February 9, 2016

39 Summit LLC
c/o Ms. Andrea Milner
cc: Mrs. Cassandra Beresini
314 Lytton Avenue, Suite 100
Palo Alto, California 94301

IGES Project No. 02132-002

Subject: Response to Additional Review Comments - Engineering
            Geotechnical Investigation Report and Soil Nail Wall
            Lot 39R of Powder Mountain Resort
            8365 East Summit Pass
            Weber County, Utah

Ms. Milner:

As requested, IGES has prepared the following response to additional review comments regarding the referenced geotechnical report and soil nail wall design package for Lot 39, part of the larger Powder Mountain Resort expansion project in Weber County, Utah. The review comments to be addressed were prepared by Taylor Geotechnical (TG); the comments were posted on Miradi (Weber County Website), and were provided to IGES on February 9, 2016 via email. The latest review comments are in regards to the review response by IGES (2016), which was prepared in response to TG's first engineering review comments posted on December 1, 2015. For convenience, the review comments will be presented first, followed by our response.

Comment No. 1
"Based on the slope analysis completed for the November 4, 2015 IGES document, the anticipated surcharge from the proposed home did not appear to be incorporated into the analysis. TG recommends IGES show the location of the home loads in the slope analysis.

Based on the slope analysis completed for the January 12, 2016 IGES document, the anticipated surcharge from the proposed home did not appear to be incorporated into the analysis. TG recommends IGES show the location of the home loads in the slope analysis."

Response to Comment No. 1
The slope stability analysis for both submittals (IGES, 2016 and 2015a) are the same. IGES has revised the slope stability analysis by adding a surcharge to simulate the load from a home. The surcharge assumes exterior continuous footings, 24" wide, with a 1,500 psf bearing stress. A floor surcharge of 200 psf has also been assumed. The reduction in driving force due to the removal of soil for the basement excavation has been conservatively neglected.

A summary of the revised slope stability analysis is attached.

Closure

We appreciate the opportunity to provide you with our services. If you have any questions please contact the undersigned at your convenience (801) 748-4044.

Respectfully Submitted,
IGES, Inc.
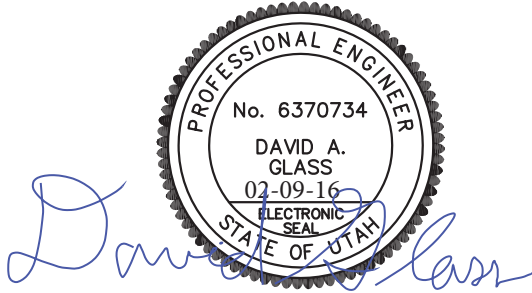
David A. Glass, P.E.
Senior Geotechnical Engineer

Attachments:

References

Revised Slope Stability Analysis

References

IGES, Inc., 2016, Response to Review Comments – Engineering, Geotechnical Investigation Report and Soil Nail Wall, Lot 39R of Powder Mountain Resort, 8365 East Summit Pass, Weber County, Utah, Project No. 02132-002, dated January 12, 2016.

IGES, Inc., 2015a, Response to Additional Review Comments – Geology, Geotechnical Investigation Report, Lot 39R of Powder Mountain Resort, 8365 East Summit Pass, Weber County, Utah, Project No. 02132-002, dated November 4, 2015.

IGES, Inc., 2015b, Response to Review Comments – Geology, Geotechnical Investigation Report, Lot 39R of Powder Mountain Resort, 8365 East Summit Pass, Weber County, Utah, Project No. 02132-002, dated September 23, 2015.

IGES, Inc., 2015c, Design Package, Permanent Shoring System, Howery Residence, 8365 East Summit Pass (Lot 39R), Summit Eden Development, Weber County, Utah, Project No. 02132-001, dated July 6, 2015, latest revision August 27, 2015.

IGES, Inc., 2015d, Geotechnical Investigation Report, Lot 39R of Powder Mountain Resort, 8365 East Summit Pass, Weber County, Utah Project No. 02052-001, dated June 3, 2015.

IGES, Inc., 2012a, Design Geotechnical Investigation, Powder Mountain Resort, Weber County, Utah, Project No. 01628-003, dated November 9, 2012.

IGES, Inc., 2012b, Preliminary Geotechnical Investigation, Powder Mountain Resort, Weber County, Utah, Project No. 01628-001, dated July 26, 2012.

Lot 39; A-A'; 02132-002; Post-LS Failure; Setback; Static

C:\DOCUME~1\DAVIDG\DESKTOP\LOT39~1\A1.PL2   Run By: DAG   2/9/2016   2:09PM
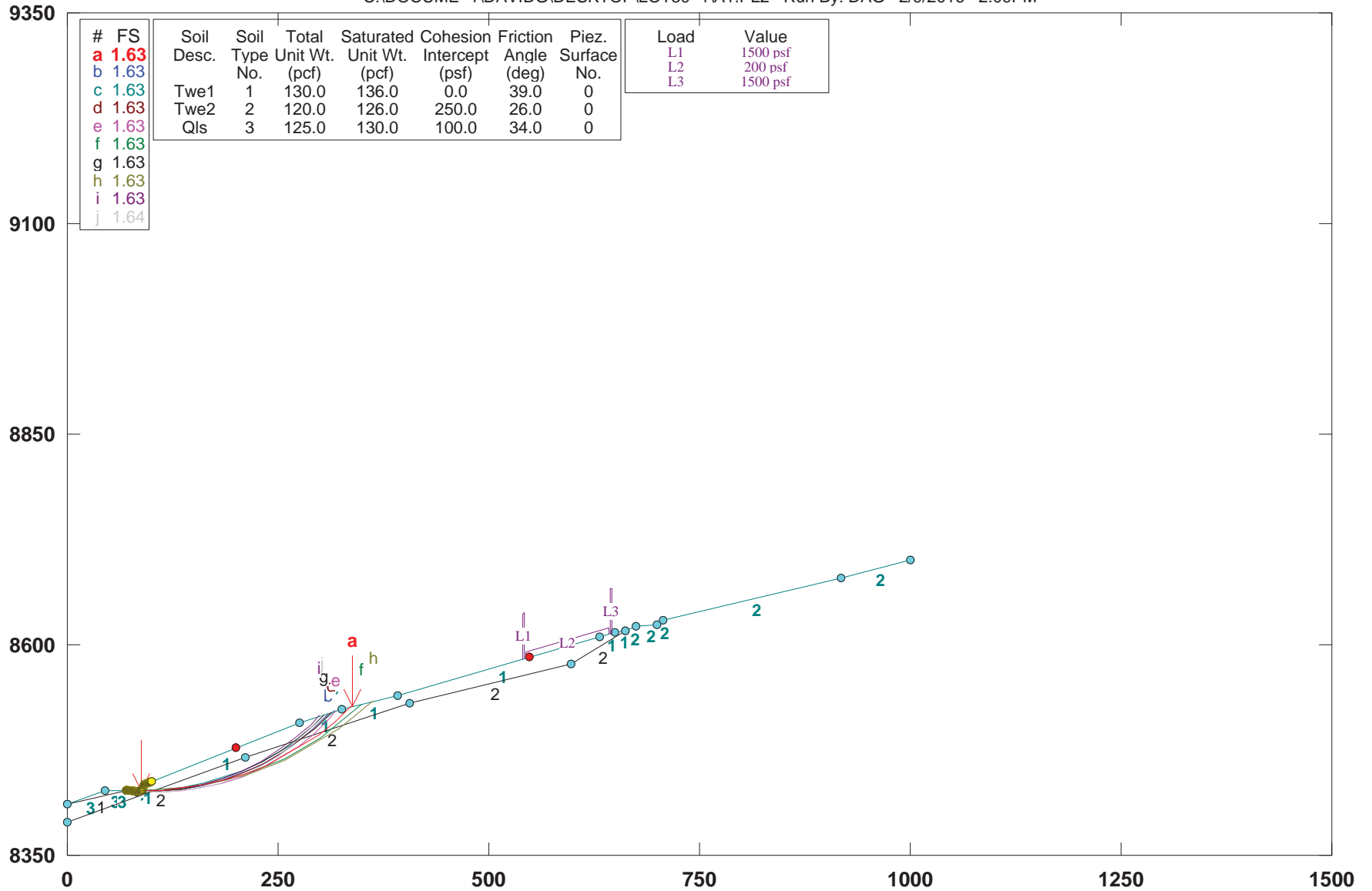
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a	**1.63**
b	1.63
c	1.63
d	1.63
e	1.63
f	1.63
g	1.63
h	1.63
i	1.63
j	1.64

Soil Desc.	Soil Type No.	Total Unit Wt. (pcf)	Saturated Unit Wt. (pcf)	Cohesion Intercept (psf)	Friction Angle (deg)	Piez. Surface No.
Twe1	1	130.0	136.0	0.0	39.0	0
Twe2	2	120.0	126.0	250.0	26.0	0
Qls	3	125.0	130.0	100.0	34.0	0

Load	Value
L1	1500 psf
L2	200 psf
L3	1500 psf

GSTABL7 v.2 FSmin=1.63
Safety Factors Are Calculated By The Modified Bishop Method

GSTABL7

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                        ***  GSTABL7  ***

                 ** GSTABL7 by Garry H. Gregory, P.E. **

        ** Original Version 1.0, January 1996; Current Version 2.002,
December 2001 **
                  (All Rights Reserved-Unauthorized Use Prohibited)


*******************************************************************************
                    SLOPE STABILITY ANALYSIS SYSTEM
           Modified Bishop, Simplified Janbu, or GLE Method of Slices.
           (Includes Spencer & Morgenstern-Price Type Analysis)
           Including Pier/Pile, Reinforcement, Soil Nail, Tieback,         1
           Nonlinear Undrained Shear Strength, Curved Phi Envelope,
           Anisotropic Soil, Fiber-Reinforced Soil, Boundary Loads, Water
           Surfaces, Pseudo-Static Earthquake, and Applied Force Options.

*******************************************************************************


        Analysis Run Date:       2/9/2016
        Time of Run:             2:09PM
        Run By:                  DAG
        Input Data Filename:     C:a1.
        Output Filename:         C:a1.OUT
        Unit System:             English

        Plotted Output Filename: C:a1.PLT
                                                                            1



        PROBLEM DESCRIPTION:  Lot 39; A-A'; 02132-002; Post-LS Failure
                              ; Setback; Static



        BOUNDARY COORDINATES

          16 Top    Boundaries
          21 Total  Boundaries


        Boundary   X-Left     Y-Left    X-Right    Y-Right    Soil Type
          No.       (ft)       (ft)      (ft)       (ft)      Below Bnd

           1        0.00     8410.00     45.00     8427.00       3          1
           2       45.00     8427.00     70.00     8427.50       3
           3       70.00     8427.50     83.00     8426.00       3
           4       83.00     8426.00     89.00     8427.70       1
           5       89.00     8427.70     91.10     8434.30       1
           6       91.10     8434.30    275.00     8508.00       1
           7      275.00     8508.00    326.00     8524.30       1
           8      326.00     8524.30    392.00     8540.50       1
           9      392.00     8540.50    632.00     8610.00       1
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          10      632.00     8610.00    650.00     8614.40       1
          11      650.00     8614.40    662.00     8616.10       1
          12      662.00     8616.10    675.00     8622.00       2
          13      675.00     8622.00    700.00     8623.60       2
          14      700.00     8623.60    706.00     8629.20       2
          15      706.00     8629.20    917.00     8680.00       2
          16      917.00     8680.00   1000.00     8700.00       2
          17        0.00     8410.00     70.00     8427.50       1
          18        0.00     8390.00    212.00     8466.00       2
          19      212.00     8466.00    406.00     8530.00       2
          20      406.00     8530.00    597.00     8578.00       2
          21      597.00     8578.00    662.00     8616.10       2

        User Specified Y-Origin =      8350.00(ft)




        ISOTROPIC SOIL PARAMETERS


          3 Type(s) of Soil


        Soil  Total  Saturated  Cohesion Friction   Pore    Pressure   Piez.
        Type Unit Wt. Unit Wt.  Intercept  Angle  Pressure Constant Surface
        No.  (pcf)    (pcf)      (psf)    (deg)   Param.    (psf)     No.

          1   130.0    136.0       0.0     39.0    0.00      0.0       0
          2   120.0    126.0     250.0     26.0    0.00      0.0       0
          3   125.0    130.0     100.0     34.0    0.00      0.0       0
                                                                            1



        BOUNDARY LOAD(S)

          3 Load(s) Specified


        Load      X-Left      X-Right     Intensity    Deflection
         No.       (ft)        (ft)        (psf)        (deg)


          1       540.00      542.00      1500.0         0.0
          2       543.00      643.00       200.0         0.0
          3       644.00      646.00      1500.0         0.0


        NOTE - Intensity Is Specified As A Uniformly Distributed
               Force Acting On A Horizontally Projected Surface.



        A Critical Failure Surface Searching Method, Using A Random
        Technique For Generating Circular Surfaces, Has Been Specified.


        2500 Trial Surfaces Have Been Generated.
```

A1

50 Surface(s) Initiate(s) From Each Of   50 Points Equally Spaced
Along The Ground Surface Between X = 70.00(ft)
                          and X = 100.00(ft)

Each Surface Terminates Between X = 200.00(ft)
                          and X = 548.00(ft)

Unless Further Limitations Were Imposed, The Minimum Elevation
At Which A Surface Extends Is Y =   0.00(ft)

25.00(ft) Line Segments Define Each Trial Failure Surface.

Restrictions Have Been Imposed Upon The Angle Of Initiation.
The Angle Has Been Restricted Between The Angles Of -30.0
And 10.0 deg.

Following Is Displayed The Most Critical Of The Trial
Failure Surfaces Evaluated.

* * Safety Factors Are Calculated By The Modified Bishop Method * *

Total Number of Trial Surfaces Evaluated = 2500

Statistical Data On All Valid FS Values:
   FS Max =   2.581   FS Min =   1.628   FS Ave =   1.990
   Standard Deviation =   0.188   Coefficient of Variation =   9.42 %

Failure Surface Specified By 13 Coordinate Points

  Point   X-Surf   Y-Surf
   No.   (ft)   (ft)

    1   87.76   8427.35
    2   112.75   8427.71
    3   137.66   8429.89
    4   162.34   8433.87
    5   186.66   8439.64
    6   210.50   8447.17
    7   233.73   8456.41
    8   256.23   8467.31
    9   277.87   8479.83
   10   298.55   8493.88
   11   318.14   8509.41
   12   336.56   8526.32
   13   337.26   8527.06

Circle Center At X =   95.31 ; Y = 8770.59 ; and Radius =   343.33

              Factor of Safety
              ***   1.628   ***

Individual data on the   19 slices

Slice No.	Width (ft)	Weight (lbs)	Water Force Top (lbs)	Water Force Bot (lbs)	Tie Force Norm (lbs)	Tie Force Tan (lbs)	Earthquake Force Hor (lbs)	Earthquake Force Ver (lbs)	Surcharge Load (lbs)
1	1.2	27.0	0.0	0.0	0.	0.	0.0	0.0	0.0
2	2.1	988.0	0.0	0.0	0.	0.	0.0	0.0	0.0
3	13.8	17117.7	0.0	0.0	0.	0.	0.0	0.0	0.0
4	7.9	13982.6	0.0	0.0	0.	0.	0.0	0.0	0.0
5	24.9	60552.2	0.0	0.0	0.	0.	0.0	0.0	0.0
6	24.7	80562.8	0.0	0.0	0.	0.	0.0	0.0	0.0
7	24.3	94078.3	0.0	0.0	0.	0.	0.0	0.0	0.0
8	23.8	101041.2	0.0	0.0	0.	0.	0.0	0.0	0.0
9	1.5	6532.4	0.0	0.0	0.	0.	0.0	0.0	0.0
10	21.7	95144.5	0.0	0.0	0.	0.	0.0	0.0	0.0
11	22.5	96369.4	0.0	0.0	0.	0.	0.0	0.0	0.0
12	18.8	74804.9	0.0	0.0	0.	0.	0.0	0.0	0.0
13	2.9	10760.9	0.0	0.0	0.	0.	0.0	0.0	0.0
14	20.7	67287.9	0.0	0.0	0.	0.	0.0	0.0	0.0
15	1.4	3993.7	0.0	0.0	0.	0.	0.0	0.0	0.0
16	18.2	39338.8	0.0	0.0	0.	0.	0.0	0.0	0.0
17	7.9	10244.1	0.0	0.0	0.	0.	0.0	0.0	0.0
18	10.6	5664.5	0.0	0.0	0.	0.	0.0	0.0	0.0
19	0.7	26.4	0.0	0.0	0.	0.	0.0	0.0	0.0

                **** END OF GSTABL7 OUTPUT ****

Lot 39; A-A'; 02132-002; Post-LS Failure; Setback; P-Static

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Soil Desc.	Soil Type No.	Total Unit Wt. (pcf)	Saturated Unit Wt. (pcf)	Cohesion Intercept (psf)	Friction Angle (deg)	Piez. Surface No.
Twe1	1	130.0	136.0	0.0	39.0	0
Twe2	2	120.0	126.0	250.0	26.0	0
Qls	3	125.0	130.0	100.0	34.0	0

Load	Value
L1	1500 psf
L2	200 psf
L3	1500 psf
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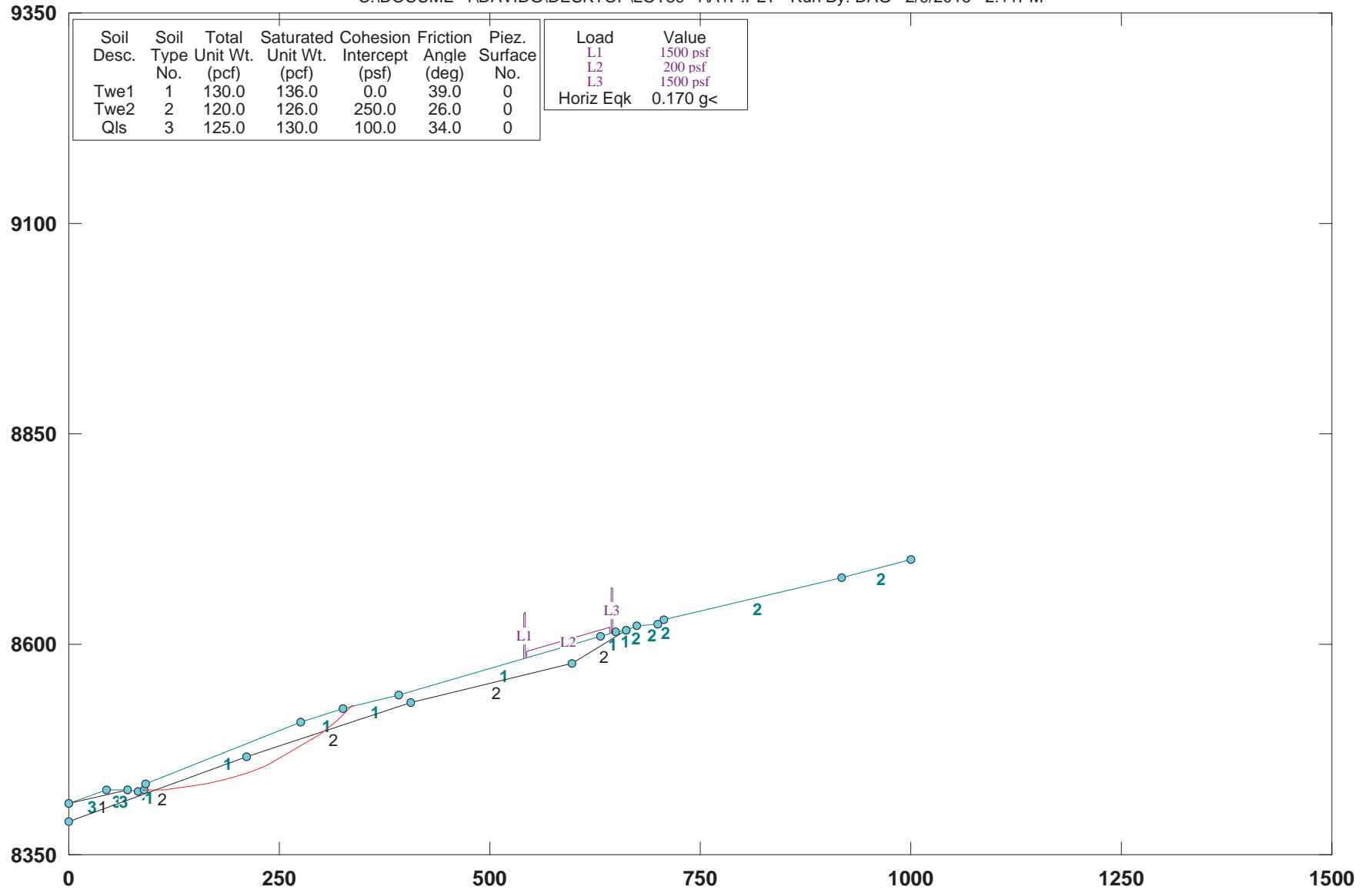
GSTABL7 v.2 FSmin=1.08
Factor Of Safety Is Calculated By The Modified Bishop Method

GSTABL7

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                    ***  GSTABL7  ***

            ** GSTABL7 by Garry H. Gregory, P.E. **

      ** Original Version 1.0, January 1996; Current Version 2.002,
December 2001 **
             (All Rights Reserved-Unauthorized Use Prohibited)


*******************************************************************************
                    SLOPE STABILITY ANALYSIS SYSTEM
           Modified Bishop, Simplified Janbu, or GLE Method of Slices.
           (Includes Spencer & Morgenstern-Price Type Analysis)
           Including Pier/Pile, Reinforcement, Soil Nail, Tieback,        1
           Nonlinear Undrained Shear Strength, Curved Phi Envelope,
           Anisotropic Soil, Fiber-Reinforced Soil, Boundary Loads, Water
           Surfaces, Pseudo-Static Earthquake, and Applied Force Options.

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      Time of Run:              2:11PM
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      Output Filename:          C:a1p.OUT
      Unit System:              English

      Plotted Output Filename:  C:a1p.PLT
                                                                          1



      PROBLEM DESCRIPTION:  Lot 39; A-A'; 02132-002; Post-LS Failure
                            ; Setback; P-Static



      BOUNDARY COORDINATES

        16 Top   Boundaries
        21 Total Boundaries


      Boundary   X-Left    Y-Left    X-Right   Y-Right   Soil Type
        No.       (ft)      (ft)      (ft)      (ft)     Below Bnd

         1         0.00    8410.00     45.00   8427.00       3
         2        45.00    8427.00     70.00   8427.50       3
         3        70.00    8427.50     83.00   8426.00       3
         4        83.00    8426.00     89.00   8427.70       1
         5        89.00    8427.70     91.10   8434.30       1
         6        91.10    8434.30    275.00   8508.00       1
         7       275.00    8508.00    326.00   8524.30       1
         8       326.00    8524.30    392.00   8540.50       1
         9       392.00    8540.50    632.00   8610.00       1
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        10       632.00    8610.00    650.00   8614.40       1
        11       650.00    8614.40    662.00   8616.10       1
        12       662.00    8616.10    675.00   8622.00       2
        13       675.00    8622.00    700.00   8623.60       2
        14       700.00    8623.60    706.00   8629.20       2
        15       706.00    8629.20    917.00   8680.00       2
        16       917.00    8680.00   1000.00   8700.00       2
        17         0.00    8410.00     70.00   8427.50       1
        18         0.00    8390.00    212.00   8466.00       2
        19       212.00    8466.00    406.00   8530.00       2
        20       406.00    8530.00    597.00   8578.00       2
        21       597.00    8578.00    662.00   8616.10       2

      User Specified Y-Origin =      8350.00(ft)




      ISOTROPIC SOIL PARAMETERS


        3 Type(s) of Soil


      Soil  Total  Saturated Cohesion Friction  Pore    Pressure  Piez.
      Type Unit Wt. Unit Wt. Intercept  Angle  Pressure Constant Surface
      No.  (pcf)    (pcf)     (psf)     (deg)   Param.    (psf)    No.


        1  130.0    136.0       0.0     39.0    0.00       0.0      0
        2  120.0    126.0     250.0     26.0    0.00       0.0      0
        3  125.0    130.0     100.0     34.0    0.00       0.0      0
                                                                          1



      BOUNDARY LOAD(S)

        3 Load(s) Specified


      Load      X-Left      X-Right     Intensity    Deflection
       No.       (ft)        (ft)        (psf)         (deg)


        1       540.00      542.00      1500.0         0.0
        2       543.00      643.00       200.0         0.0
        3       644.00      646.00      1500.0         0.0


      NOTE - Intensity Is Specified As A Uniformly Distributed
             Force Acting On A Horizontally Projected Surface.



      A Horizontal Earthquake Loading Coefficient
      Of0.170 Has Been Assigned

      A Vertical Earthquake Loading Coefficient
      Of0.000 Has Been Assigned
```

A1P

Cavitation Pressure =   0.0(psf)

1

Trial Failure Surface Specified By 13 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	87.76	8427.35
2	112.75	8427.71
3	137.66	8429.89
4	162.34	8433.87
5	186.66	8439.64
6	210.50	8447.17
7	233.73	8456.41
8	256.23	8467.31
9	277.87	8479.83
10	298.55	8493.88
11	318.14	8509.41
12	336.56	8526.32
13	337.26	8527.06

Circle Center At X =   95.30 ; Y = 8770.61; and Radius =   343.35

* * Factor Of Safety Is Calculated By The Modified Bishop Method * *

Factor Of Safety For The Preceding Specified Surface = 1.077

Table 1 - Individual Data on the   19 Slices

Slice No.	Width (ft)	Weight (lbs)	Water Force Top (lbs)	Water Force Bot (lbs)	Tie Force Norm (lbs)	Tie Force Tan (lbs)	Earthquake Force Hor (lbs)	Ver (lbs)	Surcharge Load (lbs)
1	1.2	26.9	0.0	0.0	0.0	0.0	4.6	0.0	0.0
2	2.1	987.8	0.0	0.0	0.0	0.0	167.9	0.0	0.0
3	13.8	17123.6	0.0	0.0	0.0	0.0	2911.0	0.0	0.0
4	7.9	13968.0	0.0	0.0	0.0	0.0	2374.6	0.0	0.0
5	24.9	60555.9	0.0	0.0	0.0	0.0	10294.5	0.0	0.0
6	24.7	80561.4	0.0	0.0	0.0	0.0	13695.4	0.0	0.0
7	24.3	94067.8	0.0	0.0	0.0	0.0	15991.5	0.0	0.0
8	23.8	101039.0	0.0	0.0	0.0	0.0	17176.6	0.0	0.0
9	1.5	6547.8	0.0	0.0	0.0	0.0	1113.1	0.0	0.0
10	21.7	95122.0	0.0	0.0	0.0	0.0	16170.7	0.0	0.0
11	22.5	96387.7	0.0	0.0	0.0	0.0	16385.9	0.0	0.0
12	18.8	74808.1	0.0	0.0	0.0	0.0	12717.4	0.0	0.0
13	2.9	10754.2	0.0	0.0	0.0	0.0	1828.2	0.0	0.0
14	20.7	67308.1	0.0	0.0	0.0	0.0	11442.4	0.0	0.0
15	1.5	4019.8	0.0	0.0	0.0	0.0	683.4	0.0	0.0
16	18.1	39301.6	0.0	0.0	0.0	0.0	6681.3	0.0	0.0
17	7.9	10244.9	0.0	0.0	0.0	0.0	1741.6	0.0	0.0
18	10.6	5660.1	0.0	0.0	0.0	0.0	962.2	0.0	0.0
19	0.7	26.0	0.0	0.0	0.0	0.0	4.4	0.0	0.0

Table 2 - Base Stress Data on the   19 Slices

Slice No. *	Alpha (deg)	X-Coord. Slice Cntr (ft)	Base Leng. (ft)	Available Shear Strength (psf)	Mobilized Shear Stress (psf)
1	0.83	88.38	1.24	17.39	2.76
2	0.83	90.05	2.10	376.79	8.24
3	0.83	97.99	13.77	995.93	18.19
4	0.83	108.81	7.88	1107.65	26.02
5	5.00	125.21	25.01	1380.93	211.22
6	9.16	150.00	25.00	1716.64	513.24
7	13.35	174.50	25.00	1929.17	868.83
8	17.53	198.58	25.00	2027.04	1217.38
9	21.69	211.25	1.61	2015.79	1501.03
10	21.69	222.86	23.39	2020.85	1503.49
11	25.85	244.98	25.00	1918.38	1680.90
12	30.05	265.61	21.69	1738.24	1727.76
13	30.05	276.43	3.32	1646.10	1625.18
14	34.19	288.21	25.00	1405.00	1513.04
15	38.41	299.28	1.85	1176.51	1348.16
16	38.41	309.07	23.14	1099.27	1055.04
17	42.55	322.07	10.67	624.37	649.62
18	42.55	331.28	14.33	256.75	267.23
19	46.75	336.91	1.02	16.74	21.53

Sum of the Resisting Forces (including Pier/Pile, Tieback, Reinforcing Soil Nail, and Applied Forces if applicable) = 414392.16 (lbs)

Average Available Shear Strength (including Tieback, Pier/Pile, Reinforcing, Soil Nail, and Applied Forces if applicable) =   1501.30(psf)

Sum of the Driving Forces =   384919.50 (lbs)

Average Mobilized Shear Stress =   1394.53(psf)
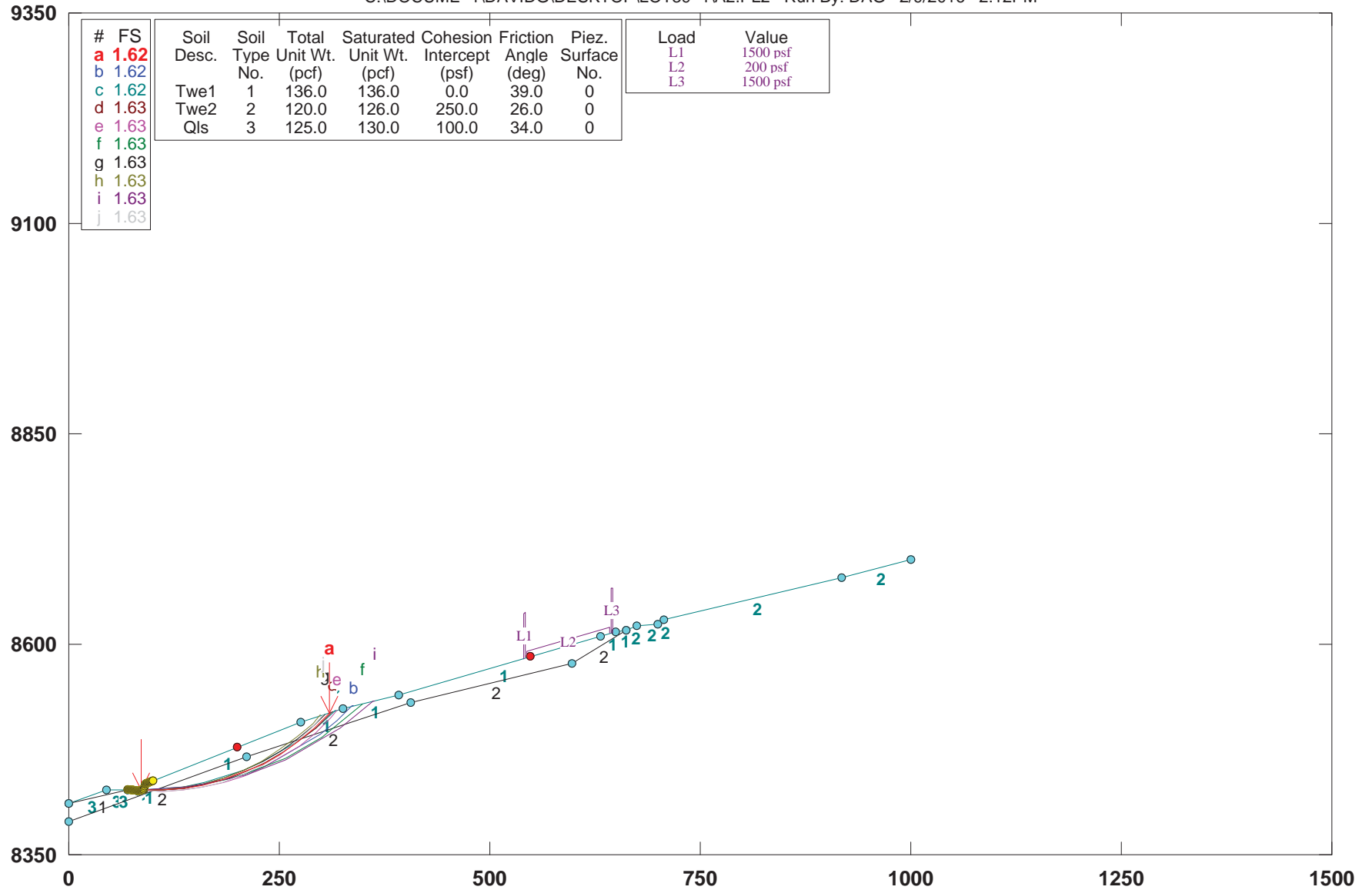

Total length of the failure surface =   276.02(ft)

CAUTION - Factor Of Safety Is Calculated By The Modified Bishop
         Method. This Method Is Valid Only If The Failure Surface
         Approximates A Circular Arc.

**** END OF GSTABL7 OUTPUT ****

A1P

Lot 39; A-A'; 02132-002; Post-LS Failure; Setback; Sat. Unit Weight; Static

C:\DOCUME~1\DAVIDG\DESKTOP\LOT39~1\A2.PL2   Run By: DAG   2/9/2016   2:12PM

#	FS
a	1.62
b	1.62
c	1.62
d	1.63
e	1.63
f	1.63
g	1.63
h	1.63
i	1.63
j	1.63

Soil Desc.	Soil Type No.	Total Unit Wt. (pcf)	Saturated Unit Wt. (pcf)	Cohesion Intercept (psf)	Friction Angle (deg)	Piez. Surface No.
Twe1	1	136.0	136.0	0.0	39.0	0
Twe2	2	120.0	126.0	250.0	26.0	0
Qls	3	125.0	130.0	100.0	34.0	0

Load	Value
L1	1500 psf
L2	200 psf
L3	1500 psf

GSTABL7 v.2 FSmin=1.62
Safety Factors Are Calculated By The Modified Bishop Method

GSTABL7

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                        ***  GSTABL7  ***                                    10      632.00    8610.00     650.00    8614.40       1
                                                                             11      650.00    8614.40     662.00    8616.10       1
                  ** GSTABL7 by Garry H. Gregory, P.E. **                    12      662.00    8616.10     675.00    8622.00       2
                                                                             13      675.00    8622.00     700.00    8623.60       2
        ** Original Version 1.0, January 1996; Current Version 2.002,        14      700.00    8623.60     706.00    8629.20       2
December 2001 **                                                             15      706.00    8629.20     917.00    8680.00       2
                  (All Rights Reserved-Unauthorized Use Prohibited)          16      917.00    8680.00    1000.00    8700.00       2
                                                                             17        0.00    8410.00      70.00    8427.50       1
                                                                             18        0.00    8390.00     212.00    8466.00       2
                                                                             19      212.00    8466.00     406.00    8530.00       2
****************************************************************************  20      406.00    8530.00     597.00    8578.00       2
                SLOPE STABILITY ANALYSIS SYSTEM                              21      597.00    8578.00     662.00    8616.10       2
        Modified Bishop, Simplified Janbu, or GLE Method of Slices.
        (Includes Spencer & Morgenstern-Price Type Analysis)             User Specified Y-Origin =       8350.00(ft)
        Including Pier/Pile, Reinforcement, Soil Nail, Tieback,     1
        Nonlinear Undrained Shear Strength, Curved Phi Envelope,
        Anisotropic Soil, Fiber-Reinforced Soil, Boundary Loads, Water
        Surfaces, Pseudo-Static Earthquake, and Applied Force Options.

****************************************************************************  ISOTROPIC SOIL PARAMETERS


                                                                             3 Type(s) of Soil

        Analysis Run Date:        2/9/2016
        Time of Run:              2:12PM                                   Soil  Total  Saturated Cohesion Friction   Pore    Pressure   Piez.
        Run By:                   DAG                                      Type Unit Wt. Unit Wt. Intercept  Angle  Pressure  Constant  Surface
        Input Data Filename:      C:a2.                                     No.  (pcf)    (pcf)    (psf)    (deg)   Param.    (psf)      No.
        Output Filename:          C:a2.OUT
        Unit System:              English                                   1   136.0    136.0      0.0     39.0    0.00       0.0        0
                                                                            2   120.0    126.0    250.0     26.0    0.00       0.0        0
        Plotted Output Filename:  C:a2.PLT                                  3   125.0    130.0    100.0     34.0    0.00       0.0        0
                                                                      1


                                                                          BOUNDARY LOAD(S)
        PROBLEM DESCRIPTION:  Lot 39; A-A'; 02132-002; Post-LS Failure
                            ; Setback; Sat. Unit Weight; Static              3 Load(s) Specified


                                                                          Load     X-Left      X-Right     Intensity    Deflection
                                                                           No.       (ft)        (ft)       (psf)        (deg)

        BOUNDARY COORDINATES
                                                                            1      540.00      542.00      1500.0         0.0
          16 Top   Boundaries                                               2      543.00      643.00       200.0         0.0
          21 Total Boundaries                                              3      644.00      646.00      1500.0         0.0


        Boundary   X-Left    Y-Left    X-Right   Y-Right   Soil Type     NOTE - Intensity Is Specified As A Uniformly Distributed
          No.       (ft)      (ft)      (ft)      (ft)    Below Bnd             Force Acting On A Horizontally Projected Surface.

           1        0.00    8410.00     45.00    8427.00      3     1
           2       45.00    8427.00     70.00    8427.50      3
           3       70.00    8427.50     83.00    8426.00      3          A Critical Failure Surface Searching Method, Using A Random
           4       83.00    8426.00     89.00    8427.70      1          Technique For Generating Circular Surfaces, Has Been Specified.
           5       89.00    8427.70     91.10    8434.30      1
           6       91.10    8434.30    275.00    8508.00      1
           7      275.00    8508.00    326.00    8524.30      1          2500 Trial Surfaces Have Been Generated.
           8      326.00    8524.30    392.00    8540.50      1
           9      392.00    8540.50    632.00    8610.00      1
```

A2

50 Surface(s) Initiate(s) From Each Of   50 Points Equally Spaced
Along The Ground Surface Between X = 70.00(ft)
                        and   X = 100.00(ft)

Each Surface Terminates Between   X = 200.00(ft)
                         and   X = 548.00(ft)

Unless Further Limitations Were Imposed, The Minimum Elevation
At Which A Surface Extends Is Y =   0.00(ft)

25.00(ft) Line Segments Define Each Trial Failure Surface.

Restrictions Have Been Imposed Upon The Angle Of Initiation.
The Angle Has Been Restricted Between The Angles Of -30.0
And 10.0 deg.

Following Is Displayed The Most Critical Of The Trial
Failure Surfaces Evaluated.

* * Safety Factors Are Calculated By The Modified Bishop Method * *

Total Number of Trial Surfaces Evaluated = 2500

Statistical Data On All Valid FS Values:
   FS Max =   2.582   FS Min =   1.621   FS Ave =   1.987
   Standard Deviation =   0.189   Coefficient of Variation =   9.52 %

Failure Surface Specified By 12 Coordinate Points

  Point   X-Surf   Y-Surf
  No.   (ft)   (ft)

   1   85.31   8426.65
   2   110.31   8426.52
   3   135.22   8428.58
   4   159.86   8432.82
   5   184.03   8439.21
   6   207.54   8447.71
   7   230.22   8458.23
   8   251.88   8470.71
   9   272.36   8485.04
  10   291.51   8501.12
  11   309.16   8518.82
  12   309.27   8518.95

Circle Center At X =   99.36 ; Y = 8710.44 ; and Radius =   284.13

                    Factor of Safety
                  ***   1.621   ***

Individual data on the   17 slices

Slice No.	Width (ft)	Weight (lbs)	Water Force Top (lbs)	Water Force Bot (lbs)	Tie Force Norm (lbs)	Tie Force Tan (lbs)	Earthquake Force Hor (lbs)	Earthquake Force Ver (lbs)	Surcharge Load (lbs)
1	3.7	267.8	0.0	0.0	0.	0.	0.0	0.0	0.0
2	2.1	1248.7	0.0	0.0	0.	0.	0.0	0.0	0.0
3	10.9	14648.0	0.0	0.0	0.	0.	0.0	0.0	0.0
4	8.3	15394.9	0.0	0.0	0.	0.	0.0	0.0	0.0
5	24.9	63299.7	0.0	0.0	0.	0.	0.0	0.0	0.0
6	24.6	83044.4	0.0	0.0	0.	0.	0.0	0.0	0.0
7	24.2	94802.6	0.0	0.0	0.	0.	0.0	0.0	0.0
8	23.5	98571.2	0.0	0.0	0.	0.	0.0	0.0	0.0
9	4.5	18909.1	0.0	0.0	0.	0.	0.0	0.0	0.0
10	18.2	75893.0	0.0	0.0	0.	0.	0.0	0.0	0.0
11	21.7	84304.9	0.0	0.0	0.	0.	0.0	0.0	0.0
12	20.5	68008.9	0.0	0.0	0.	0.	0.0	0.0	0.0
13	1.7	4980.5	0.0	0.0	0.	0.	0.0	0.0	0.0
14	0.9	2653.5	0.0	0.0	0.	0.	0.0	0.0	0.0
15	16.5	36923.2	0.0	0.0	0.	0.	0.0	0.0	0.0
16	17.7	14710.2	0.0	0.0	0.	0.	0.0	0.0	0.0
17	0.1	0.7	0.0	0.0	0.	0.	0.0	0.0	0.0

                    **** END OF GSTABL7 OUTPUT ****