September 27, 2022

Jesse Winterowd
Winterbrook Planning
610 SW Alder Street, Suite 810
Portland, 97205

Subject: Executive Summary, Filtration Facility Geotechnical Engineering Report
Re: Land Use Permitting

Dear Jesse:

McMillen Jacobs Associates completed a geotechnical explorations program for the Portland Water Bureau, Bull Run Filtration Facility. The results of the explorations, geologic hazard assessments, conclusions and recommendations for design and construction of the Filtration Facility are presented in a Geotechnical Engineering Report dated March 11, 2022. This letter was prepared by McMillen Jacobs to provide an executive summary of the project. Based on the results of the explorations, geologic and seismic hazards assessments the site is suite able for the proposed development.

The Portland Water Bureau serves high-quality drinking water to nearly a quarter of Oregon State's population in a 225-square-mile service area encompassing the City of Portland and neighboring municipalities and water districts. In 2017, the Portland Water Bureau launched the Bull Run Filtration Project, which will construct a water filtration facility to help the water supply meet the requirements of the U.S. Environmental Protection Agency's Long-Term Enhanced Surface Water Treatment Rule. The new facility is anticipated to be on-line and compliant by September 30, 2027.

The Bull Run Filtration Project has two primary elements: The Filtration Facility (Facility) and the Filtration Pipelines (Pipelines) connecting the Facility to existing conduits in present systems. This Filtration Facility will have a 135 million gallon per day capacity and is located on a 95-acre site owned by the Water Bureau east of Gresham, Oregon. This Geotechnical Engineering Report presents geologic and seismic hazards at the site and provides recommendations for the design and construction of the Filtration Facility.

Geotechnical investigations at the site began in 2018 by Rhino One Geotechnical and included 16 borings, 6 Cone Penetration test (CPT) explorations, 18 test pits and multiple geophysical tests. Two additional borings were drilled during an investigation by McMillin Jacobs in April 2020. A more detail investigation was performed by McMillen Jacobs in Spring of 2021 and included 22 borings and 8 CPT explorations. Groundwater level monitoring wells were installed at several of the boring locations. These investigations were used to evaluate the geologic and subsurface conditions, evaluate the geologic and seismic hazards, and develop recommendations for the design and construction of the facility.

The recommendations provided in this report will be provided the Portland Water Bureau, the design team, and the contractor. It is the understanding of the Geotechnical Team that there will be continued interaction, communication, and review between these teams so that these recommendations are appropriately incorporated.

Based on the geotechnical investigations and evaluations performed for the project, the site is suitable for the intended development and the risks from the geologic and seismic hazards are low and can be mitigated with appropriate foundations and site developments. Detailed recommendations for the geotechnical foundation design, construction and site development are included in this report.

We believe the information provided herein are sufficient to be included for land use permit request. Please feel free to contact us if there are any questions or concerns.

Sincerely,

Yuxin "Wolfe" Lang, PE, GE, P.Eng
Principal Engineer

cc: File