Delineation / Mitigation / Restoration / Habitat Creation / Permit Assistance

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August 15, 2017

Four Season Homes, LLC Attn: Paul Maksimchuk 32814 38th Avenue South Federal Way, WA 98001

RE: Watercourse Determination Report for 4634 E Mercer Way SFR (King County parcel 7558700008), Located in the City of Mercer Island, Washington.

Introduction

Wetland Resources, Inc. (WRI) performed a site investigation on April 7, 2017. The purpose of the site visit was to locate watercourses, wetlands, and wildlife habitat conservation areas on and in the vicinity of the 0.49-acre parcel located at 4634 E Mercer Way, in Mercer Island, Washington. The Public Land Survey System (PLSS) locator for the subject property is Section 18, Township 24N, Range 5E, W.M.

The applicant proposes to develop the subject property with a single-family residence. This report is intended to demonstrate compliance with the Mercer Island City Code. Proposed development occurs outside of the following critical areas: watercourses, wetlands, and wildlife habitat conservation areas and their associated buffers. Geologic hazard areas compliance documentation is beyond the scope of this work.

The subject property is an undeveloped parcel surrounded on all sides by single-family residences. Access to the property is from the west via E Mercer Way. The lot has a general east-aspect, and slopes down to the north, south, and east towards Lake Washington. A small ravine is located in the southern portion of the site, and contains a narrow ephemeral stream channel (herein referred to as Stream A) that is located in the topographic low point. Stream A is a Type 3 watercourse that requires a 35-foot protective buffer. No wetlands or wildlife habitat conservation areas were observed on or in the vicinity of the subject property.

Proposed Project

The proposed development includes a single-family residence, driveway, and associated utilities. The proposed residence and driveway are located outside of the 35-foot buffer associated with Stream A (see enclosed Critical Area Determination Map, Sheet 1/1). No impacts to the on-site watercourse or buffer are proposed.

Review of Existing Information

The City of Mercer Island GIS Map Portal depicts two watercourses in the vicinity of the subject property; each are classified as Type 3 watercourses.

Critical Areas Determination Methodology

All watercourses observed within the project area were located in the field and are depicted on the attached map. Ordinary high water marks (OHWM) were delineated using the methodology described in the Washington State Department of Ecology document *Determining the Ordinary High Water Mark for Shoreline Management Act Compliance in Washington State* (Anderson et al 2016).

Watercourse Findings

The City of Mercer Island depicts a Type 3 watercourse located to the north of the subject property. The depicted alignment of the channel meanders across the existing access road (labeled 4600 Block on Google Maps). During the April 2017 investigation, WRI staff walked the entire length of the access road in search of evidence of a stream channel, or evidence of subsurface drainage (potential piped watercourse). No drains, catch basins, or manhole covers were observed. No surface channels were observed. It is apparent that the mapped watercourse to the north of the subject property is not present in the location depicted on the City of Mercer Island map.

The City of Mercer Island also depicts a Type 3 watercourse (Stream A) in the south of the subject property. WRI staff observed this feature during the April 7, 2017 site visit. Stream A is an ephemeral channel that likely only conveys surface channels during peak flow events. The width is variable, and the feature is located at the lowest point in an east-to-west oriented ravine.

Bed substrate primarily consists of sorted cobble and gravel, but varies across the subject property. It is presumed that the feature outlets to Lake Washington, but the connection was not physically observed due to lack of legal access. Surface flows were absent during the April 7, 2017 site visit, which occurred during one of the wettest months on record (See Figure 1 below). Significant rainfall events occurred in the several days preceding the site visit. The absence of surface water during the site visit supports the Type 3 watercourse determination made for Stream A. Stream A requires a 35-foot buffer in the City of Mercer Island.

Stream Name	Stream Type MICC 19.07.070(A)	Standard Buffer Requirement
A	Type 3	35 feet

Table 1: Observed Watercourses in the Vicinity of Project Area



Figure 1: Stream A (Photo Taken 4.6.17)



Figure 2: Stream A (Photo Taken 4.6.17)

Use Of This Report

This Determination Report is supplied to Four Season Homes, LLC as a means of determining the presence of on-site and adjacent watercourses, wetlands, and wildlife habitat conservation areas, as required by the City of Mercer Island. 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 legislative bodies. This report is intended to provide information deemed relevant in the applicant's effort 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.

Niels Pedersen Senior Ecologist

Enclosure: Critical Areas Determination Map (Sheet 1/1)

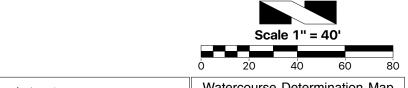
WATERCOURSE DETERMINATION MAP 4634 E MERCER WAY

SECTION 18, TOWNSHIP 24N, RANGE 05E, W.M.



IMAGE SOURCE: KING COUNTY IMAP DATA SOURCES: APS SURVEY AND MAPPING (OHWM), KING COUNTY ASSESSOR (PARCELS), STUDIO19 ARCHITECTS (PROPOSED IMPROVEMENTS)

TYPE 3 WATERCOURSE (DELINEATED) TYPE 3 WATERCOURSE (ESTIMATED) WATERCOURSE BUFFER PROPERTY BOUNDARY



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Watercourse Determination Map <u>4634 E Mercer Way</u>

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C Sheet 1/1 WRI Job #: 17067 Drawn by: NP Date: 08/15/2017