

OSLO BAY APARTMENTS

TREE RETENTION NARRATIVE

The Oslo Bay Apartments project is a residential community proposed to be located northwest of the intersections of State Route 305 and State Route 307 in the City of Poulsbo. The project and offsite improvements encompass seven existing tax parcels and adjacent Vetter Road right-of-way (ROW). A boundary line adjustment (BLA) of these seven lots and a proposed Vetter Road ROW vacation and relocation plan are being submitted concurrent with the site plan review application. Resultant parcels V and VI of the BLA are zoned Residential Medium and are subject to tree retention requirements.

The Poulsbo Municipal Code (PMC) Chapter 18.180.030 *Retention required* sets forth the following tree retention preservation priorities and tree retention requirement:

- A. In applying the requirement for retention of trees, the review authority shall consider the preservation of trees in any of the following circumstances as priorities:
 - 1. Trees located within healthy, vegetated groups and stands, rather than as isolated trees scattered throughout the site.
 - 2. Trees that have a reasonable chance of survival once the site is developed.
 - 3. Trees that can be incorporated into required landscaping and setback areas.
 - 4. Trees adjacent to required critical area buffers.
 - 5. Trees having a land stability function.
 - 6. Trees that can be incorporated into a perimeter buffer or screen the site from adjacent properties.
 - 7. Trees that can be incorporated into required open space and/or recreational amenity areas or tracts.
 - 8. Trees that will not pose a threat to persons or properties.
 - 9. Conifers which provide for superior ability to intercept stormwater during high rain events over deciduous trees.
- B. Tree Retention Requirement.
 - 1. At least twenty-five percent of the existing trees which are ten inches in diameter or greater measured four feet six inches above grade and meet the priorities in subsection A of this section, shall be retained.
 - 2. The review authority may approve retention of trees which do not meet the size requirement above as a contribution toward the sum of the diameter inches required if a group of trees and its associated undergrowth can be preserved and falls within one of the priorities identified in subsection A of this section.

A. Existing Tree Survey

Two tree surveys were conducted on site. One survey was conducted by Team 4 Engineering which manually located approximately 2300 trees which met the tree retention criteria. These trees were flagged and located using GPS. Because of the size of the project area, manually locating all significant trees proved to be extremely time consuming. American Forest Management then conducted a second site survey using a sample inventory method to quantify the number of significant trees on the property.

Fifty-nine, 0.1-ac fixed plots with a 37.2-foot plot radius were randomly sampled across the site. Approximately 10 percent of the site area was inventoried, and the data extrapolated to estimate the number of significant trees per acre across the site. See "Significant Tree Inventory Report" (American Forest Management, March 2019).

Five forest types/areas were identified across the site and the number of significant trees per acre were estimated for each forest type. In addition, the number of trees in poor condition for each forest type/area was documented.

The Poulsbo Municipal Code (PMC) Chapter 18.180.070 *Tree protection measures* requires the development of tree retention tract(s), open space tract(s) or other protective mechanism for preserving and protecting existing trees and vegetated areas prior to initiating tree removal and land alteration on the site. This chapter also requires that the existing trees to be retained are shown in plans and protective measures (including protection fencing detail) illustrated.

A Tree Retention Plan has been developed to demonstrate compliance with the City of Poulsbo's retention requirements for Parcels V and VI (see sheets TP-001 through TP-105). Existing significant trees as inventoried by Team 4 Engineering are shown. In general significant trees at or outside of the project's limit of work on Parcels V and VI have been retained, and tree protection fencing and special construction activities are proposed for significant tree critical root zones within the limit of work. (See below for a summary of compliance with the tree retention requirement percentage based on the American Forestry Management inventory method). In cases where existing significant tree critical root zones extend into the project area (within the limit of work), each tree's likelihood of long-term survival and health has been evaluated on a case-by-case basis. Trees located at or near the limit of work line but whose critical root zones would be detrimentally affected by proposed grading, paving, walls, and/or buildings, have been identified for removal. Trees with critical root zones in more favorable proposed conditions (such as minimal grading and landscape areas) have been selected for retention. Note that the existing tree inventories and site survey data do not locate all trees on site; it may be assumed that trees and vegetation outside of the project's limit of work will be left undisturbed *in situ*. This retention strategy, along with limiting the extents of proposed grading, pavements, walls, and buildings will create a nearly continuous existing forested and vegetated condition along the outer boundaries of Parcels V and VI.

The project intends to utilize the protective measures listed in Chapter 18.180.070 items B through D, consistent with accepted urban forestry practices, including but not limited to:

- Installation and maintenance of tree protection fencing and signage (see TP-105 Tree Retention Details) for the entirety of construction.
- Continuous mulching and maintenance of critical root zones of existing trees to remain throughout the project.
- Special construction practices to reduce compaction and root cutting, including performing some work by alternate methods such as light machinery or hand labor.
- Prohibition of storage of materials and chemicals on or adjacent to root zones and trees.
- Clean cutting of roots over 2" diameter only as needed and under supervision of a licensed arborist.
- Corrective pruning of canopies to avoid damage supervised by a licensed arborist.

The project looks forward to further collaboration with the City to determine the best practices for tree protection on this site.

B. Summary of Compliance with Tree Retention Requirement

The PMC requires the retention of 25 percent of trees which are 10 inches in diameter or greater measure 4.5 feet above grade subject to the priorities noted above from PMC 18.180.030.

Approximately 40.6 percent of significant trees are proposed to be retained on Parcels V and VI.

ZONE	AREA (AC)	SIGNIFICANT TREES/AC	TOTAL SIGNIFICANT TREES	AREA PRESERVED WITHIN ZONE (AC)	TOTAL SIGNIFICANT TREES RETAINED	% RETAINED
1	18.7	123	2300	1	126	5.5%
2	17	119	2026	7.7	916	45.2%
3	7.7	128	991	7.7	991	100%
4	4.9	103	508	3.3	334	65.9%
NF	No existing forest					
TOTAL	48.3		5824	19.7	2367	40.6%

**Note that Area 5 is located outside of the regulated parcels and is not included in this calculation as tree retention is not required in those zones. Areas 1 and 2 within Parcel VII are not included in the significant tree retention calculations. These inventory areas were included, however, in the calculations for establishing the significant trees per acre counts.*