



Soundview Consultants LLC

Environmental Assessment • Planning • Land Use Solutions

2907 Harborview Dr., Suite D, Gig Harbor, WA 98335
Phone: (253) 514-8952 Fax: (253) 514-8954

Certified Arborist Report

To: Jeff Nelson, NorthPoint Development LLC File Number: 1703.0007

From: Shauna Willett, Soundview Consultants LLC Revision Date: November 3, 2021
Matt DeCaro, Soundview Consultants LLC

Re: Certified Arborist Report
Founder's Ridge – Center Drive, Dupont, Washington

Dear Mr. Nelson,

Soundview Consultants LLC (SVC) is assisting NorthPoint Development (Applicant) with this Certified Arborist Report for the proposed Founder's Ridge project located on Center Drive in the City of DuPont, Washington. The project area for the proposed light manufacturing development project encompasses approximately 101 acres of a larger 261-acre tax parcel situated in a portion of Sections 26 and 27, Township 19 North, Range 01 East, W.M. (Pierce County Tax Parcel Number 0119272005). This purpose of this report is to identify and assess existing trees in the project area to be retained or removed.

Figure 1. Approximate Project Area Location.



Background

The 101-acre project area is located within the Old Fort Lake subarea, which is an approximately 655-acre area south of Sequalitchew Creek. According to the City's pre-application notes (DuPont, 2021), the *Old Fort Lake Subarea Plan* (OFLSAP) was adopted in 2017 as an element of the City's *Comprehensive Plan*. The OFLSAP defines the City's vision for the subarea and establishes the strategy for future development. The project area lies within the Mixed-Use Village 5 (MUV-5) zoning district, which includes light manufacturing as an allowed use.

According to the OFLSAP, the subarea planning area includes an "Open Space/Sensitive Areas" land use designation which, among other objectives, recognizes lands for parks, greenbelts, open space, and tree preservation areas (p. 36). The OFLSAP states that "the major tree canopies are clustered along [Sequalitchew Creek], [Old Fort Lake], along the [Puget Sound] bluff, and at the southeast corner" (p. 11). The major tree canopies at the southeast corner of the OFLSAP correlate to the forested portion of the 101-acre project area. Under the OFLSAP, the forested areas along Sequalitchew Creek, Old Fort Lake, and along the Puget Sound bluffs were preserved and designated as passive open space in recognition of the tree preservation goal for the subarea, while the forested portion on the project area was designated for business/industry development.

Methods

The investigation consisted of walk-through surveys of the project area by SVC's Certified Arborist and a qualified biologist during multiple dates in March 2021 to determine the location, size, species and health of all trees with a diameter at breast height (DBH) of 6 inches or greater in the approximately 101-acre project area, with a specific focus on specimen, landmark, and historic trees according to DuPont Municipal Code (DMC) 25.120.

Tree locations were initially surveyed and flagged by professional land surveyors with Barghausen Consulting Engineers, Inc. Each tree was then located by SVC using a high-accuracy Arrow 100 GNSS receiver unit and assigned a unique identification number¹. SVC's qualified arborist and biologist recorded species identification, DBH, and observations of health and structural condition. Tree health and risk assessments were made using current methodology in accordance with the standards and practices of the International Society of Arboriculture (ISA) and American National Standards Institute (ANSI) A300 standards.

Tree condition ratings are based on the following criteria. Refer to Attachment A of this report for further details and definitions.

Good = Tree has no significant defects and is expected to survive without disturbance to its normal life expectancy.

Fair = Tree has a defect, either fungal decay or mechanical, that render it unstable or not likely to survive to normal life expectancy.

Poor = Tree has significant defects or mechanical issues that render it not likely to survive three years.

Dying = Tree is dying and lacks vigor.

¹ Tree locations were initially surveyed across a larger assessment area. This *Certified Arborist Report* provides an assessment of existing trees only within the project area; however, the tree ID numbers assigned during the initial inventory are retained, which results in skipped IDs in the data presented in Attachment B.

Tree determinations were based on the definitions of landmark and specimen trees under DMC 25.120.030, DMC 25.10.120.005, and DMC 25.10.190.115 as outlined in Table 1 below.

Table 1. Tree Determination Criteria for the City of Dupont

Tree Designation	Trunk Type	Size (DBH)	Species
Landmark Tree	Single Trunk	24 inches	Oregon white oak, Pacific yew, or madrona
	Multi-Stem ¹	30 inches	
Landmark Tree	Single Trunk	30 inches	Douglas fir, western red cedar, western hemlock, big leaf maple
	Multi-Stem ¹	45 inches	
Specimen Tree	--	12 inches	Oregon white oak, Pacific yew, or madrona
		15 inches	Douglas fir, western red cedar, western hemlock, big leaf maple
		No size limit	Historic fruit trees

1. The measurement of multi-stemmed or multi-trunked trees is the square root of the sum of the squares of the diameters of the stems at breast height unless indicated otherwise.

To calculate a single DBH for multi-stemmed trees, vector magnitude is applied, whereby the square root of the sum of the squares of the diameters of the stems is used. For example, a multi-stemmed tree with diameter measurements of 12, 15 and 28 inches results in the square root of 1,153 which is 34 inches in diameter.

To determine the canopy extent of each tree and estimate the critical root zone (CRZ) prior to and during construction, SVC utilized the ISA's CRZ definition as "an area equal to 1-foot radius from the base of the tree's trunk for each 1 inch of the tree's diameter at 4.5 feet above grade (referred to as diameter at breast height)" rather than field-measure the drip line for every individual tree during the tree assessment. For example, a tree with a 20-inch diameter measurement would have a 20-foot critical root zone radius and a total protection zone diameter, (including the trunk) of approximately 42 feet.

A number of trees on the project site are healthy and good candidates for retention. In circumstances where construction is required within the CRZ, where feasible it is recommended to stay 6 inches from the trunk for every 1 inch in diameter the tree is at DBH. For example: a 16-inch DBH tree requires a construction free distance of 8 feet from the trunk if the tree is to be preserved. Note: The extent to which grading within the dripline or CRZ will impact the trees depend on the tree species, health, structure, age, and to some extent height. It is therefore recommended to consult a certified arborist on an individual tree basis following clearing actions. Proper care should be given to abide by the tree protection guidelines outlined in the "Site Clearing and Construction Impacts" section of this report.

The results of this report include the identification and discussion of trees that were determined to meet the definition of a specimen or landmark tree. Trees that are not healthy or well-formed and pose a safety hazard due to potential collapse (dead, diseased, substantially damaged or contain defects that could lead to probable or imminent failure within the reach of a target) are excluded from

consideration as landmark or specimen trees pursuant to the definitions under DMC 25.10.120.005 and DMC 25.10.190.115.

< 6-Inch DBH Tree Count Estimate

SVC utilized ArcGIS technology, aerial imagery, and field observations to estimate the number of trees with DBHs less than 6 inches in the proposed tree retention areas (i.e., those portions within the 101-acre project limits but outside of the proposed clearing limits) as many of these have been planted with dense Douglas fir trees. The density calculations took into consideration the proposed thinning of these Douglas fir trees to 16 feet on center within the 5.6-acre voluntary bat habitat restoration area (refer to SVC, 2021) and accounts for a conservative 10-foot on center estimated density for an additional 25.1 acres of tree retention area that is dominated by dense trees under 6" DBH. Areas lacking significant tree cover (e.g., bare earth or dominated by the invasive, non-native Scotch broom) were excluded from the density calculations; the methodology also excluded potential 6-inch DBH trees beneath retained, mature tree canopies. Refer to the GIS exhibit in Attachment B for additional details.

Results

The approximately 101-acre subject property is located in the MUV-5 zoning district within the Old Fort Lake subarea of the City of Dupont. Approximately 30 percent of the project area is forested, predominated by Douglas fir (*Pseudotsuga menziesii*) trees intermixed with a lesser amount of Oregon white oak (*Quercus garryana*) and sparse individual bigleaf maple (*Acer macrophyllum*), shore pine (*Pinus contorta*), red oak (*Quercus rubra*), and Pacific yew (*Taxus brevifolia*).

Tree distribution throughout the forested portion is generally characterized by widely spaced wooded areas of Douglas fir with a multi-aged representation of small saplings to mature 100+ year old trees. The central and northern portions of the subject property consist of cleared and graded gravelly areas recolonized by Douglas fir and black cottonwood (*Populus balsamifera*) saplings and dense patches of non-native, invasive Scotch broom (*Cytisus scoparius*).

Existing Tree Characterization

This investigation identified a total of 834 trees greater than 6 inches DBH in the project area, 480 of which met the definition of a specimen or landmark tree [139 landmark trees and 341 specimen trees] (see Table 1 above and Table 2 below). The tree composition was comprised of 764 Douglas fir trees (92%), 56 Oregon white oaks (7%), 6 black cottonwood (1%) and one to three trees each of the following species: Pacific yew, big leaf maple, shore pine and red oak. Of the total trees, 696 trees were assessed as being in good or fair condition, and 138 were assessed as dead, dying, or in poor condition. Of the 696 healthy trees onsite [in good or fair condition], 139 landmark trees and 341 specimen trees were present. A total of 5,236 trees with DBH's less than 6 inches were estimated in the tree retention areas (Attachment B).

All of the 139 landmark trees on the project site were Douglas fir trees with an average DBH of 35 inches including single-stemmed and multi-stemmed trees. Of the 341 specimen trees, 18 were Oregon white oaks with a DBH of 12 inches or greater (average 16-inch DBH) and 323 Douglas fir trees qualified with a DBH of 15 inches or greater (average 22-inch DBH).

The majority of trees were structurally sound and healthy with full, well-rounded, symmetric canopies with good branch distribution and trunks with good taper and few defects. However, structural

defects, typically present in an unmanaged forest, were present. The most prevalent defects observed were 42 trees with codominant stems (6%), 7 trees with basally joined stems (1%), 10 trees with vertical branches (tight crotch unions with a higher likelihood of failure) (1%), 20 trees had kinks or crooks in their mid to upper trunks (3%) and 24 trees had corrected leans (3%). More detailed health and structural defect notes are provided in Attachment B.

Tree Retention Narrative

As described above and detailed further in the OFLSAP, the subarea planning efforts accounted for the overall subarea's tree retention objectives by preserving as open space multiple areas of the subarea (including the forested areas along Sequalitchew Creek, Old Fort Lake, and the Puget Sound bluffs). The remainder of the subarea was designated for parks or development, including the forested portion of the current project area which was never intended to satisfy the subarea's tree preservation needs but, rather was designated within a primary development area identified as Subblock F.1. Therefore, the tree retention plan for the Founder's Ridge does not attempt to satisfy the retention requirements under DMC 25.125, but rather to specify which trees will be removed and preserved. A summary of the proposed tree retention and removal is provided below.

Table 2. Tree Retention and Removal Summary

Tree Category	Preserve	Remove (Project Area)	Remove (Roadway)	Total Removals
Landmark Trees	7	108	24	132
Specimen Trees	36	244	61	305
All Other Trees \geq 6" DBH	56	239	59	298
All Other Trees $<$ 6 " DBH (estimated)	5,236	NE	NE	NE
Total	5,335	591	144	735

NE: not estimated

Site Clearing and Construction Impacts

Measures to protect trees to be retained shall be implemented during and after construction. Temporary fencing shall be installed along the tree protection boundary, which generally corresponds to the CRZ of the protected tree(s). [Note: where construction is planned in the critical root zone of a tree targeted for retention, it is recommended that the tree protection boundary is established, at its closest point, 6 inches from the tree trunk for every 1 inch of diameter at breast height.] Upon completion of the proposed clearing actions, it is recommended that a certified arborist conduct a tree risk assessment along the clearing/tree protection limits.

Construction equipment and machinery should be kept outside of the tree crown driplines to the extent possible. Leaving the native groundcover intact will prevent roots from desiccation from exposure to air and increased sunlight. Any exposed roots shall be cleanly cut and immediately covered with moist soil to prevent decay. Tunneling 18 inches to 24 inches or deeper under the tree's CRZ as opposed to trenching should be utilized when practicable.

Closure

All observations regarding trees in this report were made by a certified arborist, independently, based on education and professional experience. All determinations of health condition, structural condition, or hazard potential of a tree or trees at issue are based on current methodology and best available science. All health and hazard determinations are limited by the visual nature of the assessment. Defects may be obscured by soil, brush, vines, aerial foliage, branches, multiple trunks, or other trees. Even structurally sound, healthy trees are wind thrown during severe storms or fail due to other weather conditions. As such a determination is not a guarantee of sound health, or lack of risk.

The findings and conclusions documented in this assessment report have been prepared for specific application to the Founder's Ridge site. These findings and conclusions have been developed in a manner consistent with that level of care and skill normally exercised by members of the environmental science profession currently practicing under similar conditions in the area. The conclusions and recommendations presented in this report are professional opinions based on an interpretation of information currently available to us and are made within the operation scope, budget, and schedule of this project. No warranty, expressed or implied, is made. In addition, changes in government codes, regulations, or laws may occur. Due to such changes, our observations and conclusions applicable to this assessment may need to be revised wholly or in part in the future.

Any trees to be retained shall be of good health and free from damage and defect. During and following site clearing and construction activities, trees designated for retention that are determined to be unhealthy or damaged and pose a hazard shall be removed. Due to the inherent risk of failure from severe weather, undetectable and hidden disease, defect, and damage of the trees to be retained, Soundview Consultants LLC assumes no liability of bodily injury, death, or property damage resulting from failure of the trees to be retained. This plan is preliminary and based on preliminary site layout and design. The final tree plan is subject to change based on approved construction plans.

If you have any further questions, please contact us at your earliest convenience.

Sincerely,



A handwritten signature in blue ink that reads "Matt DeCaro".

Matt DeCaro
Associate Principal

A handwritten signature in blue ink that reads "Shauna Willett".

Shauna Willett
Certified Arborist #
WE-7452A

References

American National Standards Institute. 2018. *ANSI A300 Best Management Practices for Tree Care: Part 6: Planting and Transplanting*. Manchester, New Hampshire.

Arborilogical. *Guidelines for Tree Preservation During Construction*. N.d. <https://www.arborilogical.com/articles/all-articles/article-repository/2012/april/guidelines-for-tree-preservation-during-construction/>. Accessed on August 9, 2021.

City of Dupont. 2017. *Old Fort Lake Subarea Plan*. Version November 20, 2017.

City of Dupont. 2021. Dupont Municipal Code Chapter 25.120 (Tree Retention). Website: <https://www.codepublishing.com/WA/DuPont/#!/html/DuPont25/DuPont25120.html>. Current through Ordinance 21-1089, passed March 9, 2021.

City of Dupont. 2021. *Planning Department Supplemental Pre-Application Meeting Comments City file number PLNG2020-007*. Founder's Ridge (aka Northwest Landing). January 25, 2021.

Dunster, Julian. 2017. *Tree Risk Assessment Manual Second Edition*. International Society of Arboriculture. Champaign, Illinois.

Hitchcock, C.L. & A. Cronquist, Ed. by D. Giblin, B. Ledger, P. Zika, and R. Olmstead. 2018. *Flora of the Pacific Northwest, 2nd Edition*. U.W. Press and Burke Museum. Seattle, Washington.

Miller, Robert. Hauer, Richard. Werner, Les. 2015. *Urban Forestry: Planning and Managing Urban Greenspaces, Third Edition*. Waveland Press Incorporated. Long Grove, Illinois.

Oregon Department of Forestry, et. Al. 2009. *Tree Protection on Construction and Development Sites*. https://www.dnr.wa.gov/Publications/rp_urban_treeprtctnguidbk.pdf

Pojar and MacKinnon. 1994. *Revised Plants of the Pacific Northwest Coast: Washington Oregon, British Columbia & Alaska*. Lone Pine. Vancouver, British Columbia, Canada.

SVC. *Wetland and Fish and Wildlife Habitat Assessment Report and Voluntary Bat Habitat Restoration Plan – Founder's Ridge*. Prepared for NorthPoint Development LLC. November 3, 2021.

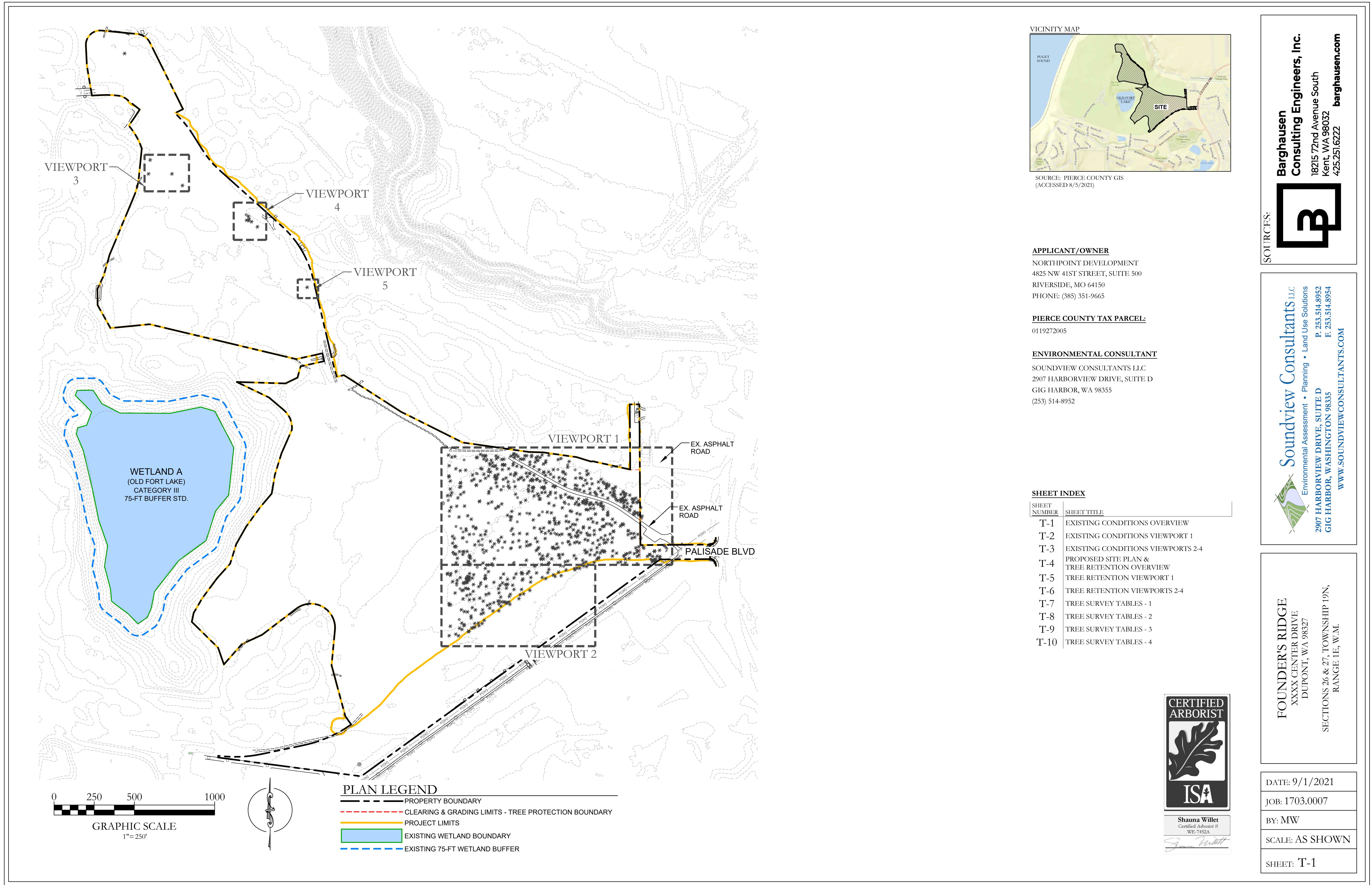
USDA Forest Service. Pacific Northwest Research Station – GenSilv Team. *Oak Root Research*. Last modified October 15, 2016. <https://www.fs.fed.us/pnw/olympia/silv/oak-studies/oak-roots.shtml>. Last modified October 15, 2016.

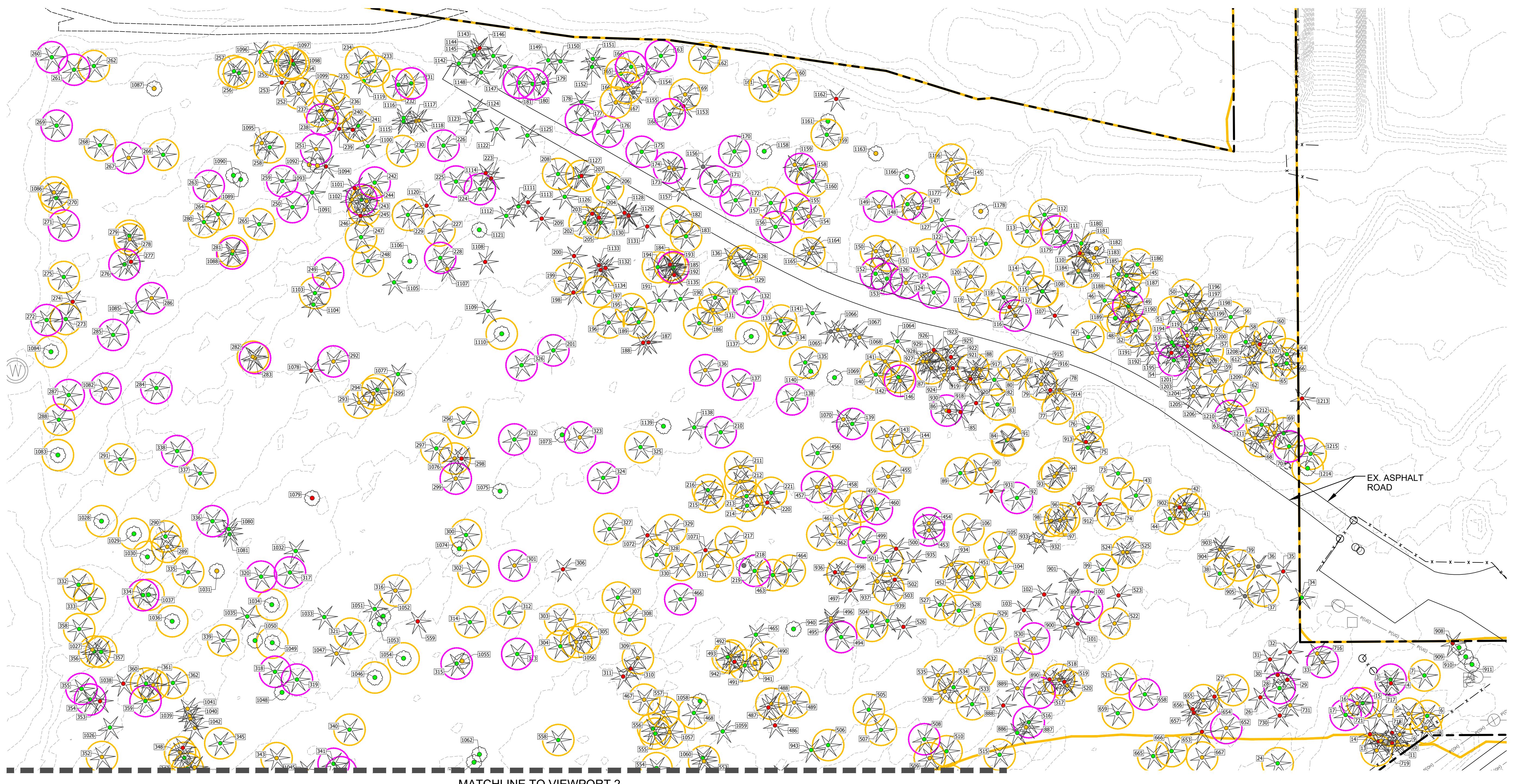
Attachment A – Tree Health and Condition Definitions

Tree Health and Condition Definitions

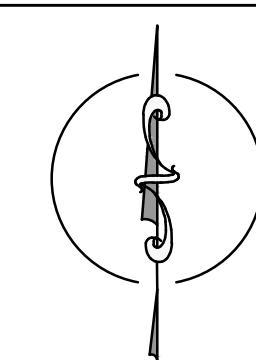
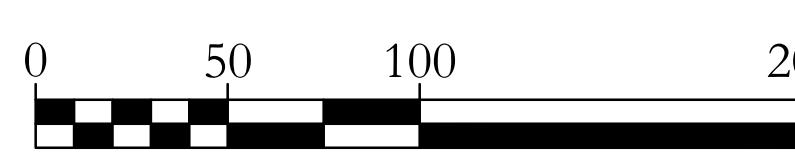
Condition	Symbol	Definition
Excellent	E	Nearly ideal specimen with excellent form and vigor Well-balanced and nearly symmetric crown Normal to excellent shoot elongation on new growth Little to no twig dieback or discoloration of leaves No apparent pest or disease problems Sound, solid trunk free of defects and mechanical damage Tree should live to full life expectancy for species
Good	G	Vigor is normal for the species Full or nearly full canopy Well-balanced or partially asymmetric crown No dieback to branches > 2" in diameter Twig dieback and leaf discoloration are minor Minor pest or disease problems are manageable Tree is reacting appropriately to damage Sound, solid trunk free of defects and mechanical damage Tree should live to full life expectancy for species
Fair	F	Reduced vigor, new growth may be stunted Thinning canopy, asymmetric or inconsistent form Suckering or secondary growth may be present Twig and branch dieback may comprise up to 50% of canopy Minor pest or disease problems are visible but not fatal Tree is reacting appropriately to damage Single or multiple defects (codominant stem, uncorrected lean, forked leader) are not practical to correct Life expectancy shortened to 10-30 years depending on species
Poor	P	Tree is declining and appears unhealthy Thinning canopy, asymmetric or inconsistent form Suckering or secondary growth may be present Twig and branch dieback may comprise more than 50% of crown Pest or disease problems are uncontrollable and likely fatal Extensive decay or cavities present in trunk and/or branches Single or multiple defects (codominant stem, forked leader, uncorrected lean) are not practical to correct Life expectancy shortened to 1-5 years depending on species
Dying	DY	Tree is dying and lacks vigor Little live foliage Suckering or secondary growth is dominant growth Twig and branch dieback may comprise more than 80% of crown Life expectancy shortened to 1-3 years depending on species
Dead	D	Tree is dead

Attachment B – Tree Retention Plan





VIEWPORT 1

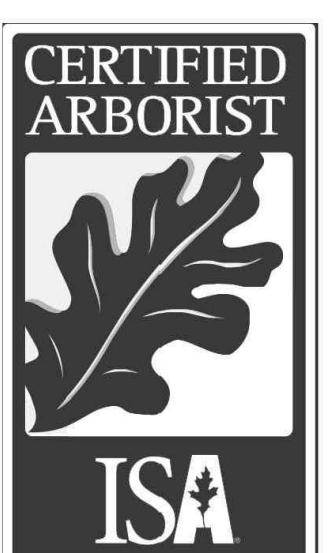


PLAN LEGEND

- PROPERTY BOUNDARY
- CLEARING & GRADING LIMITS - TREE PROTECTION BOUNDARY
- PROJECT LIMITS

TREE LEGEND

SYMBOL	CATEGORY
CON. - DEC.	TREES IN GOOD HEALTH
CON. - DEC.	TREES IN FAIR HEALTH
CON. - DEC.	TREES IN POOR HEALTH
CON. - DEC.	DYING TREES
CON.	LANDMARK TREES
CON.	SPECIMEN TREES

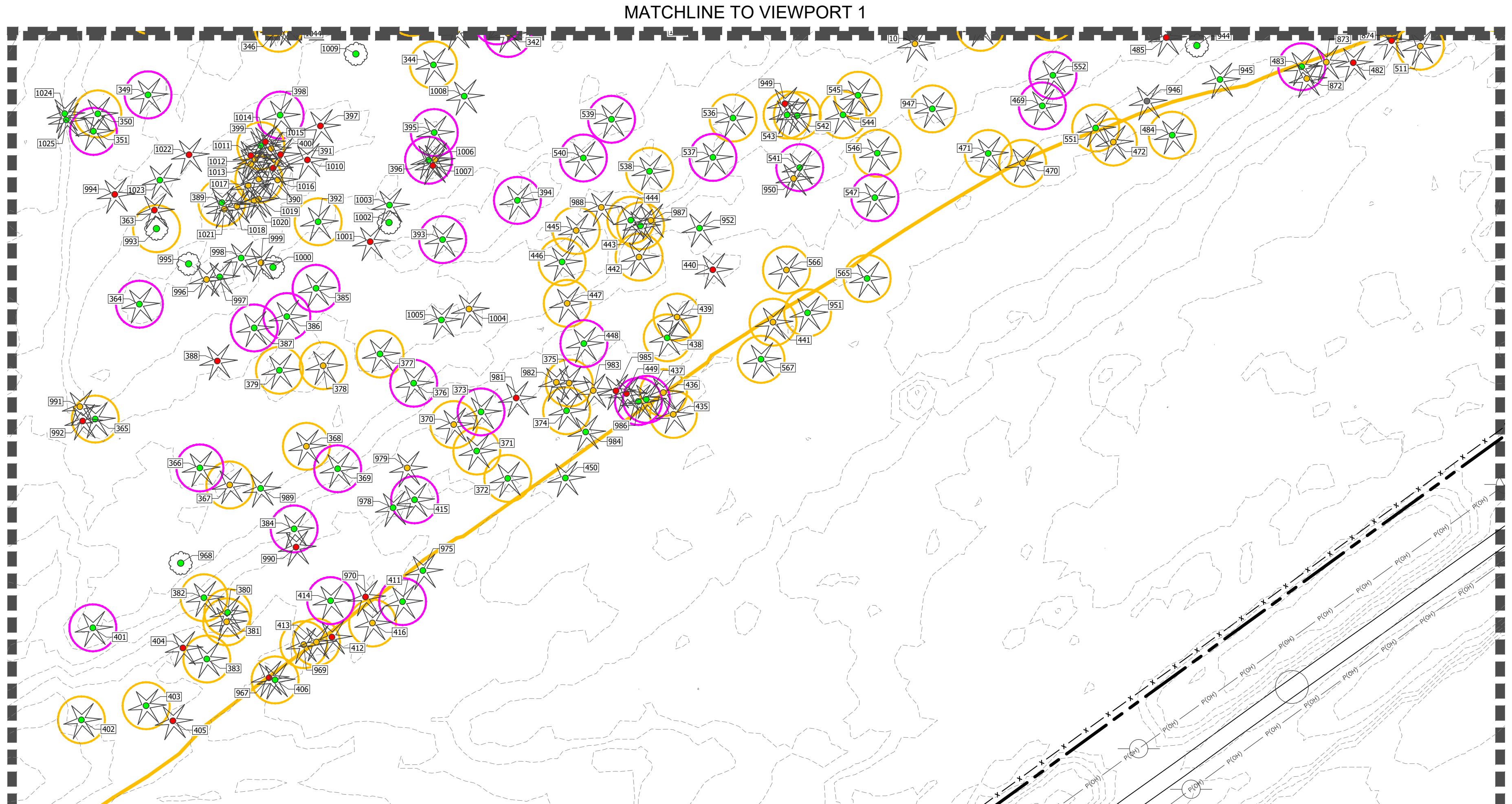


Shauna Willet
Certified Arborist #
WE-7452A

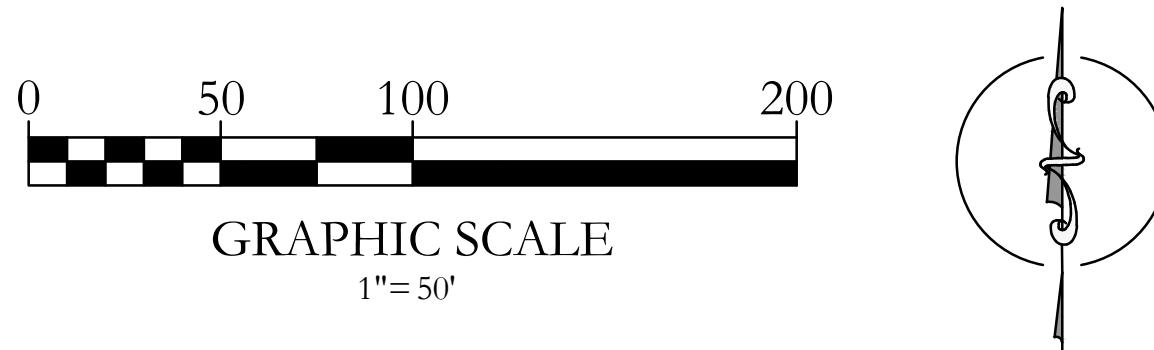
DATE: 9/1/2021
JOB: 1703.0007
BY: MW
SCALE: AS SHOWN
SHEET: T-2

Barghausen Consulting Engineers, Inc.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222

Soundview Consultants LLC
Environmental Assessment • Planning • Land Use Solutions
2907 HARBORVIEW DRIVE, SUITE D
GIG HARBOR, WASHINGTON 98335
WWW.SOUNDVIEWCONSULTANTS.COM

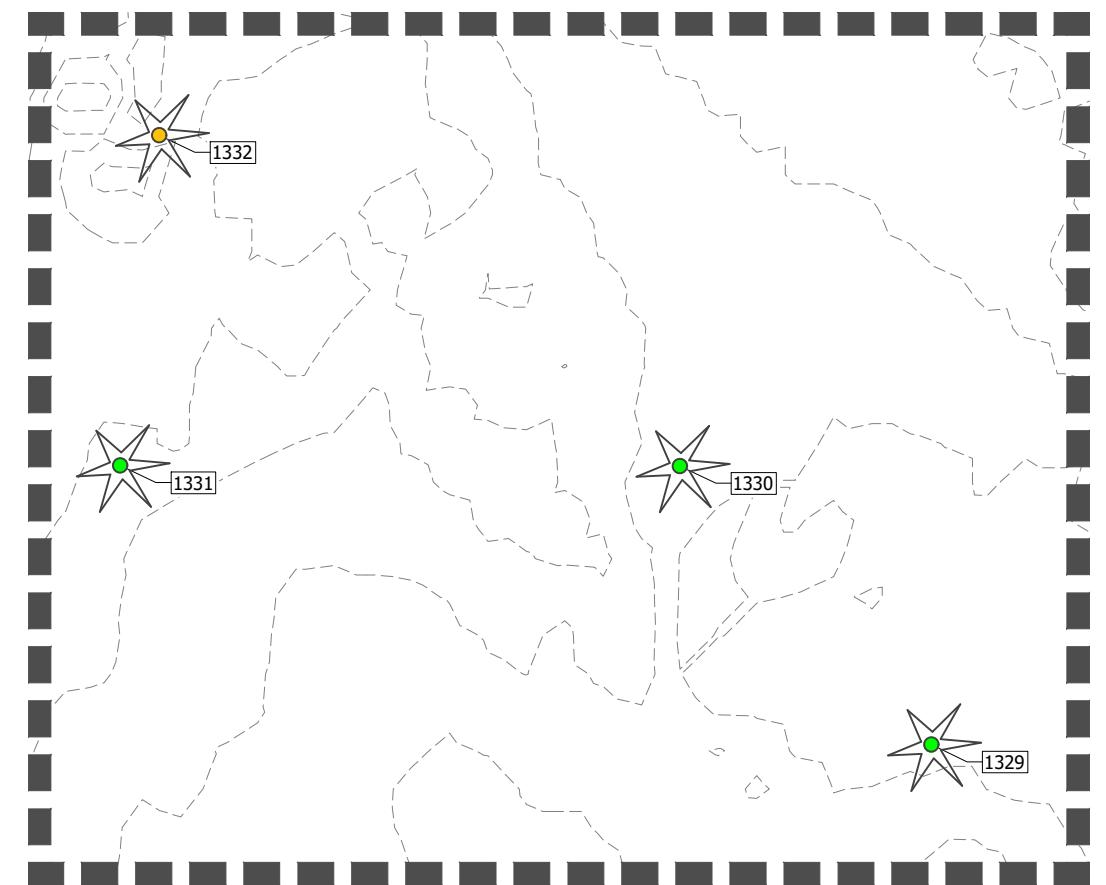
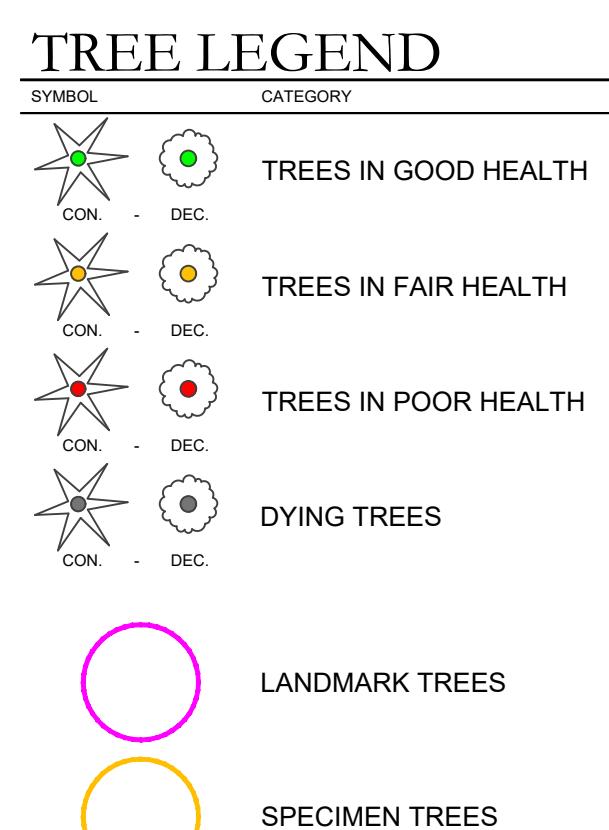


VIEWPORT 2



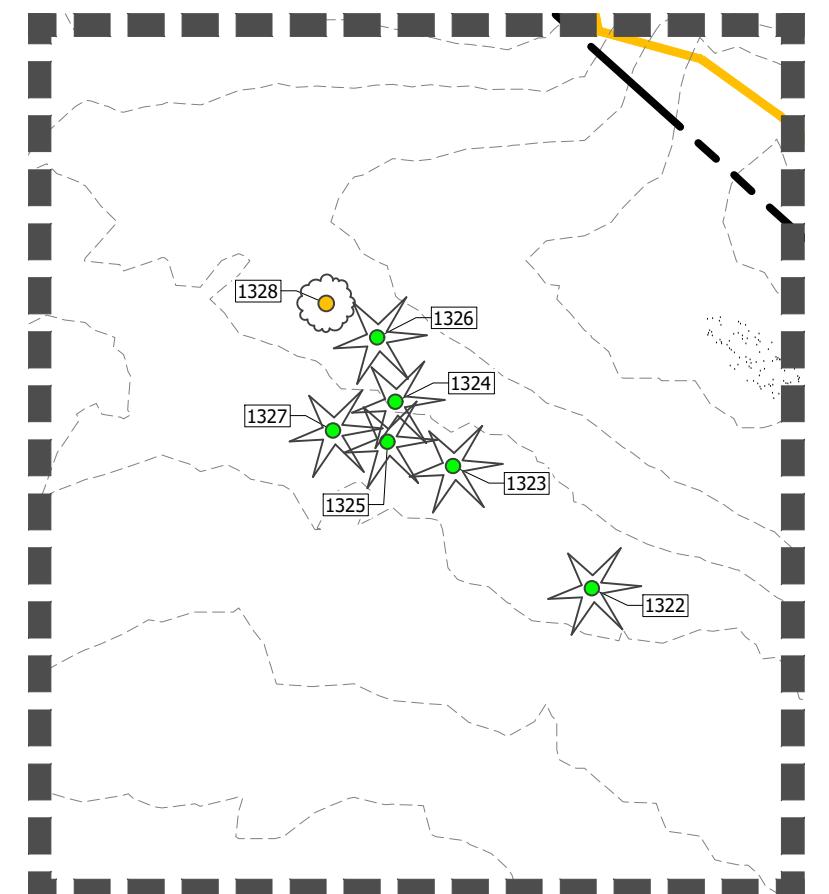
PLAN LEGEND

PROPERTY BOUNDARY
CLEARING & GRADING LIMITS - TREE PROTECTION BOUNDARY
PROJECT LIMITS



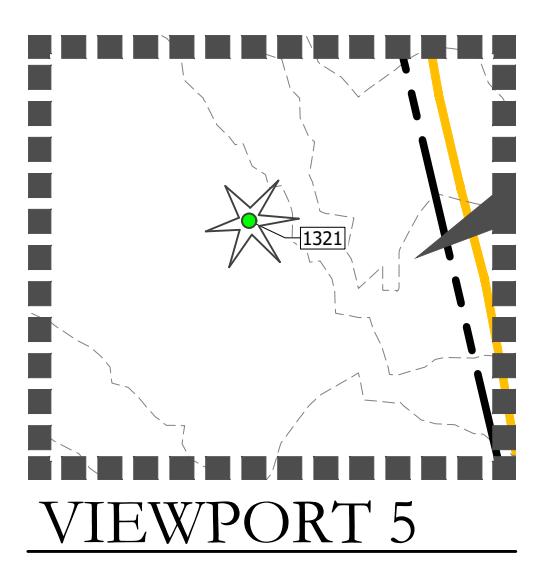
VIEWPORT 3

SCALE: 1"=50'



VIEWPORT 4

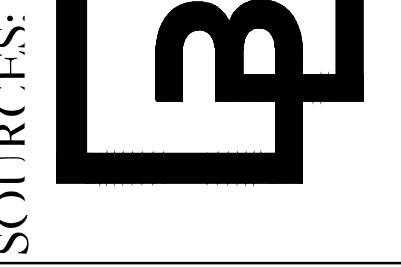
SCALE: 1"=50'



VIEWPORT 5

SCALE: 1"=50'

Barghausen Consulting Engineers, Inc.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222

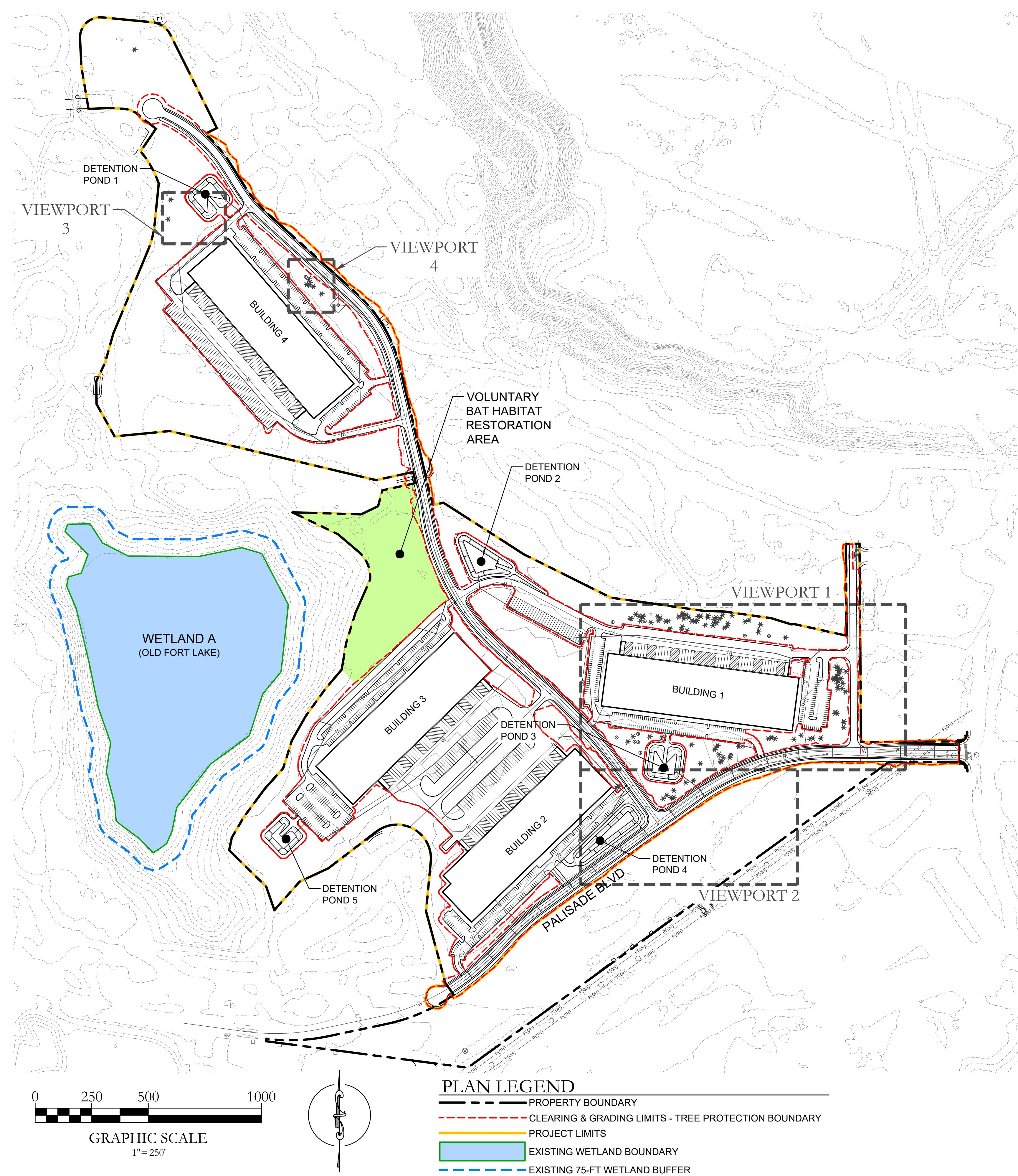


Soundview Consultants LLC
Environmental Assessment • Planning • Land Use Solutions
P. 253.514.8952
F. 253.514.8954
2907 HARBORVIEW DRIVE, SUITE D
GIG HARBOR, WASHINGTON 98335
www.soundviewconsultants.com

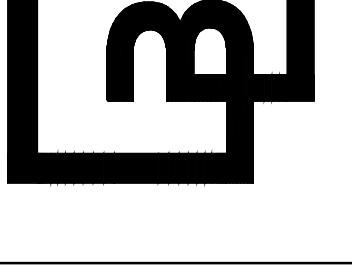
FOUNDER'S RIDGE
XXXX CENTER DRIVE
DUPONT, WA 98327
SECTIONS 26 & 27, TOWNSHIP 19N,
RANGE 1E, W.M.



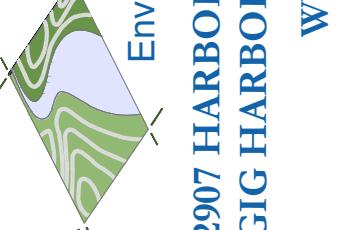
DATE: 9/1/2021
JOB: 1703.0007
BY: MW
SCALE: AS SHOWN
SHEET: T-3



Barghausen Consulting Engineers, Inc.
18215 72nd Avenue South
Kent, WA 98032
425.51.6222



Soundview Consultants LLC
Environmental Assessment • Planning • Land Use Solutions
2907 HARBORVIEW DRIVE, SUITE D
GIG HARBOR, WASHINGTON 98335
www.soundviewconsultants.com



FOUNDER'S RIDGE
XXXX CENTER DRIVE
DUPONT, WA 98327
SECTIONS 26 & 27, TOWNSHIP 19N,
RANGE 1E, W.M.

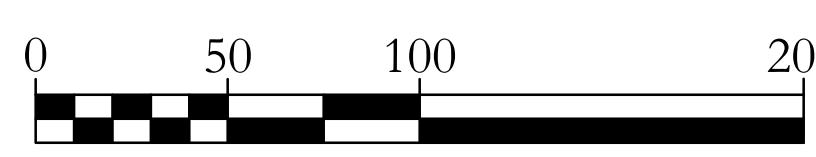
DATE: 9/1/2021
JOB: 1703.0007
BY: MW
SCALE: AS SHOWN
SHEET: T-4



Shauna Willet
Certified Arborist #
WE-7452A
Shauna Willet



VIEWPORT 1



PLAN LEGEND

- PROPERTY BOUNDARY
- CLEARING & GRADING LIMITS - TREE PROTECTION BOUNDARY
- PROJECT LIMITS

TREE LEGEND

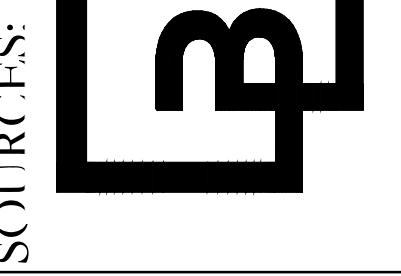
SYMBOL	CATEGORY
CON. - DEC.	TREES IN GOOD HEALTH
CON. - DEC.	TREES IN FAIR HEALTH
CON. - DEC.	TREES IN POOR HEALTH
CON. - DEC.	DYING TREES
CON.	LANDMARK TREES
CON.	SPECIMEN TREES
CON.	RETAINED CANOPY

FOUNDER'S RIDGE
XXXX CENTER DRIVE
DUPONT, WA 98327
SECTIONS 26 & 27, TOWNSHIP 19N,
RANGE 1E, W.M.

DATE: 9/1/2021
JOB: 1703.0007
BY: MW
SCALE: AS SHOWN
SHEET: T-5

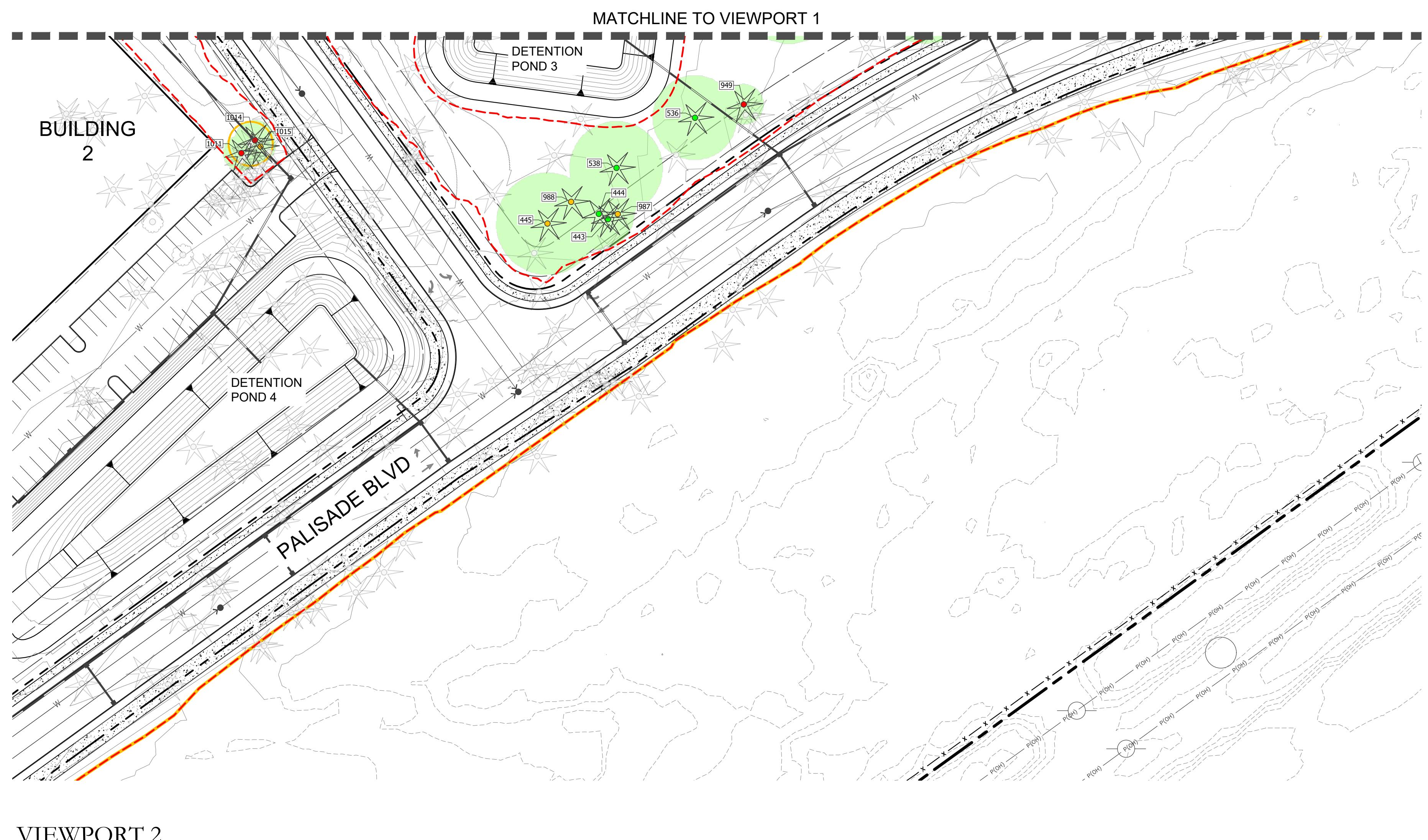


Barghausen
Consulting Engineers, Inc.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222



Soundview Consultants LLC
Environmental Assessment • Planning • Land Use Solutions
P. 253.514.8952
F. 253.514.8954
2907 HARBORVIEW DRIVE, SUITE D
GIG HARBOR, WASHINGTON 98335
WWW.SOUNDVIEWCONSULTANTS.COM





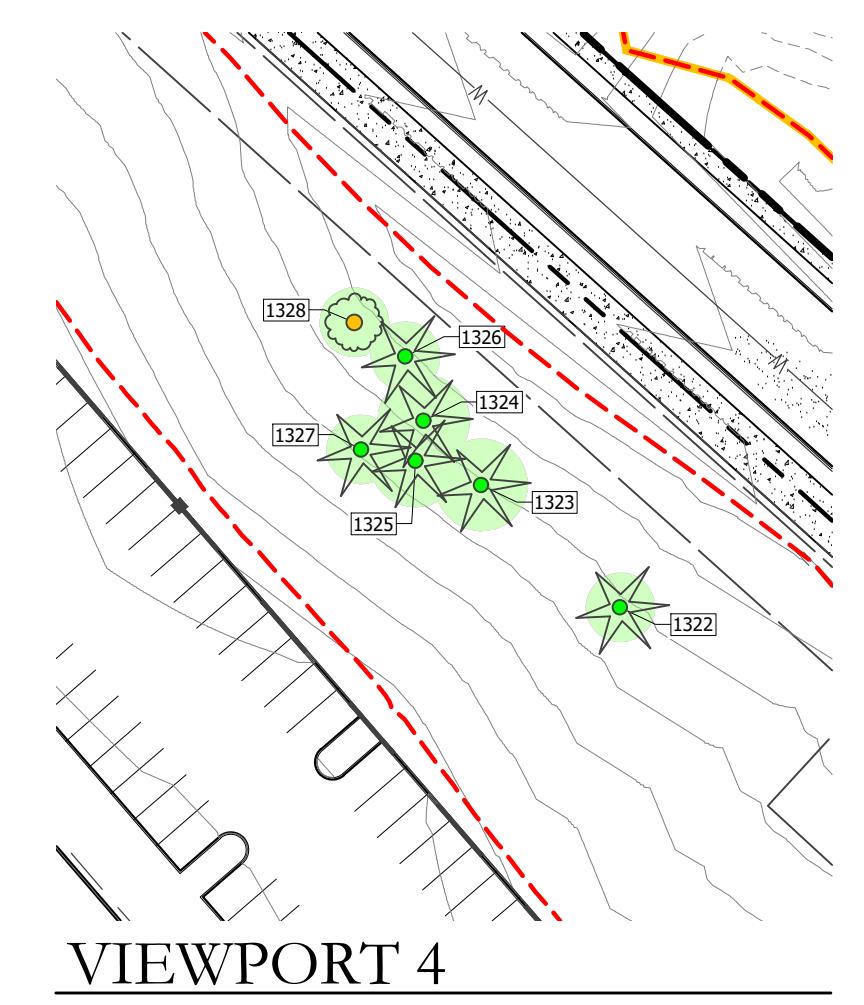
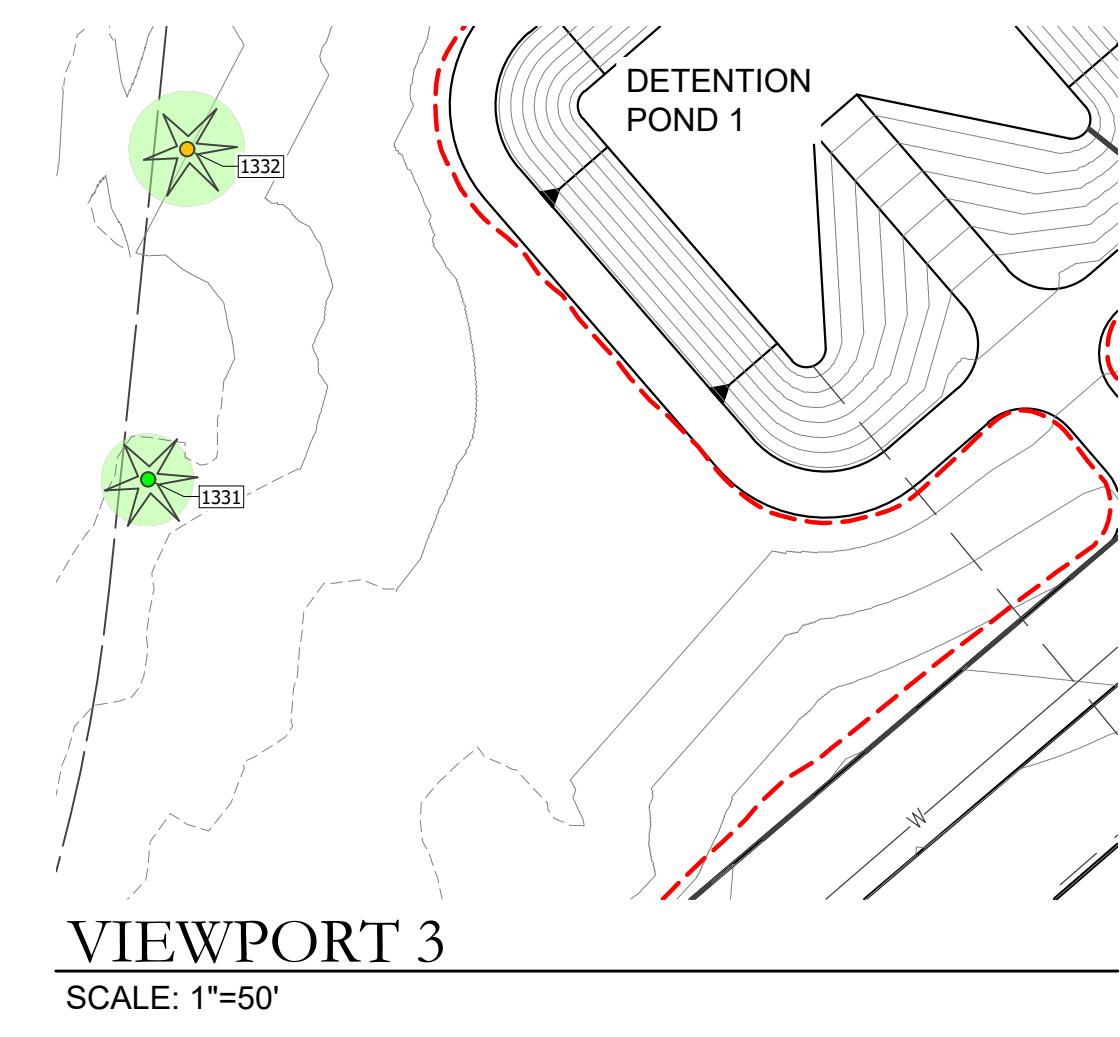
PLAN LEGEND

— PROPERTY BOUNDARY

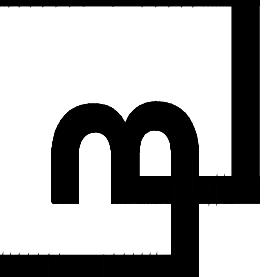
- - - CLEARING & GRADING LIMITS - TREE PROTECTION BOUNDARY

— PROJECT LIMITS

SYMBOL	CATEGORY
CON. • DEC.	TREES IN GOOD HEALTH
CON. • DEC.	TREES IN FAIR HEALTH
CON. • DEC.	TREES IN POOR HEALTH
CON. • DEC.	DYING TREES
—	LANDMARK TREES
—	SPECIMEN TREES
—	RETAINED CANOPY



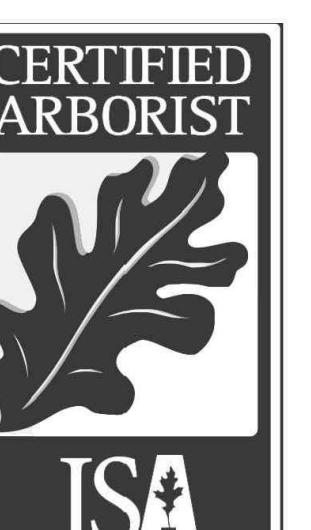
Barghausen Consulting Engineers, Inc.
18215 72nd Avenue South
Kent, WA 98032
425.251.6222

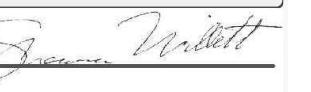
SOURCE: 

Soundview Consultants LLC
Environmental Assessment • Planning • Land Use Solutions
2907 HARBORVIEW DRIVE, SUITE D
GIG HARBOR, WASHINGTON 98335
www.soundviewconsultants.com



FOUNDER'S RIDGE
XXXX CENTER DRIVE
DUPONT, WA 98327
SECTIONS 26 & 27, TOWNSHIP 19N,
RANGE 1E, W.M.



Shauna Willet
Certified Arborist #
WE-7452A


DATE: 9/1/2021
JOB: 1703.0007
BY: MW
SCALE: AS SHOWN
SHEET: T-6

Tree Number	Common Name	Scientific Name	DBH (inches)	Condition	Landmark/Specimen	Structural Notes	(-) Preserved (X) Removed (RD) Removed for road impacts
3	Douglas-fir	<i>Pseudotsuga menziesii</i>	58	Good	Landmark	Codominant Stems	RD
4	Douglas-fir	<i>Pseudotsuga menziesii</i>	15	Poor	Specimen	Lean, carker	RD
5	Douglas-fir	<i>Pseudotsuga menziesii</i>	20	Fair	Specimen		RD
6	Douglas-fir	<i>Pseudotsuga menziesii</i>	19	Good	Specimen		RD
7	Douglas-fir	<i>Pseudotsuga menziesii</i>	25	Good	Specimen		RD
8	Douglas-fir	<i>Pseudotsuga menziesii</i>	19	Fair	Specimen		RD
9	Douglas-fir	<i>Pseudotsuga menziesii</i>	13	Fair			RD
10	Douglas-fir	<i>Pseudotsuga menziesii</i>	14	Fair			RD
10	Douglas-fir	<i>Pseudotsuga menziesii</i>	14	Fair			RD
11	Douglas-fir	<i>Pseudotsuga menziesii</i>	11	Poor			RD
13	Douglas-fir	<i>Pseudotsuga menziesii</i>	15	Fair	Specimen		RD
14	Douglas-fir	<i>Pseudotsuga menziesii</i>	12	Poor			RD
15	Douglas-fir	<i>Pseudotsuga menziesii</i>	27	Good	Specimen		RD
16	Douglas-fir	<i>Pseudotsuga menziesii</i>	32	Fair	Landmark		RD
17	Douglas-fir	<i>Pseudotsuga menziesii</i>	46	Good	Landmark		RD
24	Douglas-fir	<i>Pseudotsuga menziesii</i>	29	Good	Specimen		RD
25	Douglas-fir	<i>Pseudotsuga menziesii</i>	29	Dead			X
26	Douglas-fir	<i>Pseudotsuga menziesii</i>	19	Poor		Crook	RD
27	Douglas-fir	<i>Pseudotsuga menziesii</i>	19	Fair	Specimen	Lean	RD
28	Douglas-fir	<i>Pseudotsuga menziesii</i>	30	Good	Landmark		RD
29	Douglas-fir	<i>Pseudotsuga menziesii</i>	20	Poor		Codominant Stems	RD
30	Douglas-fir	<i>Pseudotsuga menziesii</i>	37	Poor		Codominant Stems	RD
31	Douglas-fir	<i>Pseudotsuga menziesii</i>	23	Poor		Crook	RD
32	Douglas-fir	<i>Pseudotsuga menziesii</i>	24	Poor		Crook	RD
33	Douglas-fir	<i>Pseudotsuga menziesii</i>	38	Fair	Landmark	Bulbous trunk base	RD
34	Douglas-fir	<i>Pseudotsuga menziesii</i>	14	Good			X
35	Douglas-fir	<i>Pseudotsuga menziesii</i>	33	Poor		Codominant Stems @ 1 FT, 13"; 10"	X
36	Douglas-fir	<i>Pseudotsuga menziesii</i>	16	Dying			X
37	Douglas-fir	<i>Pseudotsuga menziesii</i>	15	Fair	Specimen		X
38	Douglas-fir	<i>Pseudotsuga menziesii</i>	23	Good	Specimen		X
39	Douglas-fir	<i>Pseudotsuga menziesii</i>	15	Fair	Specimen		X
41	Douglas-fir	<i>Pseudotsuga menziesii</i>	21	Good	Specimen		X
42	Douglas-fir	<i>Pseudotsuga menziesii</i>	17	Fair	Specimen	Corrected Lean	X
43	Douglas-fir	<i>Pseudotsuga menziesii</i>	24	Good	Specimen		X
44	Douglas-fir	<i>Pseudotsuga menziesii</i>	19	Good	Specimen		X
45	Douglas-fir	<i>Pseudotsuga menziesii</i>	24	Good	Specimen		X
46	Douglas-fir	<i>Pseudotsuga menziesii</i>	22	Good	Specimen		X
47	Douglas-fir	<i>Pseudotsuga menziesii</i>	20	Good	Specimen		X
48	Douglas-fir	<i>Pseudotsuga menziesii</i>	24	Fair	Specimen		X
49	Douglas-fir	<i>Pseudotsuga menziesii</i>	31	Good	Landmark		X
50	Douglas-fir	<i>Pseudotsuga menziesii</i>	20	Good	Specimen		X
51	Douglas-fir	<i>Pseudotsuga menziesii</i>	18	Good	Specimen		X
52	Douglas-fir	<i>Pseudotsuga menziesii</i>	26	Good	Specimen		X
53	Douglas-fir	<i>Pseudotsuga menziesii</i>	30	Good	Landmark		X
54	Douglas-fir	<i>Pseudotsuga menziesii</i>	36	Good	Landmark		X
55	Douglas-fir	<i>Pseudotsuga menziesii</i>	25	Good	Specimen		X
56	Douglas-fir	<i>Pseudotsuga menziesii</i>	18	Good	Specimen		X
57	Douglas-fir	<i>Pseudotsuga menziesii</i>	27	Good	Specimen		X
58	Douglas-fir	<i>Pseudotsuga menziesii</i>	24	Good	Specimen		X
59	Douglas-fir	<i>Pseudotsuga menziesii</i>	19	Fair	Specimen		X
60	Douglas-fir	<i>Pseudotsuga menziesii</i>	21	Good	Specimen		X
61	Douglas-fir	<i>Pseudotsuga menziesii</i>	14	Fair			X
62	Douglas-fir	<i>Pseudotsuga menziesii</i>	19	Good	Specimen		X
63	Douglas-fir	<i>Pseudotsuga menziesii</i>	34	Good	Landmark		X
64	Douglas-fir	<i>Pseudotsuga menziesii</i>	17	Good	Specimen		X
65	Douglas-fir	<i>Pseudotsuga menziesii</i>	25	Good	Specimen		X
66	Douglas-fir	<i>Pseudotsuga menziesii</i>	22	Good	Specimen		X
67	Douglas-fir	<i>Pseudotsuga menziesii</i>	19	Good	Specimen		X
68	Douglas-fir	<i>Pseudotsuga menziesii</i>	15	Fair	Specimen		X
69	Douglas-fir	<i>Pseudotsuga menziesii</i>	21	Good	Specimen	Corrected Lean	X
70	Douglas-fir	<i>Pseudotsuga menziesii</i>	30	Good	Landmark		X
73	Douglas-fir	<i>Pseudotsuga menziesii</i>	22	Good	Specimen		X
74	Douglas-fir	<i>Pseudotsuga menziesii</i>	22	Fair	Specimen	Crook	X
75	Douglas-fir	<i>Pseudotsuga menziesii</i>	21	Good	Specimen		X
76	Douglas-fir	<i>Pseudotsuga menziesii</i>	20	Good	Specimen		X
77	Douglas-fir	<i>Pseudotsuga menziesii</i>	19	Fair	Specimen		X
78	Douglas-fir	<i>Pseudotsuga menziesii</i>	20	Poor		Split Top	X
79	Douglas-fir	<i>Pseudotsuga menziesii</i>	16	Fair	Specimen	Corrected Lean	X
80	Douglas-fir	<i>Pseudotsuga menziesii</i>	14	Fair	Specimen		X
81	Douglas-fir	<i>Pseudotsuga menziesii</i>	17	Fair	Specimen		X
82	Douglas-fir	<i>Pseudotsuga menziesii</i>	19	Good	Specimen		X
83	Douglas-fir	<i>Pseudotsuga menziesii</i>	24	Good	Specimen		X

Tree Number	Common Name	Scientific Name	DBH (inches)	Condition	Landmark/Specimen	Structural Notes	(-) Preserved (X) Removed (RD) Removed for road impacts
84	Douglas-fir	<i>Pseudotsuga menziesii</i>	29	Good	Specimen		X
85	Douglas-fir	<i>Pseudotsuga menziesii</i>	28	Poor		Crook	X
86	Douglas-fir	<i>Pseudotsuga menziesii</i>	38	Fair	Landmark	Codominant Stems	X
87	Douglas-fir	<i>Pseudotsuga menziesii</i>	16	Fair	Specimen		X
88	Douglas-fir	<i>Pseudotsuga menziesii</i>	17	Fair	Specimen		X
89	Douglas-fir	<i>Pseudotsuga menziesii</i>	29	Good	Specimen		X
90	Douglas-fir	<i>Pseudotsuga menziesii</i>	16	Fair	Specimen		X
92	Douglas-fir	<i>Pseudotsuga menziesii</i>	48	Good	Landmark	Codominant Stems @ 4.5FT	X
93	Douglas-fir	<i>Pseudotsuga menziesii</i>	21	Fair	Specimen		X
94	Douglas-fir	<i>Pseudotsuga menziesii</i>	15	Fair	Specimen		X
95	Douglas-fir	<i>Pseudotsuga menziesii</i>	23	Poor		Codominant Stems @ 1FT	X
96	Douglas-fir	<i>Pseudotsuga menziesii</i>	19	Fair	Specimen		X
97	Douglas-fir	<i>Pseudotsuga menziesii</i>	22	Fair	Specimen		X
98	Douglas-fir	<i>Pseudotsuga menziesii</i>	19	Fair	Specimen		X
99	Douglas-fir	<i>Pseudotsuga menziesii</i>	24	Good	Specimen		X
100	Douglas-fir	<i>Pseudotsuga menziesii</i>	32	Fair	Landmark	Vertical Branch	X
101	Douglas-fir	<i>Pseudotsuga menziesii</i>	21	Poor		Forked Top	X
102	Douglas-fir	<i>Pseudotsuga menziesii</i>	45	Poor		Codominant Stems with Dead stem, Crook	X
103	Douglas-fir	<i>Pseudotsuga menziesii</i>	19	Poor		Corrected Lean	X
104	Douglas-fir	<i>Pseudotsuga menziesii</i>	24	Good	Specimen		X
105	Douglas-fir	<i>Pseudotsuga menziesii</i>	19	Good	Specimen		X
106	Douglas-fir	<i>Pseudotsuga menziesii</i>	15	Fair	Specimen		X
107	Douglas-fir	<i>Pseudotsuga menziesii</i>	33	Poor		Crook	X
109	Douglas-fir	<i>Pseudotsuga menziesii</i>	27	Good	Specimen		X
110	Douglas-fir	<i>Pseudotsuga menziesii</i>	28	Poor		Conks	X
111	Douglas-fir	<i>Pseudotsuga menziesii</i>	32	Good	Landmark		X
112	Douglas-fir	<i>Pseudotsuga menziesii</i>	28	Good	Specimen		X
113	Douglas-fir	<i>Pseudotsuga menziesii</i>	17	Good	Specimen		X
114	Douglas-fir	<i>Pseudotsuga menziesii</i>	23	Good	Specimen	Lean	X
115	Douglas-fir	<i>Pseudotsuga menziesii</i>	15	Good	Specimen		X
116	Douglas-fir	<i>Pseudotsuga menziesii</i>	37	Fair	Landmark		X
117	Douglas-fir	<i>Pseudotsuga menziesii</i>	23	Poor		Lean	X
118	Douglas-fir	<i>Pseudotsuga menziesii</i>	27	Good	Specimen		X
119	Douglas-fir	<i>Pseudotsuga menziesii</i>	28	Fair	Spec		

Tree Number	Common Name	Scientific Name	DBH (inches)	Condition	Landmark/Specimen	Structural Notes	(-) Preserved (X) Removed (RD) Removed for road impacts
226	Douglas-fir	<i>Pseudotsuga menziesii</i>	35	Good	Landmark		X
227	Douglas-fir	<i>Pseudotsuga menziesii</i>	29	Fair	Specimen	Codominant Stems	X
228	Douglas-fir	<i>Pseudotsuga menziesii</i>	34	Good	Landmark		X
229	Douglas-fir	<i>Pseudotsuga menziesii</i>	28	Good	Specimen		X
230	Douglas-fir	<i>Pseudotsuga menziesii</i>	21	Good	Specimen		X
231	Douglas-fir	<i>Pseudotsuga menziesii</i>	30	Good	Landmark	Corrected Lean	-
232	Douglas-fir	<i>Pseudotsuga menziesii</i>	18	Good	Specimen		-
233	Douglas-fir	<i>Pseudotsuga menziesii</i>	17	Good	Specimen	Corrected Lean	-
234	Douglas-fir	<i>Pseudotsuga menziesii</i>	29	Good	Specimen		-
235	Douglas-fir	<i>Pseudotsuga menziesii</i>	20	Fair	Specimen	Bow	-
236	Douglas-fir	<i>Pseudotsuga menziesii</i>	21	Fair	Specimen	Corrected Lean	X
237	Douglas-fir	<i>Pseudotsuga menziesii</i>	20	Fair	Specimen	Lean	X
238	Douglas-fir	<i>Pseudotsuga menziesii</i>	31	Good	Landmark		X
239	Douglas-fir	<i>Pseudotsuga menziesii</i>	25	Poor		Defect at 6FT	X
240	Douglas-fir	<i>Pseudotsuga menziesii</i>	23	Poor		Split Top	X
241	Douglas-fir	<i>Pseudotsuga menziesii</i>	26	Good	Specimen		X
242	Douglas-fir	<i>Pseudotsuga menziesii</i>	30	Good	Landmark		X
243	Douglas-fir	<i>Pseudotsuga menziesii</i>	23	Fair	Specimen		X
244	Douglas-fir	<i>Pseudotsuga menziesii</i>	43	Good	Landmark		X
245	Douglas-fir	<i>Pseudotsuga menziesii</i>	27	Fair	Specimen		X
246	Douglas-fir	<i>Pseudotsuga menziesii</i>	15	Poor		Double Leader @ 8FT	X
247	Douglas-fir	<i>Pseudotsuga menziesii</i>	18	Good	Specimen		X
248	Douglas-fir	<i>Pseudotsuga menziesii</i>	15	Good	Specimen		X
249	Douglas-fir	<i>Pseudotsuga menziesii</i>	37	Fair	Landmark	Codominant Stems @2FT	X
250	Douglas-fir	<i>Pseudotsuga menziesii</i>	34	Good	Landmark	Vertical Branch	X
251	Douglas-fir	<i>Pseudotsuga menziesii</i>	34	Fair	Landmark	Basally-joined 17" ; 17"	X
252	Douglas-fir	<i>Pseudotsuga menziesii</i>	22	Fair	Specimen	Codominant Stems @2FT	X
253	Douglas-fir	<i>Pseudotsuga menziesii</i>	23	Poor		Double Leader	-
254	Douglas-fir	<i>Pseudotsuga menziesii</i>	19	Good	Specimen		-
255	Douglas-fir	<i>Pseudotsuga menziesii</i>	26	Good	Specimen		-
256	Douglas-fir	<i>Pseudotsuga menziesii</i>	20	Good	Specimen		-
257	Douglas-fir	<i>Pseudotsuga menziesii</i>	20	Good	Specimen		-
258	Douglas-fir	<i>Pseudotsuga menziesii</i>	29	Good	Specimen		X
259	Douglas-fir	<i>Pseudotsuga menziesii</i>	32	Good	Landmark		X
260	Douglas-fir	<i>Pseudotsuga menziesii</i>	32	Good	Landmark		X
261	Douglas-fir	<i>Pseudotsuga menziesii</i>	33	Good	Landmark		X
262	Douglas-fir	<i>Pseudotsuga menziesii</i>	28	Good	Specimen		X
263	Douglas-fir	<i>Pseudotsuga menziesii</i>	59	Fair	Landmark	Multi-stemmed, Basally-joined @2FT, 47" ; 12"	X
264	Douglas-fir	<i>Pseudotsuga menziesii</i>	15	Good	Specimen		X
265	Douglas-fir	<i>Pseudotsuga menziesii</i>	16	Good	Specimen		X
266	Douglas-fir	<i>Pseudotsuga menziesii</i>	23	Good	Specimen		X
267	Douglas-fir	<i>Pseudotsuga menziesii</i>	36	Fair	Landmark	Codominant Stems	X
268	Douglas-fir	<i>Pseudotsuga menziesii</i>	29	Good	Specimen		X
269	Douglas-fir	<i>Pseudotsuga menziesii</i>	30	Good	Landmark		X
270	Douglas-fir	<i>Pseudotsuga menziesii</i>	25	Good	Specimen		X
271	Douglas-fir	<i>Pseudotsuga menziesii</i>	45	Fair	Landmark	Codominant Stems @1FT	X
272	Douglas-fir	<i>Pseudotsuga menziesii</i>	34	Good	Landmark		X
273	Douglas-fir	<i>Pseudotsuga menziesii</i>	17	Good	Specimen		X
274	Douglas-fir	<i>Pseudotsuga menziesii</i>	32	Poor		2 Large Vertical Branches @30 FT, Crook	X
275	Douglas-fir	<i>Pseudotsuga menziesii</i>	29	Good	Specimen		X
276	Douglas-fir	<i>Pseudotsuga menziesii</i>	38	Good	Landmark		X
277	Douglas-fir	<i>Pseudotsuga menziesii</i>	29	Poor		Double Leader	X
278	Douglas-fir	<i>Pseudotsuga menziesii</i>	22	Fair	Specimen	Corrected Lean	X
279	Douglas-fir	<i>Pseudotsuga menziesii</i>	25	Good	Specimen		X
280	Douglas-fir	<i>Pseudotsuga menziesii</i>	17	Good	Specimen		X
281	Douglas-fir	<i>Pseudotsuga menziesii</i>	28	Fair	Specimen	Corrected Lean	X
283	Douglas-fir	<i>Pseudotsuga menziesii</i>	62	Fair	Landmark	Multi-stemmed, 29" ; 19" ; 13"	X
284	Douglas-fir	<i>Pseudotsuga menziesii</i>	35	Good	Landmark		X
285	Douglas-fir	<i>Pseudotsuga menziesii</i>	35	Good	Landmark		X
286	Douglas-fir	<i>Pseudotsuga menziesii</i>	47	Fair	Landmark	Basally-joined, 22" ; 25"	X
287	Douglas-fir	<i>Pseudotsuga menziesii</i>	34	Good	Landmark		X
288	Douglas-fir	<i>Pseudotsuga menziesii</i>	29	Good	Specimen		X
289	Douglas-fir	<i>Pseudotsuga menziesii</i>	19	Fair	Specimen	Lean	X

Tree Number	Common Name	Scientific Name	DBH (inches)	Condition	Landmark/Specimen	Structural Notes	(-) Preserved (X) Removed (RD) Removed for road impacts
290	Douglas-fir	<i>Pseudotsuga menziesii</i>	27	Good	Specimen		X
291	Douglas-fir	<i>Pseudotsuga menziesii</i>	19	Good	Specimen		X
292	Douglas-fir	<i>Pseudotsuga menziesii</i>	43	Fair	Landmark	Double Leader	X
293	Douglas-fir	<i>Pseudotsuga menziesii</i>	27	Fair	Specimen	Codominant Stems	X
294	Douglas-fir	<i>Pseudotsuga menziesii</i>	16	Fair	Specimen		X
295	Douglas-fir	<i>Pseudotsuga menziesii</i>	28	Good	Specimen		X
296	Douglas-fir	<i>Pseudotsuga menziesii</i>	24	Good	Specimen		X
297	Douglas-fir	<i>Pseudotsuga menziesii</i>	28	Good	Specimen		X
298	Douglas-fir	<i>Pseudotsuga menziesii</i>	42	Poor		Codominant Stems	X
299	Douglas-fir	<i>Pseudotsuga menziesii</i>	41	Fair	Landmark	3 Codominant Stems	X
300	Douglas-fir	<i>Pseudotsuga menziesii</i>	29	Good	Specimen		X
301	Douglas-fir	<i>Pseudotsuga menziesii</i>	42	Fair	Landmark	Codominant Stems @2FT	X
302	Douglas-fir	<i>Pseudotsuga menziesii</i>	29	Fair	Specimen		X
303	Douglas-fir	<i>Pseudotsuga menziesii</i>	18	Fair	Specimen		X
304	Douglas-fir	<i>Pseudotsuga menziesii</i>	27	Good	Specimen		X
305	Douglas-fir	<i>Pseudotsuga menziesii</i>	20	Fair	Specimen		X
306	Douglas-fir	<i>Pseudotsuga menziesii</i>	25	Poor		Double Leader	X
307	Douglas-fir	<i>Pseudotsuga menziesii</i>	29	Good	Specimen		X
308	Douglas-fir	<i>Pseudotsuga menziesii</i>	24	Good	Specimen		X
309	Douglas-fir	<i>Pseudotsuga menziesii</i>	20	Fair	Specimen		-
310	Douglas-fir	<i>Pseudotsuga menziesii</i>	27	Poor		Double Leader	-
311	Douglas-fir	<i>Pseudotsuga menziesii</i>	27	Poor		Double Leader	-
312	Douglas-fir	<i>Pseudotsuga menziesii</i>	28	Good	Specimen		X
313	Douglas-fir	<i>Pseudotsuga menziesii</i>	30	Good	Landmark		-
314	Douglas-fir	<i>Pseudotsuga menziesii</i>	27	Good	Specimen		X
315	Douglas-fir	<i>Pseudotsuga menziesii</i>	31	Good	Landmark		X
316	Douglas-fir	<i>Pseudotsuga menziesii</i>	25	Fair	Specimen		X
317	Douglas-fir	<i>Pseudotsuga menziesii</i>	33	Good	Landmark		X
318	Douglas-fir	<i>Pseudotsuga menziesii</i>	38	Good	Landmark		X
319	Douglas-fir	<i>Pseudotsuga menziesii</i>	34	Good	Landmark		X
320	Douglas-fir	<i>Pseudotsuga menziesii</i>	32	Good	Landmark		X
321	Douglas-fir	<i>Pseudotsuga menziesii</i>	27	Good	Specimen		X
322	Douglas-fir	<i>Pseudotsuga menziesii</i>	34	Good	Landmark		X
323	Douglas-fir	<i>Pseudotsuga menziesii</i>	43	Fair	Landmark	Codominant Stems	X
324	Douglas-fir	<i>Pseudotsuga menziesii</i>	30	Good	Landmark		X
325	Douglas-fir	<i>Pseudotsuga menziesii</i>	21	Good	Specimen		X
326	Douglas-fir	<i>Pseudotsuga menziesii</i>	31	Good	Landmark		X
327	Douglas-fir	<i>Pseudotsuga menziesii</i>	26	Good	Specimen		X
328	Douglas-fir	<i>Pseudotsuga menziesii</i>	29	Good	Specimen		X
329	Douglas-fir	<i>Pseudotsuga menziesii</i>	26	Fair	Specimen	Codomin	

Tree Number	Common Name	Scientific Name	DBH (inches)	Condition	Landmark/ Specimen	Structural Notes	(-) Preserved (X) Removed (RD) Removed for road impacts
450	Douglas-fir	<i>Pseudotsuga menziesii</i>	17	Good	Specimen		RD
451	Douglas-fir	<i>Pseudotsuga menziesii</i>	16	Good	Specimen		X
452	Douglas-fir	<i>Pseudotsuga menziesii</i>	15	Fair	Specimen		X
453	Douglas-fir	<i>Pseudotsuga menziesii</i>	33	Fair	Landmark		X
454	Douglas-fir	<i>Pseudotsuga menziesii</i>	39	Fair	Landmark	Codominant Stems	X
455	Douglas-fir	<i>Pseudotsuga menziesii</i>	19	Fair	Specimen		X
456	Douglas-fir	<i>Pseudotsuga menziesii</i>	29	Good	Specimen		X
457	Douglas-fir	<i>Pseudotsuga menziesii</i>	32	Fair	Landmark	Codominant Stems	X
458	Douglas-fir	<i>Pseudotsuga menziesii</i>	17	Fair	Specimen	Sparse canopy	X
459	Douglas-fir	<i>Pseudotsuga menziesii</i>	16	Fair	Specimen		X
460	Douglas-fir	<i>Pseudotsuga menziesii</i>	41	Good	Landmark	Codominant Stems	X
461	Douglas-fir	<i>Pseudotsuga menziesii</i>	18	Fair	Specimen	Vertical Branch	X
462	Douglas-fir	<i>Pseudotsuga menziesii</i>	17	Fair	Specimen		X
463	Douglas-fir	<i>Pseudotsuga menziesii</i>	25	Good	Specimen		X
464	Douglas-fir	<i>Pseudotsuga menziesii</i>	17	Good	Specimen		X
465	Douglas-fir	<i>Pseudotsuga menziesii</i>	25	Good	Specimen		X
466	Douglas-fir	<i>Pseudotsuga menziesii</i>	32	Good	Landmark		X
467	Douglas-fir	<i>Pseudotsuga menziesii</i>	16	Fair	Specimen		-
468	Douglas-fir	<i>Pseudotsuga menziesii</i>	27	Good	Specimen		-
469	Douglas-fir	<i>Pseudotsuga menziesii</i>	49	Good	Landmark	Codominant Stems	RD
470	Douglas-fir	<i>Pseudotsuga menziesii</i>	15	Fair	Specimen		RD
471	Douglas-fir	<i>Pseudotsuga menziesii</i>	19	Good	Specimen		RD
472	Douglas-fir	<i>Pseudotsuga menziesii</i>	27	Fair	Specimen		RD
482	Douglas-fir	<i>Pseudotsuga menziesii</i>	37	Poor		Codominant Stems	RD
483	Douglas-fir	<i>Pseudotsuga menziesii</i>	35	Good	Landmark		RD
484	Douglas-fir	<i>Pseudotsuga menziesii</i>	26	Good	Specimen		RD
485	Douglas-fir	<i>Pseudotsuga menziesii</i>	27	Poor		Split top	RD
486	Douglas-fir	<i>Pseudotsuga menziesii</i>	23	Poor		Codominant Stems @2FT, Dead stem	RD
487	Douglas-fir	<i>Pseudotsuga menziesii</i>	15	Poor		Conks	X
488	Douglas-fir	<i>Pseudotsuga menziesii</i>	17	Fair	Specimen		X
489	Douglas-fir	<i>Pseudotsuga menziesii</i>	15	Fair	Specimen		X
490	Douglas-fir	<i>Pseudotsuga menziesii</i>	17	Fair	Specimen		X
491	Douglas-fir	<i>Pseudotsuga menziesii</i>	23	Good	Specimen	Lean	X
492	Douglas-fir	<i>Pseudotsuga menziesii</i>	19	Fair	Specimen		X
493	Douglas-fir	<i>Pseudotsuga menziesii</i>	24	Good	Specimen		X
494	Douglas-fir	<i>Pseudotsuga menziesii</i>	33	Good	Landmark		X
495	Douglas-fir	<i>Pseudotsuga menziesii</i>	14	Fair			X
496	Douglas-fir	<i>Pseudotsuga menziesii</i>	14	Fair			X
497	Douglas-fir	<i>Pseudotsuga menziesii</i>	27	Poor		Codominant Stems @ 2FT	X
498	Douglas-fir	<i>Pseudotsuga menziesii</i>	19	Fair	Specimen		X
499	Douglas-fir	<i>Pseudotsuga menziesii</i>	32	Good	Landmark		X
500	Douglas-fir	<i>Pseudotsuga menziesii</i>	29	Poor		Codominant Stems	X
501	Douglas-fir	<i>Pseudotsuga menziesii</i>	25	Good	Specimen		X
502	Douglas-fir	<i>Pseudotsuga menziesii</i>	42	Poor		Multi-stemmed @ 1 FT, 15"; 7"; 20"	X
503	Douglas-fir	<i>Pseudotsuga menziesii</i>	16	Fair	Specimen		X
504	Douglas-fir	<i>Pseudotsuga menziesii</i>	16	Good	Specimen		X
505	Douglas-fir	<i>Pseudotsuga menziesii</i>	29	Good	Specimen		RD
506	Douglas-fir	<i>Pseudotsuga menziesii</i>	27	Good	Specimen		RD
507	Douglas-fir	<i>Pseudotsuga menziesii</i>	20	Good	Specimen	Corrected Lean	RD
508	Douglas-fir	<i>Pseudotsuga menziesii</i>	33	Good	Landmark		RD
509	Douglas-fir	<i>Pseudotsuga menziesii</i>	15	Fair	Specimen		RD
510	Douglas-fir	<i>Pseudotsuga menziesii</i>	28	Good	Specimen		RD
511	Douglas-fir	<i>Pseudotsuga menziesii</i>	17	Fair	Specimen		RD
515	Douglas-fir	<i>Pseudotsuga menziesii</i>	22	Good	Specimen	Corrected Lean	RD
516	Douglas-fir	<i>Pseudotsuga menziesii</i>	33	Good	Landmark		RD
517	Douglas-fir	<i>Pseudotsuga menziesii</i>	33	Fair	Landmark	Codominant Stems	RD
518	Douglas-fir	<i>Pseudotsuga menziesii</i>	16	Fair	Specimen		RD
519	Douglas-fir	<i>Pseudotsuga menziesii</i>	15	Poor		Crook	RD
520	Douglas-fir	<i>Pseudotsuga menziesii</i>	17	Fair	Specimen		RD
521	Douglas-fir	<i>Pseudotsuga menziesii</i>	28	Good	Specimen		RD
522	Douglas-fir	<i>Pseudotsuga menziesii</i>	18	Fair	Specimen		X
523	Douglas-fir	<i>Pseudotsuga menziesii</i>	33	Poor		Crook	X
524	Douglas-fir	<i>Pseudotsuga menziesii</i>	14	Fair		Bow	X
525	Douglas-fir	<i>Pseudotsuga menziesii</i>	16	Fair	Specimen	Basally-joined with Dead stem	X
526	Douglas-fir	<i>Pseudotsuga menziesii</i>	20	Poor		Lean	X
527	Douglas-fir	<i>Pseudotsuga menziesii</i>	26	Good	Specimen		X
528	Douglas-fir	<i>Pseudotsuga menziesii</i>	26	Good	Specimen		X
529	Douglas-fir	<i>Pseudotsuga menziesii</i>	29	Good	Specimen		X
530	Douglas-fir	<i>Pseudotsuga menziesii</i>	31	Fair	Landmark	Codominant Stems	X

Tree Number	Common Name	Scientific Name	DBH (inches)	Condition	Landmark/ Specimen	Structural Notes	(-) Preserved (X) Removed (RD) Removed for road impacts
531	Douglas-fir	<i>Pseudotsuga menziesii</i>	15	Fair	Specimen		X
532	Douglas-fir	<i>Pseudotsuga menziesii</i>	22	Fair	Specimen		RD
533	Douglas-fir	<i>Pseudotsuga menziesii</i>	29	Good	Specimen		RD
534	Douglas-fir	<i>Pseudotsuga menziesii</i>	28	Good	Specimen		RD
535	Douglas-fir	<i>Pseudotsuga menziesii</i>	23	Fair	Specimen	Bow	RD
536	Douglas-fir	<i>Pseudotsuga menziesii</i>	19	Good	Specimen		-
537	Douglas-fir	<i>Pseudotsuga menziesii</i>	32	Good	Landmark		X
538	Douglas-fir	<i>Pseudotsuga menziesii</i>	21	Good	Specimen		-
539	Douglas-fir	<i>Pseudotsuga menziesii</i>	30	Good	Landmark		X
540	Douglas-fir	<i>Pseudotsuga menziesii</i>	30	Good	Landmark		X
541	Douglas-fir	<i>Pseudotsuga menziesii</i>	36	Good	Landmark		RD
542	Douglas-fir	<i>Pseudotsuga menziesii</i>	21	Good	Specimen	Lean	X
543	Douglas-fir	<i>Pseudotsuga menziesii</i>	25	Good	Specimen	Lean	X
544	Douglas-fir	<i>Pseudotsuga menziesii</i>	15	Good	Specimen		RD
545	Douglas-fir	<i>Pseudotsuga menziesii</i>	24	Good	Specimen		X
546	Douglas-fir	<i>Pseudotsuga menziesii</i>	18	Good	Specimen		RD
547	Douglas-fir	<i>Pseudotsuga menziesii</i>	34	Good	Landmark		RD
551	Douglas-fir	<i>Pseudotsuga menziesii</i>	26	Good	Specimen		RD
552	Douglas-fir	<i>Pseudotsuga menziesii</i>	30	Good	Landmark		RD
553	Douglas-fir	<i>Pseudotsuga menziesii</i>	19	Fair	Specimen	Lean	RD
554	Douglas-fir	<i>Pseudotsuga menziesii</i>	22	Good	Specimen		X
555	Douglas-fir	<i>Pseudotsuga menziesii</i>	27	Good	Specimen		-
556	Douglas-fir	<i>Pseudotsuga menziesii</i>	26	Good	Specimen		-
557	Douglas-fir	<i>Pseudotsuga menziesii</i>	16	Fair	Specimen		-
558	Douglas-fir	<i>Pseudotsuga menziesii</i>	23	Good	Specimen		-
559	Douglas-fir	<i>Pseudotsuga menziesii</i>	25	Poor		Broken top	X
565	Douglas-fir	<i>Pseudotsuga menziesii</i>	20	Poor		Crook	RD
654	Douglas-fir	<i>Pseudotsuga menziesii</i>	27	Poor		3-Crown	RD
655	Douglas-fir	<i>Pseudotsuga menziesii</i>	18	Fair	Specimen		RD
656	Douglas-fir	<i>Pseudotsuga menziesii</i>	26	Poor		Crook	RD
657	Douglas-fir	<i>Pseudotsuga menziesii</i>	15	Poor		Crook	RD
658	Douglas-fir	<i>Pseudotsuga menziesii</i>	34	Good	Landmark		RD
659	Douglas-fir	<i>Pseudotsuga menziesii</i>	23	Good	Specimen		RD
665	Douglas-fir	<i>Pseudotsuga menziesii</i>	26	Good	Specimen		RD
666	Douglas-fir	<i>Pseudotsuga menziesii</i>	2				

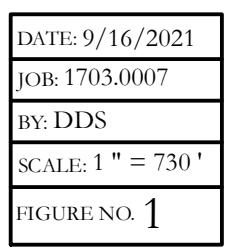
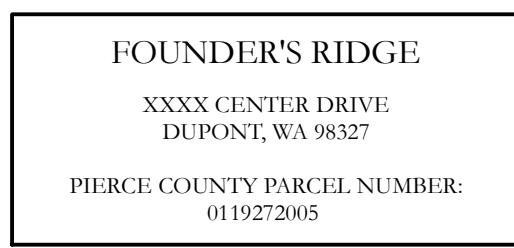
Tree Number	Common Name	Scientific Name	DBH (inches)	Condition	Landmark/Specimen	Structural Notes	(-) Preserved (X) Removed (RD) Removed for road impacts
1008	Douglas-fir	<i>Pseudotsuga menziesii</i>	8	Good			X
1009	Oregon white oak	<i>Quercus garryana</i>	9	Good			X
1010	Douglas-fir	<i>Pseudotsuga menziesii</i>	14	Poor	Split Top	X	
1011	Douglas-fir	<i>Pseudotsuga menziesii</i>	8	Poor	Lean	X	
1012	Douglas-fir	<i>Pseudotsuga menziesii</i>	10	Fair		X	
1013	Douglas-fir	<i>Pseudotsuga menziesii</i>	14	Fair		X	
1014	Douglas-fir	<i>Pseudotsuga menziesii</i>	9	Poor	Lean	X	
1015	Douglas-fir	<i>Pseudotsuga menziesii</i>	7	Fair		X	
1016	Douglas-fir	<i>Pseudotsuga menziesii</i>	14	Fair		X	
1017	Douglas-fir	<i>Pseudotsuga menziesii</i>	13	Fair		X	
1018	Douglas-fir	<i>Pseudotsuga menziesii</i>	13	Fair		X	
1019	Douglas-fir	<i>Pseudotsuga menziesii</i>	10	Fair	Crook	X	
1020	Douglas-fir	<i>Pseudotsuga menziesii</i>	13	Fair		X	
1021	Douglas-fir	<i>Pseudotsuga menziesii</i>	13	Fair		X	
1022	Douglas-fir	<i>Pseudotsuga menziesii</i>	7	Poor	Lean	X	
1023	Douglas-fir	<i>Pseudotsuga menziesii</i>	6	Good		X	
1024	Douglas-fir	<i>Pseudotsuga menziesii</i>	13	Good		X	
1025	Douglas-fir	<i>Pseudotsuga menziesii</i>	13	Good		X	
1026	Douglas-fir	<i>Pseudotsuga menziesii</i>	12	Good		X	
1027	Douglas-fir	<i>Pseudotsuga menziesii</i>	7	Fair		X	
1028	Oregon white oak	<i>Quercus garryana</i>	23	Good	Specimen	X	
1029	Oregon white oak	<i>Quercus garryana</i>	19	Good	Specimen	X	
1030	Oregon white oak	<i>Quercus garryana</i>	20	Good	Specimen	X	
1031	Oregon white oak	<i>Quercus garryana</i>	7	Fair		X	
1032	Douglas-fir	<i>Pseudotsuga menziesii</i>	6	Good		X	
1033	Douglas-fir	<i>Pseudotsuga menziesii</i>	12	Good		-	
1034	Oregon white oak	<i>Quercus garryana</i>	13	Good	Specimen	-	
1035	Douglas-fir	<i>Pseudotsuga menziesii</i>	8	Good		-	
1036	Oregon white oak	<i>Quercus garryana</i>	13	Good	Specimen	-	
1037	Oregon white oak	<i>Quercus garryana</i>	20	Good	Specimen	X	
1038	Douglas-fir	<i>Pseudotsuga menziesii</i>	12	Poor	Split top	X	
1039	Douglas-fir	<i>Pseudotsuga menziesii</i>	11	Fair		X	
1040	Douglas-fir	<i>Pseudotsuga menziesii</i>	9	Fair		X	
1041	Douglas-fir	<i>Pseudotsuga menziesii</i>	9	Fair		X	
1042	Douglas-fir	<i>Pseudotsuga menziesii</i>	8	Fair		X	
1043	Douglas-fir	<i>Pseudotsuga menziesii</i>	12	Poor	Lean	X	
1044	Douglas-fir	<i>Pseudotsuga menziesii</i>	11	Fair	Lean	X	
1045	Douglas-fir	<i>Pseudotsuga menziesii</i>	10	Fair		X	
1046	Oregon white oak	<i>Quercus garryana</i>	12	Good	Specimen	X	
1047	Douglas-fir	<i>Pseudotsuga menziesii</i>	10	Fair		X	
1048	Oregon white oak	<i>Quercus garryana</i>	11	Good		-	
1049	Oregon white oak	<i>Quercus garryana</i>	14	Good	Specimen	-	
1050	Oregon white oak	<i>Quercus garryana</i>	9	Good		-	
1051	Douglas-fir	<i>Pseudotsuga menziesii</i>	9	Good		X	
1052	Oregon white oak	<i>Quercus garryana</i>	9	Good		-	
1053	Oregon white oak	<i>Quercus garryana</i>	10	Good		-	
1054	Oregon white oak	<i>Quercus garryana</i>	15	Good	Specimen	X	
1055	Oregon white oak	<i>Quercus garryana</i>	6	Fair		X	
1056	Douglas-fir	<i>Pseudotsuga menziesii</i>	25	Fair	Specimen	Vertical Branch	X
1057	Douglas-fir	<i>Pseudotsuga menziesii</i>	16	Fair	Specimen	X	
1058	Oregon white oak	<i>Quercus garryana</i>	9	Good		-	
1059	Douglas-fir	<i>Pseudotsuga menziesii</i>	8	Good		X	
1060	Douglas-fir	<i>Pseudotsuga menziesii</i>	8	Good		X	
1062	Oregon white oak	<i>Quercus garryana</i>	11	Good		X	
1063	Oregon white oak	<i>Quercus garryana</i>	8	Good		X	
1064	Douglas-fir	<i>Pseudotsuga menziesii</i>	8	Good		X	
1065	Douglas-fir	<i>Pseudotsuga menziesii</i>	9	Dying		X	
1066	Douglas-fir	<i>Pseudotsuga menziesii</i>	9	Fair		X	
1067	Douglas-fir	<i>Pseudotsuga menziesii</i>	9	Fair		X	
1068	Douglas-fir	<i>Pseudotsuga menziesii</i>	7	Fair		X	
1069	Oregon white oak	<i>Quercus garryana</i>	22	Good	Specimen	X	
1070	Douglas-fir	<i>Pseudotsuga menziesii</i>	11	Fair		X	
1071	Douglas-fir	<i>Pseudotsuga menziesii</i>	7	Poor	Lean	X	
1072	Douglas-fir	<i>Pseudotsuga menziesii</i>	9	Poor	Lean	X	
1073	Oregon white oak	<i>Quercus garryana</i>	8	Good		X	
1074	Oregon white oak	<i>Quercus garryana</i>	6	Good		X	
1075	Oregon white oak	<i>Quercus garryana</i>	9	Good		X	
1076	Douglas-fir	<i>Pseudotsuga menziesii</i>	26	Fair	Specimen	Bow, Basally-joined to Codominant Stems	X
1077	Douglas-fir	<i>Pseudotsuga menziesii</i>	10	Good		Corrected Lean	X
1078	Douglas-fir	<i>Pseudotsuga menziesii</i>	10	Poor		Double Leader, Vertical Branch	X
1079	Bigleaf maple	<i>Acer macrophyllum</i>	31	Poor		Multi-stem split out	X

Tree Number	Common Name	Scientific Name	DBH (inches)	Condition	Landmark/Specimen	Structural Notes	(-) Preserved (X) Removed (RD) Removed for road impacts
1080	Douglas-fir	<i>Pseudotsuga menziesii</i>	6	Good			X
1081	Douglas-fir	<i>Pseudotsuga menziesii</i>	6	Good			X
1082	Douglas-fir	<i>Pseudotsuga menziesii</i>	34	Fair	Landmark	Codominant Stems	X
1083	Oregon white oak	<i>Quercus garryana</i>	18	Good	Specimen		X
1084	Oregon white oak	<i>Quercus garryana</i>	14	Good	Specimen		X
1085	Douglas-fir	<i>Pseudotsuga menziesii</i>	8	Good			X
1086	Douglas-fir	<i>Pseudotsuga menziesii</i>	17	Fair	Specimen	Lean	X
1087	Oregon white oak	<i>Quercus garryana</i>	8	Fair		-	
1088	Douglas-fir	<i>Pseudotsuga menziesii</i>	36	Good	Landmark		X
1089	Oregon white oak	<i>Quercus garryana</i>	9	Good			X
1090	Oregon white oak	<i>Quercus garryana</i>	9	Good			X
1091	Douglas-fir	<i>Pseudotsuga menziesii</i>	14	Good			X
1092	Oregon white oak	<i>Quercus garryana</i>	11	Fair		Multiple Dead large branches	X
1093	Oregon white oak	<i>Quercus garryana</i>	7	Fair			X
1094	Douglas-fir	<i>Pseudotsuga menziesii</i>	6	Poor		Sparse canopy	X
1095	Douglas-fir	<i>Pseudotsuga menziesii</i>	8	Fair			X
1096	Douglas-fir	<i>Pseudotsuga menziesii</i>	11	Good			-
1097	Douglas-fir	<i>Pseudotsuga menziesii</i>	6	Poor		Crook	-
1098	Douglas-fir	<i>Pseudotsuga menziesii</i>	18	Good	Specimen		-
1099	Oregon white oak	<i>Quercus garryana</i>	9	Fair			
1100	Douglas-fir	<i>Pseudotsuga menziesii</i>	6	Good			X
1101	Pacific yew	<i>Taxus brevifolia</i>	9	Poor		Lean	X
1102	Douglas-fir	<i>Pseudotsuga menziesii</i>	10	Fair		Crook	X
1103	Douglas-fir	<i>Pseudotsuga menziesii</i>	15	Good	Specimen		X
1104	Douglas-fir	<i>Pseudotsuga menziesii</i>	14	Good			X
1105	Douglas-fir	<i>Pseudotsuga menziesii</i>	14	Good			X
1106	Oregon white oak	<i>Quercus garryana</i>	10	Good			X
1107	Douglas-fir	<i>Pseudotsuga menziesii</i>	9	Fair			X
1108	Douglas-fir	<i>Pseudotsuga menziesii</i>	9	Poor		Lean	X
1109	Douglas-fir	<i>Pseudotsuga menziesii</i>	14	Good			X
1110	Oregon white oak	<i>Quercus garryana</i>	17	Good	Specimen		X
1111	Douglas-fir	<i>Pseudotsuga menziesii</i>	10	Good			X
1112	Douglas-fir	<i>Pseudotsuga menziesii</i>	8	Good			X
1113	Douglas-fir	<i>Pseudotsuga menziesii</i>	13	Poor		Crook	X
1114	Douglas-fir	<i>Pseudotsuga menziesii</i>	6	Poor		Lean	X
1115	Douglas-fir	<i>Pseudotsuga menziesii</i>	6	Good		Vertical Branch	X
1116	Douglas-fir	<i>Pseudotsuga menziesii</i>	8	Good			X
1117	Douglas-fir	<i>Pseudotsuga menziesii</i>	6				

FOUNDER'S RIDGE - ESTIMATED < 6" TREE RETENTION EXHIBIT



Tree Count Based Spacing			
Area	Acres	Acres of Trees	Number of trees
Existing Bat Habitat Restoration Plan	5.6	3.1	527 @ 16' Spacing (170 TPA)
Outside Clearing Limits/Inside Project Boundary	25.1	10.8	4,709 @ 10' Spacing (436 TPA)
Total Estimated # of Retained Trees < 6" DBH	30.7	13.9	5,236



Attachment C – Qualifications

All field inspections, assessments, and supporting documentation, including this **Certified Arborist Report** prepared for **Founder's Ridge**, were prepared by or under the direction of Matt DeCaro and Shauna Willett of SVC.

Matt DeCaro

Associate Principal

Professional Experience: 12 years

Matt DeCaro is an Associate Principal and Senior Scientist with a diverse background in environmental planning, wetland science, stream ecology, water quality, site remediation, NEPA compliance, and project management. He manages a wide range of industrial, commercial, and multi-family residential projects throughout Western Washington, providing environmental permitting and regulatory compliance assistance for land use projects from their planning stages through entitlement and construction. His local expertise, diverse professional background, and positive relationships with regulatory personnel are integral components of his successful project outcomes.

Matt earned a Bachelor of Science degree with a focus in Environmental Science from the Evergreen State College in Olympia, Washington, with additional graduate-level coursework and research in aquatic restoration and salmonid ecology. Matt has received 40-hour wetland delineation training (*Western Mountains, Valleys, & Coast and Arid West Regional Supplements*) and regularly performs wetland, stream, and shoreline delineations. Matt has been formally trained in the use of the *2014 Washington State Wetland Rating System and Determination of Ordinary High Water Mark* by WSDOE, and he is a Pierce County Qualified Wetland Specialist and Wildlife Biologist. He has attended USFWS survey workshops for multiple threatened and endangered species, and he is a Senior Author of WSDOT Biological Assessments. Matt holds 40-hour HAZWOPER training and has managed Phase I Environmental Site Assessments, subsurface investigations, and contaminant remediation projects throughout the Pacific Northwest. His diverse experience also includes NEPA compliance for federal permitting projects; noxious weed abatement; army ant research in the Costa Rican tropical rainforest; spotted owl surveys on federal and private lands; and salmonid spawning and migration surveys.

Shauna Willett

Certified Arborist and Environmental Scientist

Professional Experience: 14 years

Shauna Willett is an Environmental Scientist and ISA Certified Arborist. She has performed individual tree assessments, tree inventories and environmental assessments of many habitats including oak woodlands, forests, riparian corridors, and wetlands of the Puget Sound region and throughout California. She has worked as a consulting arborist in the residential, commercial, and utility sectors of arboriculture where she conducted preventative maintenance inspections of distribution and high voltage transmission lines for Puget Sound Energy. This assessment work has involved field identification of tree and plant species, pest and disease diagnosis, and data collection and analysis in public and private sectors. Her research background is highly varied, spanning the fields of agriculture, nutrition - domestically and internationally, aquatic toxicology and urban forestry. Shauna received her master's degree in geography with a dual emphasis in urban forestry and landscape architecture at the University of California, Davis. Shauna is a Tree Risk Assessment Qualified (ISA) arborist. She has extensive knowledge on local plant taxonomy and ecological vegetative indicators.

Shauna currently performs tree assessments, wetland and stream delineations, fish and wildlife habitat assessments; conducts environmental code analysis; creates and modifies maps and tree surveys using AutoCAD, prepares environmental assessment and mitigation reports, biological evaluations, and permit applications to support clients through the regulatory and planning process for various land use projects. She has been formally trained by the Washington State Department of Ecology in the use of the Washington State Wetland Rating System. Shauna earned a Bachelor of Science degree in Landscape Architecture from the University of California, Davis, with a focus on the relationship between communities and their urban forest ecosystems.