

March 16, 2022

Hurley Development
275 West 3rd Street, Suite 300
Vancouver, WA 98660

Attention: Scot Brantley

Discussion and Recommendations for Pedestrian Trail Connection

HQ Vancouver
West of SE Brady Road and SE 192nd Avenue
Vancouver, Washington
Project: HurleyDev-3-01

NV5 has prepared this letter to discuss the pedestrian trail at the HQ Development in Vancouver, Washington. We understand that a trail connection is proposed between the “north ridge” area and the quarry base in the west portion of the site. We have been involved with the HQ Vancouver development for multiple years and have conducted geotechnical explorations, slope stability analysis, and rockfall analysis as well as prepared preliminary geotechnical reports in the location of the proposed trail connection and in other portions of the site.

Subsurface conditions at the proposed trail connection consist of a thin layer of overburden soil consisting of a variable mixture of silt, clay, sand, gravel, and cobbles on top of basalt bedrock. The slopes leading from the “north ridge” area to the quarry base in the proposed alignment consist of basalt benches created during historic mining operations. The benches include vertical to sub-vertical highwalls that expose fresh to slightly weathered basaltic andesite with areas of poorly developed columnar jointing.

Observations by a licensed engineering geologist at NV5 concluded that rock masses of up to three feet in diameter could be released as rockfall from the vertical to sub-vertical highwalls. A preliminary rockfall analysis concluded a 20- to 30-foot-wide catchment area with a berm at least 5 feet high should be installed at the base of the highwalls to contain released rock.

Due to the public safety concern associated with the potential for rockfall, we recommend an alternative trail connection between the upper and lower portions of the HQ Development be selected. Based on our experience at the site, we recommend accessing the quarry floor from the east portion of the site along 192nd Avenue, where exposed rock is not present and slopes are more conducive for constructing a trail.

We appreciate the opportunity to be of continued service to you on this project. Please call if you have questions concerning the information provided.

Sincerely,

NV5



Nick Pavaglio, P.E.
Principal Engineer



Signed 03/16/2022

cc: Tim Leavitt, Otak (via email only)
Li Alligood, Otak (via email only)

NNP:sn

One copy submitted (via email only)

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