

AGEC

Applied GeoTech

March 21, 2018

Henry Walker Homes
1148 West Legacy Crossing, Suite 400
Centerville, Utah 84014

Attention: Brock Loomis
EMAIL: brock@jfcapital.com

Subject: Slope Stability Evaluation
Proposed Edgewater Beach Resort, Phase 3
6350 East Highway 39
Huntsville, Utah
Project No. 1170319

Gentlemen:

This study was conducted to evaluate the stability of the slope north of the site with respect to the proposed buildings to be constructed in Phase 3 of the Edgewater Beach Resort located at 6350 East Highway 39 in Huntsville, Utah. This letter has been prepared to summarize the data obtained during the study and to present our conclusions.

We performed a geologic-hazards study for the site and provided results of the study in a letter dated January 3, 2018 under Project No. 1170319.

PROPOSED CONSTRUCTION

We understand that 24 residential units are planned for Phase 3 (See Figure 1). We anticipate buildings will be two-story, wood-frame structures with basements. The grading plan provided shows minor amounts of grade change. Roads have already been constructed for Phases 1 and 2 of the development.

SITE DESCRIPTION

At the time of our field study, there were no permanent structures on the site but roads had been constructed and some underground utilities had been installed for Phases 1 and 2. The remaining portion of the site consists of undeveloped ground.

The ground surface at the site slopes gently down toward the north.

Vegetation consists of grass and weeds with some areas of brush.

There are similar condominiums in Phase 1 and undeveloped land to the east and west. Highway 39 borders the south edge of the property. There is undeveloped land south of the Highway. Pineview reservoir is to the north.

FIELD STUDY

The field study was performed on March 1, 2018. Two borings were drilled at the approximate locations indicated on Figure 1 using 8-inch diameter hollow-stem auger. The borings were logged and soil samples obtained by an engineer from AGECE. Logs of the subsurface conditions encountered in the borings are presented on Figure 2.

SUBSURFACE CONDITIONS

The subsurface conditions encountered at the site consist of approximately ½ foot of topsoil overlying clay extending to depths of approximately 4 and 1 ½ feet in Borings B-1 and B-2, respectively. Mudstone bedrock was encountered below the clay. Practical auger refusal was encountered in the mudstone at depths of approximately 21 and 10 feet in Borings B-1 and B-2, respectively.

A description of the soil and bedrock encountered in the boring follows:

Topsoil - The topsoil consists of sandy lean clay. It is very moist, dark brown and contains roots.

Lean Clay - The clay contains sand layers. It is stiff, moist and brown.

Mudstone Bedrock - The bedrock is firm to very hard, slightly moist and brown to gray.

Laboratory tests conducted on a sample of the mudstone indicate it has a liquid limit of 43 and plasticity index of 22. A sample of the bedrock obtained from the cuttings of Boring B-1 was remolded to dry densities of approximately 91 to 92 pounds per cubic foot and a moisture content of approximately 25 percent. A direct shear test was performed on the sample. Results of the test are included on Figure 3.

SLOPE STABILITY EVALUATION

A slope profile was developed for the proposed building planned to be closest to the slope north of the site, Pad 42. The profile is based on the elevation information obtained from Google Earth since topography is not available for the slope north of the site. The profile is presented on the stability printouts included in the appendix. Strength parameters used for the analysis are based on the direct shear test results for the remolded mudstone, which should be conservative since the slope shows no evidence of past slope failure as discussed in our letter of January 3, 2018. Slope-stability safety factors of 3.3 and 1.7 were obtained

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Page 3

for the static and seismic conditions for Pad 42. Generally accepted slope-stability safety factors are 1.5 and 1.0 for the static and seismic conditions, respectively. The seismic parameters used in the analysis are for a seismic event with a probability of occurrence of 2 percent in 50 years per IBC (2015). The seismic coefficient selected assumes 2 inches of slope deformation per Blake and others (2002).

CONCLUSIONS

Slope stability is not considered a potential geologic hazard at the site. This assumes building locations as indicated on Figure 1.

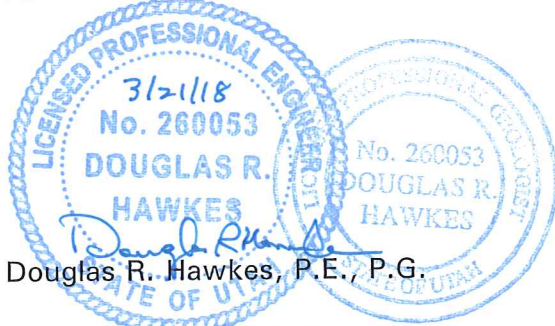
LIMITATIONS

The analysis and report findings are based on published geologic maps and aerial photographs of the site, the subsurface conditions encountered in the two borings and the laboratory testing described. Our conclusions are based on currently accepted geotechnical engineering practices for the area and geologic interpretation of the condition of the site and vicinity.

If you have questions or if we can be of further service, please call.

Sincerely,

APPLIED GEOTECHNICAL ENGINEERING CONSULTANTS, INC.



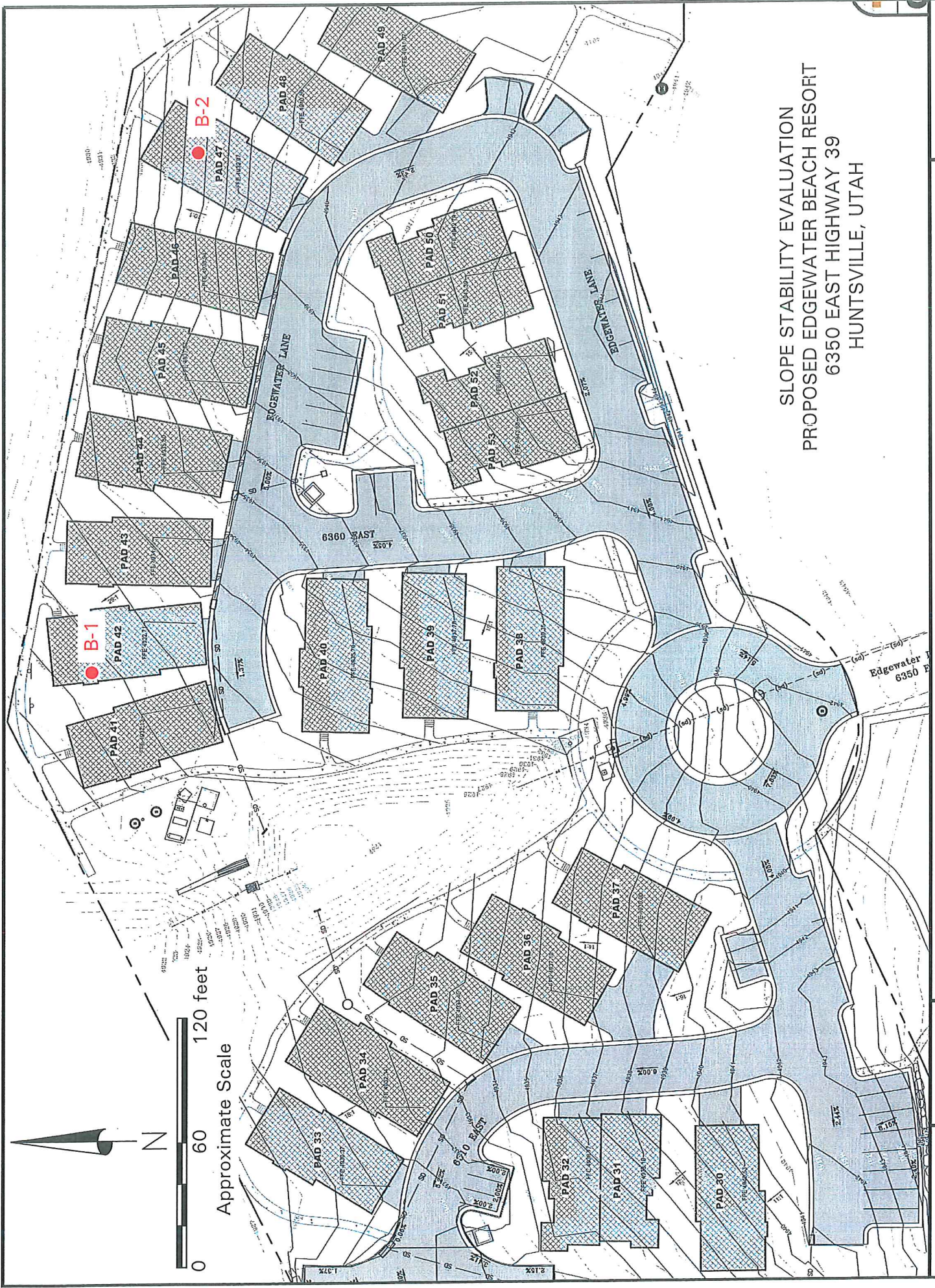
Douglas R. Hawkes, P.E., P.G.

Reviewed by JRM, P.E.
DRH/rs

References:

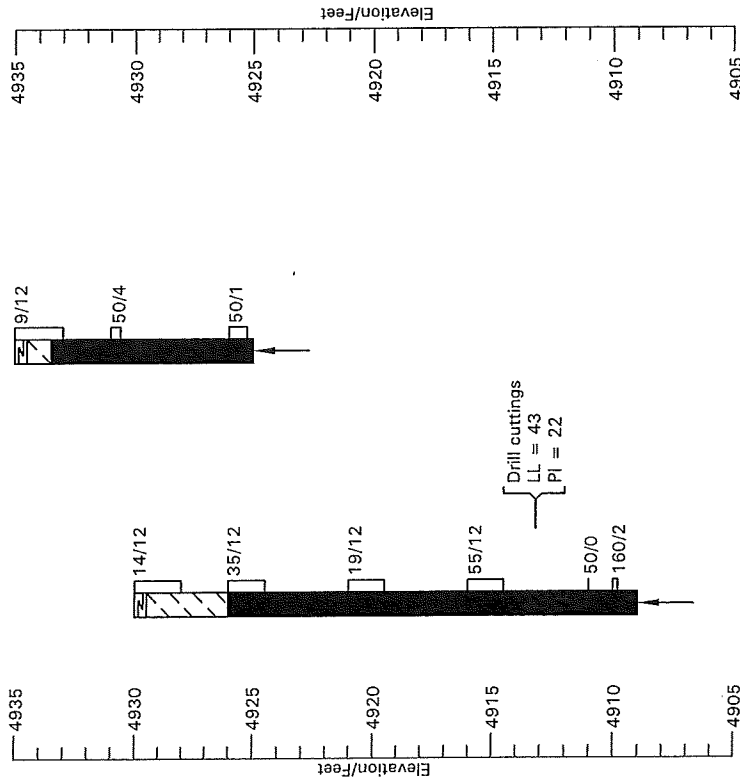
Blake, T.F., Hollingsworth, R.A. and Stewart, J.P., Editors (2002), Recommended Procedures for Implementation of DMG Special Publication 117, Guidelines for analyzing and mitigating landslide hazards in California: organized by the Southern California Earthquake Center, University of Southern California.

International Building Code, 2015; International Code Council, Falls Church, Virginia.

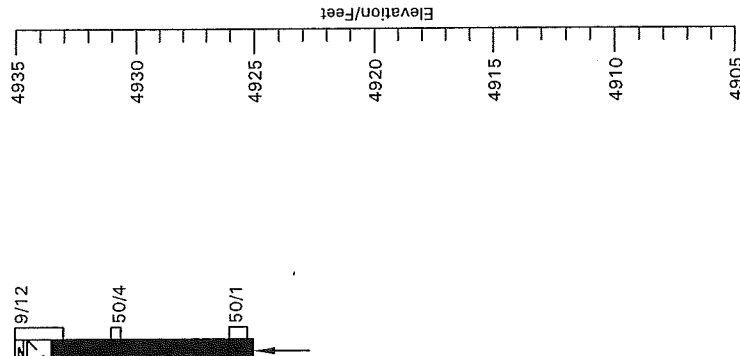


SLOPE STABILITY EVALUATION
 PROPOSED EDGEWATER BEACH RESORT
 6350 EAST HIGHWAY 39
 HUNTSVILLE, UTAH






B-1
Elev. 4930'



B-2
Elev. 4935'



LEGEND:

-  Topsoil; sandy lean clay, very moist, dark brown, roots.
-  Lean Clay (CL); sand layers, stiff, moist, brown.
-  Mudstone, firm to very hard, slightly moist, brown to gray.
-  10/12 California Drive sample taken. The symbol 10/12 indicates that 10 blows from a 140 pound automatic hammer falling 30 inches were required to drive the sampler 12 inches.
-  Indicates practical auger refusal.

NOTES:

1. The borings were drilled on March 1, 2018 with 8-inch diameter hollow-stem auger.
2. The locations of the borings were measured approximately by pacing from features shown on the site plan provided.
3. The elevations of the borings were estimated from the contours shown on the plan provided.
4. The boring locations and elevations should be considered accurate only to the degree implied by the method used.
5. The lines between materials shown on the boring logs represent the approximate boundaries between material types and the transitions may be gradual.
6. No free water was encountered in the borings at the time of drilling.
7. LL = Liquid Limit (%);
PI = Plasticity Index (%).

Approximate Vertical Scale 1" = 8"

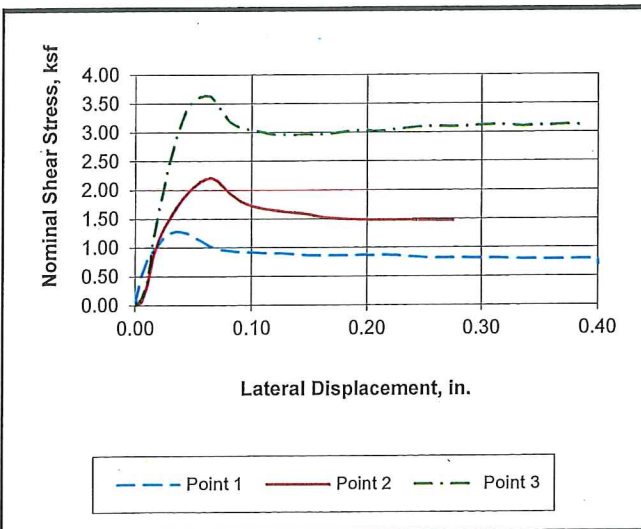
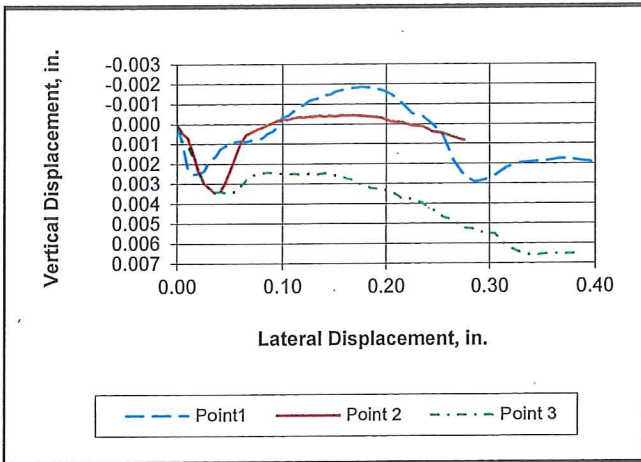
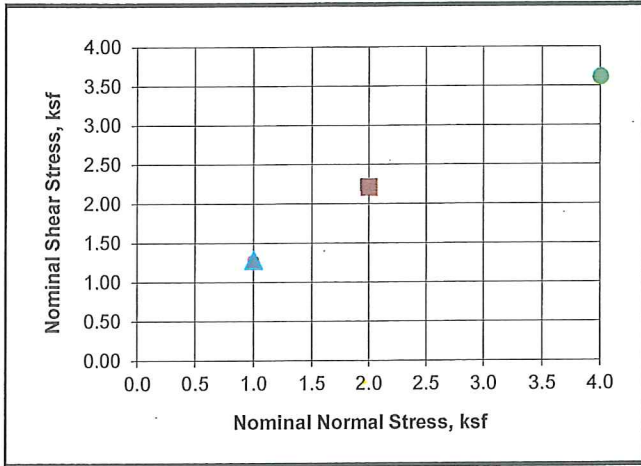
1170319



Exploratory Boring Logs, Legend and Notes

Figure 2

Applied Geotechnical Engineering Consultants, Inc.



Project and Sample Information			
Project Number	1170319		
Project Name	Edgewater		
Sample Identification	B-1 Drill Cuttings		
Sample Description	Mudstone		
Test No. (Symbol)	1 (▲)	2 (■)	3 (●)
Test Type	Consolidated Wetted		
Sample Type	Remolded		
Length, in.	1.00	1.00	1.00
Diameter, in.	2.42	2.42	2.42
Dry Density, pcf	91.3	92.2	91.5
Moisture Content, %	24.7	24.7	24.7
Consol. Load, ksf	1.0	2.0	4.0
Normal Load, ksf	1.0	2.0	4.0
Peak Shear Stress, ksf	1.29	2.22	3.62
Rate of Strain, in/min	0.001	0.001	0.001
The samples were passed over a No. 40 sieve and molded to the densities indicated at a moisture content of 24.7 percent. Samples were wetted and loaded, and soaked for at least 24 hours.			

Direct Shear Sample Properties	
Liquid Limit, %	43
Plasticity Index, %	22

APPENDIX
SLOPE STABILITY PRINTOUTS

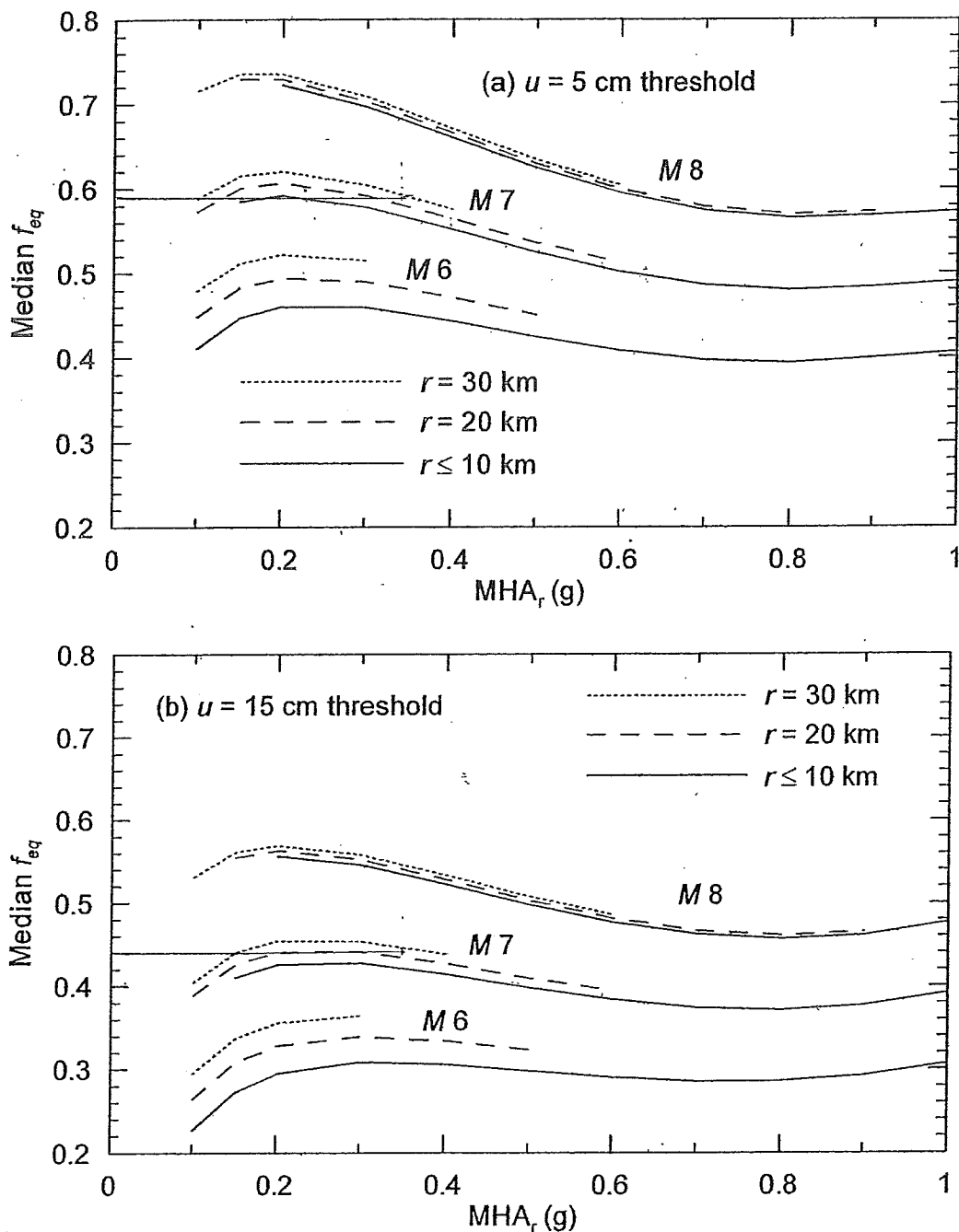



Figure 11.1. Required Values of f_{eq} as Function of MHA_r and Seismological Condition for Threshold Displacements of (a) 5 cm and (b) 15 cm

3.27

Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Shear Normal Function	Water Surface	Hu Type	Hu
Material 1		120	Shear Normal function	Bedrock	Water Surface	Custom	1

1170319
Edgewater Beach Resort
Static

South

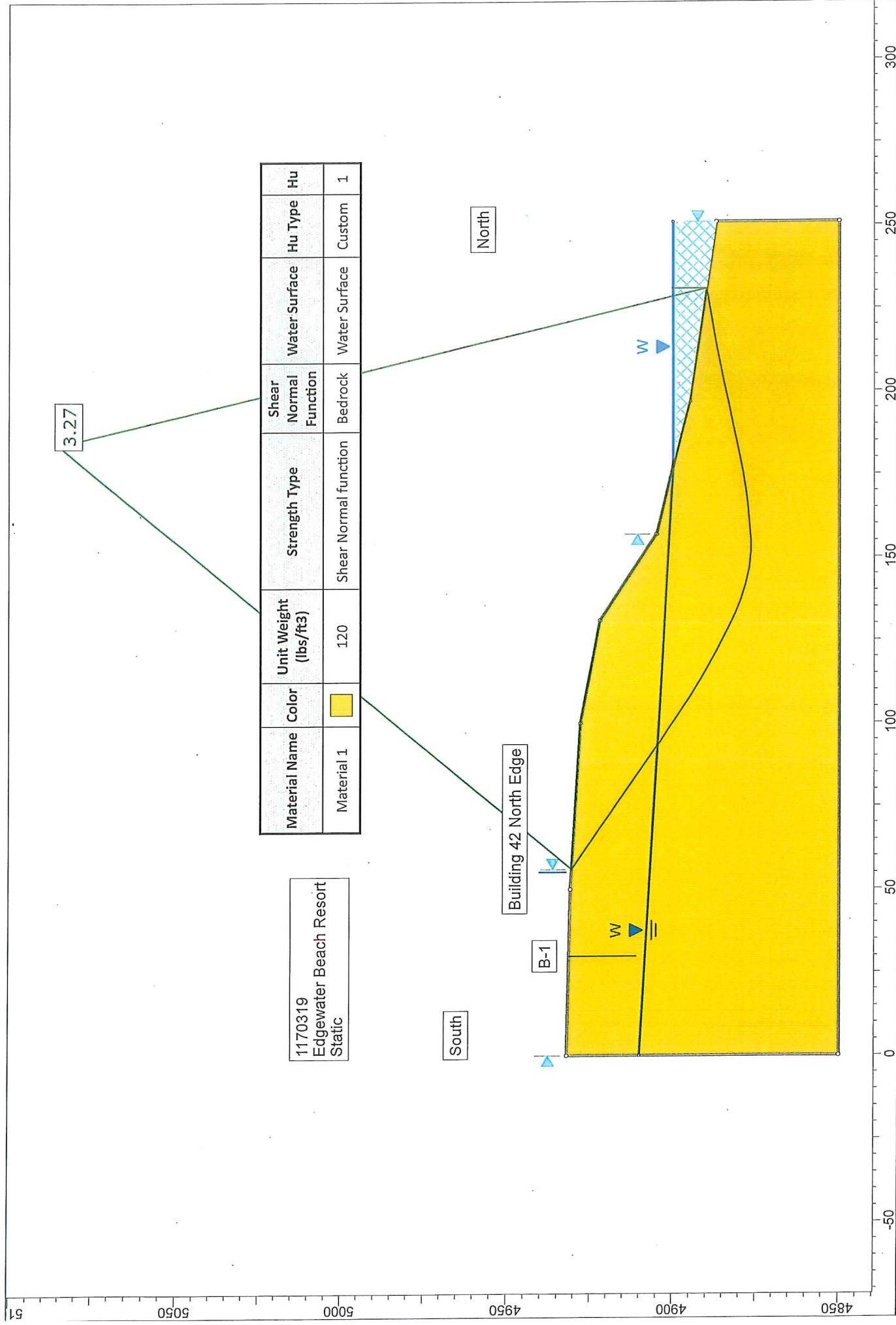
North

Building 42 North Edge

B-1

W

W



Slide Analysis Information

SLIDE - An Interactive Slope Stability Program

Project Summary

File Name: 1170319 - Edgewater Static
 Last saved with Slide version: 7.03
 Project Title: SLIDE - An Interactive Slope Stability Program
 Date Created: 3/19/2018, 12:55:21 PM

General Settings

Units of Measurement: Imperial Units
 Time Units: days
 Permeability Units: feet/second
 Failure Direction: Left to Right
 Data Output: Standard
 Maximum Material Properties: 20
 Maximum Support Properties: 20

Analysis Options

Slices Type: Vertical

Analysis Methods Used

Spencer

Number of slices: 50
 Tolerance: 0.005
 Maximum number of iterations: 75
 Check $m_{\alpha} < 0.2$: Yes
 Create Interslice boundaries at intersections with water tables and piezos: Yes
 Initial trial value of FS: 1
 Steffensen Iteration: Yes

Groundwater Analysis

Groundwater Method: Water Surfaces
 Pore Fluid Unit Weight [lbs/ft³]: 62.4
 Use negative pore pressure cutoff: Yes
 Maximum negative pore pressure [psf]: 0
 Advanced Groundwater Method: None

Random Numbers

Pseudo-random Seed: 10116
 Random Number Generation Method: Park and Miller v.3


Surface Options

Search Method: Auto Refine Search
 Divisions along slope: 10
 Circles per division: 10
 Number of iterations: 10
 Divisions to use in next iteration: 50%
 Number of vertices per surface: 12
 Minimum Elevation: Not Defined
 Minimum Depth: Not Defined
 Minimum Area: Not Defined
 Minimum Weight: Not Defined

Seismic

Advanced seismic analysis: No
 Staged pseudostatic analysis: No

Material Properties

Property	Material 1
Color	
Strength Type	Shear Normal function
Unit Weight [lbs/ft3]	120
Water Surface	Water Table
Hu Value	1

Shear Normal Functions

Name: Bedrock

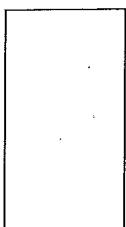
Normal (psf)	Shear (psf)
0	0
1000	1290
2000	2220
4000	3620

List Of Coordinates

Water Table

X	Y
0	4910
177.334	4899.92
251	4900

External Boundary



X	Y
0	4850
251	4850
251	4887
197	4895
157	4905
131	4922
100	4928
50	4931
0	4932

Slide Analysis Information

SLIDE - An Interactive Slope Stability Program

Project Summary

File Name: 1170319 - Edgewater Seismic
 Slide Modeler Version: 7.03
 Project Title: SLIDE - An Interactive Slope Stability Program
 Date Created: 3/19/2018, 12:55:21 PM

General Settings

Units of Measurement: Imperial Units
 Time Units: days
 Permeability Units: feet/second
 Failure Direction: Left to Right
 Data Output: Standard
 Maximum Material Properties: 20
 Maximum Support Properties: 20

Analysis Options

Slices Type: Vertical

Analysis Methods Used

Spencer

Number of slices: 50
 Tolerance: 0.005
 Maximum number of iterations: 75
 Check malpha < 0.2: Yes
 Create Interslice boundaries at intersections with water tables and piezos: Yes
 Initial trial value of FS: 1
 Steffensen Iteration: Yes

Groundwater Analysis

Groundwater Method: Water Surfaces
 Pore Fluid Unit Weight [lbs/ft³]: 62.4
 Use negative pore pressure cutoff: Yes
 Maximum negative pore pressure [psf]: 0
 Advanced Groundwater Method: None

Random Numbers

Pseudo-random Seed: 10116
 Random Number Generation Method: Park and Miller v.3

Surface Options

Search Method: Auto Refine Search
 Divisions along slope: 10
 Circles per division: 10
 Number of iterations: 10
 Divisions to use in next iteration: 50%
 Number of vertices per surface: 12
 Minimum Elevation: Not Defined
 Minimum Depth: Not Defined
 Minimum Area: Not Defined
 Minimum Weight: Not Defined


Seismic

Advanced seismic analysis: No
 Staged pseudostatic analysis: No

Loading

Seismic Load Coefficient (Horizontal): 0.21

Material Properties

Property	Material 1
Color	
Strength Type	Shear Normal function
Unit Weight [lbs/ft3]	120
Water Surface	Water Table
Hu Value	1

Shear Normal Functions

Name: Bedrock

Normal (psf)	Shear (psf)
0	0
1000	1290
2000	2220
4000	3620

Global Minimums

Method: spencer

FS 1.737040
 Axis Location: 244.508, 5227.182
 Left Slip Surface Endpoint: 26.057, 4931.479
 Right Slip Surface Endpoint: 350.000, 4875.000
 Left Slope Intercept: 26.057 4931.479
 Right Slope Intercept: 350.000 4900.000
 Resisting Moment: 3.0318e+008 lb-ft
 Driving Moment: 1.74538e+008 lb-ft
 Resisting Horizontal Force: 756182 lb
 Driving Horizontal Force: 435328 lb
 Total Slice Area: 13857.8 ft2
 Surface Horizontal Width: 323.943 ft
 Surface Average Height: 42.7785 ft

Global Minimum Coordinates

Method: spencer



X	Y
26.0574	4931.48
40.6427	4913.79
59.0159	4896.19
76.954	4883.86
99.0558	4871.25
119.272	4861.75
137.421	4855.02
150.381	4852.1
165.484	4850.79
187.601	4850.82
216.046	4852.59
245.597	4855.97
273.123	4860.69
295.24	4864.27
320.449	4869.46
350	4875
350.001	4900

Valid / Invalid Surfaces

Method: spencer

Number of Valid Surfaces: 891
 Number of Invalid Surfaces: 3610

Error Codes:

Error Code -105 reported for 1313 surfaces
 Error Code -111 reported for 3 surfaces
 Error Code -113 reported for 2294 surfaces

Error Codes

The following errors were encountered during the computation:

- 105 = More than two surface / slope intersections with no valid slip surface.
- 111 = safety factor equation did not converge
- 113 = Surface intersects outside slope limits.

Slice Data

Global Minimum Query (spencer) - Safety Factor: 1.73704

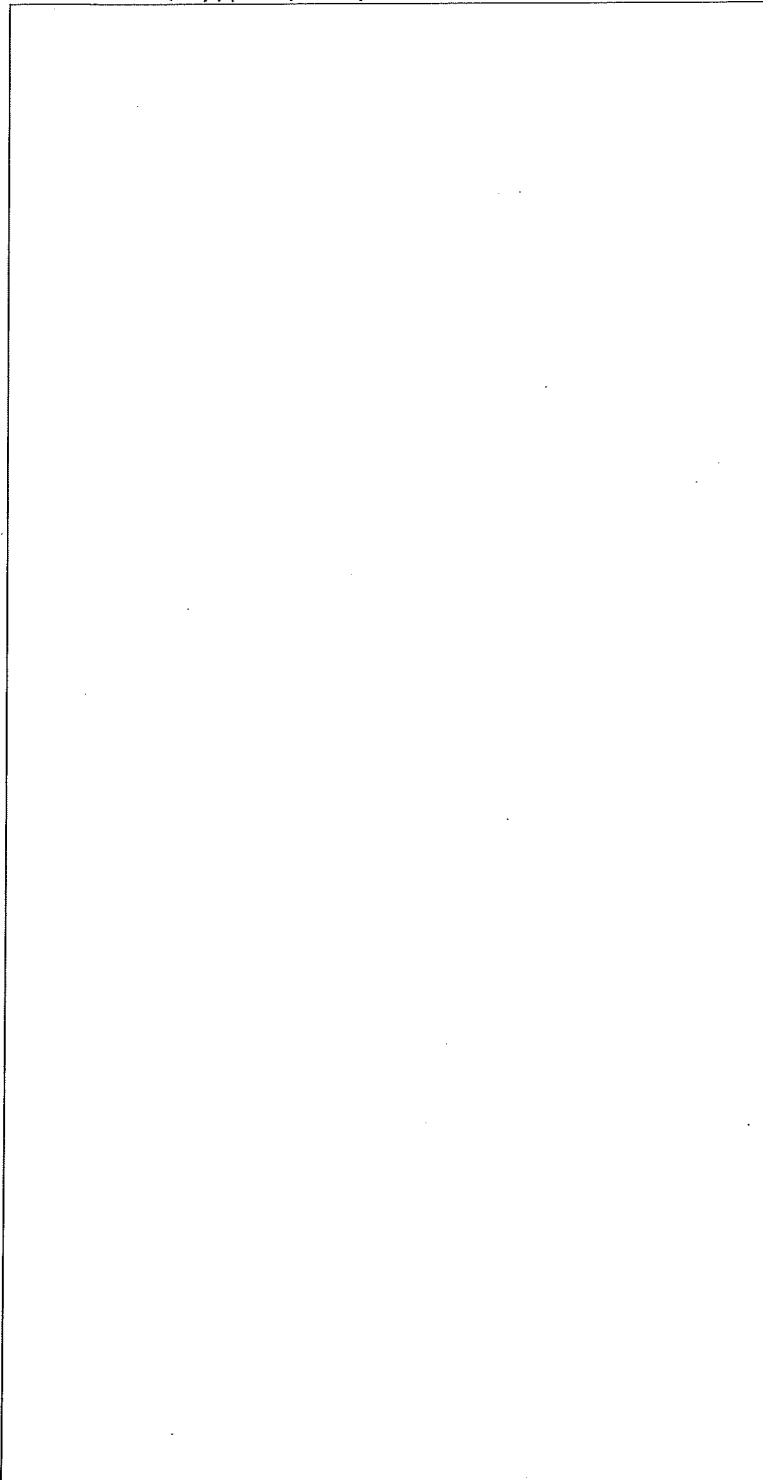
Slice Number	Width [ft]	Weight [lbs]	Angle of Slice Base [degrees]	Base Material	Base Cohesion [psf]	Base Friction Angle [degrees]	Shear Stress [psf]	Shear Strength [psf]	Base Normal Stress [psf]	Pore Pressure [psf]	Effective Normal Stress [psf]	Base Vertical Stress [psf]	Effective Vertical Stress [psf]
1	7.29262	3805.9	-50.4913	Material 1	0	52.2174	181.007	314.417	243.734	0	243.734	463.246	463.246
2	7.29262	11417.7	-50.4913	Material 1	0	52.2174	543.023	943.252	731.203	0	731.203	1389.74	1389.74
3	6.77001	16712.7	-43.7769	Material 1	360	42.9228	928.971	1613.66	1348.02	0	1348.02	2238.16	2238.16
4	5.80161	18402.9	-43.7769	Material 1	360	42.9228	1080.9	1877.56	1794.94	163.15	1631.79	2830.65	2667.5
5	5.80161	22046.8	-43.7769	Material 1	360	42.9228	1142.06	1983.81	2235.49	489.45	1746.04	3329.8	2840.35
6	5.97939	25937.5	-34.4992	Material 1	820	34.992	1363.71	2368.82	2982.8	770.205	2212.6	3920.03	3149.82
7	5.97939	28628.6	-34.4992	Material 1	820	34.992	1407.8	2445.41	3327.43	1005.42	2322.01	4294.96	3289.54
8	5.97939	31319.8	-34.4992	Material 1	820	34.992	1451.9	2522	3672.06	1240.63	2431.43	4669.89	3429.26
9	7.36725	41909.8	-29.7053	Material 1	820	34.992	1590.07	2762.02	4250.62	1476.3	2774.32	5157.78	3681.48
10	7.36725	45234.9	-29.7053	Material 1	820	34.992	1639.17	2847.3	4608.57	1712.43	2896.14	5543.74	3831.31

11	7.36725	48559.9	-29.7053	Material 1	820	34.992	1688.26	2932.57	4966.52	1948.57	3017.95	5929.7	3981.13
12	6.73861	46784.5	-25.1641	Material 1	820	34.992	1822.81	3166.29	5505.29	2153.45	3351.84	6361.64	4208.19
13	6.73861	48297	-25.1641	Material 1	820	34.992	1828.54	3176.24	5693.14	2327.09	3366.05	6552.19	4225.1
14	6.73861	49802.3	-25.1641	Material 1	820	34.992	1833.92	3185.6	5880.15	2500.72	3379.43	6741.72	4241
15	6.04987	45776.8	-20.339	Material 1	820	34.992	1954.13	3394.4	6324.49	2646.77	3677.72	7048.85	4402.08
16	6.04987	46551	-20.339	Material 1	820	34.992	1950.94	3388.86	6435.05	2765.25	3669.8	7158.24	4392.99
17	6.04987	46197.9	-20.339	Material 1	820	34.992	1885.56	3275.29	6391.27	2883.72	3507.55	7090.22	4206.5
18	6.47987	47735.7	-12.6946	Material 1	820	34.992	1948.82	3385.17	6641.54	2977	3664.54	7080.53	4103.53
19	6.47987	45576.2	-12.6946	Material 1	820	34.992	1799.45	3125.72	6338.98	3045.09	3293.89	6744.32	3699.23
20	7.55155	49936	-4.95419	Material 1	820	34.992	1816.15	3154.72	6421.47	3086.16	3335.31	6578.9	3492.74
21	7.55155	47756.8	-4.95419	Material 1	820	34.992	1694.64	2943.66	6134.01	3100.21	3033.8	6280.91	3180.7
22	5.52925	34097.7	0.0662598	Material 1	820	34.992	1759.61	3056.51	6292.25	3097.23	3195.02	6290.21	3192.98
23	5.52925	33176.3	0.0662598	Material 1	820	34.992	1697.63	2948.85	6118.43	3077.21	3041.22	6116.46	3039.25
24	5.52925	32430.2	0.0662598	Material 1	820	34.992	1647.7	2862.12	5981.57	3064.26	2917.31	5979.67	2915.41
25	5.52925	31981.8	0.0662598	Material 1	820	34.992	1617.89	2810.34	5907.37	3064.02	2843.35	5905.5	2841.48
26	5.68901	32324.1	3.56736	Material 1	820	34.992	1673.8	2907.46	6035.01	3052.93	2982.08	5930.66	2877.73
27	5.68901	31628.4	3.56736	Material 1	820	34.992	1632.96	2836.52	5911.71	3030.97	2880.74	5809.91	2778.94
28	5.68901	31070.7	3.56736	Material 1	820	34.992	1599.8	2778.92	5807.47	3009.01	2798.46	5707.73	2698.72
29	5.68901	30553.4	3.56736	Material 1	820	34.992	1571.75	2730.19	5715.89	2987.05	2728.84	5617.9	2630.85
30	5.68901	30036	3.56736	Material 1	820	34.992	1543.7	2681.46	5624.33	2965.09	2659.24	5528.09	2563
31	5.91011	30546.6	6.51954	Material 1	820	34.992	1586.83	2756.39	5699.4	2933.13	2766.27	5518.05	2584.92
32	5.91011	29770.6	6.51954	Material 1	820	34.992	1548.32	2689.49	5561.87	2891.16	2670.71	5384.93	2493.77
33	5.91011	28994.6	6.51954	Material 1	820	34.992	1509.81	2622.6	5424.32	2849.19	2575.13	5251.78	2402.59
34	5.91011	28218.5	6.51954	Material 1	820	34.992	1471.3	2555.7	5286.79	2807.22	2479.57	5118.65	2311.43
35	5.91011	27442.5	6.51954	Material 1	820	34.992	1432.78	2488.8	5149.25	2765.26	2383.99	4985.51	2220.25
36	6.88166	30815	9.73221	Material 1	820	34.992	1464.85	2544.5	5171.13	2707.55	2463.58	4919.89	2212.34
37	6.88166	29488.4	9.73221	Material 1	820	34.992	1407.28	2444.5	4954.82	2634.11	2320.71	4713.46	2079.35
38	6.88166	28184.6	9.73221	Material 1	820	34.992	1353.39	2350.9	4747.67	2560.67	2187	4515.54	1954.87
39	6.88166	26880.7	9.73221	Material 1	820	34.992	1299.5	2257.29	4540.5	2487.23	2053.27	4317.62	1830.39
40	7.37233	27381.7	9.20104	Material 1	360	42.9228	1213.71	2108.27	4293.21	2413.36	1879.85	4096.61	1683.25
41	7.37233	25947.4	9.20104	Material 1	360	42.9228	1134.7	1971.02	4071.34	2339.06	1732.28	3887.54	1548.48
42	7.37233	24513.1	9.20104	Material 1	360	42.9228	1055.68	1833.76	3849.46	2264.77	1584.69	3678.46	1413.69
43	6.30231	19713.5	11.6335	Material 1	360	42.9228	1041.99	1809.97	3746.34	2187.23	1559.11	3531.82	1344.59
44	6.30231	18456.1	11.6335	Material 1	360	42.9228	958.907	1665.66	3510.4	2106.46	1403.94	3312.98	1206.52
45	6.30231	17198.7	11.6335	Material 1	360	42.9228	875.835	1521.36	3274.46	2025.68	1248.78	3094.15	1068.47
46	6.30231	15941.3	11.6335	Material 1	360	42.9228	792.757	1377.05	3038.57	1944.91	1093.61	2875.3	930.395

47	7.38763	17146.5	10.6098	Material 1	1	0	52.2174	651.159	1131.09	2738.27	1861.46	876.812	2616.3	754.835
48	7.38763	15540.3	10.6098	Material 1	1	-1.13687e-013	52.2174	508.437	883.175	2459.96	1775.33	684.634	2364.72	589.392
49	7.38763	13934	10.6098	Material 1	1	0	52.2174	365.711	635.254	2181.64	1689.2	492.442	2113.14	423.936
50	7.38763	12327.8	10.6098	Material 1	1	0	52.2174	222.985	387.334	1903.32	1603.07	300.251	1861.55	258.481

Interslice Data

Global Minimum Query (spencer) - Safety Factor: 1.73704



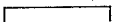
Slice Number	X coordinate [ft]	Y coordinate - Bottom [ft]	Interslice Normal Force [lbs]	Interslice Shear Force [lbs]	Interslice Force Angle [degrees]
1	26.0574	4931.48	0	0	0
2	33.35	4922.63	1634.79	427.625	14.6589
3	40.6427	4913.79	6539.16	1710.5	14.6589
4	47.4127	4907.3	12504.2	3270.83	14.6589
5	53.2143	4901.74	20076.1	5251.45	14.6588
6	59.0159	4896.19	30507.2	7980.02	14.6589
7	64.9953	4892.08	40057.5	10478.2	14.6589
8	70.9746	4887.97	51325.4	13425.6	14.6589
9	76.954	4883.86	64311.1	16822.4	14.6589
10	84.3213	4879.65	79263.5	20733.6	14.6589
11	91.6885	4875.45	96057	25126.4	14.6589
12	99.0558	4871.25	114692	30000.8	14.6588
13	105.794	4868.08	129662	33916.6	14.6588
14	112.533	4864.92	145506	38061	14.6588
15	119.272	4861.75	162221	42433.5	14.6589
16	125.321	4859.51	174195	45565.7	14.6589
17	131.371	4857.27	186599	48810.3	14.6589
18	137.421	4855.02	199227	52113.3	14.6588
19	143.901	4853.56	206317	53968.1	14.6589
20	150.381	4852.1	213481	55841.9	14.6589
21	157.932	4851.45	214456	56097	14.6589
22	165.484	4850.79	215703	56423.2	14.6589
23	171.013	4850.8	213094	55740.7	14.6589
24	176.543	4850.81	210635	55097.6	14.6589
25	182.072	4850.81	208216	54464.8	14.6589
26	187.601	4850.82	205650	53793.6	14.6589
27	193.29	4851.17	200239	52378	14.6588
28	198.979	4851.53	194794	50953.8	14.6589
29	204.668	4851.88	189439	49553.1	14.6589
30	210.357	4852.24	184061	48146.1	14.6588
31	216.046	4852.59	178657	46732.8	14.6589
32	221.956	4853.27	170760	44667.1	14.6589
33	227.866	4853.94	162905	42612.3	14.6589
34	233.776	4854.62	155090	40568.2	14.6589
35	239.687	4855.3	147318	38535	14.6588
36	245.597	4855.97	139586	36512.6	14.6589
37	252.478	4857.15	127956	33470.6	14.6589
38	259.36	4858.33	116686	30522.6	14.6589
39	266.242	4859.51	105639	27632.7	14.6588
40	273.123	4860.69	94812.9	24801	14.6589
41	280.496	4861.89	84032.6	21981.1	14.6589
42	287.868	4863.08	73661.7	19268.3	14.6589
43	295.24	4864.27	63700.1	16662.5	14.6588
44	301.543	4865.57	53970.3	14117.4	14.6588
45	307.845	4866.87	44706	11694.1	14.6589
46	314.147	4868.17	35907.4	9392.57	14.6588
47	320.449	4869.46	27574.3	7212.83	14.6589
48	327.837	4870.85	19233.6	5031.07	14.6588
49	335.225	4872.23	11857.6	3101.68	14.6588
50	342.612	4873.62	5446.41	1424.66	14.6589
51	350	4875	19500	0	0

List Of Coordinates

Water Table

X	Y
0	4910
177.334	4899.92
350	4900

External Boundary



X	Y
0	4850
350	4850
350	4875
251	4887
197	4895
157	4905
131	4922
100	4928
50	4931
0	4932