Exhibit D

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Easton Geology, Inc.
P.O. Box 3533, Santa Cruz, CA 95063
831.247.4317 info@eastongeology.com

14 March 2017

Ron Chez
c/o Eric Miller Architects
157 Grand Avenue, Suite 106
Pacific Grove, CA 93950

Job No. C16021

Subject: Supplemental Geologic Report for
Proposed Guest House
36150 Highway 1, Monterey
Monterey County APN 243-251-023

Dear Mr. Chez:

We are pleased to present you with this supplemental geologic report for the above-referenced parcel. We completed an initial report in 2013 which provided geologic investigation, analysis, and recommendations regarding the construction of a new single-family residence on the parcel. The report was accepted and construction of the residence is nearing completion. We understand that as part of the site improvements, you wish to construct a guest house on the parcel. The proposed guest house is situated near the edge of a tall, steeply-sloping coastal bluff and outside of the area of focus during our 2013 investigation. The improvements will be located within fifty feet of the bluff, and per Monterey County policy, a geologic investigation assessing the suitability of the site for development is required.

The subject property is susceptible to geologic hazards including coastal erosion, shallow landsliding, and seismic shaking. Please refer to our 2013 report for background information pertaining to the parcel and subject area.

Our scope of work for this supplement included: 1) review of existing maps, proposed development plans, and reports existing for the parcel; 2) geologic mapping of the proposed guest house site; 3) analysis of collected data pertaining to the proposed development; 4) coordination with the project professionals, including collaboration with the project geotechnical engineer with their slope stability analysis; and 5) preparation of this supplemental geologic report.

Site Investigation

The guest house is proposed atop an approximately 120 foot tall coastal bluff (Figures 1 & 2). Relatively young, noncemented terrace deposits comprise the upper 90 or so feet of the bluff. The lowermost 30 feet of the bluff consists of much older, erosion resistant granitic bedrock.

We mapped the proposed guest house site and surrounding area including the bluff below (Figures 1 & 2). The blufftop at the guest house site slopes gently seaward, and the dwelling situated about eight feet from the edge of the bluff. Grading in the area of the guest house site has created: 1) an

unimproved access road; 2) an adjacent generator building and fill pad; 3) a stockpile of excavated material from construction of the main house; and 4) minor cuts and fills associated with an access trail to the base of the bluff. From our mapping, we estimate that the stockpiled material overlying the ground surface at the site of the guest house is about five feet thick (Figure 2).

To evaluate the current configuration of the bluff, we surveyed a geologic cross section across the proposed development site and down the bluff- face below (Figure 2). In general, the terrace deposits in the upper 50 feet of the bluff are steeply sloping (about 71% gradient). The lower portion of the terrace deposits and the granitic bedrock comprising the base of the bluff are very steep (over 100% gradient).

During our 2013 investigation we noted shallow landsliding within the terrace deposits on the bluff-face, just southeast of the proposed guest house location. The landsliding is occurring in an area of abundant groundwater seepage and immediately below the proposed new driveway improvements on the parcel. During our recent work we saw no significant change in the extent of landsliding at this location; however, we did observe that a drainage pipe on the slope within the landslide area appeared to be disconnected and that a portion of the beach access trail is impassable due to landsliding subsequent to our 2013 work.

Analysis and Conclusions

The blufftop on the subject parcel retreats as a result of shallow landsliding on the bluff-face as the terrace deposits erode to a more stable, long-term slope of about 1.5:1 (66%). Overall, bluff retreat occurs in response to wave erosion at the base of the bedrock bluff and subsequent oversteepening of the overlying terrace deposits. Although the overall rate of bluff retreat at the site is very low, shallow landsliding on the bluff-face below the proposed guest house and driveway may be hastened by strong regional earthquakes and saturation due to heavy rains and misdirected drainage. Deep-seated landsliding is *not* a dominant mode of failure within the terrace deposits on the parcel and we saw no evidence for such landslides occurring in the vicinity of the site. In our opinion, there is a potential for shallow translational landslides between five and ten feet thick to occur below the proposed development area. Due to the proximity of the guest house and access driveway to the edge of the bluff, shallow landsliding of the slope may undermine the improvements during the project lifetime. A line representing our estimated long-term position of the blufftop is depicted on Figures 1 and 2. This retreat line is based on our analysis of the subject slopes and does not imply that landsliding will encompass the entire blufftop seaward of the line, but that shallow landsliding within this area is possible during the project lifetime. The risk of landsliding to impact the proposed improvements may be mitigated by proper foundation selection and design.

The results of the slope stability analysis performed by the project geotechnical engineer indicate that the bluff -face is susceptible to shallow translational failures.

The location of the proposed guest house and access driveway is geologically feasible provided our recommendations and those of the project geotechnical engineer are closely followed. By following these recommendations, the proposed improvements will be subject to "ordinary" risks (as defined in Appendix C of our 2013 report) over the project lifetime: Appendix C should be reviewed in detail to determine whether an "ordinary" level of risk is acceptable. If "ordinary" risks, as defined, are unacceptable, then the geologic hazards in question should be further mitigated to reduce the corresponding risks to a lower level.

Recommendations

1. The guest house should be founded on piers of sufficient depth so as to resist undermining from potential shallow landsliding of the bluff-face. Pier depths of at least 20 feet on the seaward portion of the structure are anticipated. No piers or other foundation elements may rely on the non-engineered fill present at the site for support. Please refer to the addendum report by the project geotechnical engineer for pier specifications.

   To mitigate the potential impacts of shallow landsliding, the proposed access driveway, parking area, and walkway improvements should be supported by piers. The pier depths shall be specified by the project geotechnical engineer.

   A representative from our firm shall verify the staked footprint of the guest house in the field prior to excavation or drilling of any foundation elements. We shall also inspect all drilled pierholes prior to installation of steel and concrete. Please notify us at least four days prior to schedule any inspection.

2. The slope below the guest house and access driveway should be inspected periodically. If any renewed erosion is observed we must be notified so that we can inspect and provide corrective measures if necessary.

3. Drainage from improved surfaces, such as walkways, patios, roofs and driveways, at the top of the bluff should be collected in impermeable gutters or pipes and either carried to the base of the bluff via closed conduit or discharged into an established storm drain system that does not issue onto the bluff. The functionality of any existing drainage controls on the subject property that satisfy this recommendation must be verified prior to its connection with any proposed drainage improvements. At no time should any concentrated discharge be allowed to spill directly onto the ground adjacent to the dwelling. Any drain water on paved areas should not be allowed to flow toward the residence or toward the blufftop. The control of runoff is essential for control of erosion and prevention of ponding.

4. We request the privilege of reviewing all geotechnical engineering, civil engineering, drainage, and architectural reports and plans pertaining to the proposed development and any mitigation measures.

It has been a pleasure working with you on this project. Please contact us if you have any questions or comments.

Sincerely,

EASTON GEOLOGY

Gregory Easton
Principal Geologist
C.E.G. No. 2502

Copies: addressee (1 and pdf)
Eric Miller Architects, attn: Carla Hashimoto (3 and pdf)
Rock Solid Engineering, attn: Yvette Wilson (pdf)

Attachments: Figure 1 – Geologic Map of Guest House Location
Figure 2 – Geologic Cross Section

References:

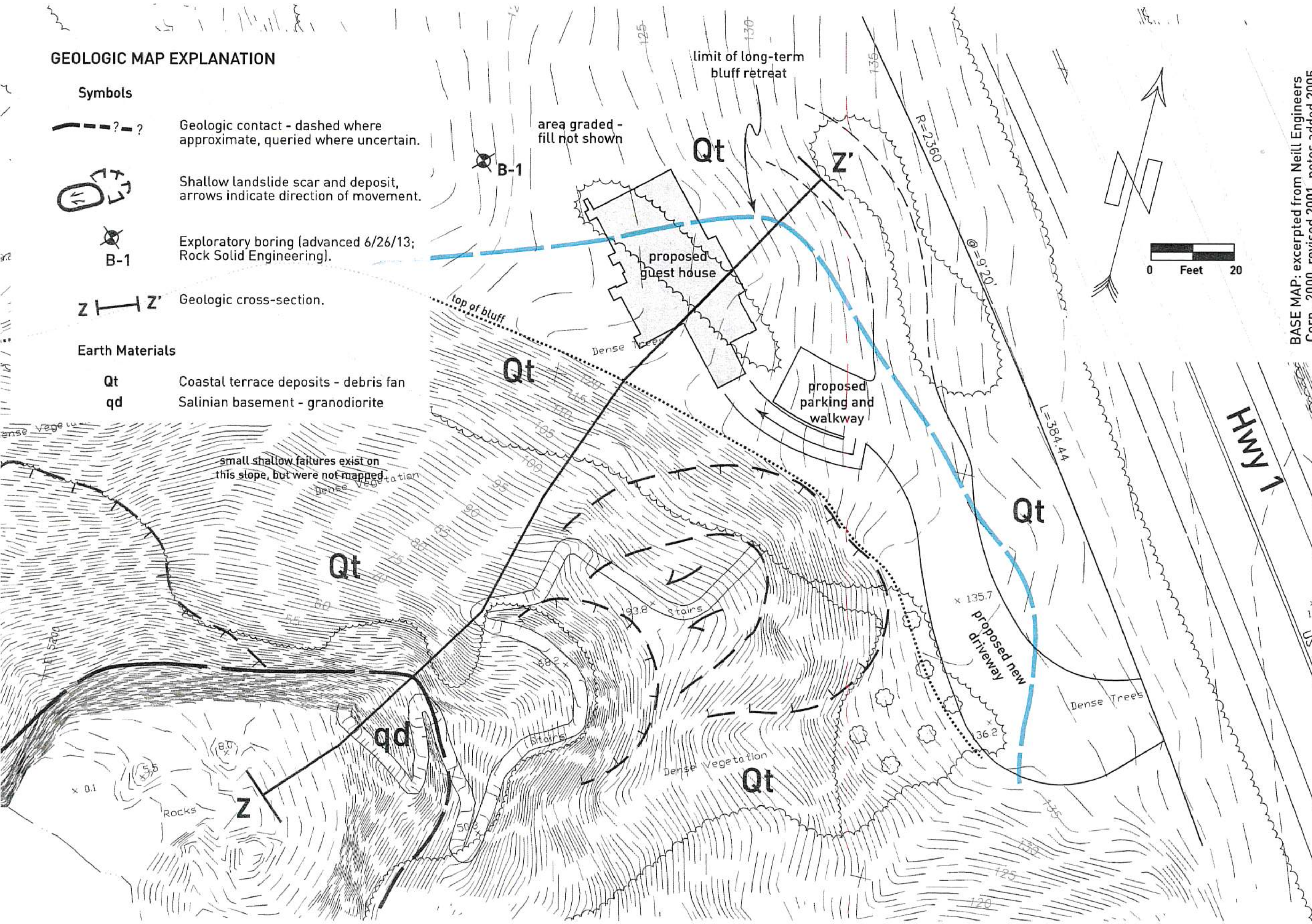
Easton Geology, 2013, Geologic Investigation of Coastal Blufftop Property, 36510 Highway 1, Monterey, California, Monterey County APN 243-251-023, Job No. C13009, prepared 15 August 2013, 42p, 2 Plates.

Eric Miller Architects, 2017, Proposed Site Plan, Chez Residence, 36510 Highway 1, Sheet A-1.1 dated 3/06/17, Job no. 12.18D.

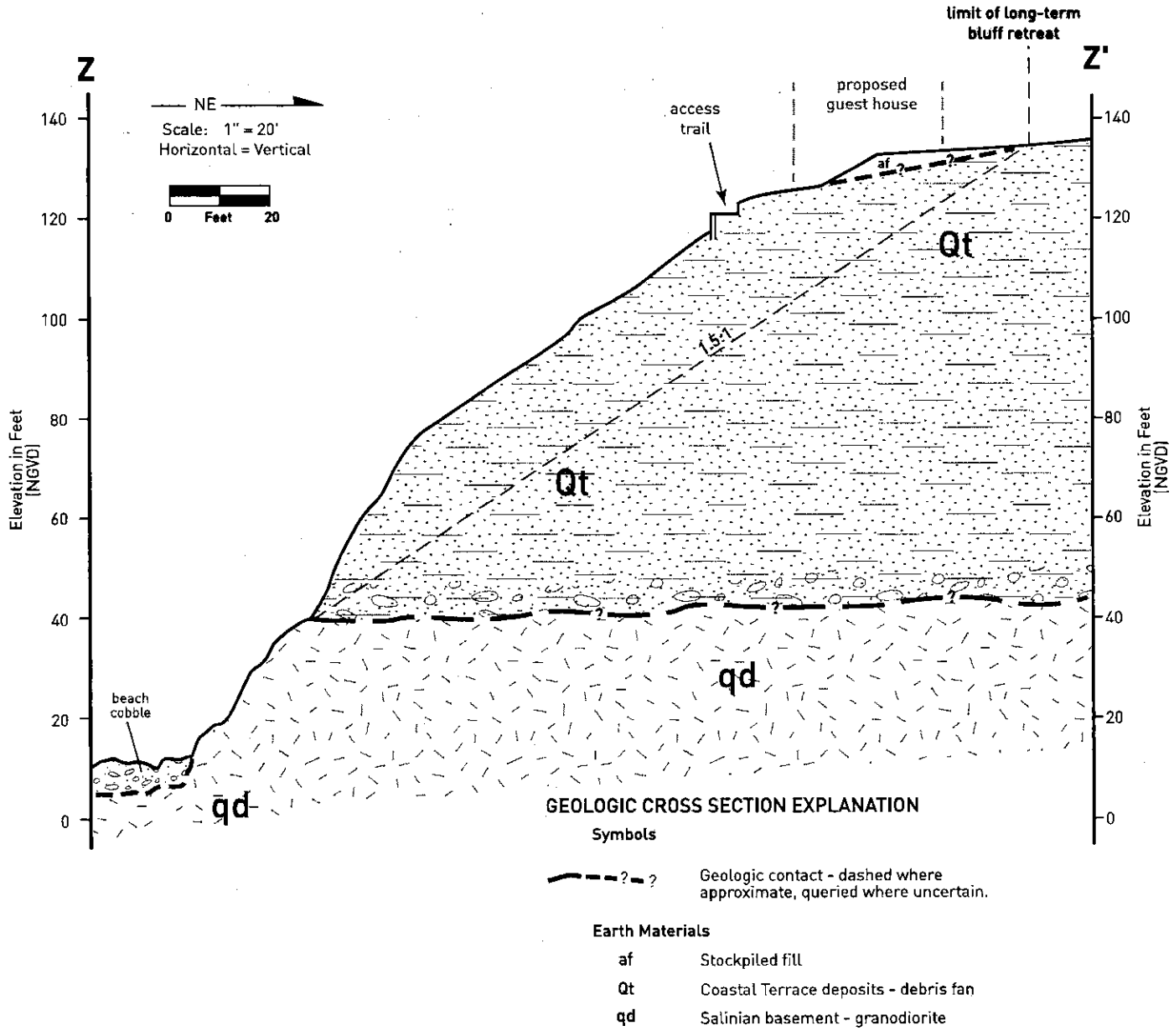
LandSet Engineers, 2017, Grading & Drainage Plan, Chez Residence, Job No. 1647-01, Sheet C2 dated January 2017.

Neill Engineers Corp., 2000, Topographic Map, 3.0 Acre APN 243-251-023, for Mr. and Mrs. Alex Stackpole, work order 7922, 1 sheet dated December 2000 (revised March 2001), notes added 1/14/2005.

Rock Solid Engineering, 2017, Addendum to Geotechnical Investigation Report, Proposed Guest House, 36510 Highway 1, Monterey, Monterey County, California, APN 243-251-023, Project No. 13016, prepared 3/14/17.



EASTON GEOLOGY, INC. P.O. Box 3533 Santa Cruz, California 95063 831.247.4317	**GEOLOGIC MAP of PROPOSED GUEST HOUSE LOCATION** Chez Property 36510 Highway 1, Monterey, California Monterey County APN 243-251-023	Scale: 1" = 20' Drawn By: GFE	Date: 3/13/17 Revised:	Drawing # Figure 1 Project # C16021



GEOLOGIC CROSS SECTION EXPLANATION

Symbols

Geologic contact - dashed where approximate, queried where uncertain.

Earth Materials

af	Stockpiled fill
Qt	Coastal Terrace deposits - debris fan
qd	Salinian basement - granodiorite

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GEOLOGIC CROSS SECTION
Chez Property
36510 Highway 1, Monterey, California
Monterey County APN 243-251-023

Scale: 1" = 20' H = V
Drawn By: GFE
Date: 3/13/17
Revised:
Drawing # Figure 2
Project # C16021

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26 September 2017

Ron Chez
c/o Eric Miller Architects
157 Grand Avenue, Suite 106
Pacific Grove, CA 93950

Job No. C16021

Subject: Supplemental Assessment of Slope
36150 Highway 1, Monterey
Monterey County APN 243-251-023

Dear Mr. Chez:

We have completed our supplemental assessment of the slope at the proposed guest house site on the above-referenced parcel. This assessment was requested by the project architect and was required by the Environmental Health Department of the Monterey County Resource Management Agency. Specifically, we evaluated the potential effect of the proposed new septic drainfields on the proposed guest house and the underlying slope. This assessment shall accompany our March 2017 supplemental geologic investigation in which we assessed the stability of the coastal bluff below the proposed guest house site.

For this supplemental assessment we: 1) reviewed the development plans for the project, including the proposed septic drainfield locations and design; 2) had several discussions with the project geotechnical engineer and the project architect; 3) discussed the project with Janna Faulk, County Environmental Health Department specialist; 4) reviewed and analyzed available maps, reports, and technical data for the subject site; and 5) prepared this letter summarizing our findings.

The guest house is proposed atop an approximately 120 foot high coastal bluff. Relatively young, noncemented terrace deposits comprise the upper 90 or so feet of the bluff. The terrace deposits consist of gravelly sands generated by upland erosion and deposited on a debris fan. The lowermost 30 feet of the bluff consists of much older granitic bedrock.

During our 2013 investigation we noted shallow landsliding within the terrace deposits on the bluff-face, just southeast of the proposed guest house location and immediately below a portion of the proposed new driveway onto the parcel. We also observed a few groundwater seeps in the shallow landslide area. From our March 2017 work we saw no significant change in the extent of landsliding at this location; however, we did observe that a drainage pipe on the slope within the landslide area appeared to be disconnected and that a portion of the beach access trail was impassable due to landsliding subsequent to our 2013 work.

The Web Soil Survey by the Natural Resources Conservation Service characterizes the terrace deposits underlying the site as Arroyo Seco gravelly sandy loam. This unit is described as well-drained, low runoff, high infiltration, and as having a high hydraulic conductivity. In essence,

the Arroyo Seco gravelly sandy loam absorbs and transmits water well. In vertical profile, the soil survey indicates that between a depth of 0 and 3.5 feet, the unit consists of a gravelly sandy loam, and between 3.5 and 5 feet the unit is a very gravelly coarse sandy loam.

Our observations of the subsurface materials at the site are generally consistent with the findings of the soil survey. Exploratory boring B1, advanced near the guest house site in 2013 by the project geotechnical engineer and co-logged by our firm, encountered predominately silty gravelly sands with lesser amounts of clay within the upper 20 feet of the native ground surface. The subsurface materials encountered were predominately dry to moist. Though the terrace deposits at the site are laterally discontinuous by nature and may vary in composition across the site, other boreholes at various elevations on the parcel penetrated similar materials, with no perched groundwater encountered.

The proposed new drainfield and expansion areas will be situated upslope of or adjacent to the guest house. The proposed primary drainfield is about 40 feet upslope of the guest house, with a proposed effective depth of about 15 feet (17 feet deep overall). The end of the secondary drainfield is about 20 feet from the corner of the guest house and slightly upslope. An overall depth of 17 feet is also proposed for the secondary drainfield.

The proposed guest house will be founded on piers. No negative effects by effluent on the foundation of the structure are anticipated. Because the thick sequence of terrace deposits underlying the site are predominately coarse grained and described as well drained, we do not anticipate effluent surfacing beneath, adjacent, or upslope of the guest house. A minor groundwater seep was encountered in borehole B1 at the time of drilling; however, no standing water developed in the hole, and the earth materials below the seep were not saturated. We observed a small, localized groundwater seep within the excavation for the main residence during an inspection of the site. This did not appear to be indicative of a perched groundwater table underlying the site. Seeps noted within the area of active slumping on the bluff-face at the site were more than 20 feet below the edge of the blufftop.

To quantitatively assess the stability of the subject bluff with regards to the proposed drainfield, the project geotechnical engineer performed supplemental slope stability analysis of the site. For their analysis, a hypothetical groundwater elevation was modeled 14 feet below the surface elevation at the drainfield to simulate saturation of the underlying materials. Their subsequent analysis indicated no significant decrease in the stability of the slope as a result of the groundwater inputs. The bluff –face, however, does remain susceptible to shallow translational failures.

The locations of the proposed septic drainfields are geologically acceptable provided they are installed as deeply as feasible (ie. effective depth of 15 feet), their lengths are commensurate with their effective depth, are designed and installed in accordance with Monterey County Resource Management Agency regulations, and function as intended.

The proposed septic tank and pump vault locations for the guest house are outside of the limit of long-term bluff retreat determined by our firm and are geologically acceptable provided they are properly installed.

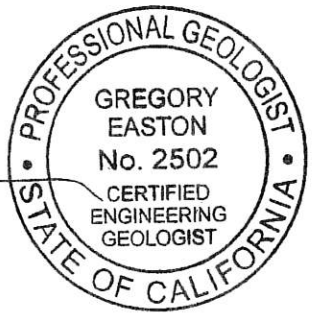
Drainage from all impermeable surfaces including the proposed new driveway and the guest house should be carefully controlled.

We must inspect the excavated drainfield trenches prior to their setting pipe or gravel. Please notify us at least four days prior to an anticipated inspection date.

It has been a pleasure working with you on this project. Please contact us if you have any questions or comments.

Sincerely,

EASTON GEOLOGY, INC.



Gregory Easton
Principal Geologist
C.E.G. No. 2502

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Eric Miller Architects, attn: Carla Hashimoto (3 and pdf)
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References:

Easton Geology, 2013, Geologic Investigation of Coastal Blufftop Property, 36510 Highway 1, Monterey, California, Monterey County APN 243-251-023, Job No. C13009, prepared 15 August 2013, 42p, 2 Plates.

Easton Geology, 2017, Supplemental Geologic Report for Proposed Guest House, 36510 Highway 1, Monterey, Monterey County APN 243-251-023, Job No. C16021, prepared 14 March 2017, 4p, 2 Figures.

Eric Miller Architects, 2017, Proposed Site Plan, Chez Residence, 36510 Highway 1, Sheet A-1.1 dated 9/26/17 (1st revision), Job no. 12.18D.

Rock Solid Engineering, 2017, Addendum to Geotechnical Investigation Report, Proposed Guest House, 36510 Highway 1, Monterey, Monterey County, California, APN 243-251-023, Project No. 13016, prepared 3/14/17.

Natural Resources Conservation Service, 2017, Web Soil Survey of Monterey County, California, https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx, accessed 9/1/17.

Monterey County Resource Management Agency – Health Department, 2017, Project Referral Sheet, Chez Project, File Number PLN160714, dated March 28, 1p.

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28 February 2018

Ron Chez
c/o Eric Miller Architects
157 Grand Avenue, Suite 106
Pacific Grove, CA 93950

Job No. C16021

Subject: Response to County Comments
Proposed Accessory Dwelling Unit
36150 Highway 1, Monterey, California
Monterey County APN 243-251-023

Dear Mr. Chez:

Easton Geology, Inc. has prepared this response letter addressing the concerns of the Monterey County Planning Department regarding the location of the proposed accessory dwelling unit (ADU) on the above-referenced property. The top of an approximately 120 foot high coastal bluff exists approximately 10 feet seaward of the closest structural member of the proposed ADU.

The Monterey County Coastal Implementation Plan and the Big Sur Coast Land Use Plan provide development standards for areas subject to geologic or environmental hazards. These standards include the regulation of: development in areas of potential slope instability; development near the coastal bluff; and blufftop development that does not rely on a seawall. To satisfy these regulations, the Monterey County Planning Department requires an engineering geologic report for development proposed within geologic hazard areas.

The two concerns raised by the Planning Department pertaining to the proposed ADU are: 1) Quantify "long-term" in reference to our earlier assessment of bluff retreat; and 2) What is the likelihood of the structure needing a seawall during the development's economic lifespan?

The specific development standards addressed in this letter are:

Chapter 3.7.3.A.8 of the Big Sur Coast Land Use Plan states: *Structures and roads in areas subject to landsliding are prohibited* [sic: read *unless*] *a certified engineering geology report indicates mitigations exist to minimize risk to life and property. Mitigation measures shall not include massive grading or excavation or the construction of protective devices that would substantially alter natural landforms.*

Chapter 3.7.3.A.9 of the Big Sur Coast Land Use Plan states: *Any proposed development within 50 feet of the face of a cliff or bluff or within the area of a 20 degree angle from the toe of a cliff, whichever is greater, shall require the preparation of a geologic report prior to consideration of*

the proposed project. The report shall demonstrate that (a) the area is stable for development; and (b) the development will not create a geologic hazard or diminish the stability of the area.

Chapter 20.145.080A.2.h of the Monterey County Coastal Implementation Plan states: *New development on blufftops subject to erosion, shall be set back sufficiently to avoid the need for seawalls during the development's economic lifespan. Such blufftop setbacks shall be based on the predicted erosion rates identified in the required geologic report.*

In 2013 we prepared an initial engineering geologic investigation for the subject parcel addressing the siting of the main residence, which is currently under construction, as well as a proposed new access driveway. In 2017, we prepared two supplemental letters pertaining to the ADU: 1) Supplemental Geologic Report for Proposed Guest House; and 2) Supplemental Assessment of Slope. The supplemental geologic report assessed the stability of the coastal bluff with respect to the proposed development and included a "limit of long-term bluff retreat" in the vicinity of the proposed ADU and access driveway. The supplemental slope assessment evaluated the stability of the bluff, taking into account the proposed septic drainfield upslope of the ADU. Our work to-date for the site has concluded that the locations of the proposed ADU, access driveway, and septic drainfield are geologically feasible and will not destabilize or substantially alter the subject bluff.

During our 2017 investigation of the ADU site, Easton Geology and Rock Solid Engineering, the project geotechnical engineer, performed detailed qualitative and quantitative stability analyses of the subject bluff.

Quantitative slope stability analysis performed by the geotechnical engineer indicated the bluff-face is susceptible to shallow translational failures due to weathering and saturation of the surficial materials over time. To evaluate the potential influence of the proposed septic drainfield on the bluff at the site, supplemental analysis was performed and the results indicated no significant decrease in the stability of the bluff-face.

During our geologic assessment of the ADU site, we performed a qualitative assessment of the bluff and assessed the long-term position of the blufftop. Our assessment took into account the earth materials underlying the site, our familiarity with their short and long-term erosional patterns, and the slow overall rate of bluff retreat at the site. The subject bluff below the proposed ADU site is about 120 feet high, with the lower 30 feet consisting of strong, highly fractured granodiorite. The granite erodes very slowly in response to scour from storm waves. The granite is unconformably overlain by a debris fan comprised of layered debris-flow deposits eroded from the sedimentary and granitic rocks forming the adjacent highlands. These younger, granular, noncemented debris fan deposits are considered well drained and as a result, deep-seated landsliding is not likely to occur within the bluff. The materials are, however, subject to surficial erosion and shallow translational landsliding due to saturation from prolonged heavy rains, misdirected runoff, and seismic shaking. Our observations of older, planar slopes on and in the vicinity of the property and underlain by debris fan deposits appear to have reached, or nearly so, their assumed long-term angle of repose (about 1.5:1 horizontal:vertical). We surmise that because of the very slow erosion rate of the bedrock at the base of bluff, it may take a few hundred years or so for the profile of the upper bluff to reach equilibrium. The line on Figure 1 of our supplemental geologic report depicted as the "limit of long-term bluff retreat" represents this equilibrium slope. The bedrock base of bluff below the ADU site will retreat a minimal amount during the project lifetime and thus will not significantly affect the overall rate of retreat of the overlying fan deposits.

From the quantitative and qualitative slope stability analyses for the proposed ADU site, we determined that there is some potential for the seaward portion of the proposed ADU to become undermined as a result of shallow landsliding between five and ten feet thick during the project lifetime. To mitigate the risk potential for damage from undermining, we recommended the dwelling be supported by piers. The piers specified for the ADU penetrate well beneath the equilibrium slope profile.

Because the base of the bluff is eroding very slowly and the proposed ADU will be supported by piers penetrating beneath the long-term bluff profile, it is highly unlikely that a seawall will be needed to protect the development during its anticipated economic lifetime.

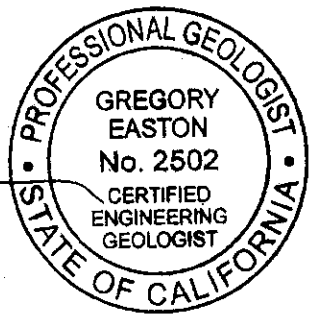
The proposed ADU is sited upon a portion of a previously approved driveway alignment on the property. The driveway alignment was evaluated by our firm and the project geotechnical engineer during our initial studies of the property in 2013. From our analysis we recommended the driveway be supported by piers in order to comply with the development standards of the Big Sur Coast Land Use Plan. The engineered driveway was subsequently approved and a portion of its alignment has been modified to pass upslope of the ADU site.

In conclusion, the proposed ADU and approved driveway alignment will be constructed on piers of sufficient depth so as to maintain support from the underlying materials. Although shallow landsliding on the bluff-face below the improvements may occur, the limit of long-term bluff retreat depicted in our supplemental report is not likely to be attained for several hundred years. The possibility that a seawall will be necessary to protect the structure from coastal bluff retreat during its economic lifetime is very low. It is our opinion that the proposed project is in conformance with the development standards of the Big Sur Coast Land Use Plan and the Monterey County Coastal Implementation Plan referenced above.

It has been a pleasure working with you on this project. Please contact us if you have any questions or comments.

Sincerely,

EASTON GEOLOGY



Gregory Easton
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Rock Solid Engineering, attn: Yvette Wilson (pdf)

References:

Easton Geology, 2013, Geologic Investigation of Coastal Blufftop Property, 36510 Highway 1, Monterey, California, Monterey County APN 243-251-023, Job No. C13009, prepared 15 August 2013, 42p, 2 Plates.

Easton Geology, Inc., 2017, Supplemental Geologic Report for Proposed Guest House, 36150 Highway 1, Monterey, Monterey County APN 243-251-023, Job No. C16021, prepared 14 March 2017, 6p.

Easton Geology, Inc., 2017, Supplemental Analysis of Slope, 36150 Highway 1, Monterey, Monterey County APN 243-251-023, Job No. C16021, prepared 26 September 2017, 3p.

Rock Solid Engineering, 2017, Addendum to Geotechnical Investigation Report, Proposed Guest House, 36510 Highway 1, Monterey, Monterey County, California, APN 243-251-023, Project No. 13016, prepared 3/14/17.

ROCK SOLID ENGINEERING, INC.
Soil Reports • Site Assessments • Manufactured Home Foundations • Expert Witness • Real Estate Inspections

Project No. 13016
March 14, 2017

Ron Chez
1524 N. Astor Street
Chicago, Illinois 60610

SUBJECT: **ADDENDUM TO GEOTECHNICAL INVESTIGATION REPORT**
Proposed Guest House
36510 Highway 1, Monterey, Monterey County, California
APN: 243-251-023-000

REFERENCES: See Attached

Dear Mr. Chez:

It is our understanding that a Guest House has been added to the scope of the project. The purpose of this addendum report is to address the proposed guest house.

1. Introduction

1.1 Project Description

a. A guest house is proposed to be located adjacent to the existing generator building approximately 50 feet from the front property line as required by the front yard setback. The proposed building is situated near the top of the coastal bluff.

b. The proposed structure is a single story structure to be used as a second dwelling.

1.2 Jurisdiction Requirements

a. We have reviewed the Big Sur Coast Land Use Plan (Reference 5) in preparation of this report. Per Section 3.7.3.A.9., a geologic report of the proposed building site was deemed necessary as it is located within 50 feet of the face of the bluff.

b. Easton Geology, Inc. has prepared a Supplemental Geologic Report (Reference 3) for the proposed Guest House to address potential geologic hazards that may impact the proposed development. The primary geologic hazard is the proximity of the proposed structure to the top of the coastal bluff. Easton Geology has therefore prepared a Geologic Cross Section through the proposed building envelope to be used in the evaluation.

2. Slope Stability Analysis

2.1 General

a. Cross Section Z-Z' used for our analysis was provided by Easton Geology (Reference 3). The cross section extended from north of the proposed guest house to the base of the coastal bluff. The location of the cross section is shown on the Geologic Map **Figure 1** and the Geologic Cross Section is shown on **Figure 2**.

b. In order to model the slope conditions in an earthquake, the pseudo-static analyses assumed a seismic coefficient of 0.36 with a required minimum Factor of Safety of 1.0 as provided by the Easton Geology (Reference 2).

2.2 Results

a. The results of our analysis indicate that the minimum factor of safety of the slope, in the current configuration, for overall circular type failures is 1.5 for the static case and 1.0 for the pseudo-static case. These just **meet** the minimum factors of safety considered to be the industry standard.

b. Shallow slope failures on the order of approximately 5 feet deep have occurred on the steep coastal bluff as indicated by the project geologist. Similar shallow type failures are anticipated in the future. Calculations for surficial stability indicated that the slopes do meet industry standards for factors of safety for shallow translational type failures.

c. The Geologist has provided a projected long term bluff retreat line. The retreat line extends from base of the terrace deposits at an angle of 1.5:1 tot the ground surface (**Figure 2**). To protect the structure from future cycles of repetitive shallow type failures, we are proposing that the structure be founded on augured piers which extend below the 1.5:1 projected line.

2.3 Discussion

a. Our quantitative slope stability analysis indicates that provided the proposed structure is founded in accordance with the recommendations herein, the slopes meet the current industry standards for the minimum required Factors of Safety for deeper overall failures.

b. As the coastal bluff is very steep and subject to episodic shallow failures, it should be anticipated that any improvements located between the new structure and the top of the bluff may be subjected to slope movement and/or failures.

c. Please be aware that quantitative slope stability analysis includes significant simplifying assumptions. Consequently, slope stability analyses and the generated Factors of Safety should be used as indicating trend lines. A slope with a Factor of Safety less than 1.0 will not necessarily fail, but the probability of slope movement will be greater than a slope with a higher Factor of Safety. Conversely, a slope with a Factor of Safety greater than 1.0 may fail, but the probability of stability is higher than a slope with a lower Factor of Safety.

d. Further discussion of slope stability analysis, methodology, and the results of the PCSTABL6 computer modeling program are presented in **Appendix A**.

3. Foundations

It is our recommendation that the proposed guest house, adjacent entry stairs and parking area be founded on augured cast-in-place concrete piers as follows.

a. The depth of the piers may be calculated by the structural engineer based on the load requirements but **not less than 10 feet deep**. The depth to the projected 1.5:1 bluff retreat line is shown on **Figure 3** at various points of the proposed structure. This depth shall be neglected in the calculation of allowable passive pressures and bearing capacity. The minimum neglected depth is 2 feet. For example, at the south corner of the proposed residence, the red line indicates a depth of 20 below grade. The piers at this location shall neglect the top 20 feet of soil.

b. Below the neglected depth, passive pressure of **180 psf/ft** acting over a plane 1½ times the shaft diameter, may be assumed for design purposes.

c. Below the neglected depth, the allowable bearing capacity is:

18 inch Diameter:	435 lb/ft
24 inch Diameter:	580 lb/ft

d. The minimum recommended shaft diameter is **18 inches**.

e. The recommended capacities apply to a single shaft, as this is the anticipated configuration. If multiple piers are used, group efficiencies should be evaluated on the basis of actual structural configurations in order to assess possible reductions in capacity due to group influences.

f. Active pressures of **30 psf/ft**, should be applied where the passive pressure is neglected.

g. Piers should be spaced no closer than 2.5 diameters, center to center, with a minimum 3.0 diameters preferred.

h. The augured excavations shall be clean, dry, and free of debris and loose soil. Furthermore, excavations should not deviate more than 1% from vertical.

i. If the contractor chooses to use casing, it must be pulled during the concrete pour. It must be pulled slowly with a minimum of 4 feet of casing remaining embedded within the concrete at all times.

j. For shaft depths in excess of 8 feet, concrete should be placed via a tremie. The end of the tube must remain embedded a minimum of 4 feet into the concrete at all times.

k. All shaft construction must be observed and approved by the Geotechnical Consultant. Any piers constructed without the full knowledge and continuous observation of Rock Solid Engineering, Inc. will render the recommendations of this report invalid.

l. The piers should contain steel reinforcement as determined by the Project Structural Engineer in accordance with applicable CBC or ACI Standards.

m. The **floor slab shall be designed to span** to the foundation piers without soil support.

n. Because the slab will be structurally supported, recompaction of the subgrade will not be required.

4. **Driveway**

a. The new driveway is also located near the top of the steep coastal bluff. A portion of the proposed driveway is included on the approved plans for construction of the main residence and is proposed to be supported by piers.

b. To prevent undermining of the access by landsliding, the new driveway layout will need to be supported by piers. The piers will be required where the driveway is seaward of the Long Term Bluff Retreat line shown on **Figure 3**.

c. The depth of embedment of the piers shall be the depth noted on **Figure 3** plus 5 feet. The depths may be interpolated between given numbers.

d. The Project Geologist mapped a landslides downslope of the proposed driveway in 2013 (**Figure 1**). During the winter of 2015-2016, an additional slide occurred in the same vicinity. A 3 to 4 inch diameter pipe was noted in the area of the slide. This pipe appeared to be separated and was discharging water into the area of the slide. If not already completed, this pipe should be located and repaired to bring the discharge location further downslope.

5. **Site Drainage**

a. All drainage, including any pipe outlets, **shall not be allowed to discharge on or near the steep coastal bluff.**

b. All discharge pipes shall be directed to the existing drainage system on the property which conveys the drainage to the base of the slope. Any existing pipes should be verified to be in good working order prior to directing drainage to them.

c. Based on our review of the preliminary civil plans (Reference 4), the drainage is shown to discharge via energy dissipators at the top of the steep slope in three locations. This drainage will need to be revised to be in accordance with the above recommendations.

6. **Miscellaneous**

a. In general, the recommendations presented in the Geotechnical Investigation (Reference 6) generally continue to apply.

b. Spoils from the on going construction of the main residence have been stockpiled in the area of the proposed guest house. It is our understanding that the stock pile will be removed prior to the construction of the guest house. Any remaining fill and/or stock pile must be removed and/or be recompacted under our direction if it is to remain.

If you have any questions, or if we may be of further assistance, please do not hesitate to contact our office.

Sincerely,

ROCK SOLID ENGINEERING, INC.

Signed: March 17, 2017

Yvette M. Wilson, P.E.
Principal Engineer
R.C.E. 60245

Attachments: Appendix A: Slope Stability Analysis

Distribution: (1) Addressee and via email
(3) Carla Hashimoto, Eric Miller Architects, Inc., and via email
(1) Greg Easton, Easton Geology, and via email

REFERENCES

1. California Building Standards Commission, 2016, 2016 California Building Code, California Code of Regulations, Title 24, Part 2, Effective January 1, 2017.

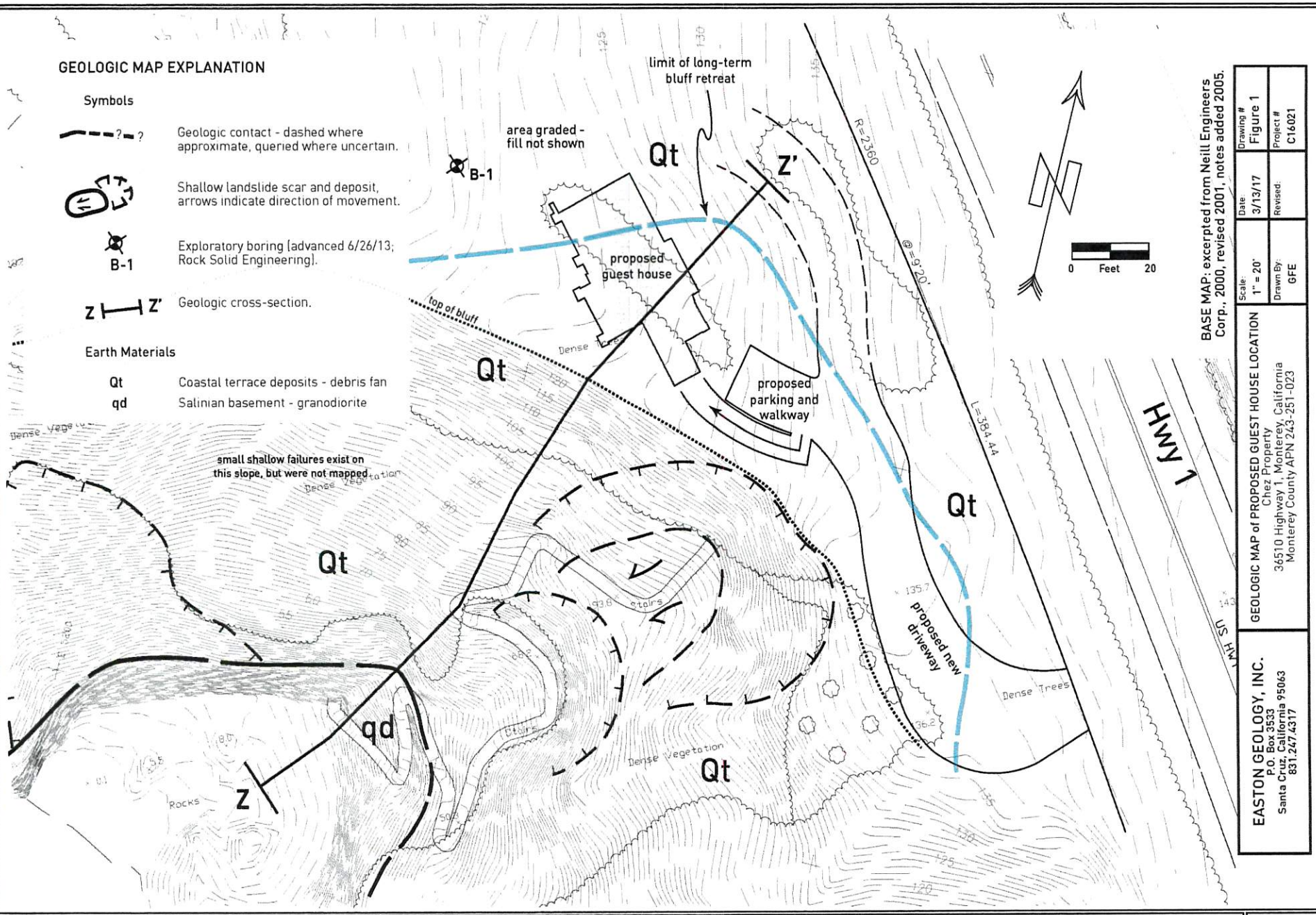
2. Easton Geology, Geologic Investigation, Chez Property, 36510 Highway 1, Big Sur, Monterey County, APN243-251-023, Easton Geology Job No. C13009, Dated August 15, 2013.

3. Easton Geology, Supplemental Geologic Report For Proposed Guest House, 36510 Highway 1, Monterey, Monterey County, APN 243-251-023, Easton Geology Job No. C16021, Dated 14 March 2017.

4. Landset Engineers Inc., Grading, Drainage & Erosion Control Plan, Chez Residence, A.P.N. 243-251-023, Monterey County, California, Sheet C2, Job No. 1647-01, Dated January 2017.

5. Monterey County, Big Sur Coast Land Use Plan, Local Coastal Program, Monterey County, California, Adopted January 9, 1996.

6. Rock Solid Engineering, Inc., Geotechnical Investigation-Design Phase, Proposed Single Family Residence, 36510 Highway 1, Monterey, Monterey County, California, APN 243-251-023-000, Project No. 13016, Dated August 16, 2013.

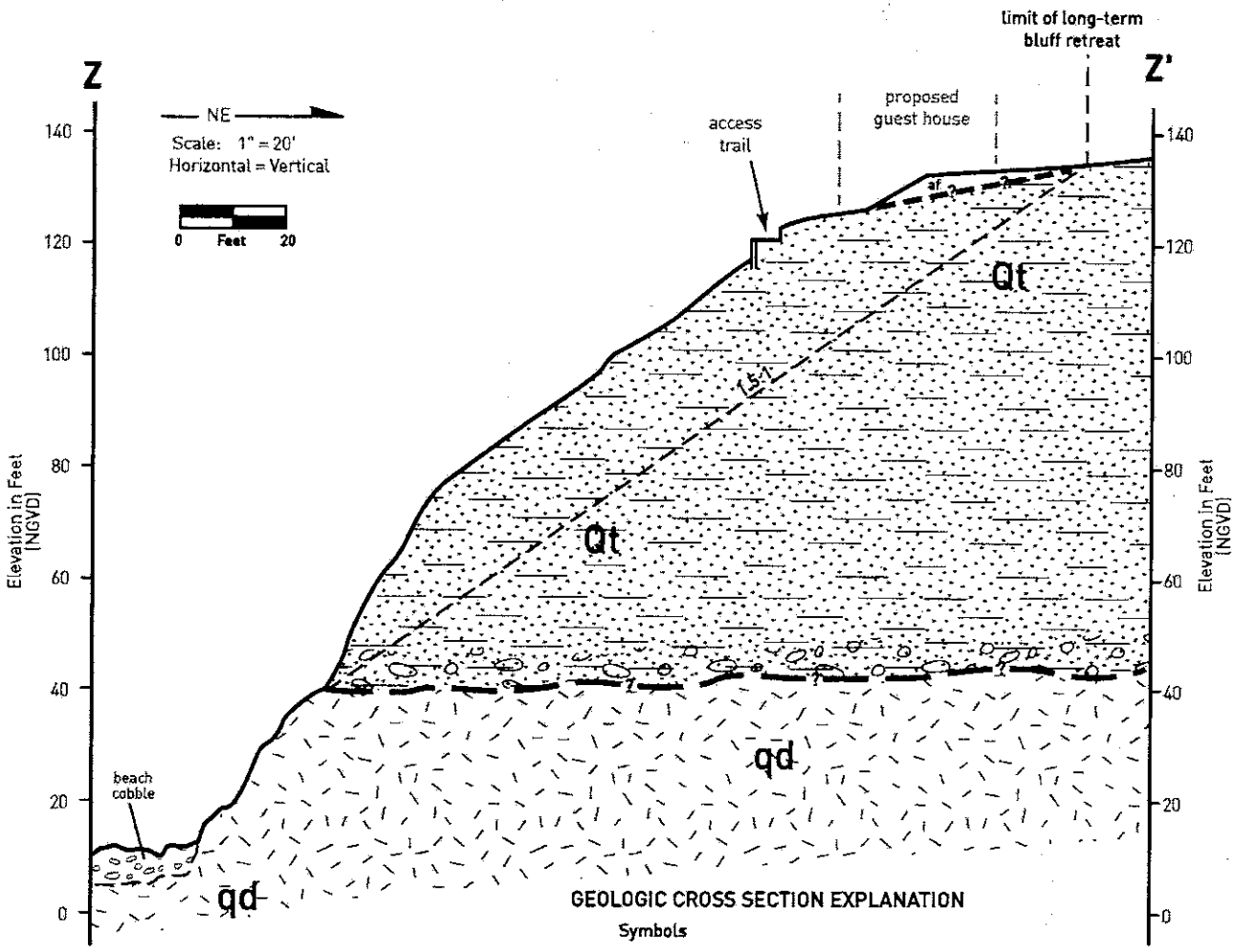


ROCK SOLID ENGINEERING, INC.

GEOLOGIC MAP

36510 Highway 1, Monterey, California

FIGURE 1



GEOLOGIC CROSS SECTION EXPLANATION

Symbols

Geologic contact - dashed where approximate, queried where uncertain.

Earth Materials

af	Stockpiled fill
Qt	Coastal Terrace deposits - debris fan
qd	Salinian basement - granodiorite

GEOLOGIC CROSS SECTION
Chez Property
36510 Highway 1, Monterey, California
Monterey County APN 243-251-023

Scale: 1" = 20' H = V
Drawn By: GFE
Date: 3/13/17
Revised:
Drawing # Figure 2
Project # C16021

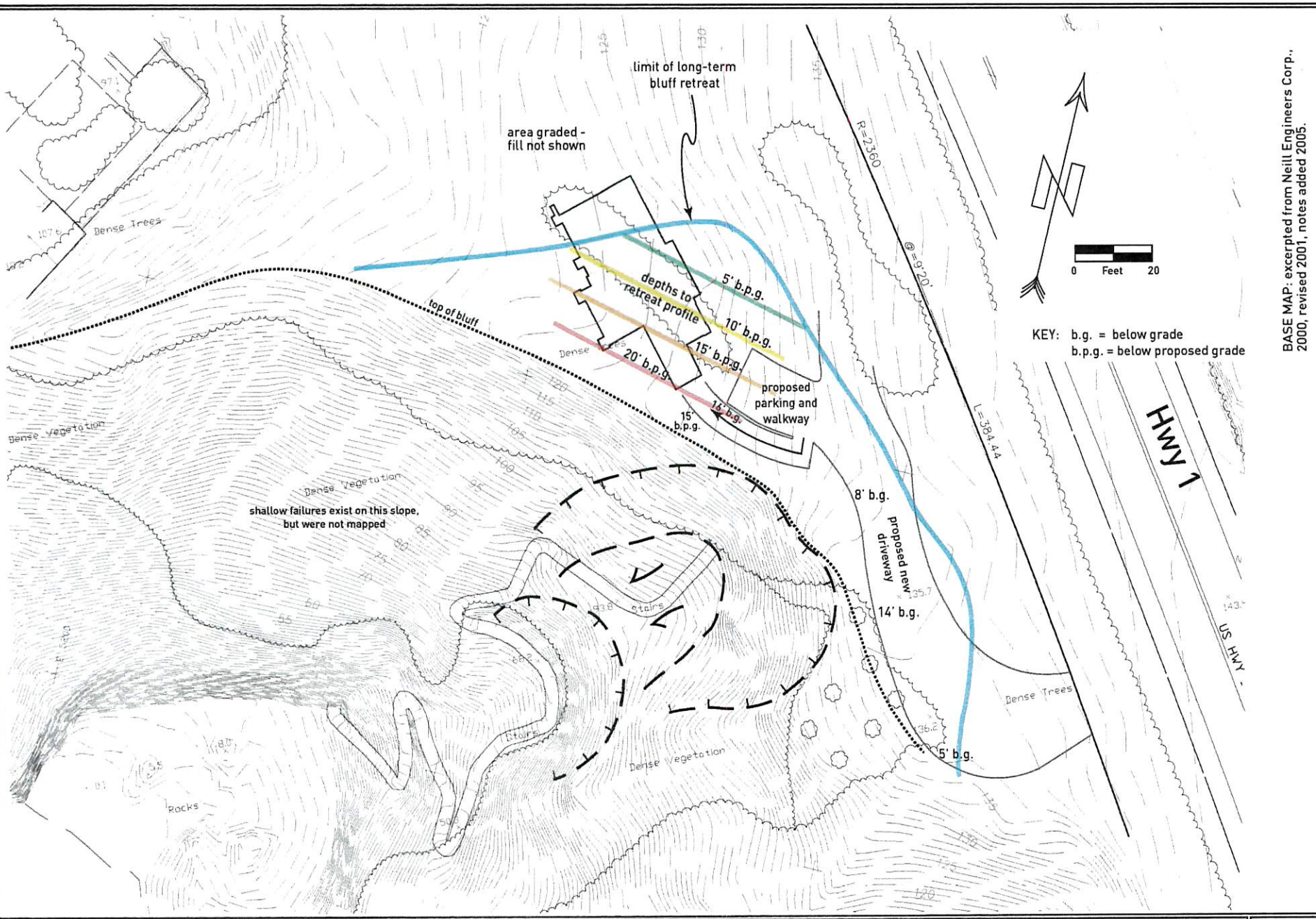
EASTON GEOLOGY, INC.
P.O. Box 3533
Santa Cruz, California 95063
831.247.4317

ROCK SOLID ENGINEERING, INC.

GEOLOGIC SECTION

36510 Highway 1, Monterey, California

FIGURE 2



ROCK SOLID ENGINEERING, INC.	DEPTHS TO LONG TERM BLUFF RETREAT LINE 36510 Highway 1, Monterey, California	FIGURE 3

APPENDIX A

SLOPE STABILITY ANALYSIS

METHODOLOGY

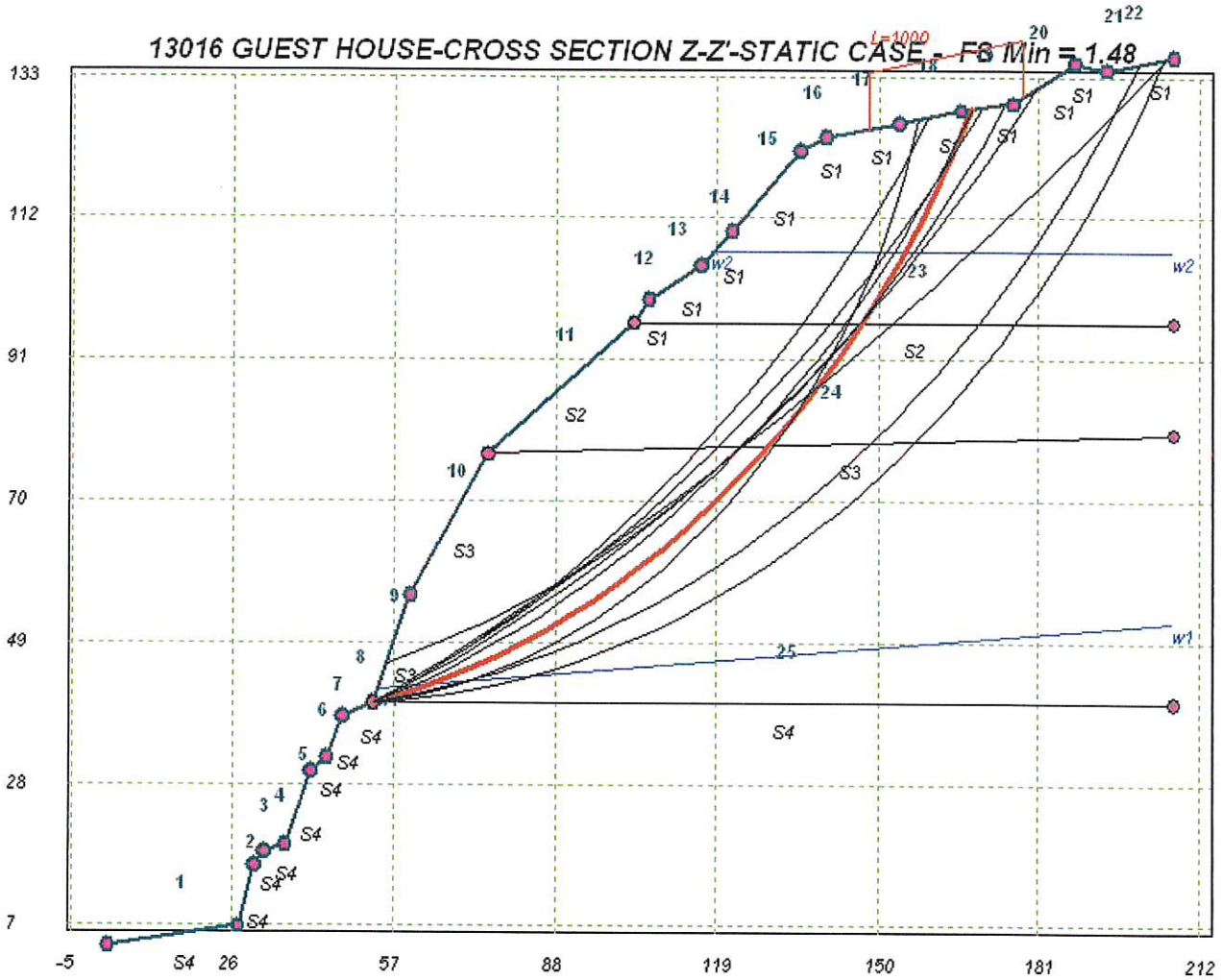
A-1. Slope stability calculations were performed on the slopes discussed under the slope stability section of this report, Section 2, and are considered representative of the conditions at the subject site.

A-2. The stability of the slope at the subject site was analyzed using the program PCSTABL6 which utilized a limiting equilibrium method for determining the Factor of Safety against sliding on an assumed failure surface. The cross section analyzed, and the results of the analysis are presented below.

A-3. Material properties chosen for this analysis are conservatively based on laboratory test results. Residual strength was used for the static analyses and peak strength used for psuedostatic analyses.

A-4. It must be cautioned that slope stability analysis is an inexact science and the mathematical models of the slopes and soils contain many simplifying assumptions, not the least of which are isotropy and homogeneity. Slope stability analyses and the generated factors of safety should be used as indicating trend lines. A slope with a safety factor less than one will not necessarily fail, but the probability of slope movement will be greater than a slope with a higher safety factor. Conversely, a slope with a safety factor greater than one may fail, but the probability of stability is higher than a slope with a lower safety factor.

CROSS SECTION Z-Z' - **STATIC CASE**




```
** PCSTABL6 **
by
Purdue University

--Slope Stability Analysis--
Simplified Janbu, Simplified Bishop
or Spencer`s Method of Slices

PROBLEM DESCRIPTION:   13016 GUEST HOUSE-CROSS SECTION Z-Z'-STATIC CASE

BOUNDARY COORDINATES

   22 Top   Boundaries
   25 Total Boundaries
```

Boundary No.	X-Left (ft)	Y-Left (ft)	X-Right (ft)	Y-Right (ft)	Soil Type Below Bnd
1	2.00	4.00	27.00	7.00	4
2	27.00	7.00	30.00	16.00	4
3	30.00	16.00	32.00	18.00	4
4	32.00	18.00	36.00	19.00	4
5	36.00	19.00	41.00	30.00	4
6	41.00	30.00	44.00	32.00	4
7	44.00	32.00	47.00	38.00	4
8	47.00	38.00	53.00	40.00	4
9	53.00	40.00	60.00	56.00	3
10	60.00	56.00	75.00	77.00	3
11	75.00	77.00	103.00	96.50	2
12	103.00	96.50	106.00	100.00	1
13	106.00	100.00	116.00	105.00	1
14	116.00	105.00	122.00	110.00	1
15	122.00	110.00	135.00	122.00	1
16	135.00	122.00	140.00	124.00	1
17	140.00	124.00	154.00	126.00	1
18	154.00	126.00	166.00	128.00	1
19	166.00	128.00	176.00	129.00	1
20	176.00	129.00	188.00	135.00	1
21	188.00	135.00	194.00	134.00	1
22	194.00	134.00	207.00	136.00	1
23	103.00	96.50	207.00	96.50	2
24	75.00	77.00	207.00	80.00	3
25	53.00	40.00	207.00	40.00	4

ISOTROPIC SOIL PARAMETERS

4 Type(s) of Soil

Soil Type No.	Total Unit Wt. (pcf)	Saturated Unit Wt. (pcf)	Cohesion Intercept (psf)	Friction Angle (deg)	Pore Pressure Param.	Pressure Constant (psf)	Piez. Surface No.
1	125.0	125.0	400.0	27.0	0.00	0.0	2
2	126.0	126.0	1500.0	25.0	0.00	0.0	0
3	125.0	125.0	1500.0	25.0	0.00	0.0	1
4	145.0	145.0	10000.0	0.0	0.00	0.0	0

2 PIEZOMETRIC SURFACE(S) HAVE BEEN SPECIFIED

Unit Weight of Water = 62.40

Piezometric Surface No. 1 Specified by 2 Coordinate Points

Point No.	X-Water (ft)	Y-Water (ft)
1	54.00	42.00
2	207.00	52.00

Piezometric Surface No. 2 Specified by 2 Coordinate Points

Point No.	X-Water (ft)	Y-Water (ft)
1	118.00	107.00
2	207.00	107.00

BOUNDARY LOAD(S)

1 Load(s) Specified

Load No.	X-Left (ft)	X-Right (ft)	Intensity (psf)	Deflection (deg)
1	148.00	178.00	1000.0	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.

400 Trial Surfaces Have Been Generated.

20 Surfaces Initiate From Each Of 20 Points Equally Spaced Along The Ground Surface Between X = 53.00 ft.
and X = 103.00 ft.

Each Surface Terminates Between X = 135.00 ft.
and X = 207.00 ft.

Unless Further Limitations Were Imposed, The Minimum Elevation At Which A Surface Extends Is Y = 40.00 ft.

5.00 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 -25.0 And 43.0 deg.

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

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

Failure Surface Specified By 31 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	53.00	40.00
2	57.87	41.12
3	62.71	42.38
4	67.51	43.78
5	72.27	45.33
6	76.97	47.01
7	81.63	48.84
8	86.23	50.80
9	90.77	52.90
10	95.24	55.13
11	99.65	57.49
12	103.98	59.98
13	108.24	62.60
14	112.42	65.35
15	116.52	68.22
16	120.52	71.20
17	124.44	74.31
18	128.27	77.53
19	132.00	80.86
20	135.62	84.31
21	139.14	87.85
22	142.56	91.50
23	145.87	95.25
24	149.06	99.10
25	152.14	103.04
26	155.10	107.07
27	157.94	111.19
28	160.65	115.39
29	163.24	119.66
30	165.71	124.02
31	167.91	128.19

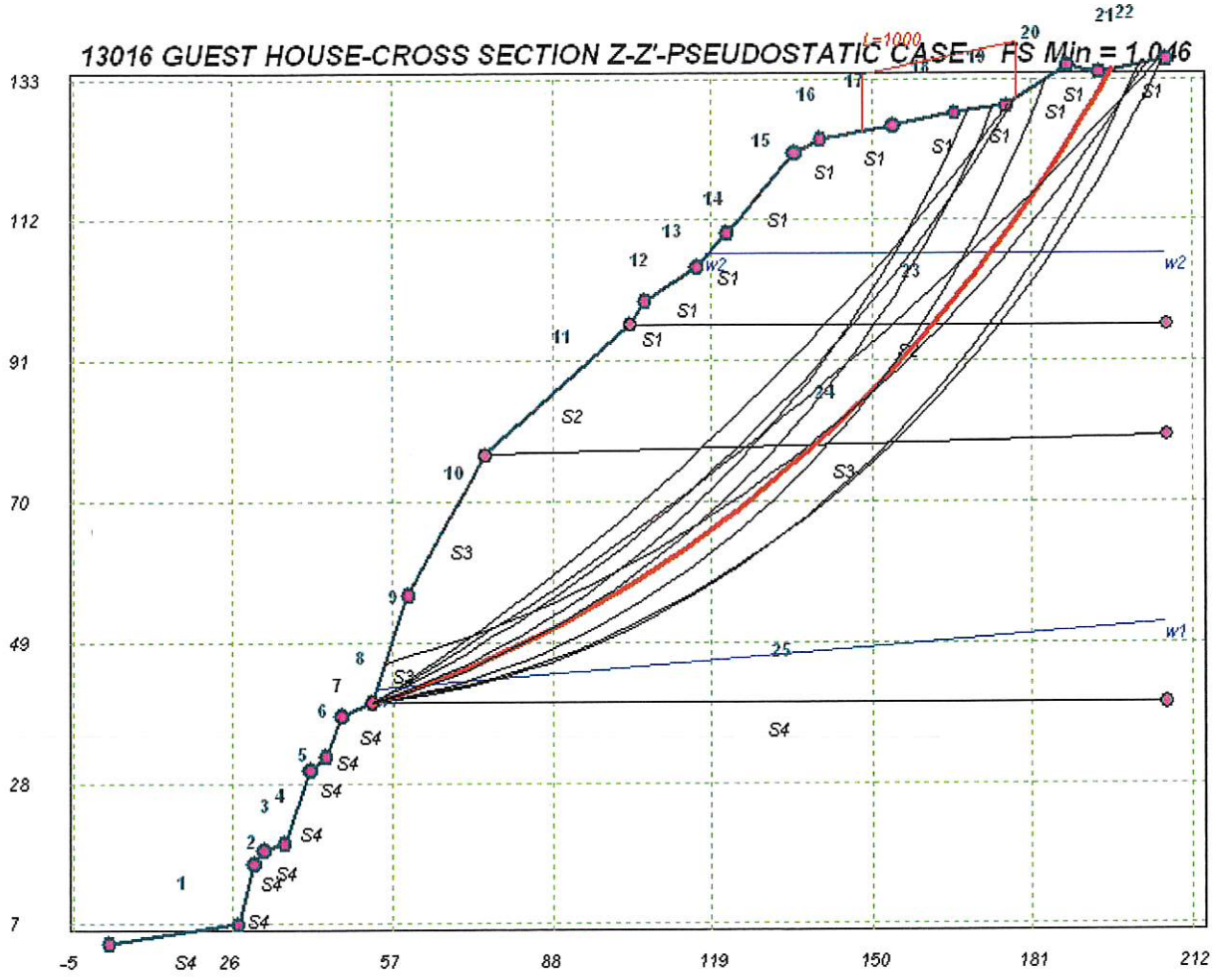
Circle Center At X = 17.8 ; Y = 204.8 and Radius, 168.5

*** 1.480 ***

Individual data on the 47 slices

Slice No.	Width (ft)	Weight (lbs)	Water Force Top (lbs)	Water Force Bot (lbs)	Force Norm (lbs)	Force Tan (lbs)	Earthquake Force Hor (lbs)	Earthquake Force Ver (lbs)	Surcharge Load (lbs)
1	1.0	128.4	127.6	118.2	0.0	0.0	0.0	0.0	0.0
2	3.9	2925.0	0.0	359.6	0.0	0.0	0.0	0.0	0.0
3	2.1	3235.4	0.0	127.0	0.0	0.0	0.0	0.0	0.0
4	2.7	5383.1	0.0	79.7	0.0	0.0	0.0	0.0	0.0
5	0.8	1887.1	0.0	5.2	0.0	0.0	0.0	0.0	0.0
6	4.0	10157.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	4.8	15033.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	2.7	9999.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	2.0	7659.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	4.7	18676.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	4.6	19229.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	4.5	19645.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	4.5	19926.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	4.4	20073.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	3.4	15509.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	1.0	4611.2	935.7	0.0	0.0	0.0	0.0	0.0	0.0
17	2.0	9674.1	1581.3	0.0	0.0	0.0	0.0	0.0	0.0
18	2.2	10871.3	1007.1	0.0	0.0	0.0	0.0	0.0	0.0
19	4.2	20027.8	1409.5	0.0	0.0	0.0	0.0	0.0	0.0
20	3.6	16847.2	722.9	0.0	0.0	0.0	0.0	0.0	0.0
21	0.5	2408.8	74.8	0.0	0.0	0.0	0.0	0.0	0.0
22	1.5	6941.9	114.7	0.0	0.0	0.0	0.0	0.0	0.0
23	2.5	11868.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	1.5	6959.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	2.4	11585.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	3.8	18284.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.8	3748.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	2.9	14164.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	3.0	14437.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.6	2970.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	3.5	16275.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.9	3804.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
33	2.6	10915.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
34	3.3	12914.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35	1.0	3752.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
36	1.1	3833.0	0.0	1056.3	0.0	0.0	0.0	0.0	0.0
37	1.1	3548.4	0.0	884.9	0.0	0.0	0.0	0.0	1061.0
38	3.1	9404.4	0.0	1849.5	0.0	0.0	0.0	0.0	3078.1
39	1.9	5014.8	0.0	527.9	0.0	0.0	0.0	0.0	1860.9
40	1.0	2588.8	0.0	78.5	0.0	0.0	0.0	0.0	1046.0
41	0.1	126.5	0.0	0.0	0.0	0.0	0.0	0.0	52.9
42	2.8	6135.7	0.0	0.0	0.0	0.0	0.0	0.0	2839.0
43	2.7	4615.1	0.0	0.0	0.0	0.0	0.0	0.0	2715.6
44	2.6	3172.6	0.0	0.0	0.0	0.0	0.0	0.0	2589.9
45	2.5	1817.6	0.0	0.0	0.0	0.0	0.0	0.0	2461.8
46	0.3	135.6	0.0	0.0	0.0	0.0	0.0	0.0	294.8
47	1.9	408.2	0.0	0.0	0.0	0.0	0.0	0.0	1906.4

CROSS SECTION Z-Z' - **PSEUDOSTATIC CASE**



** PCSTABL6 **
by
Purdue University

--Slope Stability Analysis--
Simplified Janbu, Simplified Bishop
or Spencer`s Method of Slices

PROBLEM DESCRIPTION 13016 GUEST HOUSE-CROSS SECTION Z-Z'-PSEUDOSTATIC CASE

BOUNDARY COORDINATES

22 Top Boundaries
25 Total Boundaries

Boundary No.	X-Left (ft)	Y-Left (ft)	X-Right (ft)	Y-Right (ft)	Soil Type Below Bnd
1	2.00	4.00	27.00	7.00	4
2	27.00	7.00	30.00	16.00	4
3	30.00	16.00	32.00	18.00	4
4	32.00	18.00	36.00	19.00	4
5	36.00	19.00	41.00	30.00	4
6	41.00	30.00	44.00	32.00	4
7	44.00	32.00	47.00	38.00	4
8	47.00	38.00	53.00	40.00	4
9	53.00	40.00	60.00	56.00	3
10	60.00	56.00	75.00	77.00	3
11	75.00	77.00	103.00	96.50	2
12	103.00	96.50	106.00	100.00	1
13	106.00	100.00	116.00	105.00	1
14	116.00	105.00	122.00	110.00	1
15	122.00	110.00	135.00	122.00	1
16	135.00	122.00	140.00	124.00	1
17	140.00	124.00	154.00	126.00	1
18	154.00	126.00	166.00	128.00	1
19	166.00	128.00	176.00	129.00	1
20	176.00	129.00	188.00	135.00	1
21	188.00	135.00	194.00	134.00	1
22	194.00	134.00	207.00	136.00	1
23	103.00	96.50	207.00	96.50	2
24	75.00	77.00	207.00	80.00	3
25	53.00	40.00	207.00	40.00	4

ISOTROPIC SOIL PARAMETERS

4 Type(s) of Soil

Soil Type No.	Total Unit Wt. (pcf)	Saturated Unit Wt. (pcf)	Cohesion Intercept (psf)	Friction Angle (deg)	Pore Pressure Param.	Pressure Constant (psf)	Piez. Surface No.
1	125.0	125.0	440.0	29.0	0.00	0.0	2
2	126.0	126.0	1800.0	28.0	0.00	0.0	0
3	125.0	125.0	1800.0	28.0	0.00	0.0	1
4	145.0	145.0	10000.0	0.0	0.00	0.0	0

2 PIEZOMETRIC SURFACE(S) HAVE BEEN SPECIFIED

Unit Weight of Water = 62.40

Piezometric Surface No. 1 Specified by 2 Coordinate Points

Point No.	X-Water (ft)	Y-Water (ft)
1	54.00	42.00
2	207.00	52.00

Piezometric Surface No. 2 Specified by 2 Coordinate Points

Point No.	X-Water (ft)	Y-Water (ft)
1	118.00	107.00
2	207.00	107.00

BOUNDARY LOAD(S)

1 Load(s) Specified

Load No.	X-Left (ft)	X-Right (ft)	Intensity (psf)	Deflection (deg)
1	148.00	178.00	1000.0	0.0

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

A Horizontal Earthquake Loading Coefficient
Of0.360 Has Been Assigned

A Vertical Earthquake Loading Coefficient
Of0.000 Has Been Assigned

Cavitation Pressure = 0.0 (psf)

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

400 Trial Surfaces Have Been Generated.

20 Surfaces Initiate From Each Of 20 Points Equally Spaced Along The Ground Surface Between X = 53.00 ft.
and X = 103.00 ft.

Each Surface Terminates Between X = 135.00 ft.
and X = 207.00 ft.

Unless Further Limitations Were Imposed, The Minimum Elevation At Which A Surface Extends Is Y = 40.00 ft.

5.00 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 -25.0 And 43.0 deg.

Following Is Displayed The Ten Most Critical Of The Trial Failure Surfaces Examined.

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

Failure Surface Specified By 37 Coordinate Points

Point No.	X-Surf (ft)	Y-Surf (ft)
1	53.00	40.00
2	57.86	41.19
3	62.69	42.48
4	67.49	43.86
5	72.27	45.34
6	77.01	46.92
7	81.73	48.59
8	86.40	50.35
9	91.05	52.21
10	95.65	54.16
11	100.22	56.20
12	104.74	58.34
13	109.22	60.56
14	113.65	62.87
15	118.04	65.27
16	122.37	67.76
17	126.66	70.33
18	130.89	72.99
19	135.07	75.74
20	139.20	78.56
21	143.27	81.47
22	147.27	84.46
23	151.22	87.53
24	155.11	90.68
25	158.93	93.90
26	162.68	97.20
27	166.37	100.58
28	169.99	104.02
29	173.54	107.54
30	177.02	111.13
31	180.43	114.79
32	183.77	118.52
33	187.02	122.31
34	190.20	126.17
35	193.31	130.09
36	196.33	134.07
37	196.57	134.40

Circle Center At X = -4.1 ; Y = 283.2 and Radius, 249.8

*** 1.046 ***

Individual data on the 57 slices

Slice No.	Width (ft)	Weight (lbs)	Water Force Top (lbs)	Water Force Bot (lbs)	Force Norm (lbs)	Force Tan (lbs)	Earthquake Force Hor (lbs)	Earthquake Force Ver (lbs)	Surcharge Load (lbs)
1	1.0	127.4	127.6	118.1	0.0	0.0	45.9	0.0	0.0
2	3.9	2880.0	0.0	347.9	0.0	0.0	1036.8	0.0	0.0
3	2.1	3234.6	0.0	116.6	0.0	0.0	1164.4	0.0	0.0
4	2.7	5295.1	0.0	62.1	0.0	0.0	1906.2	0.0	0.0
5	0.4	863.6	0.0	1.1	0.0	0.0	310.9	0.0	0.0
6	4.4	11120.2	0.0	0.0	0.0	0.0	4003.3	0.0	0.0
7	4.8	15060.9	0.0	0.0	0.0	0.0	5421.9	0.0	0.0
8	2.7	10001.3	0.0	0.0	0.0	0.0	3600.5	0.0	0.0
9	2.0	7833.2	0.0	0.0	0.0	0.0	2820.0	0.0	0.0
10	4.7	19035.0	0.0	0.0	0.0	0.0	6852.6	0.0	0.0
11	4.7	19819.2	0.0	0.0	0.0	0.0	7134.9	0.0	0.0
12	4.6	20512.7	0.0	0.0	0.0	0.0	7384.6	0.0	0.0
13	4.6	21116.0	0.0	0.0	0.0	0.0	7601.8	0.0	0.0
14	4.6	21629.5	0.0	0.0	0.0	0.0	7786.6	0.0	0.0
15	2.8	13510.9	0.0	0.0	0.0	0.0	4863.9	0.0	0.0
16	1.7	8630.8	1580.5	0.0	0.0	0.0	3107.1	0.0	0.0
17	1.3	6432.9	936.5	0.0	0.0	0.0	2315.8	0.0	0.0
18	3.2	16561.2	1390.3	0.0	0.0	0.0	5962.0	0.0	0.0
19	4.4	22804.4	1324.9	0.0	0.0	0.0	8209.6	0.0	0.0
20	2.4	12059.4	424.3	0.0	0.0	0.0	4341.4	0.0	0.0
21	2.0	10319.3	189.5	0.0	0.0	0.0	3714.9	0.0	0.0
22	0.0	186.1	0.9	0.0	0.0	0.0	67.0	0.0	0.0
23	4.0	20855.5	0.0	0.0	0.0	0.0	7508.0	0.0	0.0
24	0.4	1989.7	0.0	0.0	0.0	0.0	716.3	0.0	0.0
25	4.3	23267.5	0.0	0.0	0.0	0.0	8376.3	0.0	0.0
26	4.2	23679.4	0.0	0.0	0.0	0.0	8524.6	0.0	0.0
27	4.1	23564.5	0.0	0.0	0.0	0.0	8483.2	0.0	0.0
28	0.1	429.6	0.0	0.0	0.0	0.0	154.7	0.0	0.0
29	4.0	22757.1	0.0	0.0	0.0	0.0	8192.5	0.0	0.0
30	0.2	880.9	0.0	0.0	0.0	0.0	317.1	0.0	0.0
31	0.8	4522.4	0.0	0.0	0.0	0.0	1628.1	0.0	0.0
32	3.3	17983.7	0.0	0.0	0.0	0.0	6474.1	0.0	0.0
33	4.0	20989.4	0.0	0.0	0.0	0.0	7556.2	0.0	0.0
34	0.7	3673.8	0.0	0.0	0.0	0.0	1322.6	0.0	0.0
35	3.2	15771.8	0.0	0.0	0.0	0.0	5677.9	0.0	3220.6
36	2.8	12927.5	0.0	0.0	0.0	0.0	4653.9	0.0	2779.4
37	1.1	4963.6	0.0	0.0	0.0	0.0	1786.9	0.0	1105.7
38	3.8	16358.8	0.0	0.0	0.0	0.0	5889.2	0.0	3821.3
39	3.0	11785.6	0.0	0.0	0.0	0.0	4242.8	0.0	2957.7
40	0.8	3046.4	0.0	673.0	0.0	0.0	1096.7	0.0	798.3
41	3.3	12026.3	0.0	2323.1	0.0	0.0	4329.5	0.0	3317.0
42	0.4	1284.5	0.0	207.5	0.0	0.0	462.4	0.0	372.1
43	3.6	11730.7	0.0	1466.3	0.0	0.0	4223.1	0.0	3620.9
44	3.0	8644.8	0.0	392.4	0.0	0.0	3112.1	0.0	3002.0
45	0.5	1472.6	0.0	0.0	0.0	0.0	530.1	0.0	549.1
46	2.5	6159.9	0.0	0.0	0.0	0.0	2217.6	0.0	2455.8
47	1.0	2387.5	0.0	0.0	0.0	0.0	859.5	0.0	1024.2
48	1.0	2207.6	0.0	0.0	0.0	0.0	794.7	0.0	975.8
49	2.4	5203.5	0.0	0.0	0.0	0.0	1873.3	0.0	0.0
50	3.3	6413.7	0.0	0.0	0.0	0.0	2308.9	0.0	0.0
51	3.3	5408.8	0.0	0.0	0.0	0.0	1947.2	0.0	0.0
52	1.0	1446.9	0.0	0.0	0.0	0.0	520.9	0.0	0.0
53	2.2	2751.4	0.0	0.0	0.0	0.0	990.5	0.0	0.0
54	3.1	2422.5	0.0	0.0	0.0	0.0	872.1	0.0	0.0
55	0.7	303.5	0.0	0.0	0.0	0.0	109.3	0.0	0.0
56	2.3	479.5	0.0	0.0	0.0	0.0	172.6	0.0	0.0
57	0.2	4.2	0.0	0.0	0.0	0.0	1.5	0.0	0.0

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Monday, December 19, 2016

SITE REPORT AND BIOLOGICAL EVALUATION

To: Ronald Chez
c/o: Carla Hashimoto, Eric Miller Architects (EMA), Monterey CA

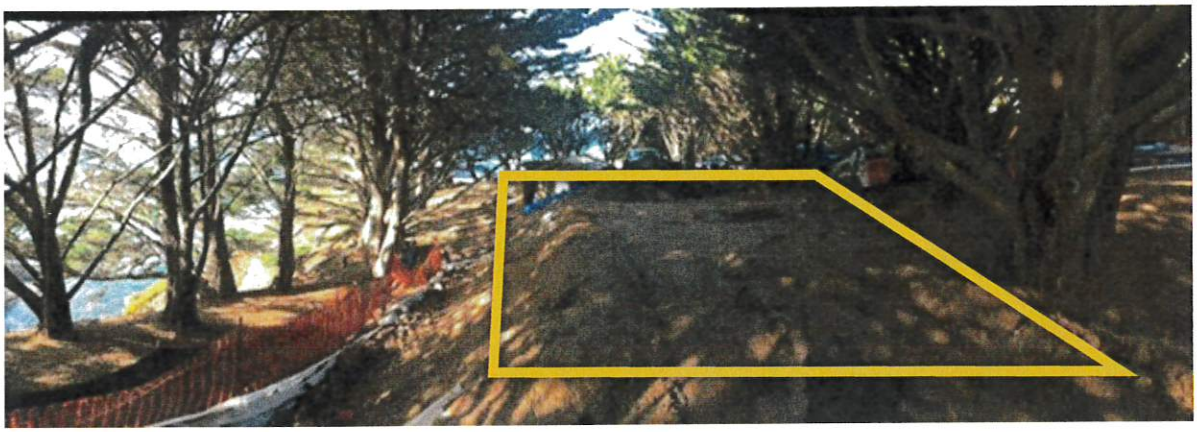
Subject: Chez Residence, 36510 Highway 1, Carmel CA
County of Monterey — APN 243-251-023-000

This report is a follow-on to my previous study and submittal of 08 June 2013, which addressed the potential biological effects of the now approved and ongoing residential project on the subject property (Chez Residence). This report specifically addresses the potential for construction of a "proposed accessory dwelling" to affect existing onsite resources.

I understand that this report will be submitted to the County of Monterey to support the RMA/Planning staff's evaluation of the permit application for the proposed accessory. Dwelling unit. The brevity of this document reflects the limited scope and determined effect of the project, and its reliance on my 2013 report to locate and describe the Chez property that encompasses the focused project area (included here in entirety by reference).

The proposed construction and site use are described by the following EMA document: A.1-1 — *Enlarged Plot Plan for Chez Residence* (25 October 2016).

Field Study: I visited and examined the ongoing construction site and particularly the proposed accessory unit site on 06 December 2016. The contractor, Michael Owen, reoriented me to the overall property and confirmed the bounds of the proposed project. Below, a set of two (2) site photographs taken on 06 December 2016 adequately illustrates the site and its context vis a vis the larger site and cover conditions.



As the photographs indicate, the proposed site is a level area that currently is cleared of vegetation — which had been evaluated in 2013 — and covered with deposited earth excavated from the main building site. The site abuts several planted and nonnative Monterey Cypress trees, none of which will be removed as part of the proposed work.

Evaluation:

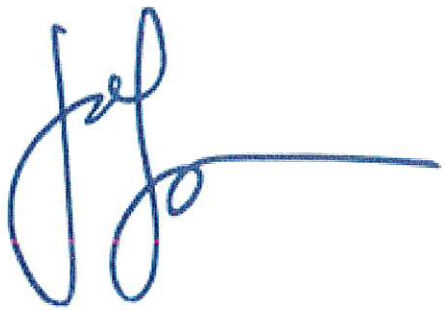
There are no biological resources associated with the proposed work site that would be affected adversely by construction then occupancy of the proposed accessory dwelling. As a working project site, the maximum possible level of temporary disruption (e.g., to local birdlife) as by ground work and construction, has already been established and is underway. No additional effect will occur as a result of the proposed next work stage.

The habitat values of the planted cypress grove which largely are in suspense during construction will resume when then total project including landscaping and demobilization have been completed.

It is my opinion that approval and construction of the proposed accessory dwelling unit may proceed without the need for additional biological evaluation and clearance.

Thank you for this opportunity to revisit the Chez property.

Sincerely,



Jeffrey B. Froke, Ph.D.
Consulting Ecologist