

C. Gary Schulz

Wetland/Forest Ecologist

7700 S. Lakeridge Drive
Seattle, Washington 98178-3135
206/772/6514 ~ 206/920/5489 cell

May 17, 2017

Mr. David Yeh
P.O. Box 809
Mercer Island, WA 98040

**Re: Wetland / Stream Reconnaissance on the Mercer Island - Short Plat Property
(Parcel #1224049034): City of Mercer Island, WA # SUB 16-011.**

Dear Mr. Yeh:

Per your request, I conducted a wetland and stream reconnaissance on your Mercer Island Property. The Property is 0.63 acres located at 7239 S.E. 27th Street in the City of Mercer Island (Parcel # 5315100695). The site has been developed with one house and a detached carport.

The City issued a letter dated March 14, 2017 requesting a critical area review from a qualified professional. The City's IGS (Information & Geographic Services) website map does not depict wetlands or watercourses on the Property but this mapping requires on-site verification. The Washington State Wetland Rating System for Western Washington (Ecology Pub. # 04-06-025) is currently used to rate wetlands per the City's code definitions.

Purpose

The primary purpose of this report is to respond to the City's request (3/14/17 Letter – Robin Proebsting, Senior Planner). An on-site reconnaissance is to confirm the absence or presence of wetland or stream (watercourse) areas and/or associated buffers. Wetland and/or stream ratings and associated buffers are provided per the City's critical areas code (Mercer Island Municipal Code - Chapter 19.07).

Methodology

The wetland method used the Corps of Engineers Wetland Delineation Manual (1987), as required, for wetland identification. In addition, the Regional Supplement to the Corps of Engineers Wetland Delineation Manual (Regional Supplement-May 2010) is used specifically for Western Mountains, Valleys, and Coast Region. Wetland determination criteria (vegetation, soils, and hydrology) observed on-site was used to support the reconnaissance investigation findings. If stream channels were present the Ordinary High Water Mark (OHWM) would be flagged to map those areas.

Mr. David Yeh, Mercer Island (Parcel # 5315100695)
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Wetland Data Plots # 1 and # 2 are attached to this letter report. Figures 1 and 2 are attached as the City's IGS (GIS) Watercourse local mapping and the Topographic Survey for 7239 SE 27th Street (Site Surveying Inc. 1/18/16). The Survey may be reviewed as the full-size and scaled version submitted with the application materials. Several photographs from the reconnaissance are also attached to this letter report.

Wetland / Stream Reconnaissance

The Reconnaissance was conducted on April 7, 2017 to review the potential presence of wetland area or a stream (watercourse) channel on the subject Property. The site is one lot described as developed land with scattered tree cover. Formal landscaping and maintained lawn areas cover most of the property adjacent to the existing house and carport.

Douglas fir (*Pseudotsuga menziesii*) and mountain ash (*Sorbus spp.*) trees are present along the east property boundary. Groups of Western red cedar (*Thuja plicata*) are present on the upper west side of the Property and include a pine (*Pinus spp.*) tree. Some Western hazelnut (*Corylus cornuta*) shrub cover was observed. The past grading and construction of an old retaining wall have disturbed the south boundary area. This area is bordered by dense Himalayan blackberry (*Rubus discolor*) but includes sword fern (*Polystichum munitum*) groundcover. The Property is predominantly a landscaped site.

The site's topography is gently sloping to the east and drops towards a natural area that is located just off-site (Figure 1 & 2). There are no visible signs of erosion from surface water runoff or related watercourse / stream channels on the Property. Recent rainfall combined with compacted soil caused mowed lawn areas to be wet at the time of this investigation.

A wet area was observed next to the Property's south boundary at the toe of an old retaining wall. Groundwater seepage can also be attributed to the cut slope area where the wall was constructed. This was the only area that needed wetland data plots to confirm wetland or non-wetland conditions on the Property. Abnormally wet conditions were expected as the rainfall data from the Sea-Tac Airport Climate Summary for March 2017 recorded above normal rainfall since January 1, 2017.

The wetland data plots (Plots # 1 & 2) were installed adjacent to the retaining wall and graded area on the south side of the Property. The area is compacted and has significant shrub cover of Himalayan blackberry. The dominant groundcover is hydrophytic (wetland) due to the presence of creeping buttercup (*Ranunculus repens*) and bluegrass (*Poa spp.*) However, the observed soil conditions indicate upland area with gravelly sandy loam soil. Also the hydrology observed in the excavated soil pits was absent or very limited and did not indicate wetland conditions.

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In summary, the Reconnaissance did not observe wetland area or a watercourse / stream channel on the Property. Please contact me if you require more information or have questions.

Sincerely,

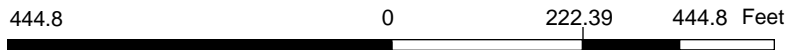

C. Gary Schulz
Wetland/Forest Ecologist



Legend

- Eagle Nest
- Eagle Nest Buffer
 - 330 Ft
 - 660 Ft
- Watercourse
 - 1-Potential Fish Use
 - 2-Perennial
 - 3-Seasonal
- Bridge
- Paved Road
- Streets
- SideWalk
- Paved Driveway
- Paved Parking Area
- Address
- Building
- Parcels
- Docks
- Parks

1: 2,669



Disclaimer: These maps were developed by the City of Mercer Island and are intended to be a general purpose digital reference tool. These maps are not an accepted legal instrument for describing, establishing, recording or maintaining descriptions for property concerns or boundaries. The City makes no representation or warranty with respect to the accuracy or currency of these data sets, especially in regard to labeling of surveyed dimensions, or agreement with official sources such as records of survey, or mapped locations of features.

Notes
1 Figure 1



View: South central portion of Lot.
Wetland Data Plot 1 is near the toe of an old rockery.



View: Southeast corner of Lot.
Wetland Data Plot 2 is also in a lawn area near the old rockery.



View: Wetland Data Plot 2 soil pit. The soil pit was dry - non-hydric soil and no wetland hydrology.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project Site: SE 27th Street Mercer Island City/County: Mercer Island/King Sampling Date: 4/7/17
 Applicant/Owner: David Yeh State: WA Sampling Point: 1
 Investigator(s): Gary Schulz Section, Township, Range: 12, 24N, 4E
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 2
 Subregion (LRR): A Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Alderwood (AgC) NWI classification: _____
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology , significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology , naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland?	
Hydric Soil Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Remarks: Plot is located along south boundary adjacent to old retaining wall - rockery. Area is gently sloping to the east. Higher than normal rainfall.			

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size: <u>to 100th acre</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:																
1. _____	_____	<u>n/a*</u>	<u>=</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
50% = _____, 20% = _____	_____	= Total Cover		Prevalence Index worksheet: <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; text-align: center;"><u>Total % Cover of:</u></td> <td style="width: 50%; text-align: center;"><u>Multiply by:</u></td> </tr> <tr> <td>OBL species _____</td> <td>x1 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x2 = _____</td> </tr> <tr> <td>FAC species _____</td> <td>x3 = _____</td> </tr> <tr> <td>FACU species _____</td> <td>x4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x5 = _____</td> </tr> <tr> <td>Column Totals: _____ (A)</td> <td>_____ (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = _____</td> </tr> </table>	<u>Total % Cover of:</u>	<u>Multiply by:</u>	OBL species _____	x1 = _____	FACW species _____	x2 = _____	FAC species _____	x3 = _____	FACU species _____	x4 = _____	UPL species _____	x5 = _____	Column Totals: _____ (A)	_____ (B)	Prevalence Index = B/A = _____	
<u>Total % Cover of:</u>	<u>Multiply by:</u>																			
OBL species _____	x1 = _____																			
FACW species _____	x2 = _____																			
FAC species _____	x3 = _____																			
FACU species _____	x4 = _____																			
UPL species _____	x5 = _____																			
Column Totals: _____ (A)	_____ (B)																			
Prevalence Index = B/A = _____																				
Sapling/Shrub Stratum (Plot size: <u>100th acre</u>)																				
1. <u>Rubus discolor</u>	<u>5</u>	<u>no</u>	<u>FAC</u>																	
2. _____	_____	<u>n/a*</u>	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
50% = _____, 20% = _____	<u>5</u>	= Total Cover																		
Herb Stratum (Plot size: <u>100th acre</u>)																				
1. <u>Ranunculus repens</u>	<u>30</u>	<u>yes</u>	<u>FACW</u>																	
2. <u>Poa sp.</u>	<u>20</u>	<u>yes</u>	<u>FAC</u>																	
3. <u>Hypochaeris sp.</u>	<u>I</u>	<u>no</u>	<u>FACU</u>																	
4. <u>moss sp.</u>	<u>50</u>	<u>yes</u>	<u>FAC</u>																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
50% = _____, 20% = _____	<u>100</u>	= Total Cover																		
Woody Vine Stratum (Plot size: _____)																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
50% = _____, 20% = _____	_____	= Total Cover																		
% Bare Ground in Herb Stratum _____																				
<table style="width: 100%; border: none;"> <tr> <td style="width: 35%;">Hydrophytic Vegetation Present?</td> <td style="width: 15%;">Yes <input checked="" type="checkbox"/></td> <td style="width: 30%;">No <input type="checkbox"/></td> <td style="width: 20%;"></td> </tr> </table>				Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>														
Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>																		
Remarks: <u>Mowed lawn.</u>																				

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
<u>8</u>	<u>10YR4/2</u>	<u>100</u>	_____	_____	_____	_____	<u>sandy loam</u>	<u>very moist</u>
<u>16</u>	<u>2.5Y5/1</u>	<u>50</u>	_____	_____	_____	_____	<u>sandy loam</u>	<u>saturated</u>
_____	_____	_____	<u>10YR5/6</u>	<u>50</u>	<u>C</u>	<u>M</u>	<u>sandy loam</u>	<u>saturated</u>
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (Explain in Remarks)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)		

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present): Type: _____ Depth (inches): _____	Hydric Soils Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Remarks: Groundwater present but upper soil layer lacks redox features with high value color.

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water-Stained Leaves (B9)
<input type="checkbox"/> High Water Table (A2)	(except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stresses Plants (D1) (LRR A)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Water-Stained Leaves (B9)
	(MLRA 1, 2, 4A, and 4B)
	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> Shallow Aquitard (D3)
	<input type="checkbox"/> FAC-Neutral Test (D5)
	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
	<input type="checkbox"/> Frost-Heave Hummocks (D7)

Field Observations: Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): <u>0</u> Water Table Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>16</u> Saturation Present? (includes capillary fringe) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Depth (inches): <u>13</u>	Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Above normal rainfall recorded at Sea Tac for March 2017.

Remarks: Water in soil pit seeping in at 16 inches. Saturation is below 12 inches.

WETLAND DETERMINATION DATA FORM – Western Mountains, Valleys, and Coast Region

Project Site: SE 27th Street Mercer Island City/County: Mercer Island/King Sampling Date: 4/7/17
 Applicant/Owner: David Yeh State: WA Sampling Point: 2
 Investigator(s): Gary Schulz Section, Township, Range: 12, 24N, 4E
 Landform (hillslope, terrace, etc.): terrace Local relief (concave, convex, none): none Slope (%): 1
 Subregion (LRR): A Lat: _____ Long: _____ Datum: _____
 Soil Map Unit Name: Alderwood (AgC) NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology , significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology , naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland?	
Hydric Soil Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Remarks: Plot is located along south boundary approximately 30 feet east of DP-1. Area is gently sloping to the east. Higher than normal rainfall.			

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size: <u>to 100th acre</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test Worksheet:																
1. _____	_____	<u>n/a*</u>	<u>=</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
50% = _____, 20% = _____	_____	= Total Cover		Prevalence Index worksheet: <table style="width: 100%; border: none;"> <tr> <td style="text-align: center;"><u>Total % Cover of:</u></td> <td style="text-align: center;"><u>Multiply by:</u></td> </tr> <tr> <td>OBL species _____</td> <td>x1 = _____</td> </tr> <tr> <td>FACW species _____</td> <td>x2 = _____</td> </tr> <tr> <td>FAC species _____</td> <td>x3 = _____</td> </tr> <tr> <td>FACU species _____</td> <td>x4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x5 = _____</td> </tr> <tr> <td>Column Totals: _____ (A)</td> <td>_____ (B)</td> </tr> <tr> <td colspan="2" style="text-align: center;">Prevalence Index = B/A = _____</td> </tr> </table>	<u>Total % Cover of:</u>	<u>Multiply by:</u>	OBL species _____	x1 = _____	FACW species _____	x2 = _____	FAC species _____	x3 = _____	FACU species _____	x4 = _____	UPL species _____	x5 = _____	Column Totals: _____ (A)	_____ (B)	Prevalence Index = B/A = _____	
<u>Total % Cover of:</u>	<u>Multiply by:</u>																			
OBL species _____	x1 = _____																			
FACW species _____	x2 = _____																			
FAC species _____	x3 = _____																			
FACU species _____	x4 = _____																			
UPL species _____	x5 = _____																			
Column Totals: _____ (A)	_____ (B)																			
Prevalence Index = B/A = _____																				
<u>Sapling/Shrub Stratum (Plot size: 100th acre)</u>																				
1. <u>Rubus discolor</u>	<u>15</u>	<u>no</u>	<u>FAC</u>																	
2. _____	_____	<u>n/a*</u>	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
50% = _____, 20% = _____	<u>15</u>	= Total Cover																		
<u>Herb Stratum (Plot size: 100th acre)</u>																				
1. <u>Ranunculus repens</u>	<u>30</u>	<u>yes</u>	<u>FACW</u>																	
2. <u>Poa sp.</u>	<u>30</u>	<u>yes</u>	<u>FAC</u>																	
3. <u>Poa compressa</u>	<u>10</u>	<u>no</u>	<u>FAC</u>																	
4. <u>Taraxicum officinale</u>	<u>10</u>	<u>no</u>	<u>FAC</u>																	
5. _____	_____	_____	_____																	
6. _____	_____	_____	_____																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
9. _____	_____	_____	_____																	
10. _____	_____	_____	_____																	
11. _____	_____	_____	_____																	
50% = _____, 20% = _____	<u>80</u>	= Total Cover																		
<u>Woody Vine Stratum (Plot size: _____)</u>																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
50% = _____, 20% = _____	_____	= Total Cover																		
% Bare Ground in Herb Stratum _____																				
Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 – Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 5 - Wetland Non-Vascular Plants ¹ <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)																				
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																				
Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>																				

Remarks: Lawn area.

SOIL

Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
13	10YR3/2	100	_____	_____	_____	_____	sandy loam	gravelly, dry
18	10YR5/2	70	_____	_____	_____	_____	sandy loam	gravelly, dry
_____	10YR5/3	30	_____	_____	_____	_____	sandy loam	gravelly, dry
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

¹Type: C= Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1) **(except MLRA 1)**
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- 2 cm Muck (A10)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____
 Depth (inches): _____

Hydric Soils Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- Water-Stained Leaves (B9) **(except MLRA 1, 2, 4A, and 4B)**
- Salt Crust (B11)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Stunted or Stresses Plants (D1) **(LRR A)**
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water-Stained Leaves (B9) **(MLRA 1, 2, 4A, and 4B)**
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Saturation Visible on Aerial Imagery (C9)
- Geomorphic Position (D2)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)
- Raised Ant Mounds (D6) **(LRR A)**
- Frost-Heave Hummocks (D7)

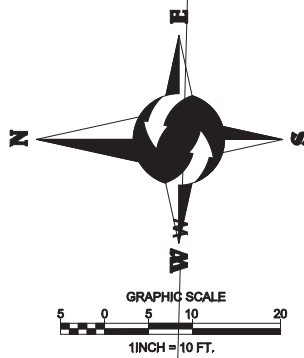
Field Observations:

Surface Water Present? Yes No Depth (inches): 0
 Water Table Present? Yes No Depth (inches): 0
 Saturation Present? (includes capillary fringe) Yes No Depth (inches): 0

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Above normal rainfall recorded at Sea Tac for March 2017.

Remarks:



GENERAL NOTES

1. THIS SURVEY WAS COMPLETED WITHOUT BENEFIT OF A CURRENT TITLE REPORT. EASEMENTS AND OTHER ENCUMBRANCES MAY EXIST ON THIS PROPERTY THAT ARE NOT SHOWN HEREON.
2. INSTRUMENTATION FOR THIS SURVEY WAS A 3-SECOND NIKON NIVO 5.C TOTAL STATION. PROCEDURES USED IN THIS SURVEY MEET OR EXCEED STANDARDS SET BY WAC 332-130-090.
3. THE INFORMATION ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY MADE IN JANUARY 2016 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
4. UTILITIES SHOWN ON THIS SURVEY ARE BASED UPON ABOVE GROUND OBSERVATIONS AND AS-BUILT PLANS WHERE AVAILABLE. ACTUAL LOCATIONS OF UNDERGROUND UTILITIES MAY VARY AND UTILITIES NOT SHOWN ON THIS SURVEY MAY EXIST ON THIS SITE.
5. ALL MONUMENTS WERE LOCATED DURING THIS SURVEY UNLESS OTHERWISE NOTED.

LEGAL DESCRIPTION

WEST HALF OF LOTS 11 AND 12, BLOCK 8, MCGIVRA'S ISLAND ADDITION, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 18 OF PLATS, PAGE 58, IN KING COUNTY, WASHINGTON, EXCEPT THE NORTH 85 FEET OF SAID WEST HALF OF LOT 12 TOGETHER WITH THE WEST 20 FEET OF THE NORTH 85 FEET OF SAID LOT 12. SITUATE IN THE CITY OF MERCER ISLAND, COUNTY OF KING, STATE OF WASHINGTON.

PROJECT INFORMATION

SURVEYOR: SITE SURVEYING, INC.
21223 NE 11TH ST
SAMMAMISH, WA 98074
PHONE: 425.296.4412

PROPERTY OWNER: 7239 LLC
PO BOX 809
MERCER ISLAND, WA 98040

TAX PARCEL NUMBER: 531510-0865

PROJECT ADDRESS: 7239 SE 27TH STREET
MERCER ISLAND, WA 98040

ZONING: R-4-B

JURISDICTION: CITY OF MERCER ISLAND

PARCEL ACREAGE: 28,794 S.F. (± 0.660 ACRES)
AS SURVEYED

VERTICAL DATUM & CONTOUR INTERVAL

ELEVATIONS SHOWN ON THIS DRAWING WERE DERIVED FROM INFORMATION PROVIDED BY THE WGS SURVEY DATA WAREHOUSE.

POINT ID NO. 8240
CONCRETE MONUMENT IN CASE AT THE INTERSECTION OF SE 127TH STREET AND 72ND AVENUE SE.

ELEVATION: 259.038 FEET NAVD 88

2.0' CONTOUR INTERVAL - THE EXPECTED VERTICAL ACCURACY IS EQUAL TO 1/2 THE CONTOUR INTERVAL OR PLUS / MINUS 1.0' FOR THIS PROJECT.



LEGEND

- SET 5/8" X 24" IRON ROD WITH YELLOW PLASTIC CAP
- ⊠ POWER METER
- ⊘ UTILITY POLE
- ⊠ GAS METER
- ⊠ SANITARY SEWER CLEANOUT
- ⊠ SANITARY SEWER MANHOLE
- ⊠ WATER VALVE
- ⊠ FIRE HYDRANT
- ⊠ WATER METER
- ⊠ SIGN
- SS- APPROXIMATE LOCATION SANITARY SEWER LINE
- SD- APPROXIMATE LOCATION STORM DRAIN LINE
- OHU- OVERHEAD POWER
- X- OVERHEAD UTILITIES
- WOOD FENCE
- ▨ CONCRETE WALL
- ⊠ ROCKERY
- ▨ ASPHALT SURFACE
- ▨ CONCRETE SURFACE
- CE CEDAR
- DB DECIDUOUS
- DF DOUGLAS FIR
- MP MAPLE
- PI PINE
- * INDICATES MULTI-TRUNK

Wetland Data Plots - (1)

(approximate location)

YEH PROPERTY

Figure 2

NE 1/4, NW 1/4, SEC 12, TWP 24N, RNG 4E, W.M.

TOPOGRAPHIC SURVEY
7239 LLC
7239 SE 27TH STREET
MERCER ISLAND, WA 98040

PROJECT NO. 15-538
DRAWN BY: EFJ
CHECKED BY: TNW
DATE: 1/18/16
SHEET 1 OF 1

DATE	REVISION	DRN

