



## Memorandum

Subject: Geotechnical Engineering Slope Review for Multnomah County Land Use Permitting

Project #s: PWB: W02563 BC: 152606 Designer: D3460500

Date: April 25, 2023

To: Dan Hogan, Project Manager

Portland Water Bureau

From: Brad Phelps, Project Manager

Jacobs

Prepared by: Todd Cotten, Geotechnical Engineer

Jacobs



EXPIRES 12/31/2023

The Bull Run Filtration Pipelines project is a large-diameter pipeline construction project impacting public rights-of-way in Multnomah County and some portions of public utility easement on private property. Within the rights-of-way of SE Dodge Park Boulevard and SE Lusted Road there are existing (pre-construction) slopes established with the prior construction of the county roads which exceed 33 percent grade. These slopes were observed during site reconnaissance to be stable with well-established vegetation. The proposed pipeline construction will impact some of those steep slopes by excavating and restoring the slopes to similar or flatter grades than existing, followed by reestablishment of vegetative cover.

In accordance with Chapter 39 of Multnomah County code, this memorandum is provided to certify that geotechnical assessments of these steep slopes, identified on the drawings, have been completed. The steep slopes identified on the drawings in the rights-of-way of SE Dodge Park Boulevard and SE Lusted Road are existing slopes which will be reestablished following construction of the pipelines at similar or flatter grades. Engineering design has been performed and construction specifications and design details have been developed to require that geosynthetics be used to construct reinforced steepened slopes where required to establish stable slopes for static and seismic loading. There are no finished conditions where cuts or fills have been designed to be unsupported. Erosion control measures are required to be implemented during construction, along with requirements for fill materials, compaction requirements, and the reestablishment of vegetative cover on the slopes within the rights-of-way of SE Dodge Park Boulevard and SE Lusted Road.

There are no proposed slopes exceeding 33 percent grade in public utility easements on private property or at the Finished Water Intertie facility site as part of this pipelines project design.

