

April 9, 2020

City of Puyallup – Permit Center 333 South Meridian Puyallup, WA 98371

Attn: Ms. Rachael Brown

Transmitted via email to: RNBrown@ci.puyallup.wa.us

Re: Geotechnical Review Services P-19-0061 Proposed Septic System Puyallup, Washington Project No. 1174044.010.011

Dear Ms. Brown:

An applicant proposes to install a septic system at 409, 427, and 433 43rd Avenue Southwest in Puyallup, Washington (site). At the City of Puyallup's (City) request, Landau Associates, Inc. (LAI) has completed a third-party review of documents prepared by the applicant's consultants.

LAI reviewed the following documents in accordance with Title 21.06 of the Puyallup Municipal Code (PMC):

- CHD-Artz Construction. ND. Site Plan, 43rd Ave SW, Parcel # 0419095022.
- Innovative GEO-Services, LLC. 2020. Artz Site and Soil Evaluation, Parcel No. 0419095003, 5004 & 5022, Site Address 409, 427 and 433 43rd AV SW. January 29.

## **Project Background**

The applicant proposes to construct an onsite sewage-treatment facility (OSS). If approved, the OSS would be constructed approximately 180 feet (ft) north of 43rd Avenue Southwest, on the eastern property boundary. The OSS would be used to service a multi-family residence (duplex).

Site topography is generally flat, with maximum slope inclinations of approximately 5 percent grade. The site is bounded by 43rd Avenue Southwest to the south, by residential development to the east, and by forested areas to the north and west. A wetland is located approximately 60 ft west of the proposed septic drain field location. The site features invasive Himalayan blackberry (*Rubus armeniacus*) and coniferous and deciduous trees with an understory of vegetation common to the area.

The City has required the applicant to provide a geologic hazard assessment in accordance with Title 21.06 of the PMC. The applicant's geotechnical consultant, Innovative GEO-Services, has concluded

that the site does not include landslide hazard areas (LHAs) and that the proposed improvements will not create an LHA.

## Comments

In LAI's opinion, the conclusions presented in Innovative GEO-Services' Site and Soil Evaluation satisfy the requirements set forth in Title 21.06 of the PMC. LAI submits the following comment:

• Innovative GEO-Services notes that septic waste could pass through "rapidly permeable" site soils and contaminate groundwater. LAI reviewed the Tacoma-Pierce County Health Department's setback requirements for OSSs (2018), and found that a horizontal separation of at least 100 ft is required between the edge of the soil dispersal component/reserve area and surface water (measured from the ordinary high water mark). A wetland is located approximately 60 ft west of the proposed septic drain field location. If surface water is present in the wetland, the current OSS design will not meet the required minimum horizontal separation.

## Closing

We trust that this letter provides you with the information necessary to respond to the applicant. If you have questions or require additional information, please call the undersigned at (360) 791-3178.

LANDAU ASSOCIATES, INC.

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Benjamin Ford, PE Associate Engineer

BJF/mcs [Y:\1174\044.010\R\P-19-0061 PROPOSED SEPTIC SYSTEM REVIEW LETTER 4.9.2020.DOCX]

## References

City of Puyallup. 2020. Puyallup Municipal Code. Chapter 21.06: Critical Areas. February 25. Seattle, WA: Code Publishing Company.

Tacoma-Pierce County Health Department. 2018. Environmental Health Code, Chapter 2: On-site Sewage. July 18.