working day said work remains incomplete after expiration of the specified time, as liquidated damages.

#### IV. CONTRACT PRICE.

The OWNER, hereby promises and agrees with the Contractor to retain and does retain the Contractor to provide the materials and to do and cause to be done the above-described work and to complete and finish the same according to the plans and specifications contained in document entitled "**Plans, Specifications, and Contract Documents – 2020 Asphalt Overlay**", and the terms and conditions herein contained, and hereby the OWNER contracts to pay CONTRACTOR for completion of the Work and in accordance to the same and the attached bid schedule, which is included as an Exhibit to this Agreement based upon the Unit Prices shown. The total contract price is **Four Hundred Forty-Six Thousand One Hundred Ninety Dollars (\$446,190.00)**.

##### A. Interest:

1. Moneys not paid when due as provided in the General Conditions shall bear interest at the maximum rate allowed by law at the place of the Project.

## V. CONTRACTOR REPRESENTATIONS.

In order to induce OWNER to enter in this Agreement, CONTRACTOR'S representations are as set forth as follows:

- A. CONTRACTOR has familiarized him/herself with the nature and extent of the Contract Document, scope of Work, site conditions, locality, general nature of work to be performed by OWNER or others at the site that relates to Work required by the Contract Documents and local conditions and federal, state, and local laws and Regulations that in any manner may affect cost, progress, performance, or furnishing of Work.
- B. CONTRACTOR has carefully studied and examined the supplement, referred to above, which pertain to the conditions (subsurface or physical) to or contiguous to the site which may affect cost, progress, performance, or furnishing of said Work as CONTRACTOR deems necessary for the performance and furnishing of the Work at the Contract Price, within the Contract Times, and in accordance with other terms and conditions of the Contract Documents, including specifically the provisions of the 2018 WSDOT Specifications; and no additional or supplementary examinations, investigations, explorations, tests, reports, or similar information or data are or will be required by CONTRACTOR for such purposes.
- C. CONTRACTOR has reviewed and checked information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the site and has included costs as defined by WSDOT Specifications.
- D. CONTRACTOR has correlated information known to CONTRACTOR and results of such observations, familiarizations, examination, investigations, explorations, tests, and studies with Contract Documents.
- E. CONTRACTOR has given OWNER written notice of conflicts, errors, ambiguities or discrepancies that it has discovered in the Contract Documents and the written resolution thereof by OWNER is acceptable to CONTRACTOR, and the Contract Documents are generally sufficient to indicate and convey understanding of terms and conditions for performing and furnishing Work.

## VI. CONTRACT DOCUMENTS.

- A. Contract Documents that comprise the entire Agreement between OWNER and CONTRACTOR concerning Work are defined in the WSDOT Specifications.
- B. Exhibits to this Agreement include:
  - 1. Conformed Bid Form signed by CONTRACTOR.
  - 2. Executed Performance Bond
  - 3. Executed Payment Bond.
  - 4. Required documents submitted by the CONTRACTOR prior to the execution of Agreement as identified in the "Instruction to Bidders".

## VII. MISCELLANEOUS

- A. No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound, and specifically but without limitation moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment. No assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.
- B. OWNER and CONTRACTOR each binds itself, its partners, successors, assigns, and legal representatives to the other party hereto, its partners, successors, assigns, and legal representatives in respect of all covenants, agreements, and obligations contained in the Contract Documents.
- C. It is further provided that no liability shall attach to the City of Anacortes, Washington, by reason of entering into this contract, except as expressly provided herein.

**The parties acknowledge** that there has been an opportunity to negotiate the terms and conditions of this Agreement and agree to each bind itself, its partners, successors, assigns, and legal representatives to the other party hereto, in respect of all covenants, agreements, and obligations contained in the Contract Documents. Each of the persons signing below on behalf of any party hereby represents and warrants that s/he or it is signing with full and complete authority to bind the party on whose behalf of whom s/he or it is signing, to each and every term of this Agreement.

**Owner:**

City of Anacortes

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Contractor:**

Granite Construction Company

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



## BIDDER RESPONSIBILITY STATEMENT

The City must award the bid to the "lowest responsible bidder," or reject all bids. It may not negotiate with any of the bidders. The following guidelines, in addition to price, may be taken into account by the City in determining the lowest responsible bidder

1. Name of Bidder: Granite Construction Company
2. Business Address: 1525 E Marine View Dr. Everett, WA 98201
3. Business Phone/Email: (425) 551-3100 / Bid.Whatcom@gcinc.com
4. How many years have you been in business under the present firm name? 98 years
5. Character of work performed by your company as it directly relates to this project: Heavy Highway, Civil Contractors  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
6. List contracts for similar work completed by your company within the past three years. Include approximate contract amounts and the name and telephone number of a contact person. A project currently in progress may be listed. Please see attached  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
7. Name, address, and telephone number of bonding and insurance company, and name and telephone number of local contact person: Please see attached  
\_\_\_\_\_  
\_\_\_\_\_
8. The Project Field Supervisor will be: Rob Withers

This person will be on the job full time and directly supervising the work. Any change will require written approval by the Owner.

Project Field Supervisor experience:

- a) Years of experience in this type of construction: 45 Yrs \_\_\_\_\_ Months
- b) Years of supervisory experience: 35 Yrs \_\_\_\_\_ Month
- c) Years employed with current firm: 35 Yrs \_\_\_\_\_ Months
- d) Years employed with previous firm: 10 Yrs \_\_\_\_\_ Months
- e) List References (include name, title, city or district, phone number):  
Please see attached  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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9. List your major equipment: Cat 5510 Asphalt Paver, Cat 420 Backhoe, 3-6 TN Asphalt Roller,  
8-12 TN asphalt Roller, Small Grader, Skid Steer

10. Bank references with contact name and telephone number: Bank of America  
c/o Mukesh Singh, Vice President (360) 743-2640  
One Bryant Park, 18th Floor  
New York, NY 10036

11. State of Washington Registration No. GRANICC916DL

12. Federal IRS Identification No. 94-0519552

13. List your other projects currently in progress along with other bids or contracts awarded but not yet started:

Please see attached

14. Will contracts currently in progress, or hereafter obtained interfere with the timely performance of the City of Anacortes project? ☐ YES ☒ NO



TO: City of Anacortes  
City Hall  
904 Sixth Street  
Anacortes, WA 98221

Attention: Eric Shjarback, P.E. – City Engineer

The undersigned, hereinafter called the bidder, declares that the only persons or parties interested in this proposal are those named herein; that this proposal is in all respects fair and without fraud; that it is made without collusion with any official of the City of Anacortes; and that the proposal is made without any connection or collusion with any person making another proposal of this contract. **Moreover, the Bidder declares by signing the signature page of this Proposal that the following statement is true and correct:**

**My firm, association or corporation has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with the project for which this proposal is submitted.**

The bidder declares that he/she has carefully examined the contract documents for the construction of the project; that he/she has personally inspected the site; that he/she has satisfied him or herself as to the quantities involved, including materials and equipment and conditions of work involved, including the fact that the description of the quantities of work and materials, as included herein, is brief and is intended only to indicate the general nature of the work and to identify the said quantities with the detailed requirements of the contract documents and that this proposal is made according to the provisions and under the terms of the contract documents, which documents are hereby made a part of this proposal.

The bidder declares that he/she has exercised his/her own judgment regarding the interpretation of subsurface information and has utilized all data, which he/she believes pertinent from the Engineer, Owner and other sources in arriving at his/her conclusions.

The bidder agrees that if this proposal is accepted, he/she will, within **Ten (10) Calendar** days after Notification of Award, execute the contract with the City of Anacortes in the form of contract included in the contract documents, and will, prior to the time of execution of the contract, deliver to the City of Anacortes the Performance and Payment Bond, all Certificates of Insurance and proof of a City of Anacortes Business License required therein and will, to the extent of his/her proposals, furnish all necessary labor, tools, materials, equipment, and services required to do the work in the manner, in the time, and according to the methods as specified in the contract documents and required by the Engineer or other designated project representative there under.

The bidder further agrees, if awarded the contract, to begin work within **Ten (10) Working** days after the date of the Notice to Proceed and to achieve Physical Completion within **Twenty (20) Working** days, in accordance with the Notice to Proceed.

In the event the bidder is awarded the contract and shall fail to complete the work within the time limit agreed upon as more particularly set forth in the contract documents, liquidated damages shall be paid to the owner per the Standard Specifications contained in the contract documents.

The bidder proposes to accept as full payment for the work proposed herein the amount computed under the provisions of the contract documents and based upon the unit price, it being expressly understood that the unit price is independent of the exact quantities involved. Bidder agrees that the unit prices shown represent a true measure of the labor and materials required to perform the work, including all allowances for overhead and profit for each type of work called for in these contract documents.



The undersigned bids for complete construction of the following described project:

The project provides for improvements within the right-of-way of the following streets including but not limited to asphalt planning, pavement repair, asphalt paving, painted and plastic traffic markings and other work, all in accordance with the Contract Plans, Contract Provisions, and the Standard Specifications.

The project is located:

- K Avenue – 12<sup>th</sup> Street to 20<sup>th</sup> Street
- 20<sup>th</sup> Street - K Avenue to I Avenue
- Dakota Avenue

The bid price shall include everything necessary for the prosecution and completion of the services as detailed in the specifications including but not limited to furnishing all materials, equipment, supplies, tools, plant and other facilities and all management, supervision, labor and service, except as may be provided otherwise in this bid.

**CITY OF ANACORTES 2020 ASPHALT OVERLAY PROJECT**

| NO. | PLAN<br>QUANTITY | ITEM DESCRIPTION                                              | UNIT PRICE<br>(Figures)             | TOTAL AMOUNT<br>(Figures) |
|-----|------------------|---------------------------------------------------------------|-------------------------------------|---------------------------|
| 1   | 1<br>LS          | <b>MOBILIZATION</b><br>1-09.7                                 | At<br>\$ 44,000.00<br>Per Lump Sum  | \$ 44,000.00              |
| 2   | EST.<br>DOL.     | <b>FORCE ACCOUNT-<br/>UNANTICIPATED SITE WORK</b><br>1-09.6SP | At<br>\$7,500<br>Per Force Account  | \$7,500                   |
| 3   | 1<br>LS          | <b>S.P.C.C PLAN</b><br>1-07.15                                | At<br>\$ 2,500.00<br>Per Lump Sum   | \$ 2,500.00               |
| 4   | 1<br>LS          | <b>PROJECT TEMPORARY<br/>TRAFFIC CONTROL</b><br>1-10.5(1)     | At<br>\$ 104,100.00<br>Per Lump Sum | \$ 104,100.00             |
| 5   | 25<br>EA         | <b>INLET PROTECTION</b><br>8-01.5                             | \$ 100.00<br>Per Each               | \$ 2,500.00               |
| 6   | 1<br>LS          | <b>ROADWAY GRADING AND PAVING<br/>PREPARATION</b><br>2-03.5SP | At<br>\$ 7,500.00<br>Per Lump Sum   | \$ 7,500.00               |
| 7   | 650<br>SY        | <b>2 IN. DEPTH PLANING REPAIR</b><br>5-04.5SP                 | At<br>\$ 9.00<br>Per Square Yard    | \$ 5,850.00               |

NOTICE TO BIDDERS: IN ACCORDANCE WITH THE ADVERTISED INVITATION TO BID, BIDDERS ARE DIRECTED TO  
WWW.BXWA.COM TO ENSURE RECEIPT OF ENTIRE SOLICITATION.

**2020 ASPHALT OVERLAY PROJECT  
BID PROPOSAL  
PAGE 3 OF 5**

| <b>NO.</b> | <b>PLAN<br/>QUANTITY</b> | <b>ITEM DESCRIPTION</b>                                           | <b>UNIT PRICE<br/>(Figures)</b>                | <b>TOTAL AMOUNT<br/>(Figures)</b> |
|------------|--------------------------|-------------------------------------------------------------------|------------------------------------------------|-----------------------------------|
| <b>8</b>   | 8,500<br>SY              | <b>PLANING BITUMINOUS PAVEMENT</b><br>5-04.5SP                    | <u>At</u><br>\$ <u>4.50</u><br>Per Square Yard | \$ <u>38,250.00</u>               |
| <b>9</b>   | 80<br>TON                | <b>HMA CL. ½ IN. PG58H-22 FOR<br/>PAVEMENT REPAIR</b><br>5-04.5SP | <u>At</u><br>\$ <u>123.00</u><br>Per Ton       | \$ <u>9,840.00</u>                |
| <b>10</b>  | 550<br>TON               | <b>HMA CL. ½ IN. PG58H-22<br/>FOR PRELEVEL</b><br>5-04.5SP        | <u>At</u><br>\$ <u>80.00</u><br>Per Ton        | \$ <u>44,000.00</u>               |
| <b>11</b>  | 1,900<br>TON             | <b>HMA CL. ½ IN. PG58H-22</b><br>5-04.5SP                         | <u>At</u><br>\$ <u>80.00</u><br>Per Ton        | \$ <u>152,000.00</u>              |
| <b>12</b>  | 20<br>EA                 | <b>ADJUST MANHOLE</b><br>7-05.5                                   | <u>At</u><br>\$ <u>550.00</u><br>Per Each      | \$ <u>11,000.00</u>               |
| <b>13</b>  | 1<br>EA                  | <b>ADJUST VALVE CASING TO GRADE</b><br>7-12.5SP                   | <u>At</u><br>\$ <u>550.00</u><br>Per Each      | \$ <u>550.00</u>                  |
| <b>14</b>  | 6<br>EA                  | <b>CIRCULAR FRAME AND COVER</b><br>7-05.5SP                       | <u>At</u><br>\$ <u>550.00</u><br>Per Each      | \$ <u>3,300.00</u>                |
| <b>15</b>  | 3,500<br>LF              | <b>PAINT LINE</b><br>8.22.5                                       | <u>At</u><br>\$ <u>0.68</u><br>Per Linear Foot | \$ <u>2,380.00</u>                |
| <b>16</b>  | 1,360<br>SF              | <b>PLASTIC CROSSWALK LINE</b><br>8.22.5                           | <u>At</u><br>\$ <u>5.10</u><br>Per Square Foot | \$ <u>6,936.00</u>                |
| <b>17</b>  | 330<br>LF                | <b>PLASTICSTOP LINE</b><br>8.22.5                                 | <u>At</u><br>\$ <u>6.80</u><br>Per Linear Foot | \$ <u>2,244.00</u>                |
| <b>18</b>  | 3<br>EA                  | <b>PLASTIC SHARED LANE MARKER</b><br>8.22.5SP                     | <u>At</u><br>\$ <u>400.00</u><br>Per Each      | \$ <u>1,200.00</u>                |

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| NO.                                                                                                   | PLAN<br>QUANTITY | ITEM DESCRIPTION                        | UNIT PRICE<br>(Figures)        | TOTAL AMOUNT<br>(Figures) |
|-------------------------------------------------------------------------------------------------------|------------------|-----------------------------------------|--------------------------------|---------------------------|
| 19                                                                                                    | 0.8<br>HUN       | RAISED PAVEMENT MARKER TYPE 2<br>8-04.5 | At<br>\$ 675.00<br>Per Hundred | \$ 540.00                 |
| Rule 171 applies to all bid items in this project. See special provision 1-07.2(1) for clarification. |                  |                                         | Total Bid:                     | \$ 446,190.00             |

**ACKNOWLEDGEMENT OF RECEIPT OF ADDENDA**

Addendum 01, Initial BS                      Addendum \_\_\_\_\_, Initial \_\_\_\_\_  
 Addendum \_\_\_\_\_, Initial \_\_\_\_\_                      Addendum \_\_\_\_\_, Initial \_\_\_\_\_

**NOTE:** Failure to acknowledge any issued Addenda may render proposal non-responsive and therefore void. It is the sole responsibility of the Bidder to learn of Addendum, if any. Such information may be obtained from the Builders Exchange website at [www.bxwa.com](http://www.bxwa.com).

**BID DEPOSIT**

A proposal deposit in an amount of five percent (5%) of the total bid is attached here in the form indicated below:

☒ Bid Bond                      ☐ Cashier's Check                      ☐ Certified Check                      ☐ Cash

**NOTICE TO ALL BIDDERS**

To report bid rigging activities call: **1-800-424-9071**

The U.S. Department of Transportation (USDOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m., Eastern time. Anyone with knowledge of possible bid rigging, Bidder collusion, or other fraudulent activities should use the "hotline" to report activities. The "hotline" is part of USDOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the USDOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

**BIDDER CERTIFIES**

- They have examined the work site and all existing conditions;
- They fully understand the manner in which payment is proposed;
- They propose to furnish all labor, equipment, and materials required to perform and complete specified work within the time fixed, and for the price proposed;
- They will observe the national, Washington State, and local codes; and
- They have the insurance coverage required for this Contract, which includes: Commercial General Liability Insurance, Business Auto Liability, Worker's Comp

**NOTICE TO BIDDERS:** IN ACCORDANCE WITH THE ADVERTISED INVITATION TO BID, BIDDERS ARE DIRECTED TO [WWW.BXWA.COM](http://WWW.BXWA.COM) TO ENSURE RECEIPT OF ENTIRE SOLICITATION.



Name of Bidder: Granite Construction Company

Contact Name: Boudrey J. Smith / Lance Chambers

Mailing Address: 7017 Everson Goshen Rd

City, State, Zip: Everson, WA 98247

Business Telephone: (360) 676-2450 Cell Phone: \_\_\_\_\_

Email Address: Bid.Whatcom@gcinc.com

Contractor's State License No: GRANICC916DL

UBI Number: 409-023-062

By signing this proposal, the bidder agrees to all requirements contained in the contract documents.



10/01/2020

Date

Granite Construction Company

Name of Bidder

NW Washington Area Manager

Title

A handwritten signature in dark ink, appearing to read "B. Smith", written over a horizontal line.

Signature of Bidder

Boudrey J. Smith

Print Name

NOTICE TO BIDDERS: IN ACCORDANCE WITH THE ADVERTISED INVITATION TO BID, BIDDERS ARE DIRECTED TO  
WWW.BXWA.COM TO ENSURE RECEIPT OF ENTIRE SOLICITATION.



## Certification of Compliance with Wage Payment Statutes

The bidder hereby certifies that, within the three-year period immediately preceding the bid solicitation date (September 16, 2020), the bidder is not a "willful" violator, as defined in RCW 49.48.082, of any provision of chapters 49.46, 49.48, or 49.52 RCW, as determined by a final and binding citation and notice of assessment issued by the Department of Labor and Industries or through a civil judgment entered by a court of limited or general jurisdiction.

I declare under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct.

Granite Construction Company

Bidder's Business Name

*BJS*

Signature of Authorized Official\*

Boudrey J. Smith

Printed Name

NW Washington Area Manager

Title

10/1/2020

Date

Everett

City

WA

State or country

Check One:

Sole Proprietorship ☐ Partnership ☐ Joint Venture ☐ Corporation ☒

State of Incorporation, or if not a corporation, State where business entity was formed:

California

If a co-partnership, give firm name under which business is transacted:

n/a

*\* If a corporation, proposal must be executed in the corporate name by the president or vice-president (or any other corporate officer accompanied by evidence of authority to sign). If a co-partnership, proposal must be executed by a partner.*

NOTICE TO BIDDERS: IN ACCORDANCE WITH THE ADVERTISED INVITATION TO BID, BIDDERS ARE DIRECTED TO [WWW.BXWA.COM](http://WWW.BXWA.COM) TO ENSURE RECEIPT OF ENTIRE SOLICITATION.

**ADDENDUM NO. 1**

To The Bid Documents  
for the  
City of Anacortes

**2020 Asphalt Overlay Project  
PW#:20-192-TRN-001**

**Issued this date:** Friday, Sept. 25, 2020

**Bid Opening:** 2:00 P.M. (Local Time) on  
Thursday, Oct. 1, 2020  
Anacortes City Hall  
904 6<sup>TH</sup> Street  
Anacortes, WA. 98221

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**Please include this Addendum No. 1 with your Bid Proposal and acknowledge receipt of same in the Proposal.**

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**TO PROSPECTIVE BIDDERS:**

The attention of all prospective bidders on the above project is directed to the following clarifications and modifications to the Contract documents.

**PART 3 SPECIAL PROVISIONS:**

The special provisions for the project have been modified as follows:

The supplement to Section 7-05.3(1) on page 89 of the Plans, Specifications, and Contract Documents for the 2020 Asphalt Overlay Project is deleted:

**7-05.3(1) ~~Adjust Manholes and Catch Basins to Grade~~ Supplement**  
(\*\*\*\*\*)

This section is supplemented with the following;

See COA Standard Detail "ST-02—Structure Adjustment and Perimeter Seal (Modified)" on the plans.

Manholes shall be adjusted to grade prior to final paving. Raised manholes shall be paved to during finish paving.

Riser rings may be used to raise manholes prior to paving at the discretion of the Engineer. The Contractor is advised that multiple manhole ring and lid sizes exist on this project.

And replaced with the following supplement:



**7-05.3(1)      Adjust Manholes and Catch Basins to Grade**  
(\*\*\*\*\*)

**Supplement**

This section is supplemented with the following;

See COA Standard Detail "ST-02 – Structure Adjustment and Perimeter Seal (Modified)" on the plans.

Manholes shall be adjusted to grade prior to final paving. Raised manholes shall be paved to during finish paving.

Riser rings may be used to raise manholes prior to paving at the discretion of the Engineer. The Contractor is advised that multiple manhole ring and lid sizes exist on this project. Riser rings used to raise manholes shall be provided by the contractor.

**PART 4 PLANS:**

Sheet C12 of C12 as originally issued under the Plans, Specifications, and Contract Documents for the 2020 Asphalt Overlay Project is hereby deleted and the enclosed revised Sheet C12 of C12 shall be inserted.

Prepared By:

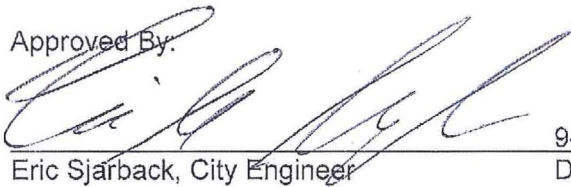


Tim Hohmann, Project Manager

9-25-2020

Date:

Approved By:



Eric Sjarback, City Engineer

9-25-2020

Date:



## Anacortes City Council

### Proposed Agenda Items for the Next Eight Weeks Beginning October 19, 2020

*Subjects listed below have been tentatively suggested for consideration by the Anacortes City Council on the dates indicated. Items may be added to, removed from or rearranged on this list. Routine business such as approval of minutes and vouchers are not included. The complete Preliminary Agenda for each meeting is published at 3:00 on the Wednesday prior to the meeting. Published Agendas are subject to change and may be updated following the posting period. For additional information on agenda topics, please contact the City Clerk's office at 360-299-1960 to be directed to the sponsoring staff member.*

#### **October 19, 2020**

- Contract Modification: Municipal Broadband Network - Library To MSTs Aerial Areas #19-175-FBR-003 (Consent)
- Public Hearing on Budgeted Revenue Sources, including 1% Property Tax Increase (Discussion)
- Review of 2021 Budget (Discussion)
- Access Anacortes Fiber Internet Update (Discussion)

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#### **October 26, 2020**

- Thompson Train Purchase Proposals (Discussion / Possible Action)
- Review of 2021 Budget (Discussion)

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#### **November 2, 2020**

- Public Hearing: 2021 Budget (Discussion)

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#### **November 9, 2020**

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#### **November 16, 2020**

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#### **November 23, 2020**

- Resolution: Making a Declaration of Substantial Need for Setting the Property Tax Levy for 2021 (Action)
- Resolution \_\_\_\_: Setting the City's Year 2021 Property Tax Regular Levy Increase (Action)
- Ordinance \_\_\_\_: Adopting the 2021 Budget (Discussion/Possible Action)

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#### **December 7, 2020**

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#### **December 14, 2020**

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#### **Upcoming City Council Committee Meetings**

*The public is welcome to attend City Council Committee Meetings.*

- Housing Affordability & Community Services, Monday, Oct 12, 2020, 4:00 PM, Teleconference
- Planning, Monday, Oct 12, 2020, 5:00 PM, Teleconference
- Finance, Wednesday, Oct 14, 2020, 5:00 PM, Teleconference
- Public Works, Monday, Oct 19, 2020, 5:00 PM, Teleconference
- Fiber, Thursday, Oct 22, 2020, 2:30 PM, Teleconference
- Planning, Monday, Oct 26, 2020, 5:00 PM, Teleconference
- Finance, Wednesday, Oct 28, 2020, 5:00 PM, Teleconference
- Public Works, Monday, Nov 2, 2020, 5:00 PM, Teleconference

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