

Memorandum

To: Brandt Design Group c/o Bree Medley
Site: 8163 W Mercer Way, Mercer Island, 98040
Re: Tree Inventory and Assessment
Date: March 11, 2021; revised May 5, 2021
Project Arborist: Connor McDermott,
ISA Certified Arborist #PN- 8704A
ISA Qualified Tree Risk Assessor
Reviewed By: Haley Galbraith,
ISA Board Certified Master Arborist #PN-7512BM
ISA Qualified Tree Risk Assessor
Referenced Documents: Topographic Survey Seaspect Short Plat (Core Design Engineers, 4/20/2015)
Site Plan: Kahn Spec Home (Brandt Design Group, 11/30/2020)
Attached: Tree Table (Tree Solutions Inc., April 30, 2021)

This memo documents my site visit to the above referenced site on February 25, 2021. I was asked by Bree Medley, of Brandt Design Group, to document the species, size, health, and structural condition of each tree on site to see if any were regulated as exceptional. I documented the diameter at standard height (DSH), health, and structural ratings of the trees to update the tree inventory for the site, based on the topographic survey I received from Bree Medley (Topographic Survey Seaspect Short Plat, Core Design Engineers, 4/20/2015).

This inventory was requested by John Kenney, City Arborist for Mercer Island. He requested the size and species of the trees on site to be verified in accordance to city regulations, and to verify if any of the trees were considered exceptional.

The species on site included European pear (*Pyrus communis*), apple (*Malus sp.*) and red alder (*Alnus rubra*). I confirmed that the three trees on site were of significant size, but not exceptional trees. I followed the standard in Mercer Island Municipal Code (MIMC) that defines an exceptional tree as a tree with a diameter greater than or equal to the threshold listed in the exceptional tree table (MIMC 19.16.010) as well as all trees 36 inches diameter or greater.

I have included an annotated site plan and survey to serve as the site map and attached a table of trees that has detailed information about each tree I assessed.

Based on the plans sent by Bree Medley ("Site Plan: Kahn Spec Home", Brandt Design Group, 11/30/2021), I do not believe the trees can safely be retained during construction. There is a direct conflict between the trees and the footprint of the house, including required excavation for the foundation.

Mercer Island Municipal Code (MIMC 19.10.010.C2) requires that development plans retain 30 percent of viable trees on site. Trees 1 and 2 are viable. I determined that tree 3 is not.

Tree 3 (7.9-inch and 9-inch apple tree) is in fair to poor condition. At the time of my site visit, the tree appeared to be in poor structural condition. There was excessive dead wood and a broken top. However, it was enveloped in ivy and blackberry which limited my visual assessment and blocked my access to the trunk. I could not determine if live buds were present or not. Apple trees grown in western Washington are prone to foliar diseases and insect infestations. They grow aggressively and require regular pruning if grown for apples which causes decay. The combination of these factors contributed to my determination that the tree is not viable for long term retention.

If these trees are removed, they will require replacement planting. I recommend you replant with the following species, which will maintain the character of the property and be suitable for the available space. These species include:

- Shore pine (*Pinus contorta* var. *contorta*)
- Japanese snowbell (*Styrax japonicus*)
- 'Eddie's White Wonder' dogwood (*Cornus nuttallii* x *florida* 'Eddies White Wonder')

Respectfully submitted,

Connor McDermott,
ISA Certified Arborist, Qualified Tree Risk Assessor

Appendix A Site Maps

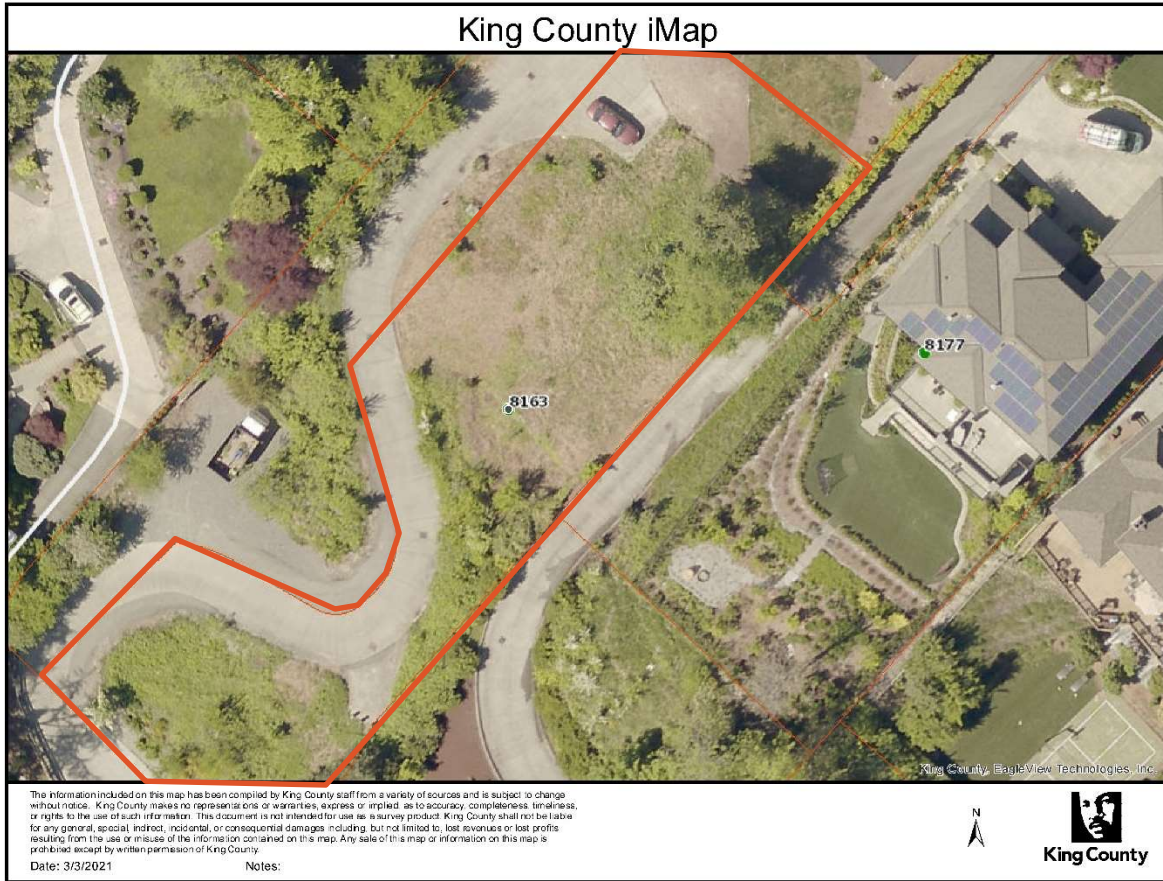


Figure 1. Aerial photograph from King County iMap GIS shows the subject site outlined in red (Accessed 3/3/2021).

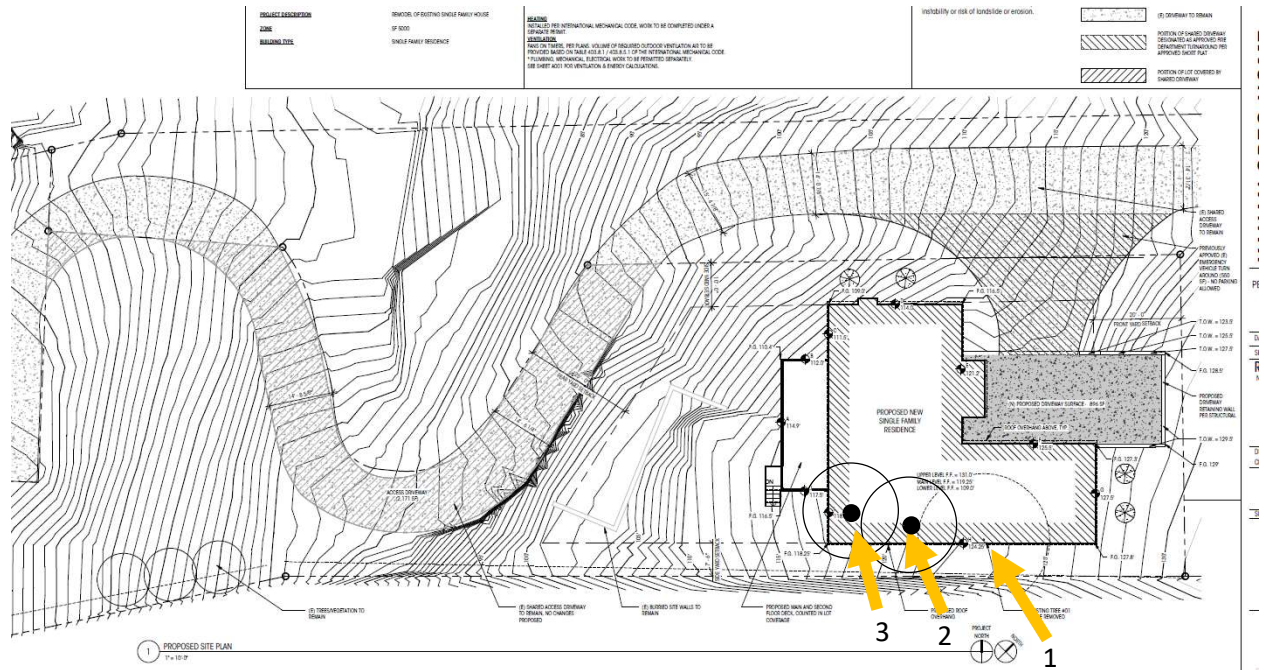


Figure 2. Site Plan: Kahn Spec Home (Brandt Design Group, 11/30/2020) with tree locations overlaid on the current development plans.

Appendix B Photographs



Photograph 1. Site Trees in order Trees 1-3 from left to right.



Photograph 2. Looking south at the site from the private drive off of W Mercer Way.

Appendix C Assumptions & Limiting Conditions

- 1 Consultant assumes that the site and its use do not violate, and is in compliance with, all applicable codes, ordinances, statutes or regulations.
- 2 The consultant may provide a report or recommendation based on published municipal regulations. The consultant assumes that the municipal regulations published on the date of the report are current municipal regulations and assumes no obligation related to unpublished city regulation information.
- 3 Any report by the consultant and any values expressed therein represent the opinion of the consultant, and the consultant's fee is in no way contingent upon the reporting of a specific value, a stipulated result, the occurrence of a subsequent event, or upon any finding to be reported.
- 4 All photographs included in this report were taken by Tree Solutions, Inc. during the documented site visit, unless otherwise noted. Sketches, drawings and photographs (included in, and attached to, this report) are intended as visual aids and are not necessarily to scale. They should not be construed as engineering drawings, architectural reports or surveys. The reproduction of any information generated by architects, engineers or other consultants and any sketches, drawings or photographs is for the express purpose of coordination and ease of reference only. Inclusion of such information on any drawings or other documents does not constitute a representation by the consultant as to the sufficiency or accuracy of the information.
- 5 Unless otherwise agreed, (1) information contained in any report by consultant covers only the items examined and reflects the condition of those items at the time of inspection; and (2) the inspection is limited to visual examination of accessible items without dissection, excavation, probing, climbing, or coring.
- 6 These findings are based on the observations and opinions of the authoring arborist, and do not provide guarantees regarding the future performance, health, vigor, structural stability or safety of the plants described and assessed.
- 7 Measurements are subject to typical margins of error, considering the oval or asymmetrical cross-section of most trunks and canopies.
- 8 Tree Solutions did not review any reports or perform any tests related to the soil located on the subject property unless outlined in the scope of services. Tree Solutions staff are not and do not claim to be soils experts. An independent inventory and evaluation of the site's soil should be obtained by a qualified professional if an additional understanding of the site's characteristics is needed to make an informed decision.
- 9 Our assessments are made in conformity with acceptable evaluation/diagnostic reporting techniques and procedures, as recommended by the International Society of Arboriculture.



Table of Trees
8163 W Mercer Way, Mercer Island, WA

Arborist: C McDermott
Date of Inventory: 2/25/2021
Table Prepared: 4/29/2021

DSH (Diameter at Standard Height) is measured 4.5 feet above grade, or as specified in the Guide for Plant Appraisal, 10th Edition, published by the Council of Tree and Landscape Appraisers. DSH for multi-stem trees are noted as a single stem equivalent, which is calculated using the method defined in the Guide for Plant Appraisal, 10th Edition. Letters are used to identify trees on neighboring property with overhanging canopies. Dripline is measured from the center of the tree to the outermost extent of the canopy.

Tree ID	Scientific Name	Common Name	DSH (inches)	DSH Multistem	Health Condition	Structural Condition	Dripline Radius (feet)				Exceptional Threshold	Exceptional	Proposed Action	Notes
							N	E	S	W				
1	<i>Pyrus communis</i>	European pear	18.1		Good	Fair	12.8	10.8	8.8	10.8	36.0	-	Remove	Multiple tear outs in canopy; maintained in natural form
2	<i>Alnus rubra</i>	Red alder	16.7		Good	Good	15.7	11.7	10.7	12.7	36.0	-	Remove	Blackberry, holly, and cherry laurel crowd base; ivy up trunk; vertical crack in trunk on east side
3	<i>Malus sp.</i>	Apple	11.7	7.5, 9	Fair	Poor	8.5	3.5	8.0	9.5	20.0	-	Remove	Ivy limits assessment; heavy ivy up in canopy; blackberry at base, estimated DSH due to ivy; ivy weighs down canopy to northwest

VERTICAL DATUM

NAVD 88 (PER CITY OF MERCER ISLAND CONTROL)

BENCHMARK

CITY OF MERCER ISLAND CONTROL POINT 4331: FOUND 1" X 1" BRASS TACK IN CONC. DOWN 1.1" IN CASE, IN THE CENTERLINE OF WEST MERCER WAY NEAR THE NORTHEASTERLY CORNER OF SITE. ELEV=140.59

BASIS OF BEARINGS

N48°05'18"W BETWEEN THE FOUND CENTERLINE MONUMENTS ON WEST MERCER WAY

REFERENCES

- SEASPECT SHORT PLAT, M.J. FILE NO. SUB9706-005, MERCER ISLAND, WASHINGTON

LEGEND

- BOLLARD
- SIGN
- MAIL KIOSK
- GAS VALVE
- FIRE DEPARTMENT CONNECTION
- FIRE HYDRANT
- WATER METER
- WATER VALVE
- STORM DRAIN STUB
- CATCH BASIN TYPE I
- CATCH BASIN TYPE II
- STORM DRAIN MANHOLE
- SEWER STUB
- SEWER CLEANOUT
- SEWER MANHOLE
- POWER POLE
- POWER JUNCTION BOX
- POWER CONDUIT
- COMMUNICATION PEDESTAL
- FOUND CORNER AS NOTED

- BOF BOTTOM OF FLANGE
- TON TOP OF NUT
- R/C REBAR AND CAP
- BPA BUILDING PAD AREA

- ASPHALT
- POWER
- COMMUNICATIONS
- GAS
- STORM
- SEWER

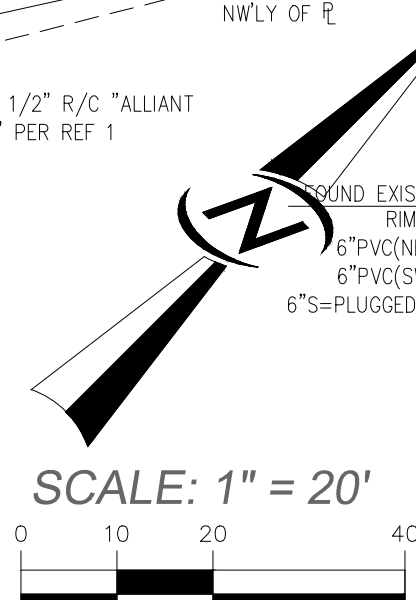
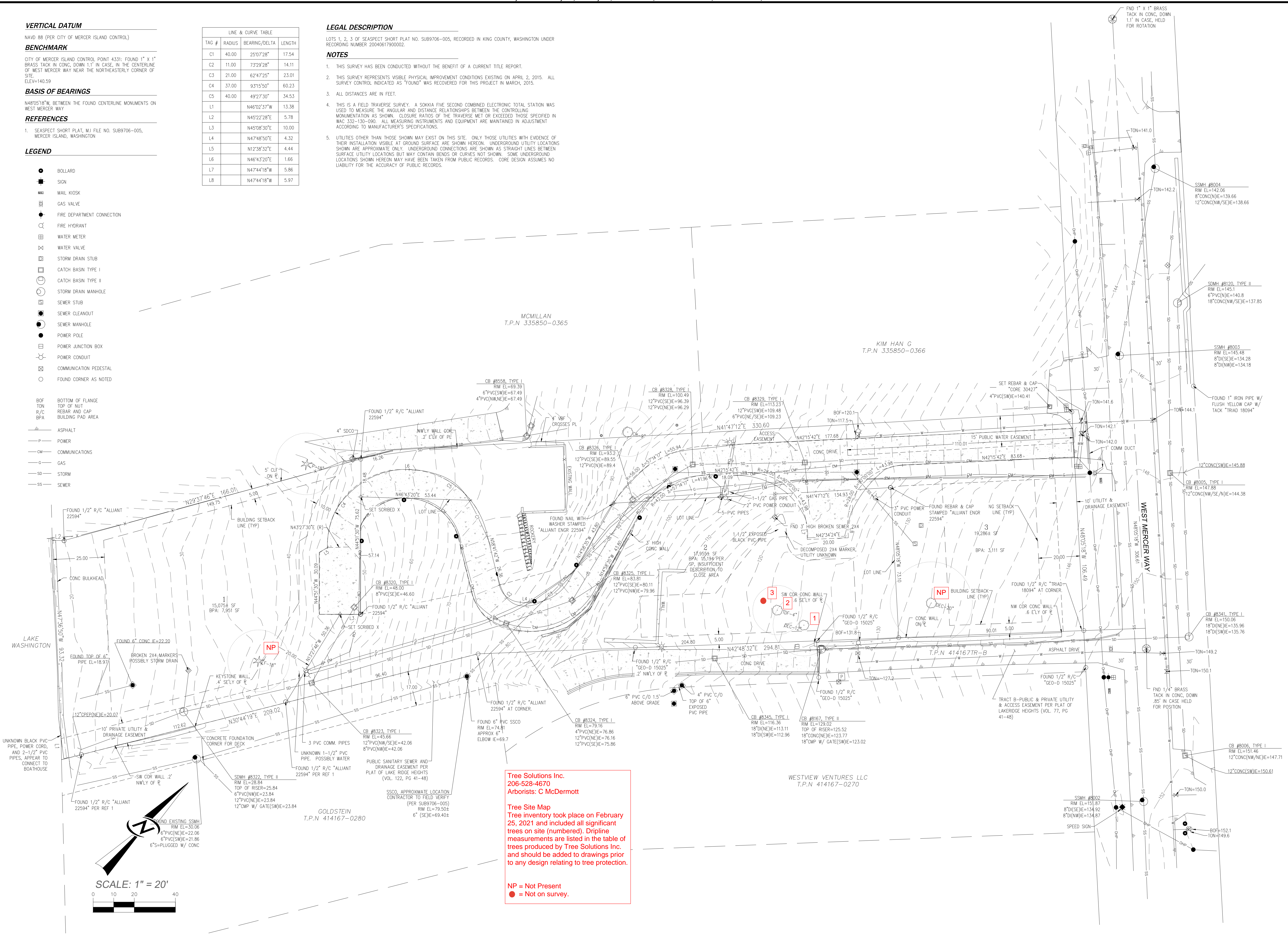
TAG #	RADIUS	BEARING/Delta	LENGTH
C1	40.00	25°07'28"	17.54
C2	11.00	73°29'28"	14.11
C3	21.00	62°47'25"	23.01
C4	37.00	93°15'50"	60.23
C5	40.00	49°27'30"	34.53
L1		N46°02'37"W	13.38
L2		N45°22'28"E	5.78
L3		N45°08'30"E	10.00
L4		N47°48'50"E	4.32
L5		N12°38'32"E	4.44
L6		N46°43'20"E	1.66
L7		N47°44'18"W	5.86
L8		N47°44'18"W	5.97

LEGAL DESCRIPTION

LOTS 1, 2, 3 OF SEASPECT SHORT PLAT NO. SUB9706-005, RECORDED IN KING COUNTY, WASHINGTON UNDER RECORDING NUMBER 20040617900002.

NOTES

- THIS SURVEY HAS BEEN CONDUCTED WITHOUT THE BENEFIT OF A CURRENT TITLE REPORT.
- THIS SURVEY REPRESENTS VISIBLE PHYSICAL IMPROVEMENT CONDITIONS EXISTING ON APRIL 2, 2015. ALL SURVEY CONTROL INDICATED AS "FOUND" WAS RECOVERED FOR THIS PROJECT IN MARCH, 2015.
- ALL DISTANCES ARE IN FEET.
- THIS IS A FIELD TRAVERSE SURVEY. A SOKKIA FIELD SECOND COMBINED ELECTRONIC TOTAL STATION WAS USED TO MEASURE THE ANGULAR AND DISTANCE RELATIONSHIPS BETWEEN THE CONTROLLING MONUMENTATION AS SHOWN. CLOSURE RATIOS OF THE TRAVERSE MET OR EXCEEDED THOSE SPECIFIED IN WAC 332-130-090. ALL MEASURING INSTRUMENTS AND EQUIPMENT ARE MAINTAINED IN ADJUSTMENT ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
- UTILITIES OTHER THAN THOSE SHOWN MAY EXIST ON THIS SITE. ONLY THOSE UTILITIES WITH EVIDENCE OF THEIR INSTALLATION VISIBLE AT GROUND SURFACE ARE SHOWN HEREON. UNDERGROUND UTILITY LOCATIONS SHOWN ARE APPROXIMATE ONLY. UNDERGROUND CONNECTIONS ARE SHOWN AS STRAIGHT LINES BETWEEN SURFACE UTILITY LOCATIONS BUT MAY CONTAIN BENDS OR CURVES NOT SHOWN. SOME UNDERGROUND LOCATIONS SHOWN HEREON MAY HAVE BEEN TAKEN FROM PUBLIC RECORDS. CORE DESIGN ASSUMES NO LIABILITY FOR THE ACCURACY OF PUBLIC RECORDS.



Tree Solutions Inc.
206-528-4670
Arborists: C McDermott

Tree Site Map
Tree inventory took place on February 25, 2021 and included all significant trees on site (numbered). Drip line measurements are listed in the table of trees produced by Tree Solutions Inc. and should be added to drawings prior to any design relating to tree protection.

NP = Not Present
● = Not on survey.

DATE: 04/20/2015 DESIGNED: MRP/NRR DRAWN: MRP/NRR APPROVED: KJV PROJECT MANAGER: KEVIN VANDERZANDEN, PLS	SHEET: 1 OF 1 PROJECT NUMBER: 15039	<p>TOPOGRAPHIC SURVEY SEASPECT SHORT PLAT JOHN KAHAN</p> <p>ENGINEERING • PLANNING • SURVEYING</p> <p>14711 NE 29th Place, #101 Bellevue, Washington 98007 425.885.7877 Fax 425.885.7963</p> <p>5656 E. MERCER WAY MERCER ISLAND, WA 98040</p>
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