Received by Email
10-05-2021

May 6, 2021

Sea Pac Homes
Attn: Glen Belew
120 SW Everett Mall Way, Suite 100
Everett, WA 98204

RE: Critical Area Reconnaissance Report for 9018 53rd Avenue West; Parcel 00611600015900

SITE DESCRIPTION

Wetland Resources, Inc. (WRI) performed a site reconnaissance on March 29, 2021, to evaluate wetland and stream conditions on and near the subject property. The site is composed of one 1.33-acre parcel, located at 9018 53rd Avenue West, within the city limits of Mukilteo, Washington. The Public Land Survey System (PLSS) locator for the property is Section 16, Township 28N, Range 4E, W.M. It is located within the Puget Sound Drainage of the Snohomish Watershed, Water Resources Inventory Area (WRIA) 8.



Figure 1 - Aerial photograph of the subject property and data site locations.

The parcel is located in a residential setting, situated between 53rd Ave W and Hargreaves Place, north of Big Gulch Park. A single-family home lies in the northern portion property. Vegetation is generally forested, with an upland species assemblage.

Topography has a gentle northern aspect. The forested vegetation that remains on the site is dominated by Douglas-fir, Western red cedar, Himalayan blackberry, salmonberry, Oso-berry, trailing blackberry, and swordfern. Observed soil pits generally display very dark grayish brown (10YR 3/2) loam from the surface to eight inches below. Between eight and sixteen inches below the surface, soils are dark yellowish brown (10YR 3/4 to 10YR 4/4). Soils were dry at the time of our March 2021 inspection, during a period of normal precipitation.

PUBLIC INFORMATION

Prior to conducting the site reconnaissance, publicly available information was reviewed to gather background information on the subject property and the surrounding area regarding wetlands, streams, and other critical areas. These sources include the following:

- United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI)
  No wetlands are mapped on or near the subject property by this source. A forested/scrub-shrub wetland is mapped approximately 250 feet off-site to the east, across 53rd Ave W. A riverine feature is mapped approximately 400 feet off-site to the west.

- USDA/Natural Resources Conservation Service (NRCS) Web Soil Survey
  The NRCS Web Soil Survey indicates that the site is underlain by Alderwood-Urban land complex, 2 to 15 percent slopes. This unit is not listed as a hydric soil. A small area of Mukilteo muck is mapped near 53rd Ave W, however, the mapping appears to be incorrect as no muck soils are present in this area.

- WDFW Priority Habitat and Species (PHS) Interactive Map
  There are no priority habitats or species mapped on or near the site. The same forested/scrub-shrub wetland mapped by NWI is displayed approximately 250 feet off-site to the east. Big Gulch Creek is mapped approximately 0.4 miles off-site to the south and is listed as a habitat for Coho Salmon and Resident Coastal Cutthroat Trout.

  Washington Department of Fish and Wildlife (WDFW) SalmonScape Mapping System
  No streams are mapped by this source on or near the site. The closest fish-bearing features are Big Gulch Creek, approximately 0.4 miles off-site to the south, and another unnamed waterway approximately 0.4 miles off-site to the west. Both streams are documented as Coho habitat and Big Gulch Creek is listed as habitat for Resident Coastal Cutthroat Trout.

  Washington Department of Natural Resources (DNR) Forest Practices Application Mapping Tool (FPAMT)
  No wetlands or streams are mapped on site by DNR. A wetland is mapped approximately 250 feet off-site to the east of the subject property, mapped as non-fish habitat. The two off-site streams mapped by WDFW are the closest streams to the site. DNR depicts a water type break for the unnamed stream 0.4 miles west of the site where it becomes a Type F stream.

- Snohomish County PDS Map Portal
  No wetlands or streams are mapped on or near the site by Snohomish County. The closest mapped stream is a non-fish seasonal stream located approximately 250 feet south of the property. A wetland is mapped approximately 250 feet off-site to the east, east of 53rd Ave W. A remote sensing-based potential wetland is mapped approximately 200 feet off-site to the west, west of Hargreaves Place.
- City of Mukilteo Online Critical Areas Map
  No wetlands or streams are mapped on site by this source. Smuggler's Gulch Creek is mapped off-site to the east and north. According to Mukilteo Municipal Code (MMC) 17.52C.080, this stream is classified as a Type 4. As a low mass wasting channel, a 50 foot buffer is required by MMC 17.52C.090.A.1 The buffer does not reach the subject property. The same off-site wetlands mapped by Snohomish County are shown by this source.

METHODOLOGY

The presence of wetlands was determined using the routine determination approach described in the Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0) (U.S. Army Corps of Engineers 2010). Under the routine methodology, the process for making a wetland determination is based on three steps:

1.) Examination of the site for hydrophytic vegetation (species present and percent cover);
2.) Examination of the site for hydric soils;
3.) Determining the presence of wetland hydrology

The ordinary high-water marks (OHWM) of streams and waterbodies were identified using the methodology described in *Determining the Ordinary High-Water Mark for Shoreline Management Act Compliance in Washington State* (Anderson et al. 2016). Streams and lakes were classified according to the water typing system provided in Mukilteo Municipal Code (MMC) 17B.52C.080.

FINDINGS

No wetlands, streams or buffers are located on the subject property. No areas on or near the site exhibit the combined positive indicators of hydrophytic vegetation, hydric soils, and wetland hydrology. A depressional area in the eastern portion of the property, adjacent to 53rd Ave W, contains a non-hydrophytic vegetation community and bright, non-hydric soils. Buffers from off-site critical areas do not reach the site.

USE OF THIS REPORT

This Critical Area Reconnaissance Report is supplied to Sea Pac Homes as a means of determining the presence of on-site and nearby critical areas. This report is based largely on readily observable conditions and, to a lesser extent, on readily ascertainable conditions. No attempt has been made to determine hidden or concealed conditions.

The laws applicable to critical areas are subject to varying interpretations and may be changed at any time by the courts or legislative bodies. This report is intended to provide information deemed relevant in the applicant's attempt to comply with the laws now in effect.

This report conforms to the standard of care employed by ecologists. No other representation or warranty is made concerning the work or this report and any implied representation or warranty is disclaimed.

Wetland Resources, Inc.



John Laufenberg
Principal Ecologist
Professional Wetland Scientist

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

Project/Site: Sea Pac Homes - 53rd Ave W City/County: Mukilteo Sampling Date: 3/29/21

Applicant/Owner: Sea Pac Homes State: WA Sampling Point: S1

Investigator(s): JL Section, Township, Range: SEC 16, TWP 28N, RGE 4E

Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____

Subregion (LRR): LRR-A Lat: 47.916617 Long: -122.306578 Datum: WSP1984

Soil Map Unit Name: Alderwood NWI classification: none

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 ☐ No ☑ Hydric Soil Present? Yes ☐ No ☑ Wetland Hydrology Present? Yes ☐ No ☑	**Is the Sampled Area within a Wetland?** Yes ☐ No ☑

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 10m x 10m)	Absolute % Cover	Dominant Species?	Indicator Status
1. Pseudotsuga menziesii	90	Y	FACU
2.			
3.			
4.			
	90	= Total Cover	
Sapling/Shrub Stratum (Plot size: 5m x 5m)			
1. Rubus spectabilis	30	Y	FAC
2. Rubus armeniacus	20	Y	FAC
3.			
4.			
5.			
	50	= Total Cover	
Herb Stratum (Plot size: 1m x 1m)			
1. Rubus ursinus	20	Y	FACU
2. Polystichum munitum	10	N	FACU
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	30	= Total Cover	
Woody Vine Stratum (Plot size: 1m x 1m)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 70

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	0
FACW species		x 2 =	0
FAC species	50	x 3 =	150
FACU species	120	x 4 =	480
UPL species		x 5 =	0
Column Totals:	170 (A)		630 (B)

Prevalence Index = B/A = 3.7

Hydrophytic Vegetation Indicators:

- ☐ Rapid Test for Hydrophytic Vegetation
- ☐ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☐ No ☑

Remarks:

SOIL

Sampling Point: S1

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	10YR 3/2	100						
8-16	10 YR 4/4	100						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: 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 Soils[3]:

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

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

Restrictive Layer (if present):

Type:_____

Depth (inches):_____

Hydric Soil 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 Stressed 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): _____

Water Table Present? Yes ☐ No ☑ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☑ Depth (inches): _____

Wetland Hydrology Present? Yes ☐ No ☑

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

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

Project/Site: Sea Pac Homes - 53rd Ave W City/County: Mukilteo Sampling Date: 3/29/21

Applicant/Owner: Sea Pac Homes State: WA Sampling Point: S2

Investigator(s): JL Section, Township, Range: SEC 16, TWP 28N, RGE 4E

Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): _____ Slope (%): _____

Subregion (LRR): LRR-A Lat: 47.916617° Long: -122.306578° Datum: WGS84

Soil Map Unit Name: Alderwood NWI classification: none

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 ☐ No ☑ Hydric Soil Present? Yes ☐ No ☑ Wetland Hydrology Present? Yes ☐ No ☑	**Is the Sampled Area within a Wetland?** Yes ☐ No ☑

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 10)	Absolute % Cover	Dominant Species?	Indicator Status
1. Pseudotsuga menziesii	70	Y	FACU
2. Thuja plicata	20	Y	FAC
3.			
4.			
	90	= Total Cover	
Sapling/Shrub Stratum (Plot size: 5)			
1. Rubus armeniacus	20	Y	FAC
2.			
3.			
4.			
5.			
	20	= Total Cover	
Herb Stratum (Plot size: 1)			
1. Polystichum munitum	10	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
	10	= Total Cover	
Woody Vine Stratum (Plot size: 1)			
1.			
2.			
	0	= Total Cover	

% Bare Ground in Herb Stratum 90

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	40	x 3 =	120
FACU species	80	x 4 =	320
UPL species	0	x 5 =	0
Column Totals:	120 (A)		440 (B)

Prevalence Index = B/A = 3.7

Hydrophytic Vegetation Indicators:

- ☐ Rapid Test for Hydrophytic Vegetation
- ☐ Dominance Test is >50%
- ☐ Prevalence Index is ≤3.0[1]
- ☐ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ☐ Wetland Non-Vascular Plants[1]
- ☐ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☐ No ☑

Remarks:

SOIL

Sampling Point: S2

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

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-10	10YR 3/2	100						
10-16	10 YR 4/4	100						

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

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

- ☐ Histosol (A1)
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- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
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- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1) (**except MLRA 1**)
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- ☐ 2 cm Muck (A10)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

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

Restrictive Layer (if present):

Type:_____

Depth (inches):_____

Hydric Soil 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)
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- ☐ 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 Stressed 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)
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- ☐ Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes ☐ No ☑ Depth (inches): _____

Water Table Present? Yes ☐ No ☑ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ☐ No ☑ Depth (inches): _____

Wetland Hydrology Present? Yes ☐ No ☑

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: