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December 22, 2023

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503.580.6422

RE: Geotechnical Report Addendum #1
Proposed Muti-Unit Memory Care Development
235 Dunn Street; McMinnville, Oregon

This document is intended to provide responses to the requested items that were recently issued to you by the City of McMinnville 3rd Party Geotechnical Engineer (GRI[1]). Our response to the numbered items is as follows:

Item 1 - *The geotechnical reports and memorandums reviewed include seismic design parameters in accordance with the 2012 Oregon Structural Specialty Code (OSSC). Seismic parameters should be updated to reflect the current 2022 OSSC.*

Response: As a portion of Addendum #1 to our Report[2], the updated seismic parameters are as follows:

Seismic design criteria for this project will be based on the 2022 SOSSC and ASCE 7-16. Based on the results of our subsurface exploration, the site is classified as Site Class D. ASCE 7-16 Section 11.4.8 requires a ground motion hazard study in accordance with section 21.2 for structures on Site Class D sites with S_1 greater than or equal to 0.2 g, (S_1 at the site is 0.451 g. Exception 2 of the ASCE 7-16 section 11.4.8 indicates a ground motion hazard study is not required for structures on Site Class D sites with S_1 greater than or equal 0.2 g, provided the value of the seismic response coefficient C_s is determined by Eq. (12.8-2) for values of $T \geq 1.5T_s$ and taken as equal to 1.5 times the computed in accordance with either Eq. (12.8-3) for $TL \geq T \geq 1.5T_s$ or Eq (12.8-4) $T \geq TL$. We anticipate the buildings will meet these requirements, but if Exception 2 is not applicable, a ground motion hazard analysis will be required. We recommend the structural engineer evaluate these requirements and exceptions to determine if the parameters of Site Class D provided in Table 1 can be used for design or if a site-specific seismic hazard evaluation is required.

1 Letter from GRI dated December 7, 2023: Third Party Review of Dunn Place Documentation, 235 NE Dunn Place, McMinnville, Oregon

2 August 15, 2014, Report of Geotechnical Site Investigation, Prepared by Strata Design, Inc.

Table 1 - Seismic Design Parameters*

Seismic Design Parameters	Short Period (T_s = 0.2 second)	1 Second Period (T_1 = 1.0 second)
MCE Spectral Acceleration	S_s = 0.904g	S_1 = 0.451g
Site Class	D	
Site Coefficient	F_A = 0.00	F_V = 0.00
Adjusted Spectral Acceleration	S_{ms} = 1.029g	S_{M1} = See Section 11.4.8
Design Spectral Response Accelerations Parameters	S_{DS} = 0.686g	S_{D1} = See Section 11.4.8

*The structural engineer should evaluate code requirements and exceptions to determine if these parameters can be used for design.

Item 2 - Geological/geotechnical hazards should be evaluated using current 2022 OSSC including review of dynamic slope stability. Sufficient factor of safety at the proposed building offset from the crest of the slope should be demonstrated.

Response: Included with this Addendum #1, STRATA completed an updated analysis of dynamic slope stability. We deem that the dynamic factor of safety achieved demonstrates that the slope setback criteria of 60-feet remains valid. The dynamic analysis included accounting for the conditions of pseudo-static (seismic), and the 100-year flood elevation level. The full analysis report is attached (Appendix A).

Item 3 - Slope stability analysis should confirm adequate factor of safety is achieved during an appropriate flood stage. Selected flood elevation should be clearly identified and referenced.

Response: Included with this Addendum #1, the updated analysis of dynamic slope stability factored in flood elevations based on a 100-year elevation of 120 feet (NAD 88). The 1996 recorded flood level was about 110-feet (NAD 88). The top of the river bank is around Elevation 160 feet (NAD 88).

Item 4 - Planned grading and development should be reviewed to confirm validity of original assumptions regarding slope stability and potential impacts to global stability from the planned development.

Response: Included with this Addendum #1, STRATA has fully reviewed of the updated development plan. The current plan shows that the structure nearest to the concave zone of the river is actually offset from the crest of slope by about 80 feet. In the previous iteration (2017) iteration for development, this distance was less at about 60 feet.

There is one structure which is about 60 feet from the crest, however it is also perpendicular to a straight section of the Yamhill River, whereas the outside curve or concave area of bank is downstream of this.

Item 5 - Geotechnical report should clearly identify recommendations concerning suitability of infiltration and surface stormwater discharge.

Response: Included with this Addendum #1, STRATA is advising that, to the extent practical, stormwater from the roof and street areas be retained in a lined facility, with a pipe overflow on to the street curb, or stormwater main pipe (if one exists). If this is not possible, then we advise infiltration locations be at least 100-feet from the top of bank.

Item 6 - Geotechnical engineer of record should clearly identify the applicability of geotechnical recommendations provided in previous reports for the current planned use.

Response: Included with this Addendum #1, STRATA concludes that the remaining recommendations stated in our Report, with the exception of the above stipulations, should remain valid and applicable to current development plans.

Respectfully Submitted,
Strata Design LLC

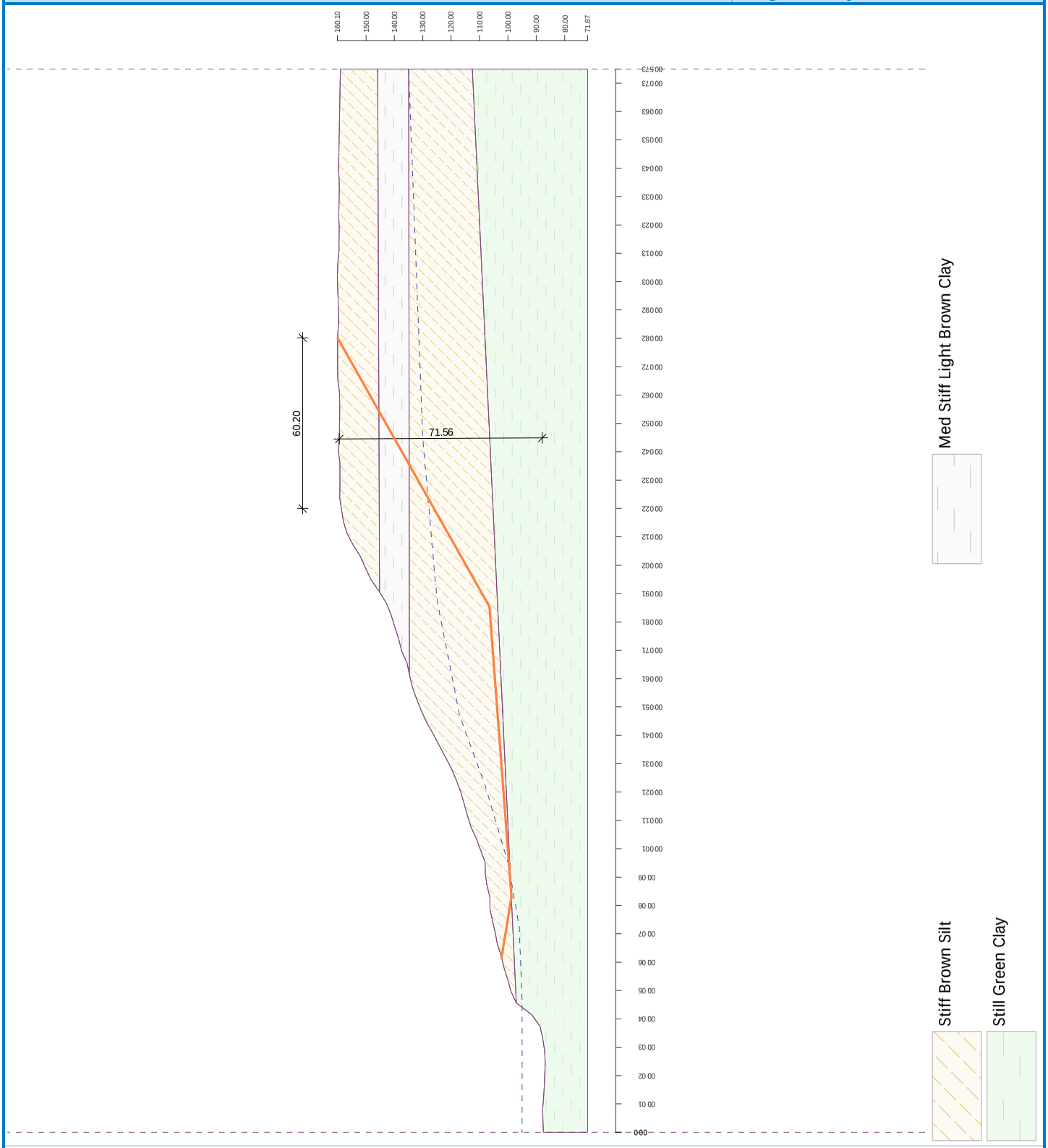
Exp: 6/30/25

Name: Randall S. Goode, PE
Title: Principal

Attachments

APPENDIX A.1: STATIC & DYNAMIC ANALYSIS OF SLOPE NON FLOOD CONDITION

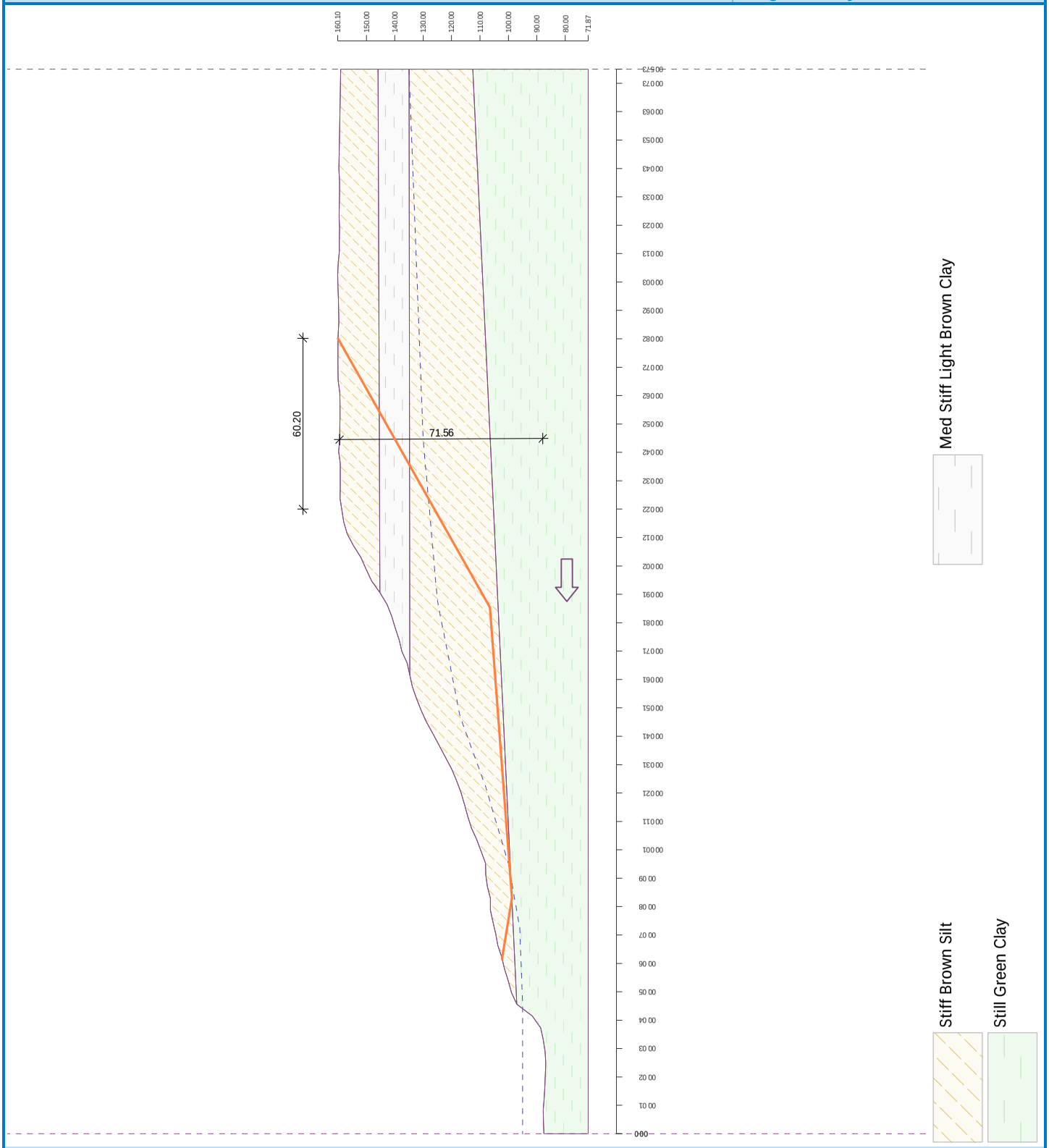
Name :	Stage - analysis : 1 - 1



Slope stability verification (Sarma)

Slope stability ACCEPTABLE

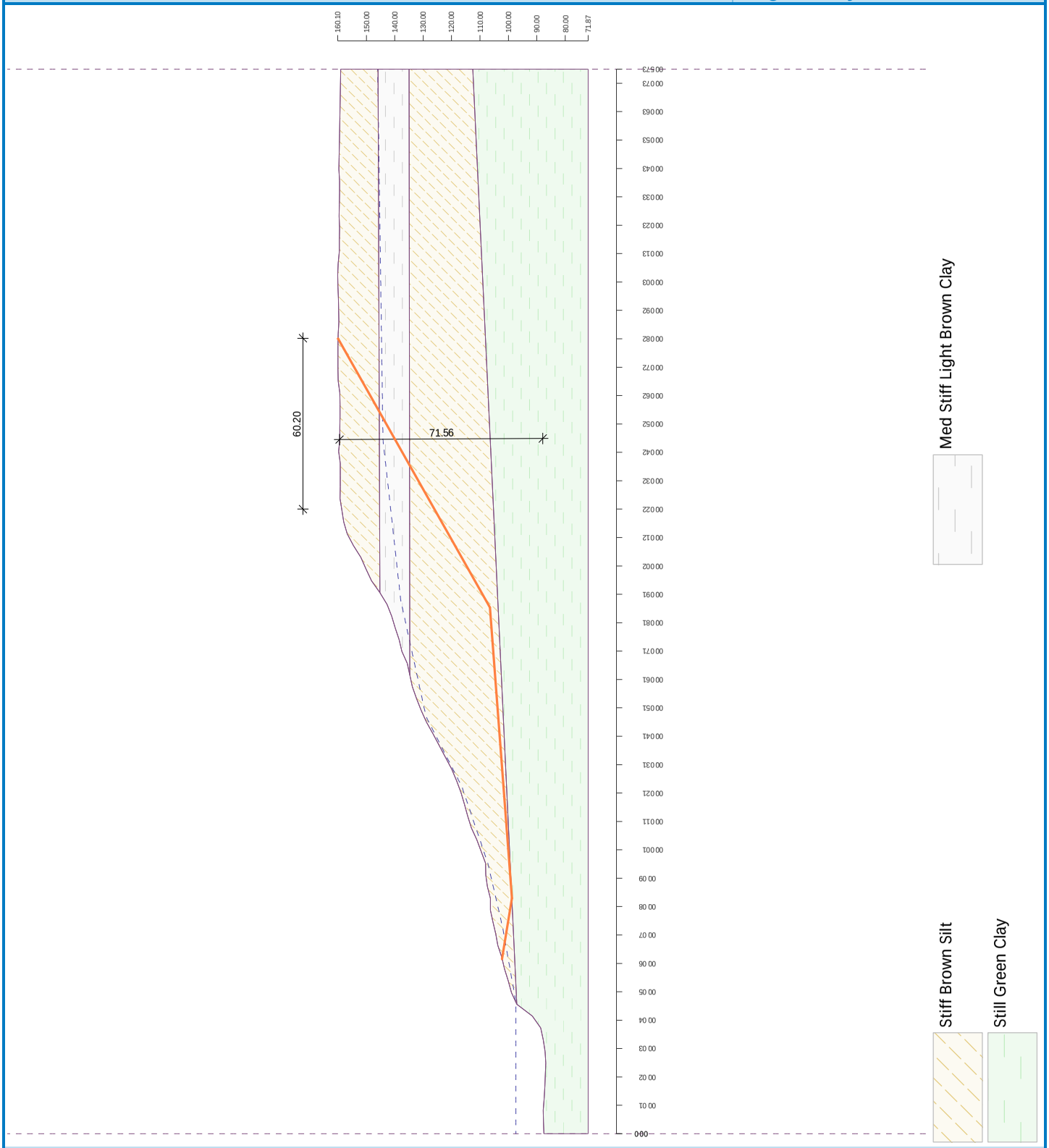
Name :	Stage - analysis : 1 - 1



Slope stability verification (Sarma)
Slope stability ACCEPTABLE

APPENDIX A.2 : SLOPE STABILITY ANALYSIS - WITH FLOOD CONDITION

Name :	Stage - analysis : 1 - 1



Slope stability verification (Sarma)
Slope stability ACCEPTABLE