



Site Visit Report

Preserving Trees. Empowering People.

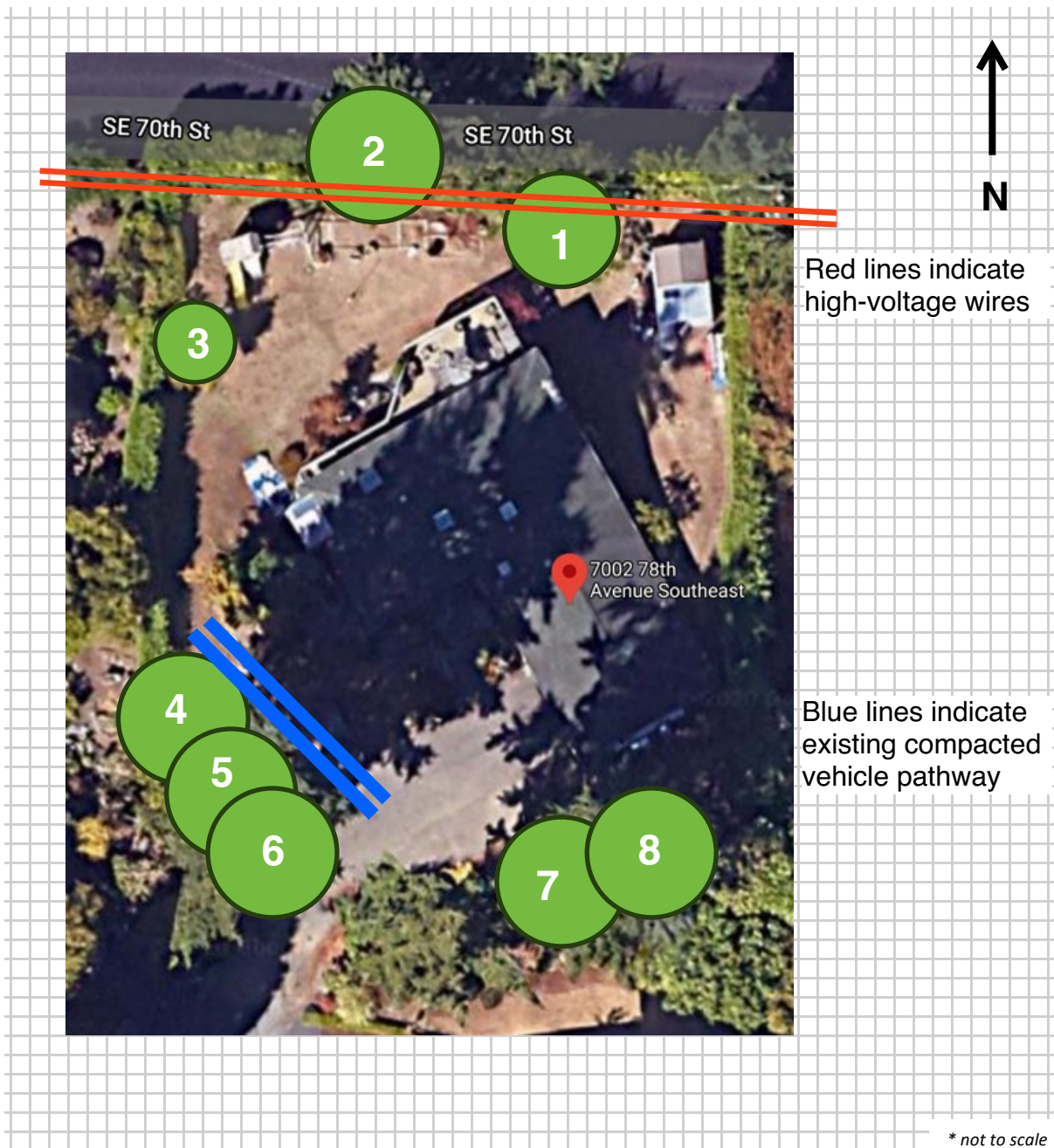
WA Lic. # TREE1L*832B3 • Bonded & Insured • SDOT TSP-164
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Client: Chung Youn

Date: 12/01/20 (rev)

Address: 7002 78th Ave SE, Mercer Island, WA

Sheet: 1 of 1



Findings & Recommendations:

Tree133 was hired to perform an inventory and recommend protection for trees located in proximity to proposed construction at a residential site. I performed site visits on November 9 and December 1 to gather tree data and evaluate potential construction impacts. All measurements are relative to the center of trunk for each tree. Tree diameter was measured at standard height (dsh), defined as 4.5 feet above grade. Height measurements are estimates. The following report documents my findings and recommendations.

Consultant: Craig Bachmann, Certified Arborist # RM-7652AT / TRAQ

Tree 1 - *Quercus palustris* (pin oak): 14.9" dsh, 35 ft height

Tree located in right of way north of property boundary. High-voltage wires passing through canopy at approximately 25 feet height. Previously topped at 15 feet for line clearance. Canopy has since regrown through two-phase primary lines (est 7 kV). The low height of the high-voltage wires, their location within tree canopy, and the canopy overhang of a residential site at less than 20 feet above ground level lead me to conclude this situation presents a site hazard for property occupants and construction crews. Recommend removal by a qualified line clearance arborist (or by utility crews and subsequent replacement. City permit required for removal.

Per City of Mercer Island code, replacement should include two (2) trees. Confirm replacement requirements with city due to circumstances of removal.

Tree 2 - *Pseudotsuga menziesii* (Douglas-fir): 26.4" dsh, 80 ft height

Tree located in right of way north of property boundary. Rooted on slope below yard grade and above SE 70th St. Previously side-pruned for clearance from high-voltage wires. Current clearance less than one (1) foot.

Recommend establishment of tree protection zone (TPZ) with radius equal to 8x trunk diameter on south aspect of tree within developed property boundary. This model yields a radius of 17.5 feet for this tree. Install and maintain tree protection per City of Mercer Island requirements. See graphic on following page.

With tree protection properly installed and maintained per above, I do not anticipate any significant impact to tree health as a result of proposed construction on the property.

Tree 3 - *Acer palmatum* (Japanese maple): 6.2" dsh, 15 ft height

Small tree located outside of construction area and away from path of equipment travel. North leader previously removed. No anticipated impact from construction assuming equipment activity and material storage remain outside drip line area.

Tree 4 - *Thuja plicata* (western red cedar): 38.6" dsh, 80 ft height

Tree located near driveway. Compacted turf/gravel two-track vehicle pathway passes through drip line area. See reference images on following page. Strongly encourage further protection of root zone within drip line due to anticipated travel of heavy equipment to/from construction area.

Recommend installation of tree protection fencing along boundary of equipment travel area (within existing compacted pathway) and following drip line on north side of canopy to prevent disturbance of the critical root zone. Add protection for equipment travel path by installation of 12 inch layer of woody mulch or 6 inch layer of mulch with 3/4-inch plywood sheets or matting on top. Alternate material solutions are also available to provide equivalent or better protection. Finally, recommend installation of plywood protection "box" around lower trunk - 8 feet height, approx. 18 inches from trunk - to prevent mechanical damage by passing equipment.

Trees 5 & 6 - *Pseudotsuga menziesii* (Douglas-fir): 35.3" dsh / 31.1" dsh, 110 ft height
Both trees rooted near and overhanging paved driveway. No significant impacts anticipated from construction providing equipment travel and material storage is limited to paved surfaces. Recommend installation of tree protection fencing along boundary of paved driveway adjacent to Trees 5 & 6 and including small Japanese maple to north. Continue tree protection fencing along drip line to property boundary.

Note - At time of inspection, Tree 5 was observed to have several significant resin "streamers" on south and southeast aspects of lower trunk beginning at 10-15 feet height. Possible old wound on south side at 10 feet. Consider advanced assessment of lower trunk to obtain further details on wood condition and possible internal decay.

Trees 7 & 8 - *Pseudotsuga menziesii* (Douglas-fir): 25" dsh / 20" dsh, 80 ft height
Both trees rooted near south property boundary above retaining wall and overhanging unpaved (gravel/dirt) vehicle parking area. Surface within parking area is heavily compacted from extensive use. As described by client, no construction or excavation will take place for this area. Anticipate continued vehicle use and possible material storage during construction. No construction impacts expected for these trees.

All tree protection recommended within this report should remain in place until construction is complete.

Reference - Images

Existing vehicle pathway adjacent to Tree 4

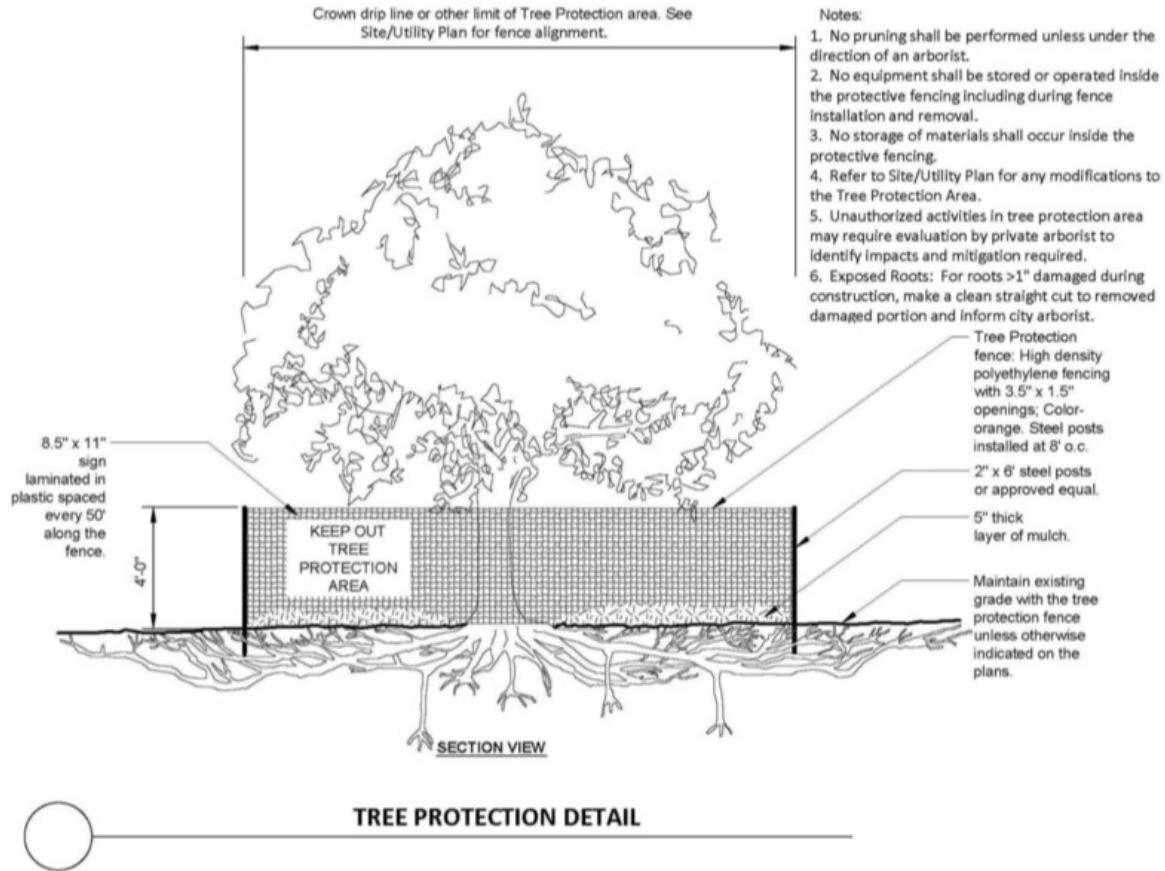


View from south



View from north

Reference - Tree Protection Detail



Source: <https://www.mercerisland.gov/sites/default/files/fileattachments/planning/page/2091/treeprotectionfencingdetail.pdf>

Assumptions & Limitations

1. Consultant has agreed to undertake Services on the subject Site. Consultant assumes that the Client owns or is the agent for the owner of the Site and that the legal description of the site provided by the Client is accurate. Consultant assumes that Client has granted license for Site access for the limited purpose of providing Services.
2. Consultant assumes that the Site and its use do not violate and is in compliance with all applicable codes, ordinances, statutes or regulations.
3. The Client is responsible for making all relevant records and related information available to the Consultant in a timely manner and for the accuracy and completeness of that information. Consultant may also obtain information from other sources that it considers reliable. Nonetheless, Client is responsible for the accuracy and completeness of that additional information and Consultant assumes no obligation for the accuracy and completeness of that additional information.
4. Consultant may provide report or recommendations based on published municipal regulations. The Consultant assumes that the municipal regulations published on the date of the report/recommendation are current and assumes no obligation related to unpublished city regulation information.
5. Any reports and the analysis and recommendations included represent the opinion of Consultant. Our fee is in no way contingent upon any specified result or occurrence of a subsequent event, nor upon any finding to be reported.
6. Consultant assessments are made in conformity with acceptable evaluation, diagnostic and reporting techniques and procedures as recommended by the International Society of Arboriculture.
7. All Services and reports consider only known targets and visible/accessible tree conditions without dissection, excavation, probing, climbing or coring. Measurements are subject to typical margins of error, considering the oval or asymmetrical cross-section of most trunks and canopies.
8. All observations and conclusions reflect the condition of the tree(s) and Site at the time of inspection, based on observable factors at the day and time of inspection. The timeframe for risk categorization should not be considered a guarantee period for the tree or level of risk. Only those tree(s) specified in the scope of work were assessed. Please keep in mind; any tree, whether it has visible weaknesses or not, will fail if the forces applied exceed the strength of the tree of its parts.
9. Tree(s) included in this project are evaluated as though under responsible ownership and competent management.
10. Consultant 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.
11. Any documentation/reporting resulting from this project shall be used for intended purposes only and by the parties to whom they are addressed. Possession of this report does not include the right of publication. Loss or alteration of any part of this report invalidates the entire report.
12. Neither all or any part of the contents of resulting documentation/reporting, nor copy thereof, shall be conveyed by anyone, including the client, to the public through advertising, public relations, news, sales, or other media, without prior expressed written consent of Consultant.
13. Sketches, diagrams, graphs and images in this report are intended as visual aids. They are not necessarily to scale and should be not construed as engineering or architectural reports or surveys.
14. Consultant reserves the right to amend conclusions or recommendations if additional relevant information is made available.
15. Consultant makes no warranty or guarantee, express or implied, that problems or deficiencies of the tree(s) or Site in question may not arise in the future. Any report is based on the opinions of the authoring arborist and does not provide guarantees regarding the future performance, health, vitality, structural stability or safety of the tree(s) described or assessed. Neither the arborist nor Tree133 LLC has assumed any responsibility for liability associated with the trees on or adjacent to this project Site, their future demise and/or any damage which may result therefrom. Changes to an established tree's environment can cause decline, death and/or structural failure.