

TERRA ASSOCIATES, Inc.

Consultants in Geotechnical Engineering, Geology
and
Environmental Earth Sciences

June 13, 2023
Project No. T-5915-3

Mr. Stephen Nornes
Presbyterian Homes & Services and Senior Housing Partners
2823 Hamline Avenue North
Roseville, Minnesota 55113

Subject: Care Center Foundation Support Alternative
Wesley Homes Expansion
Puyallup, Washington

Reference: Response to Comments, Geotechnical Report Addendum, Wesley Homes Expansion, Puyallup
Washington, Project No. T-5915-3, prepared by Terra Associates, Inc., dated May 22, 2023

Geotechnical Report Addendum, Wesley Homes Expansion, Puyallup, Washington, Project No.
T-5915-3, prepared by Terra Associates, Inc., dated December 29, 2022

Geotechnical Report, Wesley Homes Puyallup, 39th Avenue SE, Puyallup, Washington, Project
No. T-5915-3, prepared by Terra Associates, Inc., revised date November 14, 2016

Dear Mr. Nornes:

Pursuant your request we have completed additional slope stability analysis for the northern Care Center building. As discussed in the referenced Response to Comments letter, stability analysis indicated that safety factors against slope failures under Psuedostatic (seismic) loading were less than the City of Puyallup Municipal Code (PMC) 1.2 minimum requirement. The purpose of this analysis was to determine what portion of the building would require pile support in order to meet the PMC minimum requirement.

As before our analysis was completed using the SLIDE2 computer program published by RocScience. Results of the analysis indicate that pile supported foundations would be required in the western approximately 50 feet of the building. This is shown on the attached site plan Figure 1. A graphic of the cross section showing the failure surface with the minimum safety factor along with soil parameters used in the analysis is attached as Figure 2.

Design recommendations for supporting the building on four-inch diameter driven pipe pile are provided in the referenced November 14, 2016 geotechnical report. These recommendations continue to remain valid for project design.

Mr. Stephen Nornes
June 13, 2023

We trust the information presented is sufficient for your current needs. If you have any questions or require additional information, please call.

Sincerely yours,
TERRA ASSOCIATES, INC.

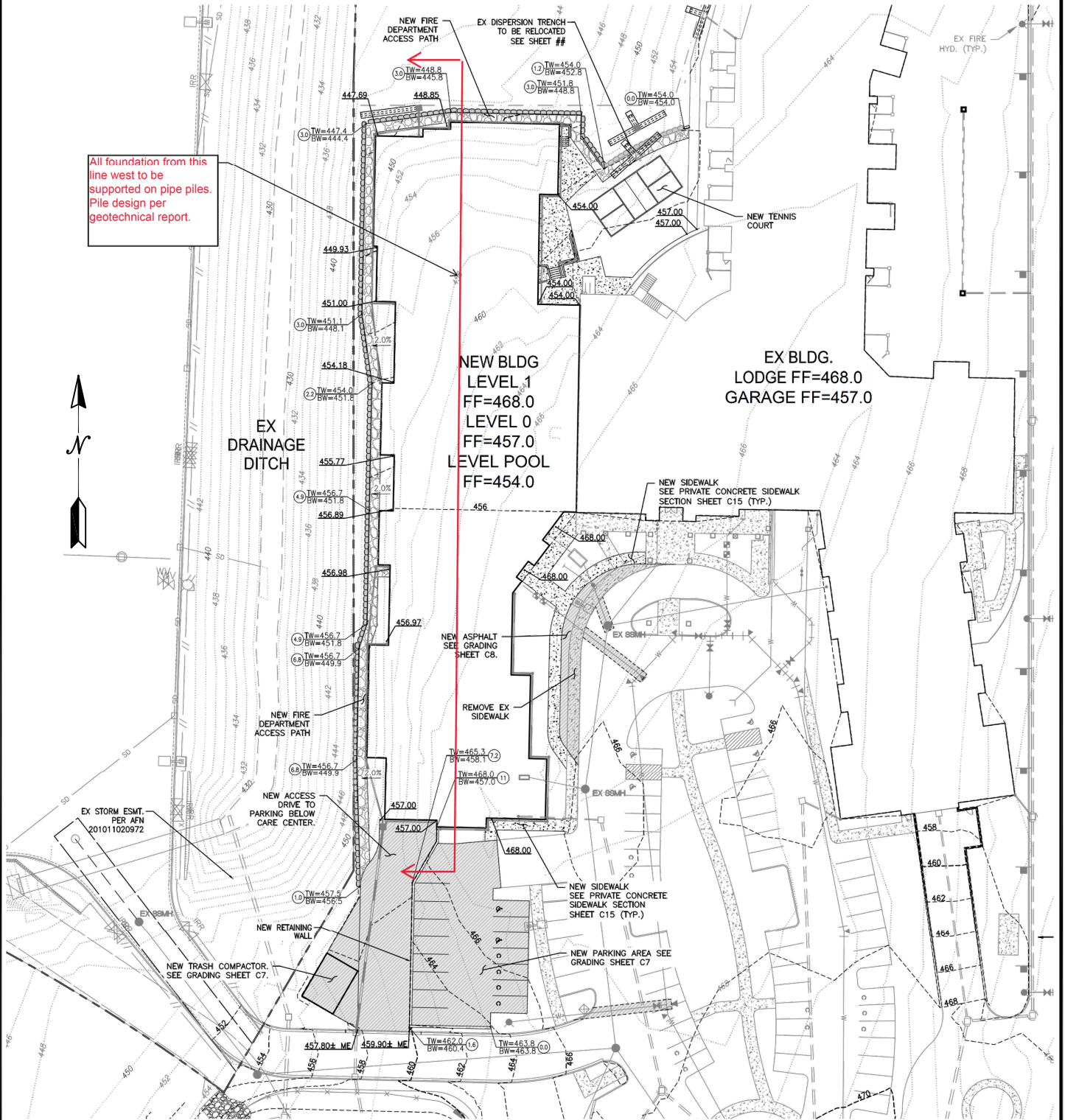
Theodore J. Schepper

Theodore J. Schepper, P.E. 6-13-23
Senior Principal Engineer

Cc: Ms. Jill Krance, In Site Architects

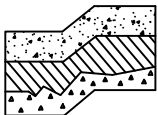
Attachments: Figure 1 – Pile Supported Foundation Area Building Site Plan
Figures 2 – SLIDE2 Stability Analysis Results

FOR
PHASE 2 - WESLEY BRADLEY PARK



REFERENCE: GRADING PLAN BY BARGHAUSEN CONSULTING ENGINEERS

NOT TO SCALE



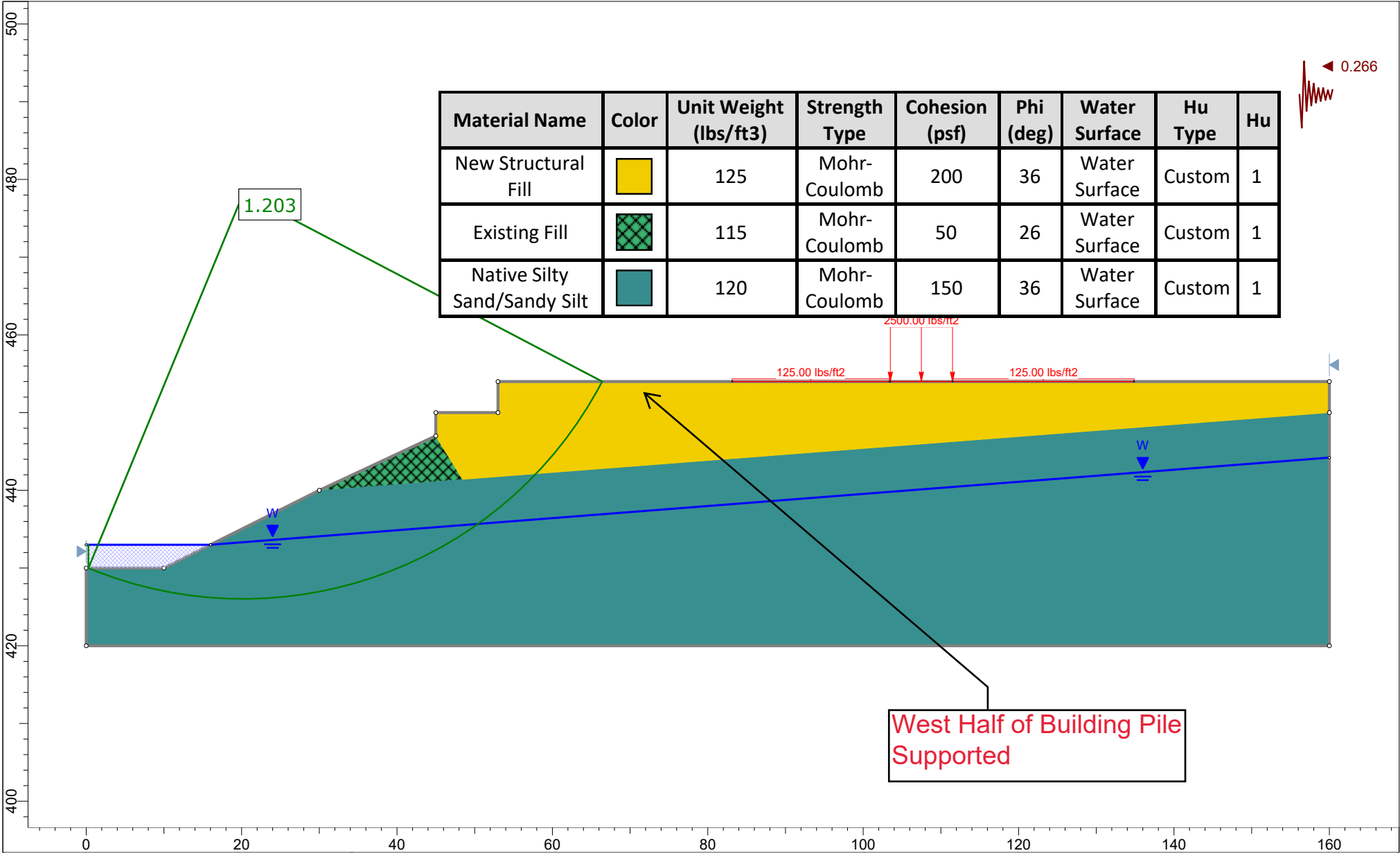
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**BUILDING SITE PLAN PILE SUPPORT AREA
 CARE CENTER WESLEY BRADLEY PARK
 PUYALLUP, WASHINGTON**

Proj. No.T-5915-3

Date JUNE 2023

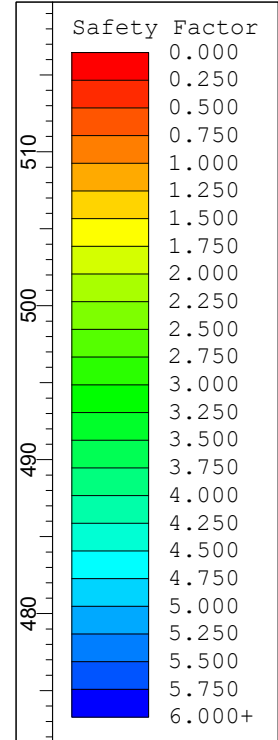
Figure 1



Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (deg)	Water Surface	Hu Type	Hu
New Structural Fill		125	Mohr-Coulomb	200	36	Water Surface	Custom	1
Existing Fill		115	Mohr-Coulomb	50	26	Water Surface	Custom	1
Native Silty Sand/Sandy Silt		120	Mohr-Coulomb	150	36	Water Surface	Custom	1

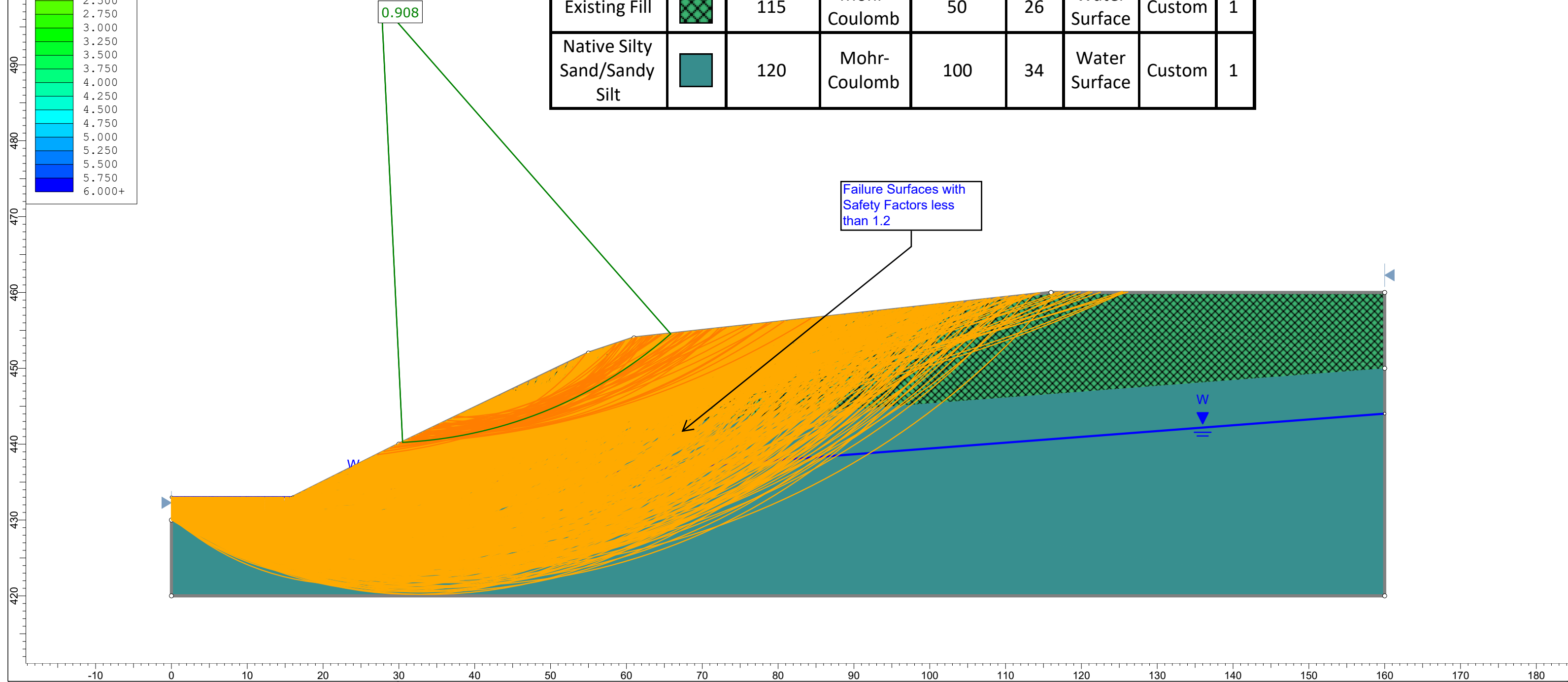
West Half of Building Pile Supported

	<i>Project</i> SLIDE - An Interactive Slope Stability Program	
	<i>Group</i> Group 1	<i>Scenario</i> Master Scenario
	<i>Drawn By</i>	<i>Company</i> Terra Associates, Inc.
	<i>Date</i> 5/16/2023, 9:57:40 AM	<i>File Name</i> Care Center Section A-A' Built Condition Seismic West Pile Supported.slmd



0.266

Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (deg)	Water Surface	Hu Type	Hu
Existing Fill		115	Mohr-Coulomb	50	26	Water Surface	Custom	1
Native Silty Sand/Sandy Silt		120	Mohr-Coulomb	100	34	Water Surface	Custom	1



SLIDEINTERPRET 9.008

Project				SLIDE - An Interactive Slope Stability Program			
Group		Group 1		Scenario		Master Scenario	
Drawn By				Company		Terra Associates, Inc.	
Date		5/16/2023, 11:31:28 AM		File Name		Care Center Section A-A' Existing Conditions Seismic Analysis	