70 Vantage Point Drive, Suite 1
Rochester, NY 14624
P (585) 247-3471
Terracon.com

November 5, 2024

Taylor, The Builders
2570 Baird Road
Penfield, New York 12203

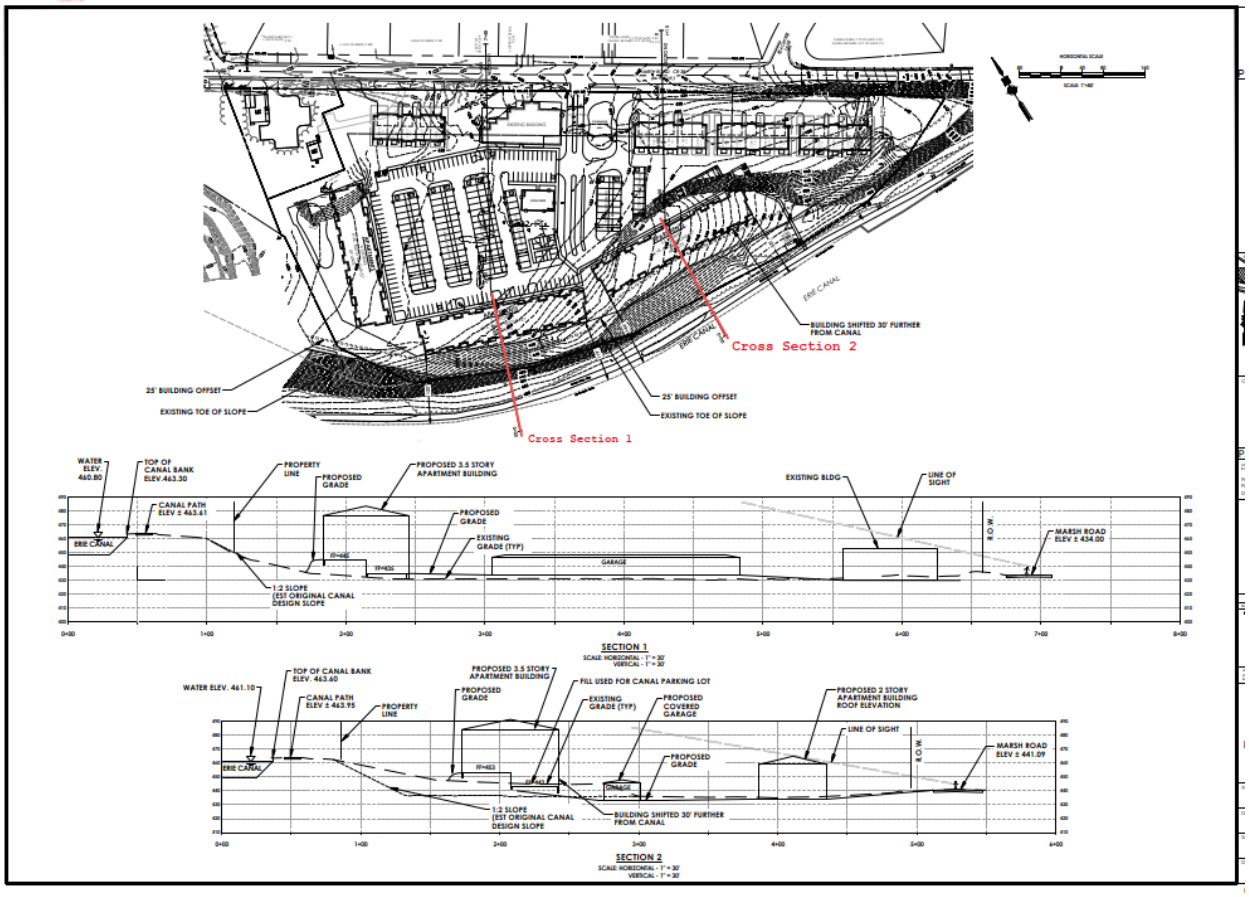
Attn: Mr. Karl Schuler
Phone: 585-248-6000
Email: karl@buildtaylor.com

RE: Geotechnical Engineering Report – Addendum No. 1 (Rev-1)
Burgundy Basin Redevelopment
1361 Marsh Road
Pittsford, New York
Terracon Project No. J5245090

Dear Mr. Schuler,

Terracon Consultants - NY, Inc. (Terracon) is submitting this letter as an addendum to our previously submitted Geotechnical Engineering Memorandum for Burgundy Basin Redevelopment (Terracon Project No. J5245090) dated April 16, 2024. Terracon was requested to perform additional slope stability analysis assuming a zero cohesion for the native soil materials. The purpose of this letter is to present the results of our revised analysis.

Based on the information provided and the received revised cross-sections, we understand the construction of the new buildings may require minimum excavation to accommodate the construction of the proposed development. The following images extracted from the revised plans show the existing and proposed grades in proximity to the proposed buildings:



Analysis and Results

Terracon previously prepared a geotechnical engineering memorandum and performed slope stability evaluations of the proposed cut slopes planned for the project along the southern portions of the site adjacent to the existing Erie Canal. After submitting the report, we were requested by Mr. David Cox from Passero Engineering to perform additional analyses and evaluate the factor of safety of the slope assuming zero cohesion for the native soils.

The stability of the revised cross-section 1 and cross-section 2, as shown above, were evaluated under both static and seismic conditions. The material properties of the soil profile for the slope stability evaluation were assumed to be consistent with the previously submitted report, except that the materials were assumed to have zero cohesion. Similar to the previous analysis, a groundwater table was also assumed, and hydrostatic forces were incorporated into the slope stability analysis. Based on these assumptions, the strength parameters used for the slope stability analyses are summarized as follows:

Depth Below Existing Grade (ft)	Soil Description	Unit Weight (pcf)	Internal Angle of Friction (degrees)	Cohesion (psf)
0 – 20	Mixtures of silt and sand with trace clay	120	32	0

The two cross-sections were analyzed under both static and seismic conditions. The evaluations involved using Slide (Rocscience, Version 9.036) software to perform iterations through the slope within anticipated failure zones to identify the critical failure surface with the lowest factor of safety for each model. The lowest factor of safety obtained from potential failure surfaces within each cross-section indicates the safety of the slope against instability. A factor of safety less than 1.0 indicates failure or instability.

Graphical results of the slope stability evaluations for each of the two cross-sections (for both the critical surface and all failure surfaces) are shown in **Attachment A** of this report. The green lines in the attachments indicate the location of the critical failure surface or the failure surface with the minimum factor of safety. The results of the stability analyses and the corresponding minimum calculated factors of safety for each case are summarized as follows:

Cross Section	Calculated Minimum Factor of Safety (FS)		
	Existing Slope Geometry		
	Static	Seismic	Rapid Drawdown
1	1.4	1.24	1.4
2	2.91	2.34	2.91

General Comments

Our analysis and opinions are based on our understanding of the project, the geotechnical conditions in the area, the project information provided, and the understanding from discussing the project with the client.

Our services and any correspondence are intended for the sole benefit and exclusive use of our client for specific application to the project discussed and are accomplished in accordance with generally accepted geotechnical engineering practices with no third-party beneficiaries intended. Any third-party access to services or correspondence is solely for information purposes to support the services provided by Terracon to our client. Reliance upon the services and any work product is limited to our client and is not intended for third parties. Any use or reliance of the provided information by third parties is done solely at their own risk. No warranties, either express or implied, are intended or made.

Closing

We appreciate the opportunity to provide this slope stability evaluation report for the proposed development at the project site. Please contact us if there are any questions or if anything else is needed.

Sincerely,
Terracon Consultants-NY, Inc.

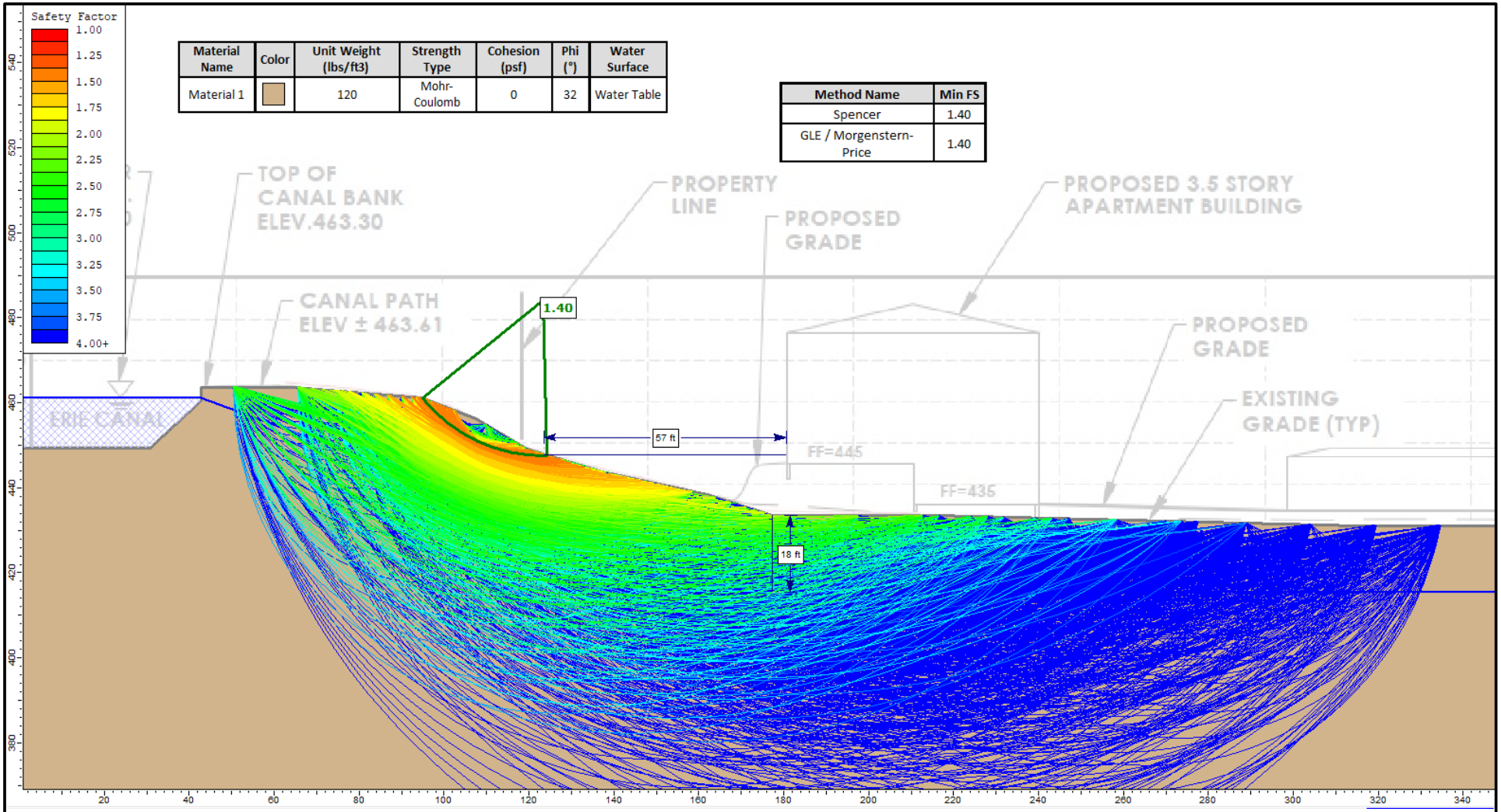
Arash Hosseini, Ph.D., P.E.
Project Engineer

Michele A. Fiorillo, P.E.
Geotechnical Department Manager

Attachments:

Attachment A: Slope Stability Analysis Results

Attachment A - Slope Stability Analysis Results



Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (°)	Water Surface
Material 1		120	Mohr-Coulomb	0	32	Water Table

Method Name	Min FS
Spencer	1.40
GLE / Morgenstern-Price	1.40

Notes:

1. Image generated using SLIDE2
2. Diagram is for general location only and is not intended for construction purposes.

Project Manager:	MF
Drawn by:	AH
Checked by:	MF
Approved by:	MF

Project No.	J5245090
Scale:	Not to Scale
File Name:	Section 1
Date:	10/6/2024

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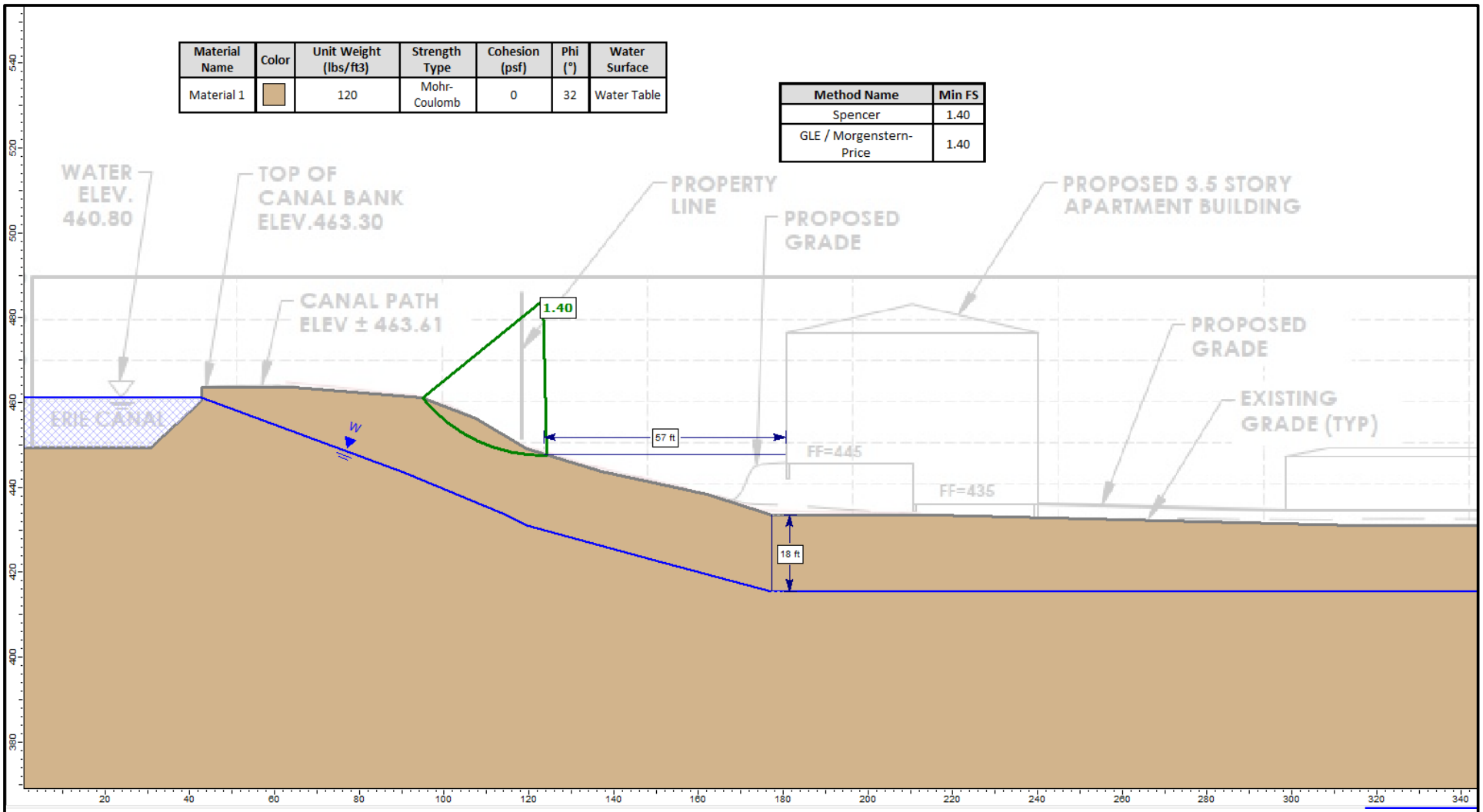
GLOBAL STABILITY EVALUATION

Slope Stability Evaluation
Burgundy Basin Inn
Section 1
All Failure Surfaces – Static Condition

Exhibit

Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (°)	Water Surface
Material 1		120	Mohr-Coulomb	0	32	Water Table

Method Name	Min FS
Spencer	1.40
GLE / Morgenstern-Price	1.40



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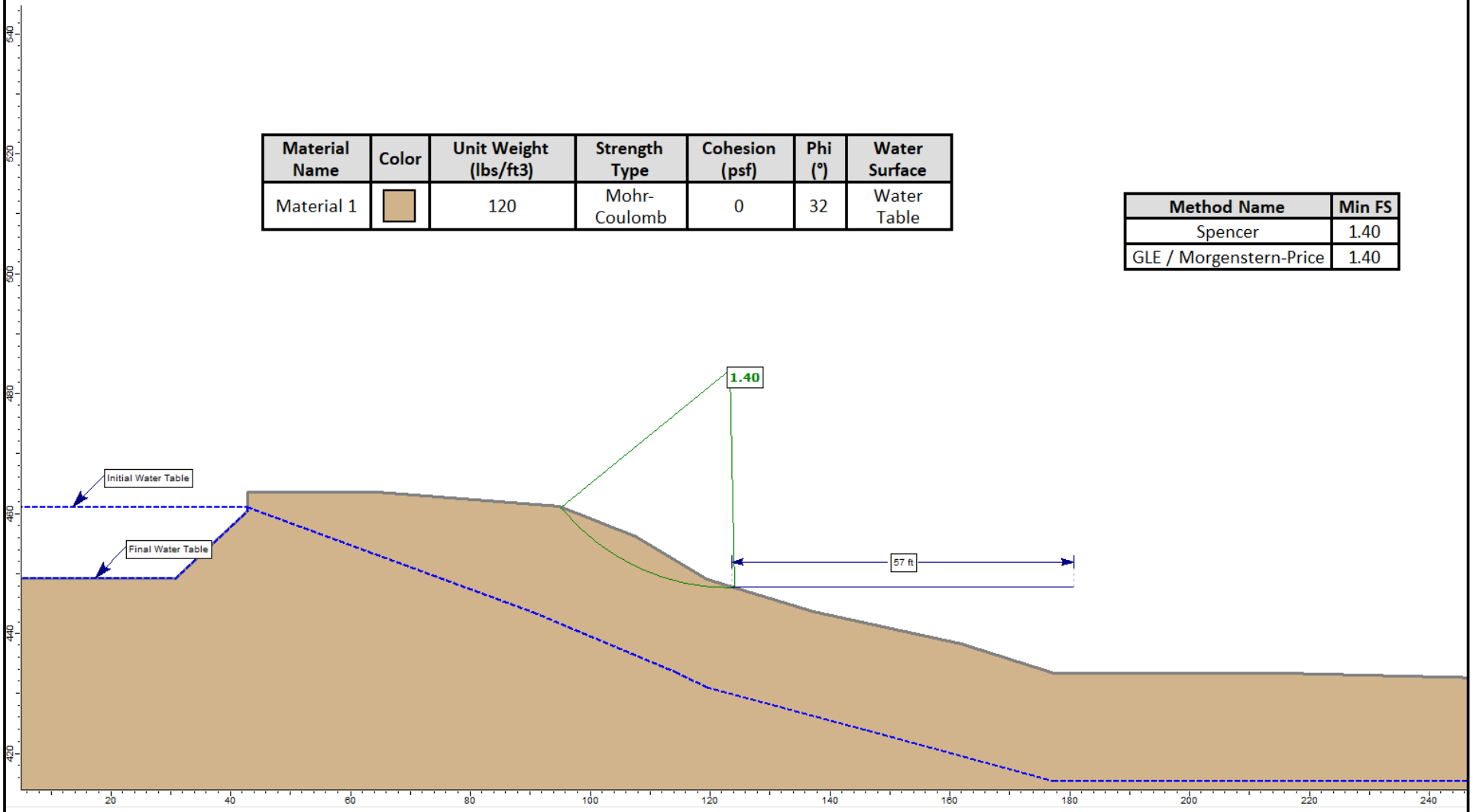
GLOBAL STABILITY EVALUATION

Slope Stability Evaluation
Burgundy Basin Inn
Section 1
Critical Failure Surface – Static Condition

Exhibit

Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (°)	Water Surface
Material 1		120	Mohr-Coulomb	0	32	Water Table

Method Name	Min FS
Spencer	1.40
GLE / Morgenstern-Price	1.40



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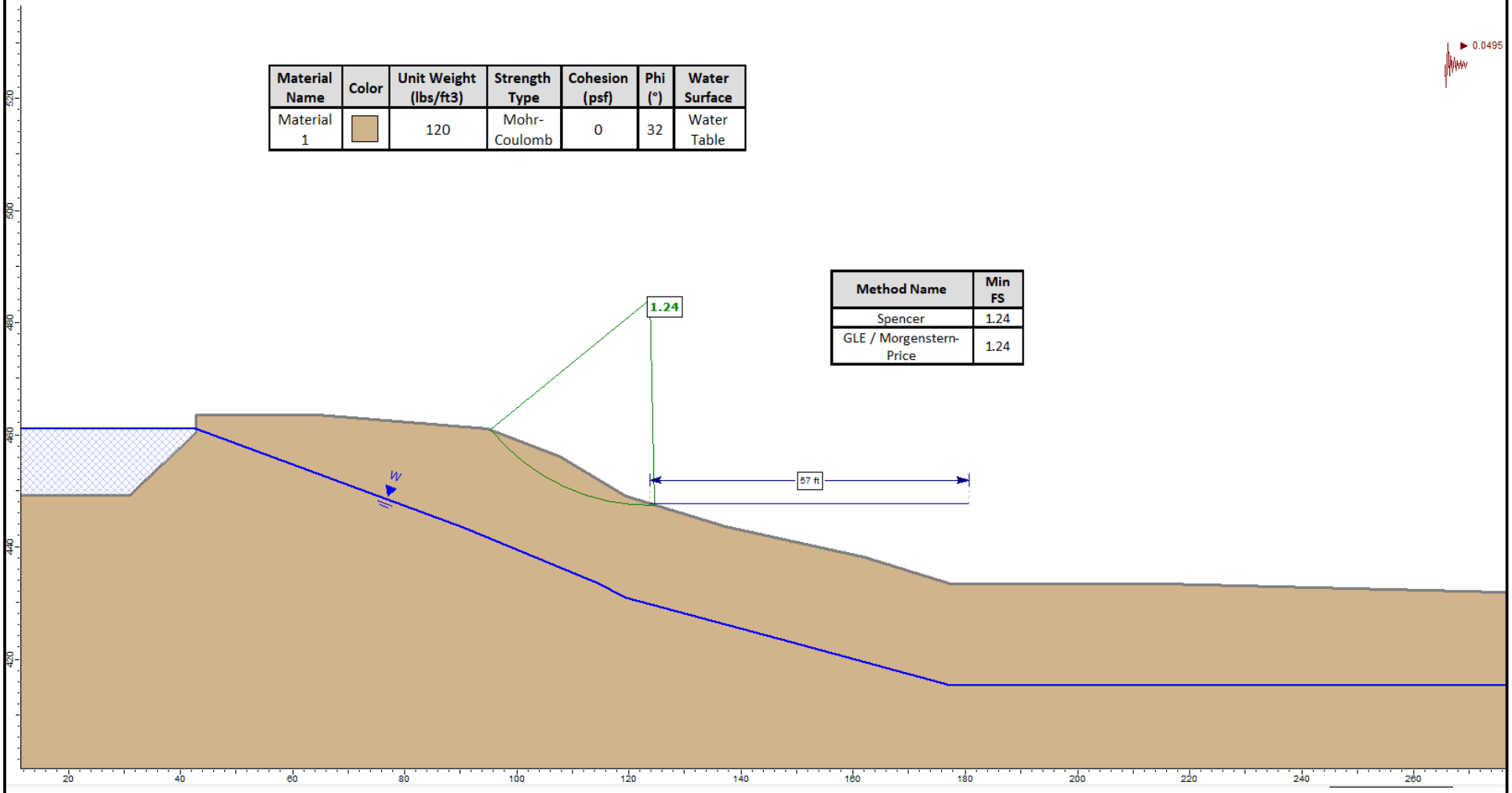
GLOBAL STABILITY EVALUATION

Slope Stability Evaluation
Burgundy Basin Inn
Section 1
Critical Failure Surface – Rapid Drawdown Condition

Exhibit

Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (°)	Water Surface
Material 1		120	Mohr-Coulomb	0	32	Water Table

Method Name	Min FS
Spencer	1.24
GLE / Morgenstern-Price	1.24



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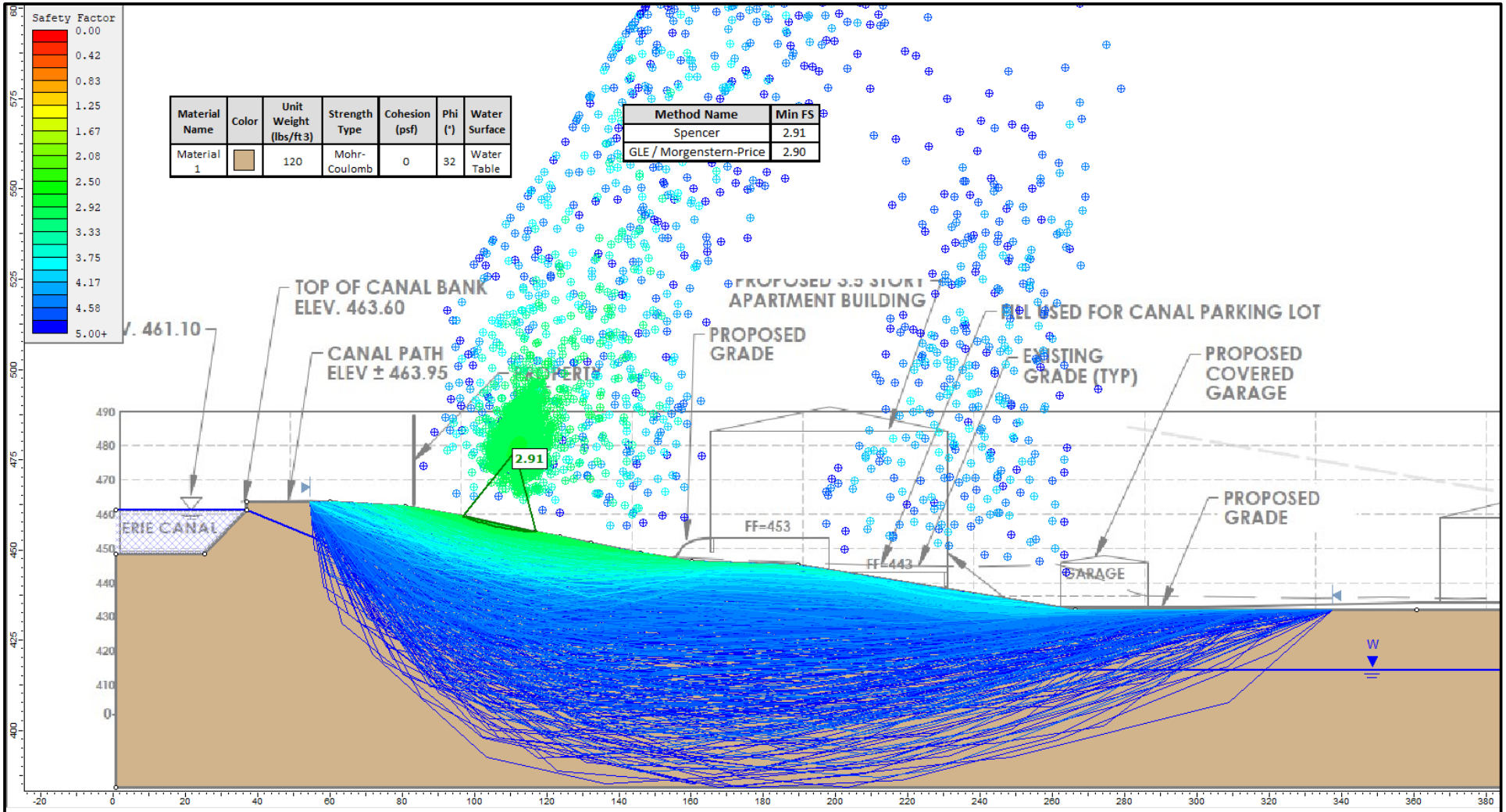
GLOBAL STABILITY EVALUATION

Slope Stability Evaluation
Burgundy Basin Inn
Section 1
Critical Failure Surface – Seismic Condition

Exhibit



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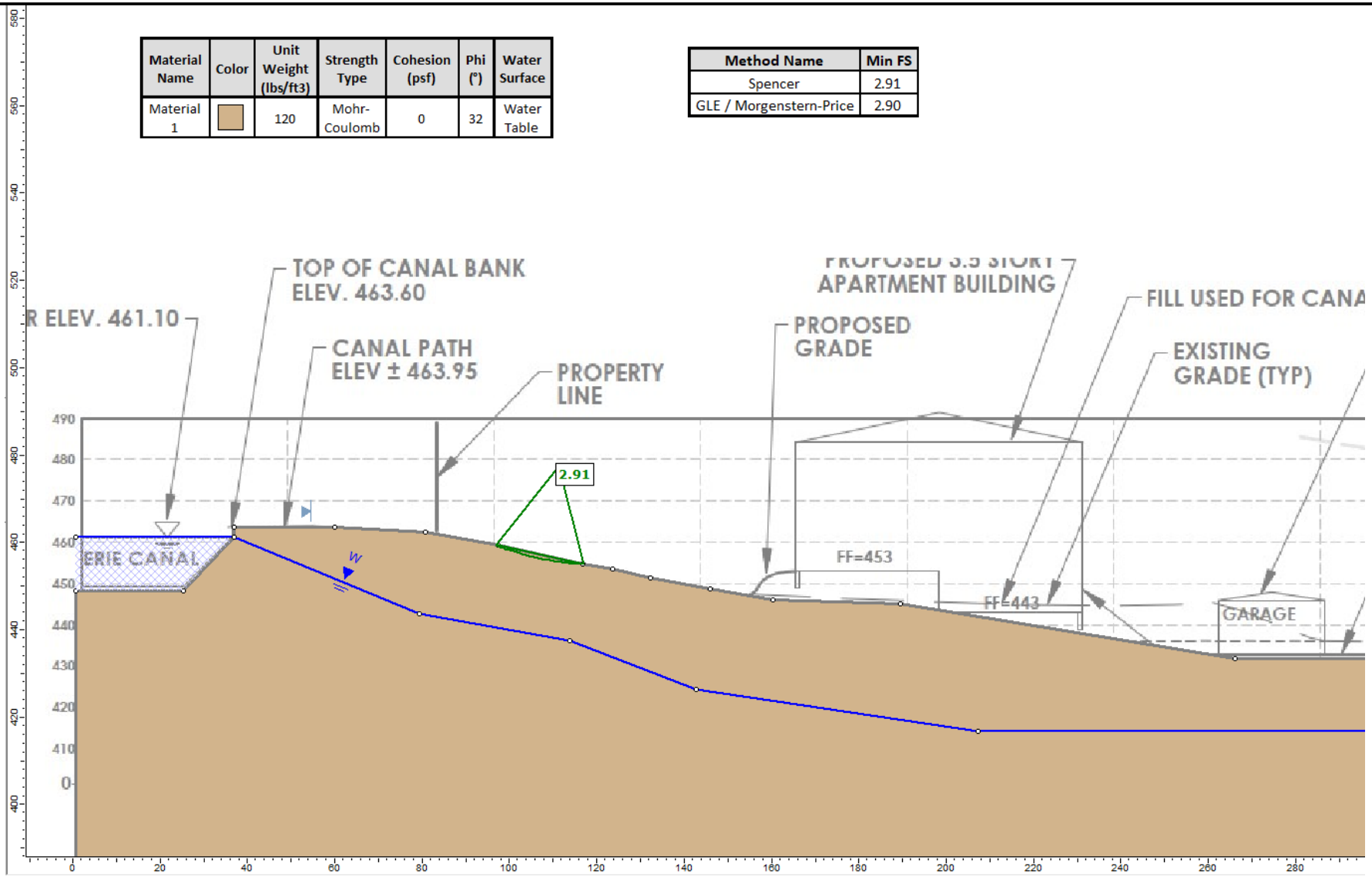
GLOBAL STABILITY EVALUATION

Slope Stability Evaluation
Burgundy Basin Inn
Section 2
Critical Failure Surface – Static Condition

Exhibit

Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (°)	Water Surface
Material 1		120	Mohr-Coulomb	0	32	Water Table

Method Name	Min FS
Spencer	2.91
GLE / Morgenstern-Price	2.90



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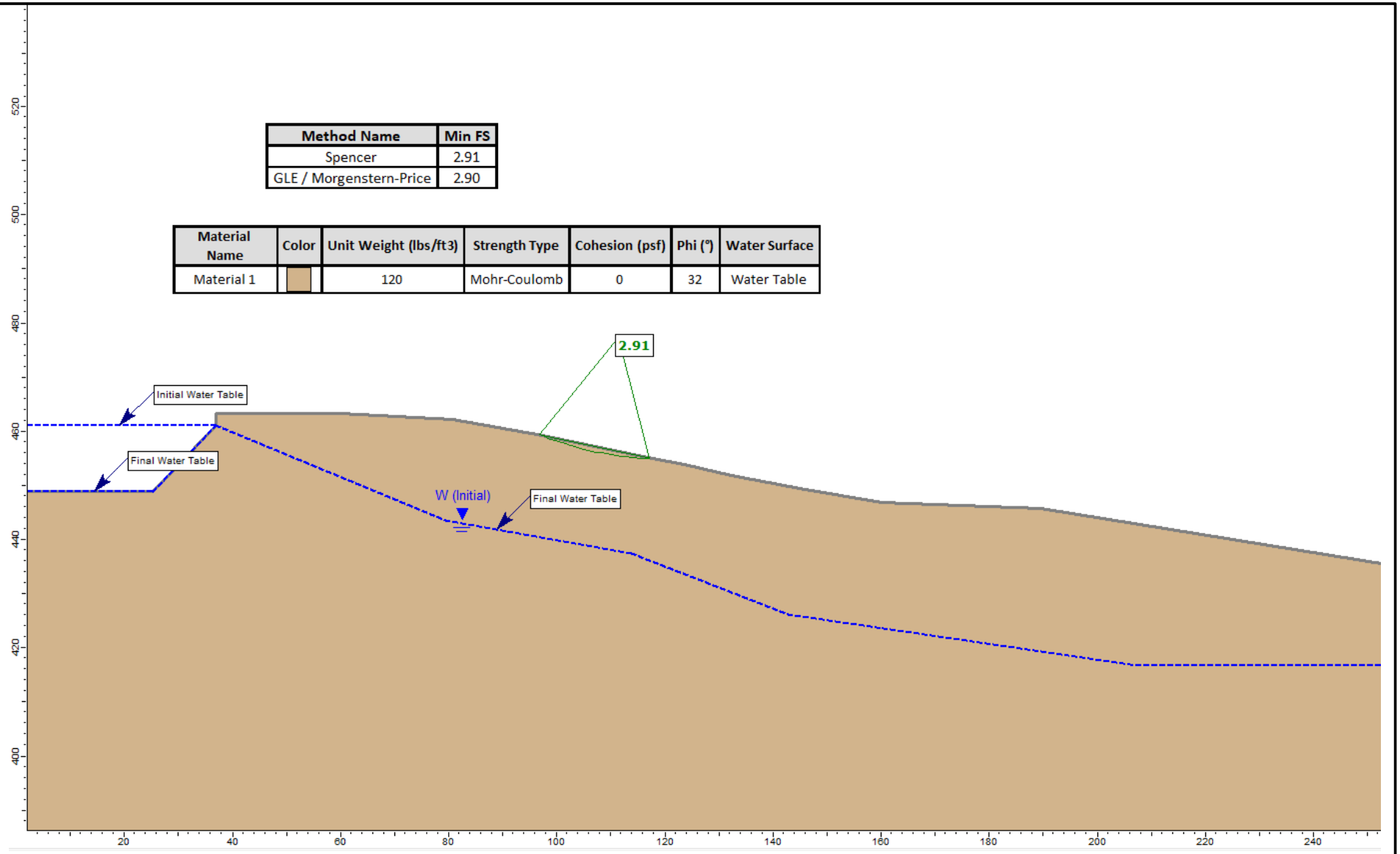
GLOBAL STABILITY EVALUATION

Slope Stability Evaluation
Burgundy Basin Inn
Section 2
Critical Failure Surface – Static Condition

Exhibit

Method Name	Min FS
Spencer	2.91
GLE / Morgenstern-Price	2.90

Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (°)	Water Surface
Material 1		120	Mohr-Coulomb	0	32	Water Table



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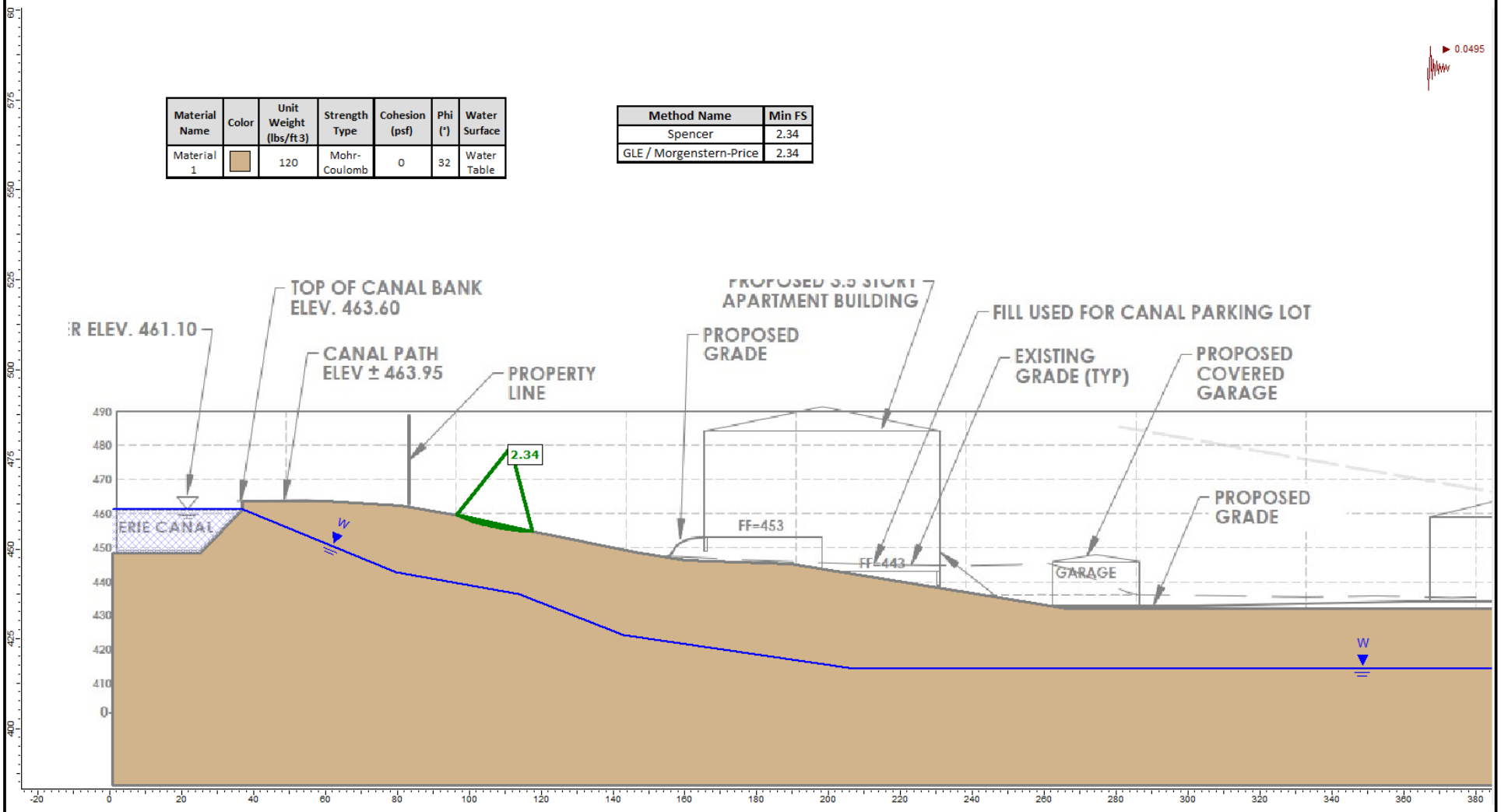
GLOBAL STABILITY EVALUATION

Slope Stability Evaluation
Burgundy Basin Inn
Section 2
Critical Failure Surface – Rapid Drawdown Condition

Exhibit

Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (°)	Water Surface
Material 1		120	Mohr-Coulomb	0	32	Water Table

Method Name	Min FS
Spencer	2.34
GLE / Morgenstern-Price	2.34



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GLOBAL STABILITY EVALUATION

Slope Stability Evaluation
Burgundy Basin Inn
Section 2
Critical Failure Surface – Seismic Condition

Exhibit