



Technical Memorandum

Date:	June 17, 2022	From:	Bruce Guenzler, Kurt Merriman, P.E.
To:	BCRA Inc.	Project Manager:	Bruce Guenzler
		Principal in Charge:	Bruce Guenzler <i>BG</i>
		Project Name:	Residential Treatment Facility North - 22 102230 CUP
Attn:	Zachary Crum	Project No:	20210354E001
Subject:	Fire Lane Paving and Emergency Use Loading		

References

Subsurface Exploration, Geologic Hazard,
Preliminary Geotechnical Engineering,
and Stormwater Infiltration Feasibility Report
Stanwood Residential Treatment Facility
29919 80th Avenue NW
Snohomish County, Washington
Associated Earth Sciences, Inc.
Dated December 9, 2021

Background

AESI completed the referenced geotechnical engineering report in support of the proposed treatment facility project. This memo should be considered supplementary to the referenced report.

The geotechnical engineering report includes logs of five exploration borings that were focused primarily on the area where the design concept proposes to place the new building. The exploration borings each encountered medium dense grading to very dense lodgement till. The till was covered by existing fill in two borings, with observed fill depths of 5.5 feet in EB-2 and 3 feet in EB-3. The geotechnical report recommends non - permeable fire lane paving consisting of 4 inches of asphalt concrete pavement, underlain by two inches of crushed surfacing top course and 4 inches of crushed surfacing base course.

We understand that applicable local design standards require that fire lane paving be competent to support HS-25 loading, including axle loads up to 40,000 pounds and outrigger point loads up to 43,000 pounds applied to a bearing pad some 2 feet by 2 feet in plan view.

Recommendations

In our opinion, considering the favorable subsurface conditions, site preparation recommendations, and pavement design recommendations included in the referenced report, the recommended non -permeable pavement section is suitable to support the emergency fire lane loading conditions described above under occasional use. We anticipate that the paving will provide adequate support for emergency loading, but the high point loads could result in isolated damage to the paving surface that would require repair.