DAVID EVANS
AND ASSOCIATES INC.

September 24, 2019

Lauren Anderson
City of Mercer Island
9611 SE 36th Street
Mercer Island, WA 98040-3732

SUBJECT: Ogden Point Short Plat: Acess Feasibility Letter

Dear Lauren Anderson:,

The City of Mercer Island has requested a letter which evaluates "the feasibility of constructing a driveway and bridge within the entire length of the access easement on Lot 1 to serve Lot 2" for the Ogden Point Short Plat. The following letter is intended to describe the feasibility of constructing a drivable access to proposed Lot 2 within the access easement proposed within Lot 1.

The Ogden Point Short Plat proposes to create two lots that would take vehicular access from West Mercer Way. Lot 1 takes access to West Mercer Way via an offsite asphalt driveway within a private access easement described in easement with recording numbers 3860939 and 3927412. Lot 2 would take access from this offsite access easement via a proposed, 20' wide by approximately 150' long ingress/egress and utility easement (access easement) across Lot 1. This proposed access easement is shown on the associated short plat map.

In the site's current condition, a driveway exists within the proposed access easement which could provide access to Lot 2 with minor modifications. The existing driveway would have to be extended approximately 10 feet in order to serve Lot 2. The existing driveway crosses over a 24-long span of bridge which is comprised of structural steel members covered by timber decking and an asphalt top coat. This bridge could be replaced by retaining walls with the void space that is currently spanned by the bridge filled in with structural fill.

Several new driveway configurations are possible within the proposed access easement. Any new driveway would consist of a paved driving surface between two retaining walls: a cut-retaining wall along the uphill (east) edge of the easement and a fill retaining wall along the downhill (west) edge of the easement.

Geotechnical explorations of this site have been completed by Geotech Consultants Inc. and are summarized in their report titled " Geotechnical Engineering Study – Proposed Ogden Two-Lot Short Plat" dated January 31, 2019. This geotechnical report gives recommendations for retaining wall and foundation design.

The cut wall section of the access can be constructed using a permanent soldier pile retaining wall, as described in page 5 of the geotechnical report: "Shoring will be required to support cuts that may be necessary into the steep, northern slopes… Cantilever soldier pile shoring should be appropriate where the excavation will be less than about 15 feet deep, but tiebacks will be necessary for deeper excavations." Cuts in excess of 15-feet are not anticipated, but if required, alternate construction methods that do not require tie backs should be explored.

For fill walls the geotechnical report recommends the use of deep foundation systems such as pipe piles: "we expect that most or all of future structures would need to be supported on deep foundations extended into the glacially compressed soils." (Page 3). Fill walls should anticipate the use of such foundation systems but are feasible in principal given proper structural and geotechnical design.

In my professional opinion, constructing a drivable access within the proposed access tract is feasible. My review of the site survey, geotechnical report and of previous conceptual designs found no design constraints that could not be mitigated for with proper civil, geotechnical and structural design.

Sincerely,
DAVID EVANS AND ASSOCIATES, INC.

Adam Stricker, PE

Copies: Jordan Lott, Dave York
Attachments/Enclosures:
Project Number: LDYB0000-0002
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