

## Arborist Report

To: Buping Wang & Wanqui Yang  
Site: 6450 E Mercer Way, Mercer Island, WA 98040  
Re: Tree Inventory  
Date: February 2, 2024  
Project Arborist: Charlie Vogelheim  
ISA Certified Arborist PN-9375A  
ISA Qualified Tree Risk Assessor  
Reviewed By: Tyler Bunton  
ISA Certified Arborist PN-8715A  
ISA Qualified Tree Risk Assessor  
Referenced Documents: Wang & Yang ADU, Architectural Proposed Site Plan A1.02 (Siyao Studios, 1/31/2024)  
Attached: Table of Trees  
Tree Site Map

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### Summary

I inventoried and assessed 3 large (regulated) and exceptional trees on this site. I tagged each tree with a numbered aluminum tree tag. Tree identifier corresponds to the number on each tag.

Of the trees assessed, one met the exceptional tree criteria outlined in the Mercer Island City Code (MICC).

I found no tree groves on-site. Trees that are part of a grove shall also be considered exceptional trees, unless they meet the definition of a hazardous tree.

There were 13 adjacent trees that required documentation for this property. Trees on neighboring properties were documented if they appeared to be large (regulated) or exceptional trees and their driplines extended over the property line. All trees on adjacent properties were estimated from the subject site or public property such as the adjacent right-of-way (ROW). I used alphabetical tree identifiers for trees off-site.

### Assignment and Scope of Work

This report outlines the site inspection by Charlie Vogelheim of Tree Solutions Inc., on August 31, 2023. I was asked to visit the site and provide a formal report including findings and management recommendations. Buping Wang and Wanqui Yang, requested these services for project planning purposes for the installation of an Auxiliary Dwelling Unit (ADU).

## Observations

### Site

This 19,270 square foot site was located on Mercer Way of Mercer Island. According to the City of Mercer Island GIS Portal, a landslide area, protected slope area, erosion hazard, and seismic hazard exist on-site.

There were two structures on-site, a two-story single family home, and a garage on the western side of the property.

### Proposed Plans

The most recent plans (Architectural Site Plan A1.01, Siyao Studios, 7/16/2023) propose the expansion of the garage so that it includes an ADU. The garage footprint appears to remain mostly the same on the west, east, and north sides, the south side of this structure plans to be expanded by about 23 feet.

### Trees

I inventoried and assessed two large (regulated) trees and one exceptional Japanese maple tree (*Acer palmatum*) on-site (tree 271). There were 13 trees off-site with overhanging canopies that I also inventoried; most were on the northern boundary of the property.

All the trees I assessed were in fair to good health and structural condition.

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

## Discussion—Construction Impacts

The most recent development plans (Wang & Yang ADU, Architectural Proposed Site Plan A1.02, Siyao Studios, 1/31/2024) propose no tree removals for this project.

No ground disturbance is allowed within the minimum limits of disturbance (MLOD), defined as five times DSH, or 6 feet from the tree trunk, whichever is greater. Development work within the MLOD has high a potential for mechanical damage to structural roots and may destabilize trees.

Development work may occur within the recommended limits of disturbance (RLOD), defined as eight times DSH or greater, depending on individual tree species and/or condition. All work proposed within the RLOD must be reviewed and approved by the project arborist and the City of Mercer Island. The RLOD for each retained tree is listed in the attached table of trees.

### Tree 269

This tree has a RLOD of 9 feet and a RLOD of 6 feet, no ground disturbance or regrading may occur within 6 feet of this tree. The building footprint for the extension of the garage/ADU structure extends to approximately 8.5 feet north of tree 269 and is within the tree's dripline and its RLOD of 9 feet. Plans indicate that some sidewalk will be removed within the northern part of the RLOD, and that sidewalk panels will be installed in the northwestern part of the RLOD.

All work within the RLOD should specifications laid out in Appendix F. Notably, a flat-front bucket should be used when removing the sidewalk within the RLOD, air-excavation should be used for any excavation within the RLOD, and any required subgrade or fill should use well-draining aggregates with little fines.

Since the dripline extends to the north 13.6 feet, this tree will require pruning for the installation of this structure. All pruning should be conducted by an ISA certified arborist following current applicable ANSI A300 specifications.

### **Recommendations**

- Obtain all necessary permits and approval from the city prior to commencement of site work.
- Create a site/tree retention plan that included the elements laid out in MICC 19.10.090
- Tree protection consisting of 6-foot-tall chain-link fencing should be installed at the RLOD of retained trees. Trees growing in a group should be protected at the edge of their shared RLOD. General tree protection specifications can be found in Appendix G.
- All off-site trees must be protected during construction.
- All pruning should be conducted by an ISA certified arborist following current and applicable ANSI A300 specifications.
- Follow tree protection specifications located in Appendix F throughout construction.
- All tree retention and removal regulations must be followed and are outlined in MICC Chapter 19.10 Trees.
- Ensure tree protection standards comply with MICC 19.10.080.

Respectfully submitted,

Charlie Vogelheim,  
Consulting Arborist

## Appendix A **Glossary**

**DBH or DSH:** diameter at breast or standard height; the diameter of the trunk measured 54 inches (4.5 feet) above grade (Council of Tree and Landscape Appraisers 2019)

**tree grove:** a group of eight or more trees each 10 inches or more in diameter that form a continuous canopy. Trees that are part of a grove shall also be considered exceptional trees, unless they also meet the definition of a hazardous tree. (MICC 19.16.010)

**exceptional tree:** a tree measuring 36 inches DSH or greater or with a diameter that is equal to or greater than the diameter listed in the Exceptional Tree Table (MICC 19.16.010)

**ISA:** International Society of Arboriculture

**large tree (regulated):** A tree measuring 10 inches or greater DSH (MICC 19.16.010)

**MLOD (Minimum Limits of Disturbance)** Minimum Limits of Disturbance: represents a distance five (5) times that of the trunk or 6-feet, whichever is greater, and is the minimum distance from a trunk that a structural root can be cut to maintain tree stability.

**RLOD (Recommend Limits of Disturbance):** As outlined in ISA Best Management Practices: Managing Trees During Construction, this is calculated as a radial distance 8 times the trunk diameter or greater depending on tree species and/or condition. For the purpose of this report, this represents the critical root zone (CRZ).

**Visual Tree Assessment (VTA):** method of evaluating structural defects and stability in trees by noting the pattern of growth (Mattheck & Breloer 1994)

## Appendix B References

Accredited Standards Committee A300 (ASC 300). ANSI A300 (Part 1) Tree, Shrub, and Other Woody Plant Management – Standard Practices (Pruning). Londonderry: Tree Care Industry Association, 2017.

Council of Tree and Landscape Appraisers, Guide for Plant Appraisal, 10<sup>th</sup> Edition Second Printing. Atlanta, GA: The International Society of Arboriculture (ISA), 2019.

Fite, Kelby and Dr. E. Thomas Smiley. Best Management Practices: Managing Trees During Construction, Second Edition. Champaign, IL: International Society of Arboriculture (ISA), 2016.

Mattheck, Claus and Helge Breloer, The Body Language of Trees.: A Handbook for Failure Analysis. London: HMSO, 1994.

Mercer Island Municipal Code (MICC) 19.16.010. Definitions

Mercer Island Municipal Code (MICC) 19.10. Trees

## Appendix C Photographs



**Photograph 1.** Looking south at tree 269. Current plans call for the extension of a garage/ADU to be 8.5 feet of this tree. Branches on the scaffold to the northwest (arrow) will need to be pruned for building and construction clearance.

## Appendix D 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.

## Appendix E Methods

### **Measuring**

I measured the diameter of each tree at 54 inches above grade, diameter at standard height (DSH). If a tree had multiple stems, I measured each stem individually at standard height and determined a single-stem equivalent diameter by using the method outlined in the Guide for Plant Appraisal, 10<sup>th</sup> Edition Second Printing published by the Council of Tree and Landscape Appraisers. A tree is regulated based on this single-stem equivalent diameter value. Because this value is calculated in the office following field work, some unregulated trees may be included in our data set. These trees are included in the tree table for informational purposes only and not factored into tree totals discussed in this report.

### **Tagging**

I tagged each tree with a circular aluminum tag at eye level. I assigned each tree a numerical identifier on our map and in our tree table, corresponding to this tree tag. I used alphabetical identifiers for trees off-site.

### **Evaluating**

I evaluated tree health and structure utilizing visual tree assessment (VTA) methods. The basis behind VTA is the identification of symptoms, which the tree produces in reaction to a weak spot or area of mechanical stress. A tree reacts to mechanical and physiological stresses by growing more vigorously to re-enforce weak areas, while depriving less stressed parts. An understanding of the uniform stress allows the arborist to make informed judgments about the condition of a tree.

### **Rating**

When rating tree health, I took into consideration crown indicators such as foliar density, size, color, stem and shoot extensions. When rating tree structure, I evaluated the tree for form and structural defects, including past damage and decay. Tree Solutions has adapted our ratings based on the Purdue University Extension formula values for health condition (*Purdue University Extension bulletin FNR-473-W - Tree Appraisal*). These values are a general representation used to assist arborists in assigning ratings.

#### **Health**

Excellent - Perfect specimen with excellent form and vigor, well-balanced crown. Normal to exceeding shoot length on new growth. Leaf size and color normal. Trunk is sound and solid. Root zone undisturbed. No apparent pest problems. Long safe useful life expectancy for the species.

Good - Imperfect canopy density in few parts of the tree, up to 10% of the canopy. Normal to less than  $\frac{3}{4}$  typical growth rate of shoots and minor deficiency in typical leaf development. Few pest issues or damage, and if they exist they are controllable or tree is reacting appropriately. Normal branch and stem development with healthy growth. Safe useful life expectancy typical for the species.

Fair - Crown decline and dieback up to 30% of the canopy. Leaf color is somewhat chlorotic/necrotic with smaller leaves and "off" coloration. Shoot extensions indicate some stunting and stressed growing conditions. Stress cone crop clearly visible. Obvious signs of pest problems contributing to lesser condition, control might be possible. Some decay areas found in main stem and branches. Below average safe useful life expectancy

Poor - Lacking full crown, more than 50% decline and dieback, especially affecting larger branches. Stunting of shoots is obvious with little evidence of growth on smaller stems. Leaf size and color



reveals overall stress in the plant. Insect or disease infestation may be severe and uncontrollable. Extensive decay or hollows in branches and trunk. Short safe useful life expectancy.

### **Structure**

Excellent - Root plate undisturbed and clear of any obstructions. Trunk flare has normal development. No visible trunk defects or cavities. Branch spacing/structure and attachments are free of any defects.

Good - Root plate appears normal, with only minor damage. Possible signs of root dysfunction around trunk flare. Minor trunk defects from previous injury, with good closure and less than 25% of bark section missing. Good branch habit; minor dieback with some signs of previous pruning. Codominant stem formation may be present, requiring minor corrections.

Fair - Root plate reveals previous damage or disturbance. Dysfunctional roots may be visible around the main stem. Evidence of trunk damage or cavities, with decay or defects present and less than 30% of bark sections missing on trunk. Co-dominant stems are present. Branching habit and attachments indicate poor pruning or damage, which requires moderate corrections.

Poor - Root plate disturbance and defects indicate major damage, with girdling roots around the trunk flare. Trunk reveals more than 50% of bark section missing. Branch structure has poor attachments, with several structurally important branches dead or broken. Canopy reveals signs of damage or previous topping or lion-tailing, with major corrective action required.

## Appendix F Tree Protection Specifications

*The following is a list of protection measures that must be employed before, during and after construction to ensure the long-term viability of retained trees.*

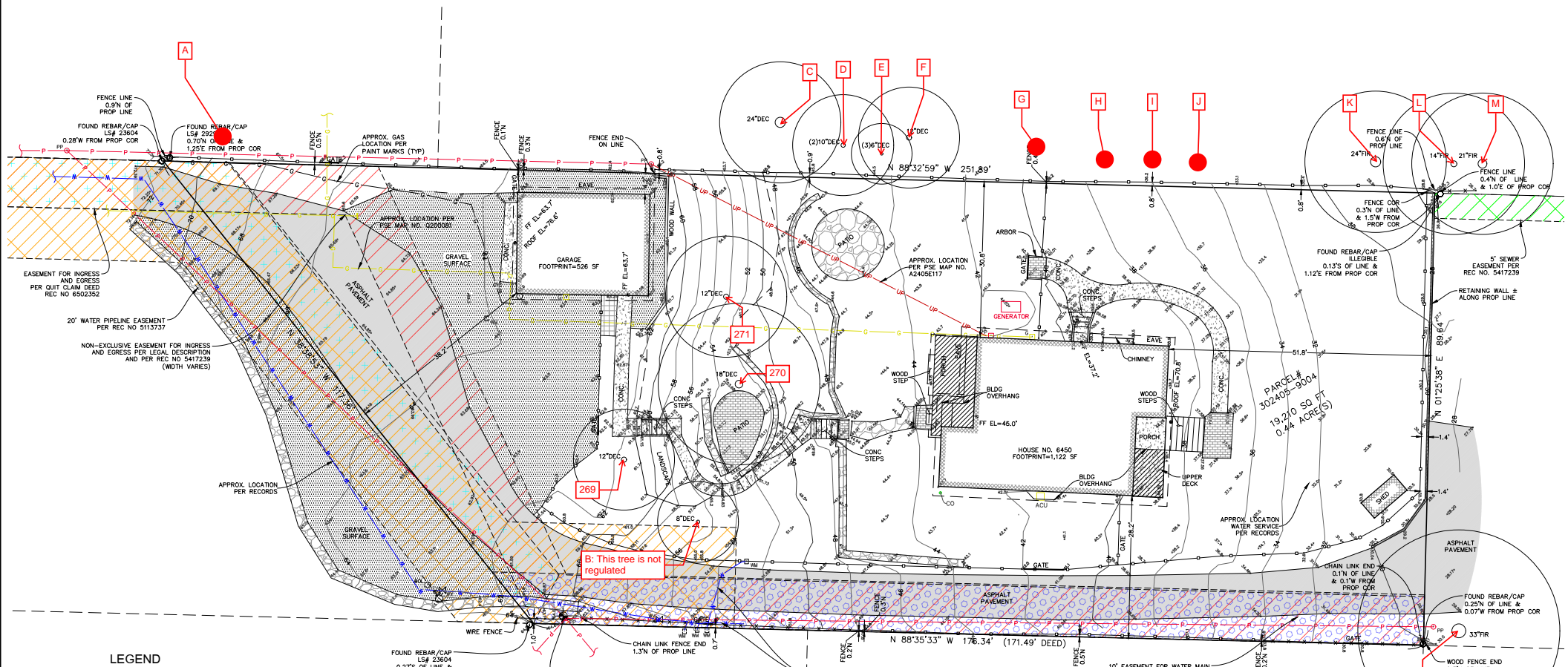
1. **Project Arborist:** The project arborists shall at minimum have an International Society of Arboriculture (ISA) Certification and ISA Tree Risk Assessment Qualification.
2. **Tree Protection Zone (TPZ):** The TPZ is to be set at the Recommended Limits of Disturbance listed in the Table of Trees. In some cases, the TPZ may extend outside tree protection fencing. Work within the TPZ must be approved and monitored by the project arborist.
3. **Tree Protection Fencing:** Tree protection shall consist of 6-foot-tall chain-link fencing installed at the TPZ as approved by the project arborist. Fence posts shall be anchored into the ground or bolted to existing hardscape surfaces.
  - a. Where trees are being retained as a group the fencing shall encompass the entire area including all landscape beds or lawn areas associated with the grove.
  - b. Per arborist approval, TPZ fencing may be placed at the edge of existing hardscape within the TPZ to allow for staging and traffic.
  - c. Where work is planned within the TPZ, install fencing at edge of TPZ and move to limits of disturbance at the time that the work within the TPZ is planned to occur. This ensures that work within the TPZ is completed to specification.
  - d. Where trees are protected at the edge of the project boundary, construction limits fencing shall be incorporated as the boundary of tree protection fencing.
4. **Access Beyond Tree Protection Fencing:** The project manager or project arborist shall be present when tree protection areas are accessed.
5. **Tree Protection Signage:** Tree protection signage shall be affixed to fencing every 20 feet. Signage shall be fluorescent, at least 2' x 2' in size. Signage will note: "Tree Protection Area – Do Not Enter: Entry into the tree protection area is prohibited unless authorized by the project manager." Signage shall include the contact information for the project manager and instructions for gaining access to the area.
6. **Filter / Silt Fencing:** Filter / silt fencing within or at the edge of the TPZ of retained trees shall be installed in a manner that does not sever roots. Install so that filter / silt fencing sits on the ground and is weighed in place by sandbags or gravel. Do not trench to insert filter / silt fencing into the ground.
7. **Monitoring:** The project arborist shall monitor all ground disturbance at the edge of or within the TPZ, including where the TPZ extends beyond the tree protection fencing.
8. **Soil Protection:** No parking, foot traffic, materials storage, or dumping (including excavated soils) are allowed within the TPZ. Heavy machinery shall remain outside of the TPZ. Access to the tree protection area will be granted under the supervision of the project arborist. If project arborist allows, heavy machinery can enter the area if soils are protected from the load. Acceptable methods of soil protection include applying 3/4-inch plywood over 6 inches of wood chip mulch or use of AlturnaMats® (or equivalent product approved by the project arborist). Retain existing paved surfaces within or at the edge of the TPZ for as long as possible.
9. **Soil Remediation:** Soil compacted within the TPZ of retained trees shall be remediated using pneumatic air excavation according to a specification produced by the project arborist.
10. **Canopy Protection:** Where fencing is installed at the limits of disturbance within the TPZ, canopy management (pruning or tying back) shall be conducted to ensure that vehicular traffic does not damage canopy parts. Exhaust from machinery shall be located 5 feet outside the dripline of retained trees. No exhaust shall come in contact with foliage for prolonged periods of time.

11. **Duff/Mulch:** Apply 6 inches of arborist wood chip mulch or hog fuel over bare soil within the TPZ to prevent compaction and evaporation. TPZ shall be free of invasive weeds to facilitate mulch application. Keep mulch 1 foot away from the base of trees and 6 inches from retained understory vegetation. Retain and protect as much of the existing duff and understory vegetation as possible.
12. **Excavation:** Excavation done at the edge of or within the TPZ shall use alternative methods such as pneumatic air excavation or hand digging. If heavy machinery is used, use flat front buckets with the project arborist spotting for roots. When roots are encountered, stop excavation and cleanly sever roots. The project arborist shall monitor all excavation done within the TPZ.
13. **Fill:** Limit fill to 1 foot of uncompacted well-draining soil, within the TPZ of retained trees. In areas where additional fill is required, consult with the project arborist. Fill must be kept at least 1 foot from the trunks of trees.
14. **Root Pruning:** Limit root pruning to the extent possible. All roots shall be pruned with a sharp saw making clean cuts. Do not fracture or break roots with excavation equipment.
15. **Root Moisture:** Root cuts and exposed roots shall be immediately covered with soil, mulch, or clear polyethylene sheeting and kept moist. Water to maintain moist condition until the area is back filled. Do not allow exposed roots to dry out before replacing permanent back fill.
16. **Hardscape Removal:** Retain hardscape surfaces for as long as practical. Remove hardscape in a manner that does not require machinery to traverse newly exposed soil within the TPZ. Where equipment must traverse the newly exposed soil, apply soil protection as described in section 8 of these specifications. Replace fencing at edge of TPZ if soil exposed by hardscape removal will remain for any period of time.
17. **Tree Removal:** All trees to be removed that are located within the TPZ of retained trees shall not be ripped, pulled, or pushed over. The tree should be cut to the base and the stump either left in place or ground out. A flat front bucket can also be used to sever roots around all sides of the stump, or the roots can be exposed using hydro or air excavation and then cut before removing the stump.
18. **Irrigation:** Retained trees with soil disturbance within the TPZ will require supplemental water from June through September. Acceptable methods of irrigation include drip, sprinkler, or watering truck. Trees shall be watered three times per month during this time.
19. **Pruning:** Pruning required for construction and safety clearance shall be done with a pruning specification provided by the project arborist in accordance with American National Standards Institute ANSI-A300 2017 Standard Practices for Pruning. Pruning shall be conducted or monitored by an arborist with an ISA Certification.
20. **Plan Updates:** All plan updates or field modification that result in impacts within the TPZ or change the retained status of trees shall be reviewed by the senior project manager and project arborist prior to conducting the work.
21. **Materials:** Contractor shall have the following materials onsite and available for use during work in the TPZ:
  - **Sharp and clean bypass hand pruners**
  - **Sharp and clean bypass loppers**
  - **Sharp hand-held root saw**
  - **Reciprocating saw with new blades**
  - **Shovels**
  - **Trowels**
  - **Clear polyethylene sheeting**
  - **Burlap**
  - **Water**

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. Minimum Limit of Disturbance (MLOD) is defined as 5 times trunk diameter or 6 feet, whichever is greater. Recommended Limit of Disturbance (RLOD) is 8 times trunk diameter or greater depending on tree species and/or condition. 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 I Threshold	Exceptional	24-Inch DSH or Greater	MLOD (feet)	RLOD (feet)	Proposed Action	Notes
							N	E	S	W							
269	<i>Prunus cerasifera</i>	Flowering Plum	13.9	7, 8, 9	Fair	Good	13.6	13.6	11.6	10.6	21.0		-	6	9	Impacted	Codominant at 3 feet, brown blossom rot.
270	<i>Magnolia denudata</i>	Yulan magnolia	14.6	7, 8, 10	Good	Good	15.6	15.6	15.6	15.6	-		-	6	15	Retain	Codominant at the base.
271	<i>Acer palmatum</i>	Japanese Maple	13.4	6.5, 7.6, 6.6, 5.9	Good	Fair	20.6	15.6	8.6	12.6	12.0	Exceptional - Size	-	6	13	Retain	Codominant at base, narrow unions, ivy around base.
<b>Offsite &amp; Non-regulated</b>																	
A	<i>Thuja plicata</i>	Western Redcedar	36.0		Good	Fair	16.5	21.5	16.5	16.5	30.0	Exceptional - Size	Yes	15			Codominant with 7 stems at 10 feet.
B	<i>Cornus florida</i>	Eastern Dogwood	9.5	5.3, 5.5, 5.7	Fair	Good	0.4	0.4	0.4	0.4	12.0		-	6			Not regulated. Possible anthracnose.
C	<i>Cornus kousa</i>	Kousa Dogwood	16.0		Fair	Good	20.7	20.7	20.7	20.7	12.0	Exceptional - Size	-	7			Assessment limited by hedge.
D	<i>Prunus laurocerasus</i>	Cherry laurel	14.1	10,10	Good	Good	10.6	10.6	10.6	10.6	-		-	6			Codominant at base.
E	<i>Prunus laurocerasus</i>	Cherry laurel	9.9	5, 5, 7	Good	Good	8.4	8.4	8.4	8.4	-		-	6			Not regulated, codominant at base
F	<i>Sorbus aucuparia</i>	Mountain-Ash	11.0		Good	Good	10.5	10.5	10.5	10.5	29.0		-	6			Assessment limited by hedge.
G	<i>Prunus laurocerasus</i>	Cherry laurel	11.0		Good	Good	8.5	8.5	8.5	8.5	-		-	6			
H	<i>Prunus laurocerasus</i>	Cherry laurel	11.0		Good	Good	8.5	8.5	8.5	8.5	-		-	6			
I	<i>Prunus laurocerasus</i>	Cherry laurel	11.0		Good	Good	8.5	8.5	8.5	8.5	-		-	6			
J	<i>Prunus laurocerasus</i>	Cherry laurel	11.0		Good	Good	8.5	8.5	8.5	8.5	-		-	6			
K	<i>Pseudotsuga menziesii</i>	Douglas-fir	24.0		Good	Good	16.0	11.0	22.0	16.0	30.0		Yes	10			
L	<i>Pseudotsuga menziesii</i>	Douglas-fir	12.0		Good	Good	20.5	8.5	20.5	8.5	30.0		-	6			
M	<i>Pseudotsuga menziesii</i>	Douglas-fir	24.0		Good	Good	21.0	11.0	21.0	6.0	30.0		Yes	10			Likely not overhanging.
N	<i>Pseudotsuga menziesii</i>	Douglas-fir	24.0		Good	Good	21.0	21.0	21.0	21.0	30.0		Yes	10			Not overhanging.

# TOPOGRAPHIC & BOUNDARY SURVEY



### LEGEND

- ASPHALT SURFACE
- BENCHMARK
- BRICK SURFACE
- BUILDING
- CENTERLINE ROW
- CLEANOUT
- CONCRETE SURFACE
- DECK
- FENCE LINE (CHAIN LINK)
- FENCE LINE (WIRE)
- FENCE LINE (WOOD)
- FIRE HYDRANT
- FLAGSTONE SURFACE
- GAS LINE
- GAS METER
- GRAVEL SURFACE
- PAVER SURFACE
- POWER METER
- POWER (OVERHEAD)
- POWER (UNDERGROUND)
- POWER POLE
- PROPERTY LINE (SUBJECT)
- PROPERTY LINES (ADJACENT)
- REBAR & CAP (SET)
- REBAR AS NOTED (FOUND)
- RETAINING WALL
- RIGHT-OF-WAY LINES
- ROCKERY
- TREE (AS NOTED)
- WATER LINE
- WATER METER
- WATER VALVE
- AIR CONDITION UNIT
- CONCRETE
- CORNER
- DECIDUOUS
- ELEVATION
- EVERGREEN
- FINISH FLOOR
- LAND SURVEYOR NUMBER
- PROPERTY
- RECORD DATA

### EASEMENTS

- INGRESS, EGRESS EASEMENT  
REC. NO. 5417239
- WATER EASEMENT  
REC. NO. 20221208000443
- WATER PIPELINE EASEMENT  
REC. NO. 5113737
- INGRESS, EGRESS EASEMENT  
REC. NO. 8502352
- SEWER EASEMENT  
REC. NO. 5417239

Tree Solutions Inc.  
Arborist: Charlie Vogelheim  
206-528-4670

Tree Inventory Date:  
08/31/2023

Regulated trees 10-inches diameter or greater on the site are identified with a number. This number corresponds with the metal tree tag unless otherwise noted.

Inventory also includes all regulated off-site trees that had overhanging canopies or that were likely to be impacted by site work. Off-site trees are identified by a letter unless otherwise noted.

Dripline measurements, species, and other tree specifics are listed in the tree table produced by Tree Solutions Inc.

Survey and site plans should be updated to include tree identifiers and accurate dripline data prior to any design related to tree protection.

Not on survey\*: Identified with a red circle

\*Tree locations added to the survey are approximate and should be confirmed and added to the survey.



( IN FEET )  
1" = 10 FT.

**STEEP SLOPE/BUFFER DISCLAIMER:**  
THE LOCATION AND EXTENT OF STEEP SLOPES SHOWN ON THIS DRAWING ARE FOR INFORMATIONAL PURPOSES ONLY AND CANNOT BE RELIED ON FOR DESIGN AND/OR CONSTRUCTION. THE PITCH, LOCATION, AND EXTENT ARE BASED SOLELY ON OUR GENERAL OBSERVATIONS ON SITE AND OUR CURSORY REVIEW OF READILY AVAILABLE PUBLIC DOCUMENTS. AS SUCH, TERRANE CANNOT BE LIABLE OR RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY STEEP SLOPE INFORMATION. ULTIMATELY, THE LIMITS AND EXTENT OF ANY STEEP SLOPES ASSOCIATED WITH ANY SETBACKS OR OTHER DESIGN OR CONSTRUCTION PARAMETERS MUST BE DISCUSSED AND APPROVED BY THE REVIEWING AGENCY BEFORE ANY CONSTRUCTION CAN OCCUR.

INDEXING INFORMATION	
NE 1/4	NE 1/4
SECTION: 30	TOWNSHIP: 24N
RANGE: 05E W.M.	COUNTY: KING

TOPOGRAPHIC & BOUNDARY SURVEY  
PARCEL NO. 302405-9004

Wang / Yang Residence

6450 E Mercer Way  
MERCER ISLAND, WA 98004



# TERRANE

10801 Main Street, Suite 102  
Bellevue, WA 98004  
p: 425-458-4488 | e: info@terrane.net

JOB NUMBER:	230545
DATE:	04/26/23
DRAFTED BY:	TLR
CHECKED BY:	JGMDRT
SCALE:	1" = 10'
REVISION HISTORY:	
05/10/23	POWER LINES
SHEET NUMBER	
2 OF 2	