

3705 77th Pl SE (Mercer Island)

August 8, 2022

Page 1 of 2

Washington Tree Experts

9792 Edmonds Way #123

Edmonds, WA 98020

206-362-3380

wtetree@yahoo.com

Parcel #: 5458800550
Street: 3705 77th Pl. SE
City, Zip: Mercer Island, WA 98040
C/O: CC Home Design LLC

Assignment:

Provide tree inventory and site details to meet development requirements.

Site and trees (see attached site map and inventory):

3705 77th Pl. SE is an 8,345 square foot residential lot with a single-family home.

There are 5 significant trees on the property. The trees are all in good health with good structures. Trees have been identified and numbered with aluminum tags. Tree diameters were measured using a diameter tape.

Two trees will require removal and replacement due to construction impacts. #3 and 5 Cherry trees (*Prunus* sp.). Removal will not adversely affect the remaining trees for retention.

Retention trees will be protected with sturdy fencing around the tree protection zone (TPZ) for the duration of the development project and according to standards MICC 19.10.8. The TPZ is equal to the driplines of the trees. Prohibited activities include, but are not limited to grade changes, trenches, root cutting, equipment traffic, or storing of materials.

Recommendations:

All retained trees should be reassessed after the project and a plant health care plan should be initiated.

In examining each tree, we look at such factors as:

- size
- vigor
- crown health
- deadwood and hanging branches
- pest and disease

While no one can predict with absolute certainty if a tree will or will not fail, we can, by using scientific process assess which of the trees is most likely to fail and take appropriate action.

Washington Tree Experts Certified Arborist

3705 77th Pl SE (Mercer Island)

August 8, 2022

Page 2 of 2

Prepared by



Jennifer Wells

Certified Arborist #PN6209A

ISA Qualified Tree Risk Assessor

To prepare this report, I drew upon my formal education in arboriculture and training used to obtain my International Society of Arboriculture credentials. Over my seventeen year career I have worked with a diverse range of clients before, during, and after development projects with trees.

Waiver of Liability

This information represents the tree health assessment at this point in time. My findings do not guarantee future safety nor are they predictions of future event. Information contained in this report covers only those items that were examined and reflects the condition of those items at the time of inspection. The inspection is limited to visual examination of accessible items without dissection, excavation, probing, or coring.

Attachments

- site map for illustration only and not to scale
- tree inventory

Texts

M. Dirr-Manual of Woody Landscapes, Fifth Edition, 1998

R. Harris, J. Clark, N. Matheny-Arboriculture Third Edition 1999

ANSI A300 Part 5-2019 Management of Trees and Shrubs During Site Planning, Site Development, and Construction

Tree Inventory Table 3705 77th Pl. SE

Tree ID	Scientific Name	Common Name	DBH (in)	Health Condition	Structural Condition	Combined Viability	Exceptional (Y/N)	Proposed Action	TPZ	Notes
1	<i>Pinus mugo</i>	Mugo pine	14	Good	Good	Viable	No	Retain	Dripline	Ornamental bonsai
2	<i>Acer palmatum</i>	Japanese maple	12	Good	Good	Viable	No	Retain	Dripline	
3	<i>Prunus serrulata</i>	Flowering cherry	16	Good	Good	Viable	No	Remove		Construction encroaches the critical root zone
4	<i>Prunus subhirtella</i> 'Pendula'	Weeping Flowering Cherry	6	Good	Good	Viable	No	Retain	Dripline	
5	<i>Prunus sp.</i>	Cherry	8	Good	Good	Viable	No	Remove		Pest and disease issues/ construction encroaches the critical root zone
6	<i>Pinus sp.</i>	Pine	20				No			Neighboring tree
7	<i>Prunus sp.</i>	Cherry	8				No			Neighboring tree
8	<i>Prunus sp.</i>	Cherry	9				No			Neighboring tree
9	<i>Photinia</i>	Photinia	14				No			Neighboring tree
10	<i>Picea sp.</i>	Spruce	12				No			Neighboring tree
11	<i>Prunus sp.</i>	Cherry	13				No			Neighboring tree
12	<i>Prunus sp.</i>	Cherry	8				No			Neighboring tree

AVERAGE BUILDING ELEVATION			
PROPOSED RESIDENCE			
WALL	WALL SEGMENT	MIDPT. ELEV.	WALL SEGMENT X ELEV.
A	13'0"	127'0"	3589
B	8'5"	126'0"	1076.7
C	9'0"	126'0"	3949
D	23'5"	126'0"	2339.5
E	29'5"	120'0"	4308
F	14'0"	120'0"	8138.53
G	3'5"	120'0"	711
H	21'5"	121'0"	4389.17
I	42'5"	126'0"	7520
TOTAL	175		21623.5

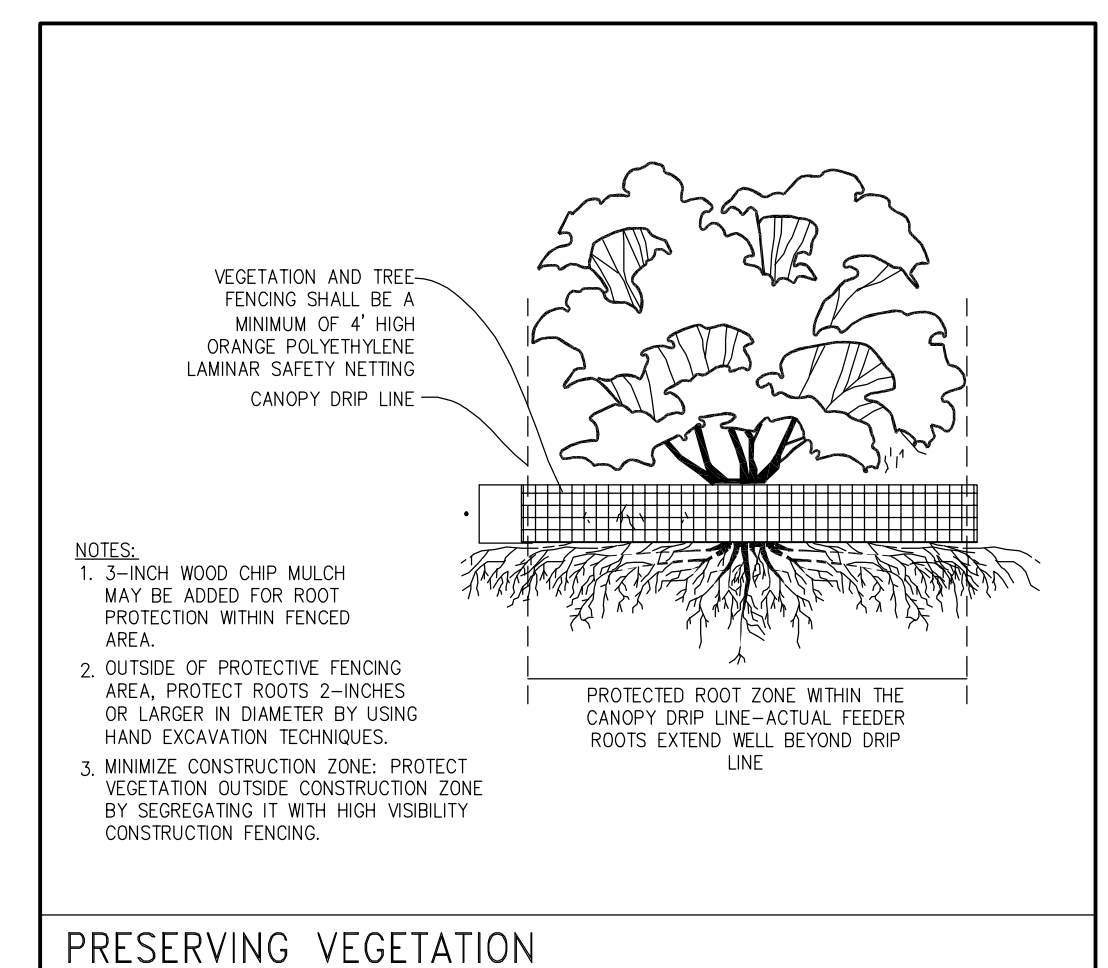
AVERAGE BUILDING ELEVATION = $21623.5/175 = 123.56'$
 MAXIMUM BUILDING HEIGHT = $123.56' + 30'0" = 153.56'$
 PROPOSED BUILDING HEIGHT = 151.95'

BASEMENT FLOOR AREA CALCULATION			
WALL	LENGTH	COVERAGE	RESULT
A	9'08"	100%	9'08"
B	1'	100%	1'
C	12'	100%	12'
D	19'33"	6.3	1.22'
E	19'5"	18.6%	3.63'
TOTAL	60'91"		26.93%

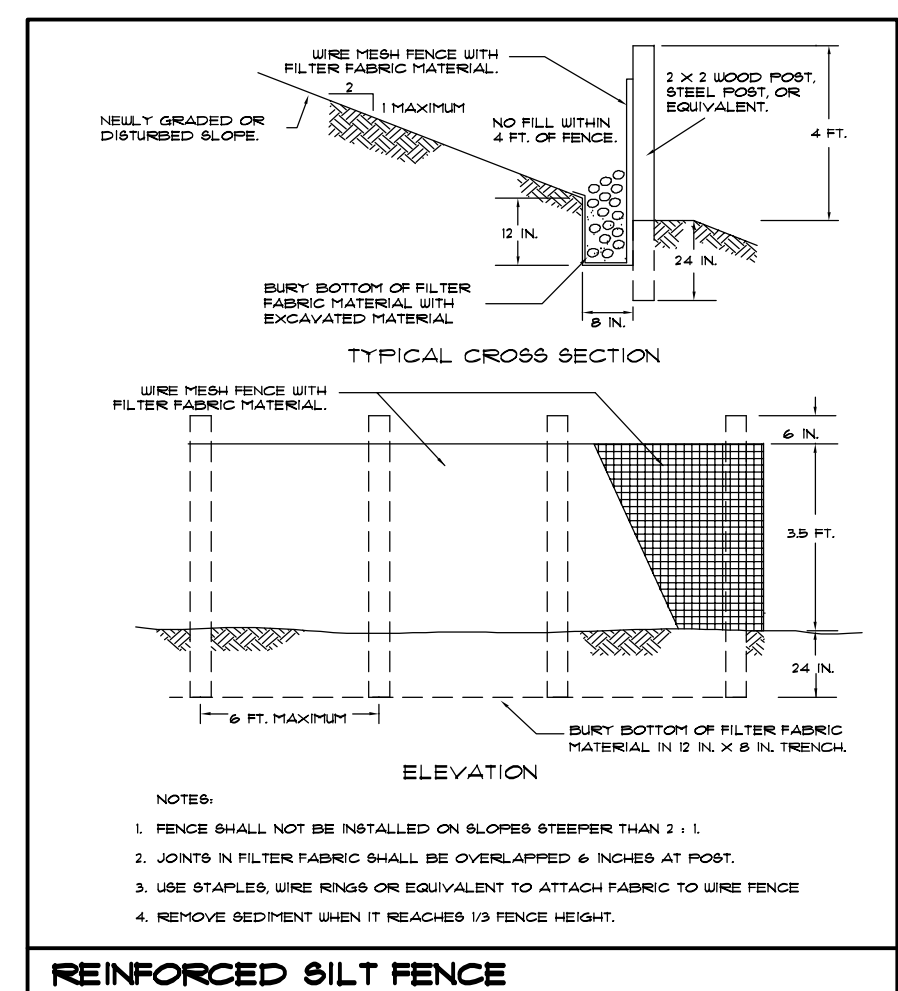
FORTION OF EXCLUDED BASEMENT FLOOR AREA:
 619 (ACTUAL SQ. FT. W/ GARAGE) X (26.93/60.91) = 273.7 SQ. FT.
 AREA OF BASEMENT EXCLUDED = 619-273.7 = 345.3 SQ. FT.

GROSS FLOOR AREA			
LOWER FLOOR W/ GARAGE	619	SQ. FT.	
MAIN FLOOR W/ GARAGE	1635	SQ. FT.	
UPPER FLOOR	1380	SQ. FT.	
TOTAL	3634	SQ. FT.	
BASEMENT EXCLUDED	345	SQ. FT.	
TOTAL	3289	SQ. FT.	
LOT AREA	8345	SQ. FT.	
SQUARE FOOTAGE ALLOWED (40%)	3338	SQ. FT.	

IMPERVIOUS SURFACE			
PROPOSED HOME W/ O.H.	1860	SQ. FT.	
COVERED DECK	210	SQ. FT.	
FRONT PORCH	79	SQ. FT.	
WALKS AND DRIVE	743	SQ. FT.	
TOTAL	2892	SQ. FT. (34.7%)	
LOT AREA	8345	SQ. FT.	
ALLOWABLE	3338	SQ. FT. (40%)	



TREE INVENTORY				
EXISTING TREES	SPECIES	DIAMETER	RETAINED	ROW
①	CHERRY	6"	NO	ROW
②	CHERRY	12"	YES	
③	EVRGN	14"	NO	
④	DEC.	3 1/2" 1"	YES	ROW
⑤	DEC.	7"	NO	

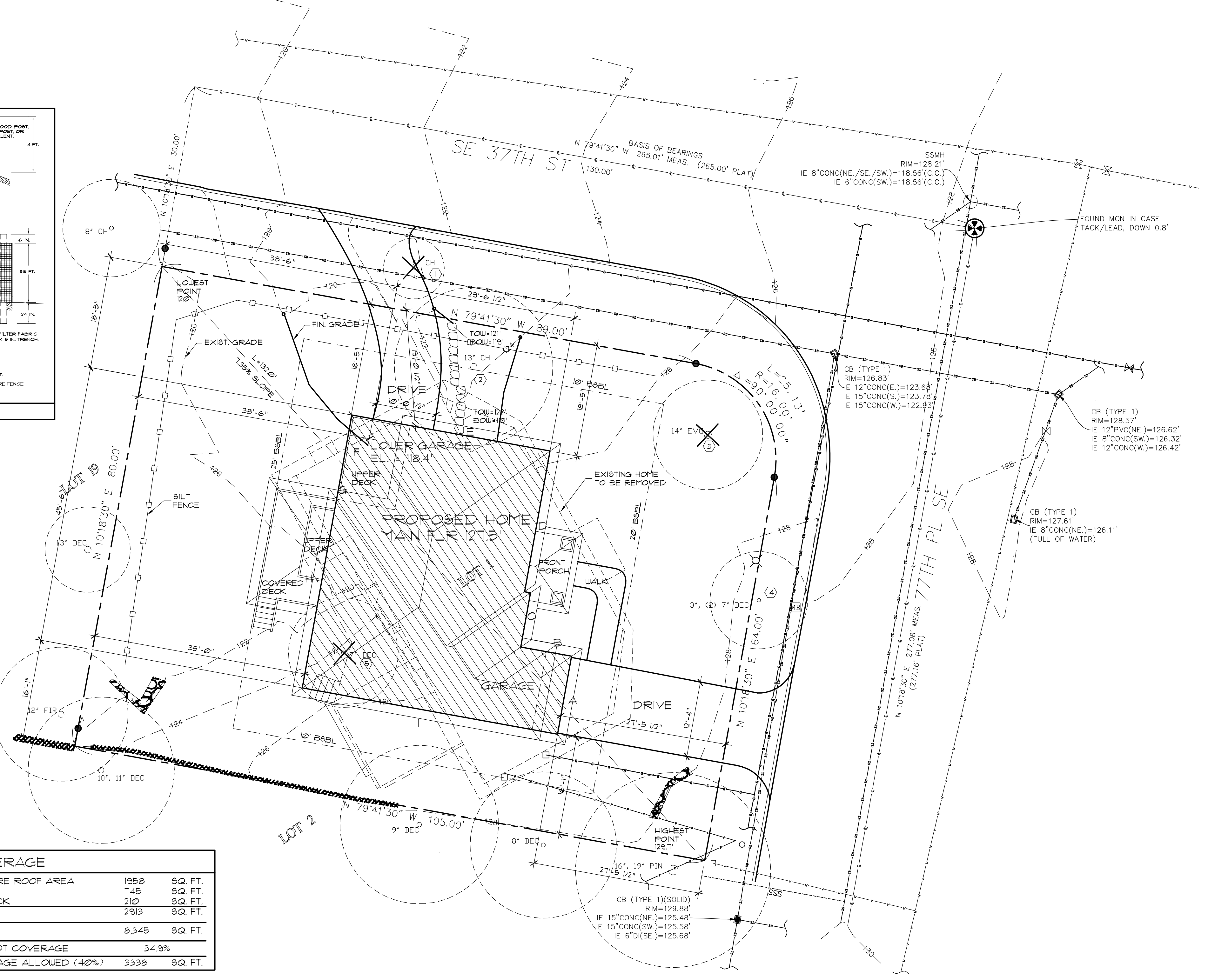


REINFORCED SILT FENCE

LOT COVERAGE			
MAIN STRUCTURE ROOF AREA	1958	SQ. FT.	
DRIVEWAYS	145	SQ. FT.	
COVERED DECK	210	SQ. FT.	
TOTAL	2913	SQ. FT.	
LOT AREA	8345	SQ. FT.	
PROPOSED LOT COVERAGE	34.9%		
SQUARE FOOTAGE ALLOWED (40%)	3338	SQ. FT.	

HARDSCAPE CALC			
LOT AREA	8345	SQ. FT.	
AREA FROM LOT COVERAGE	2913	SQ. FT.	
ROCKERY	50	SQ. FT.	
TOTAL	2963	SQ. FT.	
HARDSCAPE ALLOWED	43.9% (2964 SQ. FT.)		
PROPOSED HARDSCAPE	35.5% (2963 SQ. FT.)		

CONTACT:
 CHARLIE CHEN
 P.O. BOX 317
 MERCER ISLAND, WA 98040
 PH: 206 - 235-8818



SITE PLAN
 SCALE 1" = 10'
 3105 11TH PL. SE
 MERCER ISLAND, WA 98040
 PARCEL #5458800550
 ZONING: R-8.4

LEGAL:
 (PER STATUTORY WARRANTY DEED RECORDING# 199411230981)
 LOT 1, BLOCK 7, MERCERDALE, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 59 OF PLATS, PAGES 94, 95 AND 96, IN KING COUNTY, WASHINGTON.

MICC 19.02.020(F)(3)(d) requires noxious weeds to be removed during new development proposals. Please add a note to the plan set that states:

"Development proposals for a new single-family home shall remove Japanese knotweed (*Polygonum cuspidatum*) and Regulated Class A, Regulated Class B, and Regulated Class C weeds identified on the King County Noxious Weed list, as amended, from required landscaping areas established pursuant to subsection 19.02.020(F)(3)(a). New landscaping associated with new single-family home shall not incorporate any weeds identified on the King County Noxious Weed list, as amended. Provided, that removal shall not be required if the removal will result in increased slope instability or risk of landslide or erosion."

Pursuant to MICC 19.02.050(D) any "...rockeries, retaining walls, fences, or any combination thereof, are limited to a maximum height of 42 inches within that portion of any required yard which lies within 20 feet of any improved street." Please indicate the height of the rock wall that falls within 20 feet of the public-right-of-way.

If the height exceeds the 42-inch height limitation you can apply for a fence height deviation pursuant to MICC 19.02.050(F).

Fence height deviation required for 4' retaining walls.

DESIGN HOMES
 CHARLIE HOMES
 P.O. BOX 317
 MERCER ISLAND, WA, 98040

A NEW HOME FOR:
 THE LIU RESIDENCE
 3105 11TH PL. SE
 MERCER ISLAND, WA 98040

JOB NO: 21006
 DATE: 6/13/22
 DRWN. BY: TH
 REVISED: 9/8/22

SHEET NO.
 10