PROPOSED FINAL
ENVIRONMENTAL IMPACT REPORT

1837½ El Camino de la Luz Residence

SCH No. 2005041031

November, 2017

City of Santa Barbara
Community Development Department, Planning Division

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Proposed Final

Environmental Impact Report

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City of Santa Barbara
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CITY OF SANTA BARBARA

1837½ EL CAMINO DE LA LUZ RESIDENCE PROJECT

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1.0 INTRODUCTION

This document is the ~~Second Revised~~Proposed Final Environmental Impact Report (EIR) prepared to evaluate the potentially significant environmental impacts of the 1837½ El Camino de la Luz Residence project and has been prepared in accordance with the requirements of the California Environmental Quality Act (CEQA). Additional information regarding why a Revised Draft EIR and a S~~s~~econd Revised Draft EIR ~~has been~~were prepared for the project is provided in Section 1.4 below.

1.1 PROJECT OVERVIEW

The project site is located at 1837½ El Camino de la Luz, Santa Barbara, California. The site is within the West Mesa neighborhood in the southern portion of the City (Figure 1.1-1).

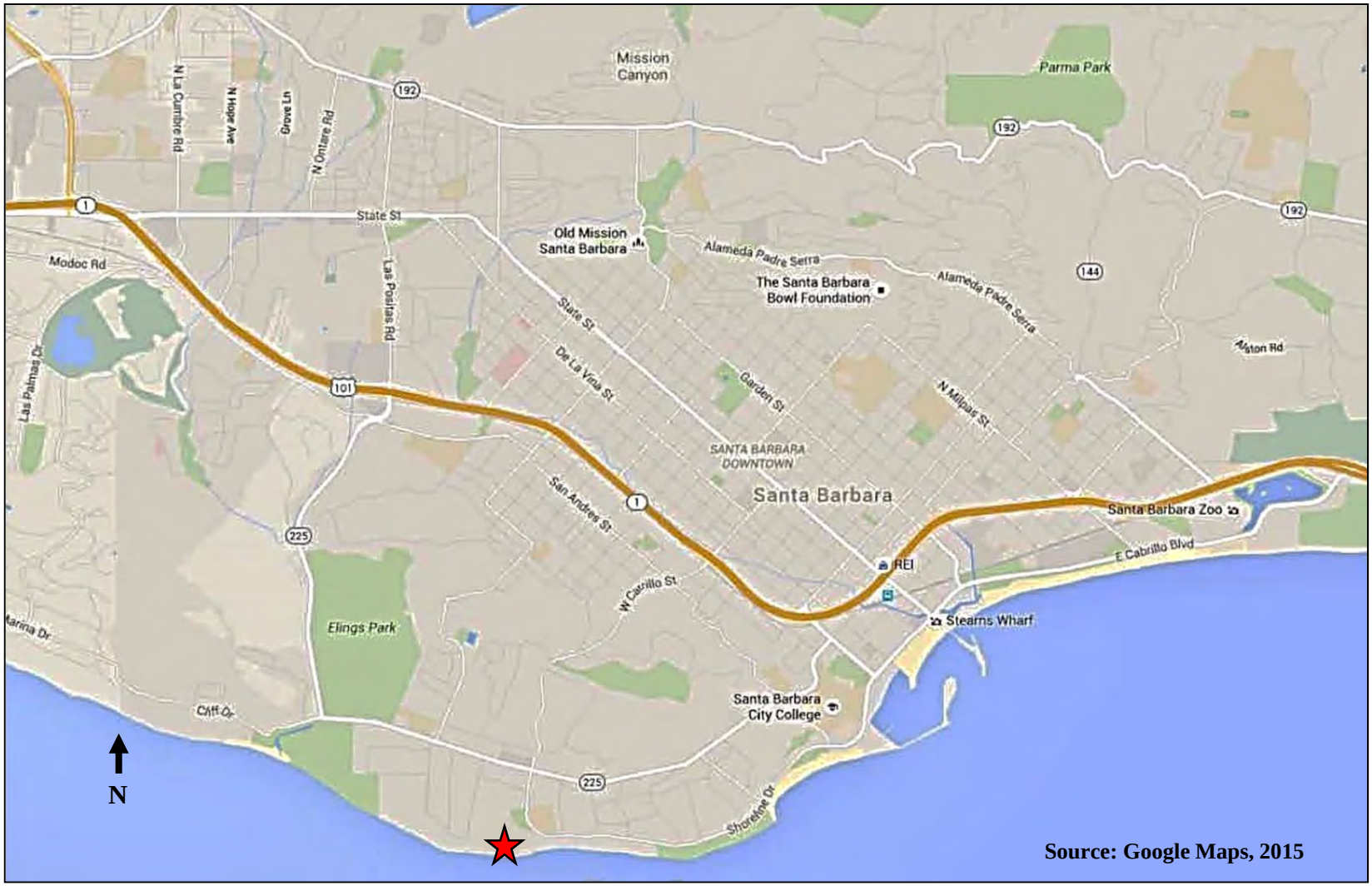
The proposed project is a request to construct a new two-level single-family residence that would provide 1,614 gross square feet of livable floor area and 2,089 gross square feet of total floor area. The residence would be developed on a vacant 23,885 square foot parcel located north of and adjacent to the Pacific Ocean, south of La Mesa Park, and west of and adjacent to Lighthouse Creek. Access to the project site is proposed to be provided using private driveway easements that extend southward from the terminus of El Camino de la Luz, which is a public street.

The proposed residence would be located in the northwest corner of the project property. The southern portion of the property consists of a coastal bluff that rises approximately 105 feet above the adjacent beach. The eastern portion of the property consists of a canyon slope that rises above the Lighthouse Creek channel. The height of the canyon slope on the project site varies between approximately 25 to 35 feet, and near the proposed residence building site the slope is approximately 25 feet in height.

Concerns have been expressed by the public regarding the potential for the proposed residence to adversely affect views of the ocean provided from La Mesa Park and surrounding areas. Additional issues of concern have included: slope stability, adequacy of routine and emergency vehicle access, and the locations of the top of the ocean bluff and the top of the Lighthouse Creek canyon slope used in the project analysis.

The design of the proposed project evaluated by this EIR has been substantially revised compared to the previous design that was evaluated by the original and First Revised Draft EIRs. The major design change has resulted in a substantial reduction in the height of proposed residence. The original residence design had a maximum height of 35 feet above grade and the current project design has a maximum height of 25 feet above grade.

Discretionary approvals required for the proposed project include a Coastal Development Permit approved by the Planning Commission, and review and approval of the project's design by the City's Single Family Design Board. An appeal of the



Project Site

City of Santa Barbara

1837½ El Camino de la Luz

Figure 1.1-1
Project Location

Planning Commission's action on the requested Coastal Development Permit would be heard by the City Council. If further appealed, the project would be considered by the California Coastal Commission. Other approvals required to implement the project include a Streambed Alteration Agreement from the California Department of Fish and Wildlife; and a permit/permit waiver for proposed storm water discharges to Lighthouse Creek from the Regional Water Quality Control Board.

1.2 PURPOSE AND LEGAL AUTHORITY FOR THIS DOCUMENT

The 1837½ El Camino de la Luz project requires discretionary approvals by the City of Santa Barbara. Therefore, the project is subject to the environmental review requirements of the California Environmental Quality Act (CEQA).

In accordance with Section 15121(a) of the CEQA Guidelines, the purpose of an EIR is to serve as an information document that "*…will inform public agency decision-makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project…*" This EIR has been prepared as a "Project EIR" pursuant to Section 15161 of the CEQA Guidelines. This section states that "*…this type of EIR should focus on the changes in the environment that would result from the development. The EIR shall examine all aspects of the project, including planning, construction and operation.*"

Impacts evaluated by this EIR were identified as being potentially significant environmental impacts by the Initial Study prepared for the project. CEQA Guidelines Section 15143 indicates that "*an EIR shall focus on the significant effects on the environment. The significant effects should be discussed with emphasis in proportion to their severity and probability of occurrence. Effects dismissed in an Initial Study as clearly insignificant and unlikely to occur need not be discussed further in the EIR unless the Lead Agency subsequently receives information inconsistent with the finding in the Initial Study.*"

The CEQA Guidelines also provide guidance regarding the standards of adequacy for an EIR. Section 15151 of the Guidelines states: "*An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and good faith effort at full disclosure.*"

~~This document is t~~The Second Revised EIR prepared for the 1837½ El Camino de la Luz residence project ~~and~~ was the third Draft EIR circulated for public review. The original Draft EIR was circulated for public review in 2006 and the first Revised Draft

EIR was circulated for public review in 2012, but neither of those previous draft EIRs were finalized or certified. CEQA Guidelines Section 15088.5 indicates that an EIR is to be recirculated for public review when "*significant new information is added to the EIR…*" Information added to ~~this~~ the Second Revised Draft EIR ~~that is~~ considered to be significant pertains to the revised location identified for the top of the western slope of Lighthouse Creek on the project site; an evaluation of the stability of the creek bank; the designated location of the top of the coastal bluff on the southern portion of the project site; and calculated rates of ocean bluff retreat at the project site.

1.3 SCOPE AND CONTENT OF THIS EIR

Impact Evaluation. After circulating a Draft Initial Study/Negative Declaration for the 1837½ El Camino de la Luz residence project, the Planning Commission determined during a hearing conducted on June 16, 2005 that an EIR would be required to evaluate project-related aesthetic impacts. Following this determination, the Santa Barbara Planning Division prepared a Revised Initial Study (2006) for the proposed project. The 2006 Revised Initial Study is provided in Appendix A of this EIR.

The Revised Initial Study concluded that the proposed residence could result in significant aesthetic impacts, resulting primarily from the potential for the structure to result in substantial changes to existing views of the Pacific Ocean that are provided from La Mesa Park and surrounding areas. Since the development of an alternative project design on the bluff-top project site could have the potential to result in significant geologic impacts, the EIRs have also evaluated the potential for the proposed project and the design alternatives to result in significant geologic hazard impacts. The Revised Initial Study concluded that project-related impacts to other environmental issue areas would not be significant, or would be reduced to a less than significant level by implementing mitigation measures identified by the Initial Study. Therefore, as described by CEQA Guidelines Section 15063 (c)(3), the environmental impact analyses provided by the EIRs prepared for the project have been focused on Visual Aesthetic and Geology impacts.

Since the Revised Initial Study and the original Draft EIR were prepared in 2006, the design of the proposed single-family residence has been revised, primarily to reduce the height of the structure consistent with the requirements of a mitigation measure provided by the original and first Revised Draft EIRs. The analysis of the proposed project's potential to result in significant aesthetic impacts ~~has been~~was updated in ~~this~~ the Second Revised Draft EIR to reflect the design changes made to the proposed project.

Alternatives Analysis. The analysis of alternatives to the proposed project provided by this EIR (Section 8.0) has been prepared in accordance with the requirements of Section 15126.6 of the *CEQA Guidelines* and focuses on alternatives capable of eliminating or reducing significant the adverse environmental effects of the project while feasibly attaining most of the objectives of the project. The alternatives to the proposed project evaluated in this EIR include:

- **No Project Alternative.** This alternative assumes that the project site would remain in its present condition and the proposed residence would not be developed.

- **Smaller Project Alternative.** This alternative evaluates the impacts of developing a residence on the project site that has 484 fewer square feet of total floor area than the proposed project. The location of the smaller residence on the project would be similar to the location of the proposed residence. Depending on the final design of this alternative, the structure height could be similar to that of the proposed project or portions of the structure could be taller or shorter. This alternative would result in a slight increase in on-site earthwork for site preparation.

1.4 EIR PREPARATION HISTORY FOR THE PROPOSED PROJECT

~~This document is the Second Revised Draft EIR prepared for the 1837½ El Camino de la Luz residence project.~~ A description of the previous EIRs prepared for the project (the original Draft EIR~~, and~~ First Revised Draft EIR and Second Revised Draft EIR) is provided below. Reasons for preparing a Second Revised Draft EIR are also described below.

Original Draft EIR. The original Draft EIR prepared for the 1837½ El Camino de la Luz residence project was circulated for public review in November 2006. A Planning Commission hearing on the Draft EIR was conducted on January 11, 2007. Responses to comments submitted on the Draft EIR were prepared and on May 22, 2008 the Planning Commission held a public hearing to consider a Proposed Final EIR and to also consider taking final action on the proposed project. At the hearing the Planning Commission requested that additional geological investigations be conducted for the project consistent with the requirements of a mitigation measure included in the Draft and Proposed Final EIR. The Planning Commission did not certify the Final EIR or take action of the requested project permit.

The geologic investigation mitigation measure included in the original Draft EIR required additional study of the project site to determine if a previously reported bedding plane fracture actually existed on the site. Additional studies of the project site were recommended by the EIR because a bedding plane fracture, if it existed, could have the potential to result in a significant slope stability impact. The proposed mitigation measure described the types of investigations to be conducted, and required that additional slope stability analysis be provided if it was determined that the bedding plane fracture existed on the project site and had the potential to result in a significant slope stability impact. The mitigation measure also required that if necessary, the proposed project be revised to ensure that it did not result in a significant slope stability impact.

First Revised Draft EIR. In response to the request by the Planning Commission that additional study of the geologic conditions of the project site be

conducted prior to taking an action on the proposed project, the required geological investigation was completed in 2009, and an additional slope stability analysis was completed in 2011. The 2009 investigation determined that the previously reported bedding plane fracture did not exist on the project site. The 2011 slope stability analysis evaluated several potential slope failure mechanisms that could have the potential to affect the project site and determined that the proposed project would not result in a significant slope stability impact. The 2009 site investigation and 2011 slope stability evaluation reports are provided in Appendices B and C of this ~~Second Revised~~ EIR, and information provided by the reports is summarized in EIR Section 5.2 (Geology).

The First Revised Draft EIR also included other minor revisions to the original Draft EIR, including the addition of a project-related climate change impact analysis (revised Section 7.2), and updates to the analysis of cumulative aesthetic and geologic impacts (Sections 5.1.4 and 5.2.4, respectively). In addition, the First Revised Draft EIR was amended to omit the requirements of the previously proposed mitigation measure (former measure GEO-3a) that required additional geological studies of the project site because the requirements of that mitigation measure were completed.

The First Revised Draft EIR was circulated for public review in March 2012, and a public hearing to consider the adequacy of the EIR was conducted by the Planning Commission on April 5, 2012. A Final EIR was not prepared pending further analysis of issues raised in public comment. Public comment letters on the 2012 First Revised Draft EIR are provided in Appendix I of this EIR along with topical responses that address the most frequently submitted comments that pertain to the adequacy of the environmental impact analysis provided by the 2012 EIR. In accordance with the State CEQA Guidelines, responses to comments submitted on the 2012 EIR will be provided as part of the Final EIR prepared for the project.

Second Revised Draft EIR. Public comments on the First Revised Draft EIR focused on several issues, including the location of the top of the ocean bluff on the project site, the location of the top of the canyon slope for Lighthouse Creek on the project site, and the stability of the Lighthouse Creek channel slope located on the eastern portion of the project site.

Additional Geology Analysis. In response to public comment on the First Revised Draft EIR, two additional geologic evaluations of the project site and the proposed project were conducted in 2013. In summary, the 2013 evaluations provide the following information:

- A revised "top of bluff" on the southern portion of the project site was identified.
- Updated information regarding the rate of bluff retreat at the project site.

- A revised top of canyon slope for Lighthouse Creek on the eastern portion of the project site was identified.

- A slope stability analysis for the western slope of the Lighthouse Creek Canyon.

The additional site investigations were reviewed by the California Coastal Commission staff geologist who concurred with the revised top of bluff location at the project site; previous slope stability analysis prepared for the project site coastal bluff; new information regarding the rate of coastal bluff retreat at the project site; and assumptions used to evaluate the possible effects of sea level rise on the coastal bluff at the project site (Johnsson, 2013). The staff geologist indicated that the slope stability analysis for the Lighthouse Creek Canyon needed to clarify information regarding the type of foundation that would be used to construct for the proposed residence, and that information is provided in this EIR. The information provided by the additional geologic evaluations is summarized in Section 5.2 of this ~~Second Revised Draft~~ EIR and the complete reports are provided in Appendices D and E.

Revised Project Design and Other Impact Analysis. The Second Revised Draft EIR also ~~includes~~ included revisions related to the design of the proposed project and the potential impacts of the project, including:

- Updates to the Project Description (Section 3.0) to reflect changes that have been made to the design of the proposed residence. In general, the western elevation of the currently proposed residence would have a maximum height of 15 feet above grade and the eastern elevation would have a maximum height of 25 feet above grade. The proposed building heights are approximately six to ten feet lower, respectively, than the maximum heights of the previously proposed residence.

- Updated analysis of the project's aesthetic impacts (Section 5.1). This analysis reflects the proposed changes to the design of the residence.

- Updated analysis of the project's consistency with applicable plans and policies (Section 6.0), including new General Plan policies adopted in 2011 and 2012, and policies regarding bluff top development included in the City's updated Safety Element (2013).

- Updated analysis of alternatives to the proposed project (Section 8.0) to reflect new information regarding the revised project design and new information regarding the geologic conditions of the project site.

- A new section that describes the environmental impacts of the proposed project that have been determined to be less than significant. The Impacts Found Not to be Significant section (Section 9.0) summarizes analysis

provided by the Revised Initial Study prepared for the project, and where necessary, updates that information to reflect changes made to the design of the project and changes to environmental conditions at the project site.

Responses to Public Comments on the Previous Project EIRs. CEQA Guidelines Section 15088.5 (f) indicates that when an EIR is recirculated in its entirety, which has been done with the First and Second Revised Draft EIRs, the Lead Agency (see section 1.5 of this EIR) is not required to prepare responses to comments on the previous version(s) of the EIR. However, for information purposes responses to comments submitted on the original Draft EIR are included in Appendix F. ~~and topical responses that address the most frequently submitted comments that pertain to the adequacy of the environmental impact analysis of the 2012 EIR are provided in Appendix I.~~ Responses to comments submitted on both the First and Second Revised Draft EIRs ~~will be~~are provided ~~as part of the~~in Final EIR Appendices I and J. ~~prepared for the proposed project.~~

1.5 LEAD AND RESPONSIBLE AGENCIES

The City of Santa Barbara Community Development Department, Planning Division, is the Lead Agency responsible for the completion of this EIR and the environmental review of the proposed project. Responsible Agencies for the proposed project include the California Department of Fish and Wildlife, which will require the issuance of a Streambed Alteration Agreement for a proposed stormwater discharge pipe that would be located within the channel of Lighthouse Creek; and the Regional Water Quality Control Board, which will require a permit/permit waiver for proposed stormwater discharges to Lighthouse Creek. The California Coastal Commission would take action on the requested Coastal Development Permit if the project is appealed to the Coastal Commission.

1.6 ENVIRONMENTAL IMPACT REPORT PROCESS

The procedural requirements for the preparation, review and adoption of an EIR are outlined below as provided in the California Environmental Quality Act (CEQA) and the State and City CEQA Guidelines..

1. **Notice of Preparation (NOP).** After determining that an EIR is required for a project, the Lead Agency files a NOP soliciting input on the EIR scope of analysis to "Responsible," "Trustee," and any involved federal agencies. The NOP is also distributed to the State Clearinghouse if one or more state agencies is a responsible or trustee agency, and to parties previously requesting notice in writing (*CEQA Guidelines* Section 15082; Public Resources Code Section 21092.2). The NOP is posted in the County Clerk's office for 30 days. A scoping meeting to solicit public input on the issues to be assessed in the EIR is required under City CEQA Guidelines. For the project, the NOP was circulated for agency and public review and comment from August 31 to October 3, 2005. The Santa

Barbara Planning Commission conducted a public environmental scoping hearing on September 22, 2005. A copy of the NOP and the written comments that were submitted are provided in Appendix A.

2. **Draft Environmental Impact Report (DEIR)**. The DEIR must provide the following information (State *CEQA Guidelines* Sections 15120-15131):

   - Table of Contents
   - Summary
   - Project Description
   - Environmental Setting
   - Significant Environmental Impacts (direct; indirect; cumulative; growth-inducing; and unavoidable impacts)
   - Mitigation Measures
   - Alternatives to the proposed project

3. **Public Notice and Review**. A Lead Agency prepares a public Notice of Availability of a Draft EIR. The Notice is placed in the County Clerk's office for a minimum of 30 days (Public Resources Code Section 21092). The Lead Agency sends a copy of its Notice to anyone requesting it (*CEQA Guidelines* Section 15087). Additionally, public notice of DEIR availability is given through at least one of the following procedures: a) publication in a newspaper of general circulation; b) posting on and off the project site; and c) direct mailing to owners and occupants of contiguous properties. A 45-day public review period has been provided for the 1837½ El Camino de la Luz residence project. Also, the City CEQA Guidelines provide that a public comment hearing is held at the Planning Commission during the Draft EIR public review period.

4. **Notice of Completion.** A Lead Agency files a Notice of Completion with the State Clearinghouse after it completes a DEIR.

5. **Final EIR (FEIR).** A FEIR must provide the following information:
   - The DEIR
   - Copies of comments received during the public review of the DEIR
   - A list of persons and entities commenting on the DEIR
   - Responses to comments on substantial environmental points (may include revisions to EIR analysis or text) received on the DEIR

6. **Certification of FEIR**. The Lead Agency certifies that: a) the FEIR has been completed in compliance with CEQA; b) the FEIR was presented to the decision-making body of the Lead Agency; c) the decision-making body reviewed and considered the information in the FEIR prior to approving a project and the FEIR reflects the Lead Agency's independent judgement and analysis.(*CEQA Guidelines* Section 15090).

7. **Lead Agency Project Decision**. A Lead Agency decision-maker (Planning Commission, or on appeal, City Council or Coastal Commission) may: a) disapprove a project because of its significant environmental effects; b) require changes to a project to reduce or avoid significant environmental effects; or c) approve a project despite its significant environmental effects, if the proper findings and statement of overriding considerations are adopted (*CEQA Guidelines* Sections 15042 and 15043).

8. **Findings and Statement of Overriding Considerations**. For each significant impact of the project identified in the EIR, the Lead or Responsible agency must find, based on substantial evidence, that either: a) the project has been changed to avoid or substantially reduce the magnitude of the impact; b) changes to the project are within another agency's jurisdiction and such changes have or should be adopted; or c) specific economic, social, or other considerations make the mitigation measures or project alternatives infeasible *(CEQA Guidelines* Section 15091). If an agency approves a project with unavoidable significant environmental effects, it must prepare a written Statement of Overriding Considerations that set forth the specific social, economic or other reasons supporting the agency's decision that the significant impacts are acceptable in this case due to the overriding benefits of the project.

9. **Mitigation Monitoring/Reporting Program.** When an agency approves a project with findings of significant or mitigated impacts identified in the EIR, it must adopt a monitoring or reporting program that verifies the implementation of the mitigation measures that were adopted or made conditions of project approval to mitigate significant effects (State *CEQA Guidelines* Section 15097). A copy of the proposed Mitigation Monitoring and Reporting Program is provided in Appendix H of this EIR.

10. **Notice of Determination.** A local agency files a Notice of Determination with the County Clerk after approving a project for which an EIR is prepared (*CEQA Guidelines* Section 15094). The Notice is posted for 30 days and sent to anyone previously requesting notice. Posting of the Notice starts a 30-day statute of limitations on CEQA legal challenges (Public Resources Code Section 21167[c]).

2.0 SUMMARY

This document is the ~~Second Revised~~ Final Environmental Impact Report (EIR) prepared to evaluate the potentially significant environmental impacts of the 1837½ El Camino de la Luz Residence project, which proposes to construct a new single-family dwelling on a vacant parcel adjacent to the Pacific Ocean. This EIR includes substantial new information about the project, existing environmental conditions at the project site, and revisions to the previously prepared impact analysis. New project-related information added to this EIR addresses the following items:

- The designated "top of bluff" on the southern portion of the project site.
- The rate of bluff retreat at the project site.
- The designated "top of canyon slope" for Lighthouse Creek on the project site.
- A slope stability analysis for the western slope of the Lighthouse Creek canyon.
- Changes that have been made to the design of the proposed residence. In general, the height of the proposed residence has been decreased approximately six to ten feet when compared to the heights of the original project design.

2.1 PROJECT LOCATION

The project site is located at 1837½ El Camino de la Luz, Santa Barbara, California. The site is within the West Mesa neighborhood in the southern portion of the City. The project site is identified as Assessor's Parcel Number 045-100-065.

2.2 PROJECT DESCRIPTION

The proposed project would result in the construction a 2,089 gross / 1,934 net square foot, two-level single-family residence on a 23,885 square foot vacant bluff-top parcel. Access to the project property is proposed to be provided by private easements extending south from the terminus of El Camino de la Luz.

The proposed development requires the following discretionary approvals from the City of Santa Barbara:

1. A City Coastal Development Permit from the Planning Commission to allow construction of a new residence in the appealable jurisdiction of the City's Coastal Zone (SBMC §28.44); and
2. Single Family Design Board design review approval (SBMC §22.69.040).

2.3 SUMMARY OF IMPACTS AND MITIGATION MEASURES

A Revised Initial Study (2006) was prepared for the El Camino de la Luz residence project to evaluate the potential for the project to result in significant environmental impacts (see Appendix A). The Revised Initial Study determined that the El Camino de la Luz residence project would have the potential to result in significant adverse impacts related to the following environmental issue areas:

- Aesthetics (scenic views)
- Biological Resources (sensitive habitats and species)
- Geophysical Conditions (slope stability)
- Hazards (fire hazards)
- Transportation (access)
- Water Resources (drainage)

The Revised Initial Study determined that the project would have the potential to result in significant scenic view impacts and pursuant to CEQA Guidelines Section 15063(b)(1) the preparation of an EIR was required. The Revised Initial Study also determined that with the implementation of proposed mitigation measures, the biology, geophysical, fire hazard, transportation, and water resource impacts of the project would be reduced to a less than significant level. Therefore, no further analysis of those issue areas would be required in an EIR. However, subsequent to the preparation of the Revised Initial Study, it was determined by the City staff environmental analyst that the project EIR should also evaluate the potential for the proposed residence to result in significant geologic hazard impacts.

2.3.1 Significant Unavoidable Impacts (Class I)

The proposed project would not result in any significant and unavoidable environmental impacts.

2.3.2 Impacts That Can be Reduced to a Less Than Significant Level (Class II)

This EIR and the Revised Initial Study have identified short- and long-term environmental impacts that would result should the proposed project be approved and constructed. The EIR and Revised Initial Study have also concluded that the identified

impacts can be reduced to a less than significant level with the implementation of proposed mitigation measures. The proposed mitigation measures are summarized on Table 2.3-1.

For each significant impact identified by the Revised Initial Study and EIR, the Lead Agency must make findings required by section 15091 of the *CEQA Guidelines*. Based on substantial evidence, the Lead Agency must determine that either:

1. The project has been changed to avoid or substantially reduce the magnitude of the identified impacts;

2. Changes to the project are within another agency's jurisdiction and such changes have or should be adopted; or,

3. Specific economic, legal, social, technological, or other considerations make infeasible the mitigation measures or project alternatives identified in the final EIR.

2.3.3 Less Than Significant Impacts (Class III)

The Revised Initial Study prepared for the El Camino de la Luz Residence project determined that the air quality, cultural resources, noise, public services, transportation (construction traffic), and water resources (drainage system maintenance) impacts of the project would not be significant, but provided recommended mitigation measures to reduce the project's less than significant impacts regarding those issue areas to the extent feasible. The Revised Initial Study also concluded that the project would have less than significant population and housing, and recreation impacts, and no mitigation for those issue areas were required or recommended.

2.4 ALTERNATIVES

This EIR has evaluated the following alternatives to the proposed project:

- **No Project Alternative.** This alternative assumes that the project site would remain in its present condition and the proposed residence would not be developed.

- **Smaller Project Alternative.** This alternative evaluates the impacts of developing a residence on the project site that has less floor area than the proposed project.

The Smaller Project Alternative was determined to be the environmentally superior alternative that would implement the applicant's objective related to the

development of a residence on the project site. The Smaller Project Alternative was identified as the environmentally superior alternative because it would slightly reduce aesthetic impacts that would result from the proposed project due to the obstruction of existing ocean views as seen from areas in and around La Mesa Park. The design of this alternative would minimize impacts to ocean views by reducing the amount of structural development on the upper level of the building, which would result in a minor decrease in the amount of ocean water that is obscured by the structure when compared to the amount of view obstruction that would result from the proposed project. While a reduction in impacts to ocean views would be beneficial, the proposed project's impacts to ocean views would not be significant, and implementation of the Smaller Project Alternative is not required to reduce project-related impacts to a less than significant level.

The portion of the project parcel that would be used to develop the Smaller Project Alternative residence would be similar to the area that would be used to develop the proposed project. Construction-related disturbances of the project site resulting from the development of the Smaller Project Alternative would also be similar to the area that would be disturbed by the proposed project, although the alternative would result in a small increase in grading when compared to the grading required to construct the proposed project. Therefore, the Smaller Project Alternative and the proposed project would have a similar potential to result in impacts related to landslides, bluff retreat, subsidence and expansive soils.

2.5 AREAS OF CONTROVERSY/ISSUES TO BE RESOLVED

Input regarding the environmental review of the proposed project has been received from the public and interested agencies in responses to the Notice of Preparation that was prepared for the project and during public hearings conducted for the project. Comments submitted in response to the Notice of Preparation are provided in Appendix A of this Revised EIR.

Several public hearings have been held regarding the proposed project, including hearings on May 19, 2005 and June 16, 2005 regarding the Draft Mitigated Negative Declaration originally prepared for the project; an EIR scoping hearing on September 22, 2005; a hearing conducted on January 11, 2007 regarding the original Draft EIR; a hearing conducted on May 22, 2008 regarding the original Proposed Final EIR; ~~and~~ a hearing on April 5, 2012 on the first Revised Draft EIR prepared for the project; and a hearing on the Second Revised Draft EIR on November 17, 2016.

Comments that were received at these hearings generally focused on the following major issue areas.

- Project-related impacts to views from La Mesa Park and surrounding areas.
- The adequacy (both physically and legally) of vehicle access to the project site.

- Impacts to biological resources of Lighthouse Creek.
- Potential slope stability and other geologic impacts.
- The location of the top/edge of the coastal bluff located on the project site.
- The location of the "top of canyon slope" for Lighthouse Creek on the project site.

Table 2.3–1

1837½ El Camino de la Luz Residence EIR
Impacts and Proposed Mitigation Measures

Significant and Unavoidable (Class I) Impacts Identified by the Project EIR

No significant and unavoidable environmental impacts have been identified

Significant but Mitigable (Class II) Impacts Identified by the Project EIR

The project-related impacts listed below can be reduced to a less than significant level with the implementation of the identified mitigation measures.

Visual Aesthetics

IMPACT AES-1. The use of bright colors or contrasting combinations of colors would have the potential to degrade important public scenic views.

AES-1. Color Approval. Colors to be used on the exterior of the proposed residence shall be approved by the Single Family Design Board. Exterior colors shall be neutral or earth-tone tones. Subsequent color changes to the residence shall also be approved by the Single Family Design Board.

IMPACT AES-2. Landscaping used at the project site has the potential to obtain a mature height that would result in additional obstruction of important public scenic views.

AES-2. Landscape Plan Compliance. The Owner shall comply with the Landscape Plan approved by the Single Family Design Board (SFDB). Such plan shall not be modified unless prior written approval is obtained from the SFDB. The landscaping on the Real Property shall be provided and maintained in accordance with said landscape plan, including any tree protection measures. If said landscaping is removed for any reason without approval by the SFDB, the owner is responsible for its immediate replacement. Proposed landscaping trees and shrubs shall consist of drought-tolerant species that when mature will not attain a height that exceeds the height of the proposed residence roof line. The project site property owner shall be responsible for maintaining landscaping in compliance with this requirement over the life of the project.

Table 2.3–1

1837½ El Camino de la Luz Residence EIR
Impacts and Proposed Mitigation Measures

Significant but Mitigable (Class II) Impacts Identified by the Project EIR (Continued)

Geologic Hazards

IMPACT GEO-1. An inadequate storm water drainage system or a substantial increase in landscape irrigation on the project site would have the potential to result in a significant slope stability impact.

GEO-1. Storm Water Pollution Control, Drainage Systems Maintenance and Project Site Landscaping. Owner shall maintain the drainage system and storm water pollution control devices in a functioning state and in accordance with the Storm Water BMP Guidance Manual and Operations and Maintenance Procedure Plan approved by the Creeks Division. Should any of the project's surface or subsurface drainage structures or storm water pollution control methods fail to capture, infiltrate, and/or treat water, or result in increased erosion, the Owner shall be responsible for any necessary repairs to the system and restoration of the eroded area. Should repairs or restoration become necessary, prior to the commencement of such repair or restoration work, the Owner shall submit a repair and restoration plan to the Community Development Director to determine if an amendment or a new Building Permit and Coastal Development Permit is required to authorize such work. The Owner is responsible for the adequacy of any project-related drainage facilities and for the continued maintenance thereof in a manner that will preclude any hazard to life, health, or damage to the Real Property or any adjoining property.

All project site landscaping shall be designed to use native species that do not require irrigation except for their propagation. Limited areas of non-native plants may be used if long-term irrigation is not required.

IMPACT GEO-2. The proposed residence has the potential to be adversely affected by fill soil previously placed at the project site, subsidence and expansive soil impacts.

GEO-2 Foundation Design Approval. The location and design of the proposed structure foundation, which implements a caisson supported foundation system, shall be approved by a licensed Engineering Geologist or Geotechnical Engineer.

Table 2.3–1

1837½ El Camino de la Luz Residence EIR Impacts and Proposed Mitigation Measures

Significant but Mitigable (Class II) Impacts Identified by the Revised Initial Study

Biological Resources

Proposed construction activities have the potential to disturb vegetation and wildlife located on and near the project site.

BIO-1 **Habitat Restoration**. Areas between the proposed building site and Lighthouse creek disturbed by project grading and construction of the drainage system shall be replanted with native plants appropriate to coastal riparian and upland areas. Iceplant, oleander, yucca, castor bean, English ivy, German ivy, and other invasive, non-native species shall be removed from this area using hand and chemical methods. Vegetation removal shall be by hand and dragged upslope to the building pad. All vegetation removal and initial site grading shall be under the supervision of a qualified habitat restoration biologist. Removed material shall be disposed of in a manner that will not result in further spread of these species. Native material used for replanting may include: encelia, California blackberry, California sage, California fuchsia, saltbush, coast goldenbush, elderberry, and lemonadeberry. Plans shall include the use of erosion control blankets and seeding of bare slopes to prevent short-term erosion. The replanting plan shall be developed by a qualified botanist or landscape architect and shall include provisions for installation and maintenance until plantings are established. This plan shall be provided to the Community Development Department Staff, Creeks Division, and the Single Family Design Board for review and approval prior to issuance of building permits. The plan shall be implemented prior to issuance of the Certificate of Occupancy and plantings maintained for the life of the project.

BIO-2 **Appropriate Plants/Hardscape on Bluff**. Special attention shall be paid to the appropriateness of the existing and proposed plant material, and to the sloped areas.

All existing succulent plants that add weight to the bluff and/or contribute to erosion shall be removed in a manner that does not disturb the root system and replaced with appropriate plant material in a manner that does not increase the rate of erosion. Plant material to be removed shall be replaced with native, drought tolerant, low water using vegetation that requires only a temporary irrigation system to establish the plantings. Replacement vegetation shall be consistent with the recommendations of the biologist's reports, dated January-February 2006 and August 23, 2013. The landscape plan shall be provided to the Community Development Department Staff, Creeks Division, and the Single Family Design Board for review and approval prior to issuance of building permits. The plan shall be implemented prior to issuance of the Certificate of Occupancy and plantings maintained for the life of the project.

Table 2.3–1

1837½ El Camino de la Luz Residence EIR
Impacts and Proposed Mitigation Measures

Significant but Mitigable (Class II) Impacts Identified by the Revised Initial Study (Continued)

BIO-3 **Irrigation System**. The irrigation system shall be designed and maintained with the most current technology to prevent a system failure. Watering of vegetation on the bluff edge / the Lighthouse Creek canyon slope shall be kept to the minimum necessary for plant survival. The drip system along the bluff edge / canyon slope shall be removed after one full season of plant growth.

BIO-4 **Erosion Control/Water Quality Plan**. An Erosion Control/Water Quality Plan shall be developed for construction activities to maintain all sediment on-site and out of the drainage system. The plan shall include Best Management Practices approved by the City, and shall include, at a minimum, the following:

1. Minimize the area of bare soil exposed at one time (phased grading).
2. Install silt fence, sand bag, hay bale or silt devices where necessary around the project site to prevent offsite transport of sediment.
3. Bare soils shall be protected from erosion by applying heavy seeding, within five days of clearing or inactivity in construction.
4. Construction entrances should be stabilized immediately after grading and frequently maintained to prevent erosion and control dust.
5. During construction of the homes, the contractor and/or property owner shall protect the storm drain inlets from sediment-laden runoff.
6. Erosion control materials (i.e. sandbags, strawbales, and silt fencing) shall be used to trap and filter sediment before entering the storm drain.
7. Establish fuel and vehicle maintenance staging areas located away from all drainage courses, and design these areas to control runoff.
8. Maintain and wash equipment and machinery in confined areas specifically designed to control runoff. Thinners or solvents should not be discharged into sanitary or storm sewer systems. Washout from concrete trucks should be disposed of at a location not subject to runoff and more than 50 feet away from a storm drain, open ditch or surface water.
9. Implement applicable BMPs to prevent, control, and contain soil erosion, as detailed in SWPPP to be developed for the project.
10. Time grading and soil disturbance to occur during the dry season (May-Nov) and hydromulch all disturbed soils at onset of rainy season.
11. A qualified biologist shall periodically check maintenance of erosion control measures and hydromulch during construction and suggest remedies where necessary.

Table 2.3–1

1837½ El Camino de la Luz Residence EIR
Impacts and Proposed Mitigation Measures

Significant but Mitigable (Class II) Impacts Identified by the Revised Initial Study (Continued)

12. The use of herbicides for the removal of non-native plants in the proposed habitat restoration area shall be minimized to the extent practical. If herbicides must be used to ensure the removal of non-native plants, herbicide use shall be limited to the application of Glyphosate Aquamaster.™ Herbicide use on the project site shall occur only in the proposed habitat restoration area.

BIO-5 **Streambed Alteration Agreement.** The applicant shall obtain a Streambed Alteration Agreement from the Department of Fish and Wildlife, prior to submittal of a building permit, for grading and installation of drainage devices within the banks of Lighthouse Creek.

BIO-6 **Nesting Birds.** Birds and their eggs nesting on or near the project site are protected under the Migratory Bird Treaty Act and pursuing, hunting, taking, capturing, killing, or attempt to do any of the above is a violation of federal and state regulations. No trimming or removing brush or trees shall occur if nesting birds are found in the vegetation. All care should be taken not to disturb the nest(s). Removal or trimming may only occur after the young have fledged from the nests(s).

BIO-7 **Wildlife Protection.** A qualified biologist shall be present at the onset of initial site grading to salvage and relocate any animals displaced by grading and vegetation grubbing.

BIO-8 **Sensitive Habitat Protection.** A qualified biologist shall supervise installation of orange construction fence and silt fence around the surveyed construction disturbance limits prior to initial site grading and vegetation removal. This fencing shall be maintained for the duration of construction.

Hazards

The proposed project has the potential to result in a significant fire safety impact.

H-1 **Automatic Fire Sprinklers.** New structures shall be equipped with an automatic fire sprinkler system in accordance with NFPA 13D. The automatic fire sprinkler system shall be submitted to the City Fire Department for review and approval under separate permit.

H-2 **Monitored Fire Alarm System.** A monitored fire alarm system shall be designed and installed throughout the new structure as approved by the Fire Department. The fire alarm system shall be submitted under separate permit.

H-3 **Compliance with High Fire Construction Requirements.** The new residence shall be built in accordance with the City's High Fire Construction requirements.

Table 2.3–1

1837½ El Camino de la Luz Residence EIR
Impacts and Proposed Mitigation Measures

Significant but Mitigable (Class II) Impacts Identified by the Revised Initial Study (Continued)

H-4 **Fire Protection System Maintenance.** The property owner shall enter into a written agreement, binding on the owner and all successors, that requires continual maintenance of the automatic fire sprinkler system and monitoring of the fire alarm system.

Transportation

The proposed use of existing driveway easements for project site ingress/egress has the potential to result in a significant access-related impact.

T-1 **Evidence of Adequate Access.** Provide evidence, satisfactory to the City Engineer and City Attorney, that the owner of the subject parcel substantially possesses the required amount of legal access that formed the basis of the original lot split.

Water Resources

The proposed project has the potential to result in significant short- and long-term water quality impacts.

W-1 **Drainage and Water Quality.** Project plans for grading, drainage, stormwater facilities, and project development shall be subject to review and approval by City Building Division and Public Works Department per City regulations. Sufficient engineered design and adequate measures shall be employed to ensure that no significant construction-related or long-term effects from increased runoff, erosion and sedimentation, urban water quality pollutants, or groundwater pollutants would result from the project.

Table 2.3–1

1837½ El Camino de la Luz Residence EIR
Impacts and Proposed Mitigation Measures

Less Than Significant (Class III) Impacts
(Recommended Measures)

Air Quality

The proposed project would result in dust and criteria pollutant emissions during construction operations.

AQ-1 **Construction Dust Control - Watering.** During construction, use water trucks or sprinkler systems to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this should include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency should be required whenever the wind speed exceeds 15 mph. Reclaimed water should be used whenever possible. However, reclaimed water should not be used in or around crops for human consumption.

AQ-2 **Soil Movement.** If importation, exportation and stockpiling of fill material is involved, soil stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting fill material to and from the site shall be tarped from the point of origin.

AQ-3 **Construction Dust Control – Gravel Pads.** Gravel pads shall be installed at all access points to prevent tracking of mud onto public roads.

AQ-4 **Construction Dust Control – Disturbed Area Treatment.** After clearing, grading, earth moving or excavation is completed, treat the disturbed area by watering, or revegetating, or by spreading soil binders until the area is paved or otherwise developed so that dust generation will not occur.

AQ-5 **Air Quality and Dust Control.** The following measures shall be shown on grading and building plans and shall be adhered to throughout grading, hauling, and construction activities:

1. The engine size of construction equipment shall be the minimum practical size.
2. The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest practical number is operating at any one time.
3. Construction equipment shall be maintained in tune per the manufacturer specifications.
4. Catalytic converters shall be installed on gasoline-powered equipment, if feasible.
5. If feasible, diesel construction equipment shall be equipped with selective catalytic reduction systems, diesel oxidation catalysts and diesel particulate filters as certified and/or verified by EPA or California.
6. Diesel powered equipment shall be replaced by electric equipment whenever feasible.
7. Construction worker trips shall be minimized by requiring carpooling and by providing for lunch onsite.

Table 2.3–1

1837½ El Camino de la Luz Residence EIR Impacts and Proposed Mitigation Measures

Less Than Significant (Class III) Impacts
(Recommended Measures)

8. Diesel construction equipment meeting the California Air Resources Board (CARB) Tier 1 emission standards for off-road heavy-duty diesel engines shall be used. Equipment meeting CARB Tier 2 or higher emission standards should be used to the maximum extent feasible.
9. The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the Air Pollution Control District.
10. All portable diesel-powered construction equipment shall be registered with the state's portable equipment registration program OR shall obtain an APCD permit.
11. Fleet owners of mobile construction equipment are subject to the California Air Resource Board (CARB) Regulation for In-use Off-road Diesel Vehicles (Title 13 California Code of Regulations, Chapter 9, § 2449), the purpose of which is to reduce diesel particulate matter (PM) and criteria pollutant emissions from in-use (existing) off-road diesel-fueled vehicles. For more information, please refer to the CARB website at www.arb.ca.gov/msprog/ordiesel/ordiesel.htm.
12. All commercial diesel vehicles are subject to Title 13, § 2485 of the California Code of Regulations, limiting engine idling time. Idling of heavy-duty diesel construction equipment and trucks during loading and unloading shall be limited to five minutes; electric auxiliary power units should be used whenever possible.

AQ-6. **Mitigation Monitoring Compliance Reports.** The Project Environmental Coordinator shall submit weekly reports to the Community Development Department, Planning Division, during demolition, excavation, grading and footing installation and biweekly reports on all other construction activity regarding MMRP compliance.

Table 2.3–1

1837½ El Camino de la Luz Residence EIR
Impacts and Proposed Mitigation Measures

Less Than Significant (Class III) Impacts (Continued)
(Recommended Measures)

Cultural Resources

Ground disturbing operations at the project site have the potential to adversely affect previously undetected archaeological resources.

CR-1 **Unanticipated Archaeological Resources Contractor Notification.** Standard discovery measures shall be implemented per the City Master Environmental Assessment throughout grading and construction: Prior to the start of any vegetation or paving removal, demolition, trenching or grading, contractors and construction personnel shall be alerted to the possibility of uncovering unanticipated subsurface archaeological features or artifacts. If such archaeological resources are encountered or suspected, work shall be halted immediately, the City Environmental Analyst shall be notified and the Owner shall retain an archaeologist from the most current City Qualified Archaeologists List. The latter shall be employed to assess the nature, extent and significance of any discoveries and to develop appropriate management recommendations for archaeological resource treatment, which may include, but are not limited to, redirection of grading and/or excavation activities, consultation and/or monitoring with a Barbareño Chumash representative from the most current City qualified Barbareño Chumash Site Monitors List, etc.

If the discovery consists of possible human remains, the Santa Barbara County Coroner shall be contacted immediately. If the Coroner determines that the remains are Native American, the Coroner shall contact the California Native American Heritage Commission. A Barbareño Chumash representative from the most current City Qualified Barbareño Chumash Site Monitors List shall be retained to monitor all further subsurface disturbance in the area of the find. Work in the area may only proceed after the Environmental Analyst grants authorization.

If the discovery consists of possible prehistoric or Native American artifacts or materials, a Barbareño Chumash representative from the most current City Qualified Barbareño Chumash Site Monitors List shall be retained to monitor all further subsurface disturbance in the area of the find. Work in the area may only proceed after the Environmental Analyst grants authorization.

A final report on the results of the archaeological monitoring shall be submitted by the City-approved archaeologist to the Environmental Analyst within 180 days of completion of the monitoring and prior to any certificate of occupancy for the project.

Table 2.3–1

1837½ El Camino de la Luz Residence EIR
Impacts and Proposed Mitigation Measures

Less Than Significant (Class III) Impacts (Continued)
(Recommended Measures)

Noise

Project-related construction activities have the potential to result in a short-term increase in noise levels adjacent to the project site.

N-1 **Neighborhood Notification Prior to Construction.** At least twenty (20) days prior to commencement of construction, the contractor shall provide written notice to all property owners, businesses, and residents within 300 feet of the project area. The notice shall contain a description of the project, the construction schedule, including days and hours of construction, the name and phone number of the Project Environmental Coordinator (PEC) and Contractor(s), site rules and Conditions of Approval pertaining to construction activities, and any additional information that will assist Building Inspectors, Police Officers and the public in addressing problems that may arise during construction.

N-2 **Construction Hours. Construction Hours.** Construction (including preparation for construction work) shall only be permitted Monday through Friday between the hours of 7:00 a.m. and 5:00 p.m. and Saturdays between the hours of 9:00 a.m. and 4:00 p.m., excluding the following holidays:

New Year's Day	January 1st*
Martin Luther King, Jr. Day	3rd Monday in January
Presidents' Day	3rd Monday in February
Memorial Day	Last Monday in May
Independence Day	July 4th*
Labor Day	1st Monday in September
Thanksgiving Day	4th Thursday in November
Following Thanksgiving Day	Friday following Thanksgiving Day
Christmas Day	December 25th*

*When a holiday falls on a Saturday or Sunday, the preceding Friday or following Monday, respectively, shall be observed as a legal holiday.

When, based on required construction type or other appropriate reasons, it is necessary to do work outside the allowed construction hours, contractor shall contact the City to request a waiver from the above construction hours, using the procedure outlined in Santa Barbara Municipal Code §9.16.015 Construction Work at Night. Contractor shall notify all residents within 300 feet of the parcel of intent to carry out said construction a minimum of 48 hours prior to said construction. Said notification shall include what the work includes, the reason for the work, the duration of the proposed work and a contact number.

Table 2.3–1

1837½ El Camino de la Luz Residence EIR
Impacts and Proposed Mitigation Measures

Less Than Significant (Class III) Impacts (Continued)
(Recommended Measures)

N-3 **Construction Equipment Sound Control.** All construction equipment, including trucks, shall be professionally maintained and fitted with standard manufacturers' muffler and silencing devices.

Public Services

The proposed project would result in the short-term generation of construction and demolition waste.

PS-1 **Construction Materials Recycling.** Construction-related solid waste shall be minimized through source reduction, re-use and recycling. Collection bins for these materials shall be provided on the site.

Transportation

Project-related construction activities would result in a short-term increase in traffic and parking demand in the project neighborhood.

T-2 **Construction Traffic.** The haul routes for all construction-related trucks, three tons or more, entering or exiting the site, shall be approved by the Transportation Engineer. Construction-related truck trips shall not be scheduled during peak hours (7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m.) to help reduce truck traffic and noise on adjacent streets and roadways. The route of construction-related traffic shall be established to minimize trips through surrounding residential neighborhoods.

T-3 **Construction Parking.** Construction parking and vehicle/equipment/materials storage shall be provided as follows:

1. During construction, free parking spaces for construction workers shall be provided on-site or off-site in a location subject to the approval of the Transportation and Parking Manager.
2. On-site or off-site storage shall be provided for construction materials, equipment, and vehicles. Storage of construction materials within the public right-of-way is prohibited.

Table 2.3–1

1837½ El Camino de la Luz Residence EIR
Impacts and Proposed Mitigation Measures

Less Than Significant (Class III) Impacts (Continued)
(Recommended Measures)

Water Resources

Inadequate drainage system maintenance would have the potential to result in drainage and water quality impacts.

The adverse effects of this impact would be minimized to the extent feasible by the requirements of proposed mitigation measures GEO-1 (Storm Water Pollution Control, Drainage Systems Maintenance and Project Site Landscaping) and W-1 (Drainage and Water Quality).

3.0 PROJECT DESCRIPTION

The 1837½ El Camino de la Luz project would result in the development of one single-family dwelling on a coastal bluff top parcel that is approximately one-half acre in area. A detailed description of the proposed project is provided below.

3.1 PROJECT APPLICANT

Dr. Herb Barthels
1701 Shoreline Drive
Santa Barbara, CA 93109

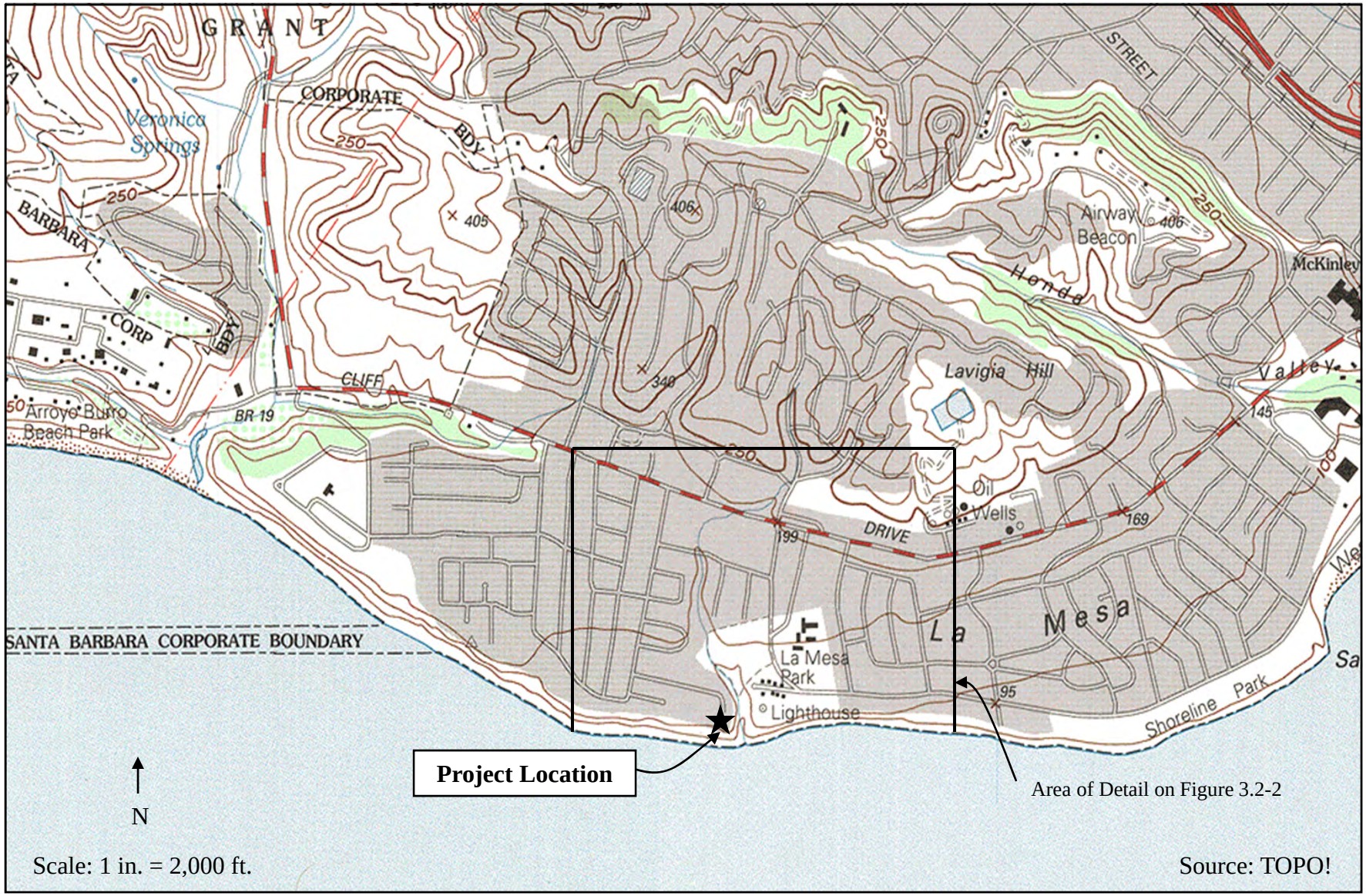
3.2 PROJECT LOCATION

The project site is located at 1837½ El Camino de la Luz, which is located in the West Mesa neighborhood of the City of Santa Barbara. The 23,885 square foot (0.55-acre) project parcel is bounded by residences to the north and west, Lighthouse Creek to the east, and the Pacific Ocean to the south. The project site is approximately 550 feet southwest of the southern boundary of La Mesa Park, which is located west of and adjacent to Meigs Road. Figures 3.2-1 and 3.2-2 depict the location of the project site.

3.3 PROJECT CHARACTERISTICS

The proposed residence would be a two-level building located in the northwestern portion of the project parcel. Access to the residence is proposed to be provided by existing driveway easements of 7.5-15 feet in width that extend southward from El Camino de la Luz to the northwest corner of the project parcel.

The topography of the project parcel is varied. A relatively level area is located in the northwestern corner, while moderate to steep slopes extend downward from the proposed development area. A slope approximately 25 feet in height extends downward to the east from the proposed building site to the channel of Lighthouse Creek, and a slope approximately 100 feet in height extends downward to the south to a sandy beach and the Pacific Ocean. The portion of the project parcel that would be used for the development of the proposed residence slopes to the east and has ground surface elevations that range from approximately 112 feet above sea level in the northwest corner to approximately 95 feet above sea level in the southeast corner. The project parcel access driveway, topography, and the location of the proposed residence are depicted on the site plan provided on Figure 3.3-1.

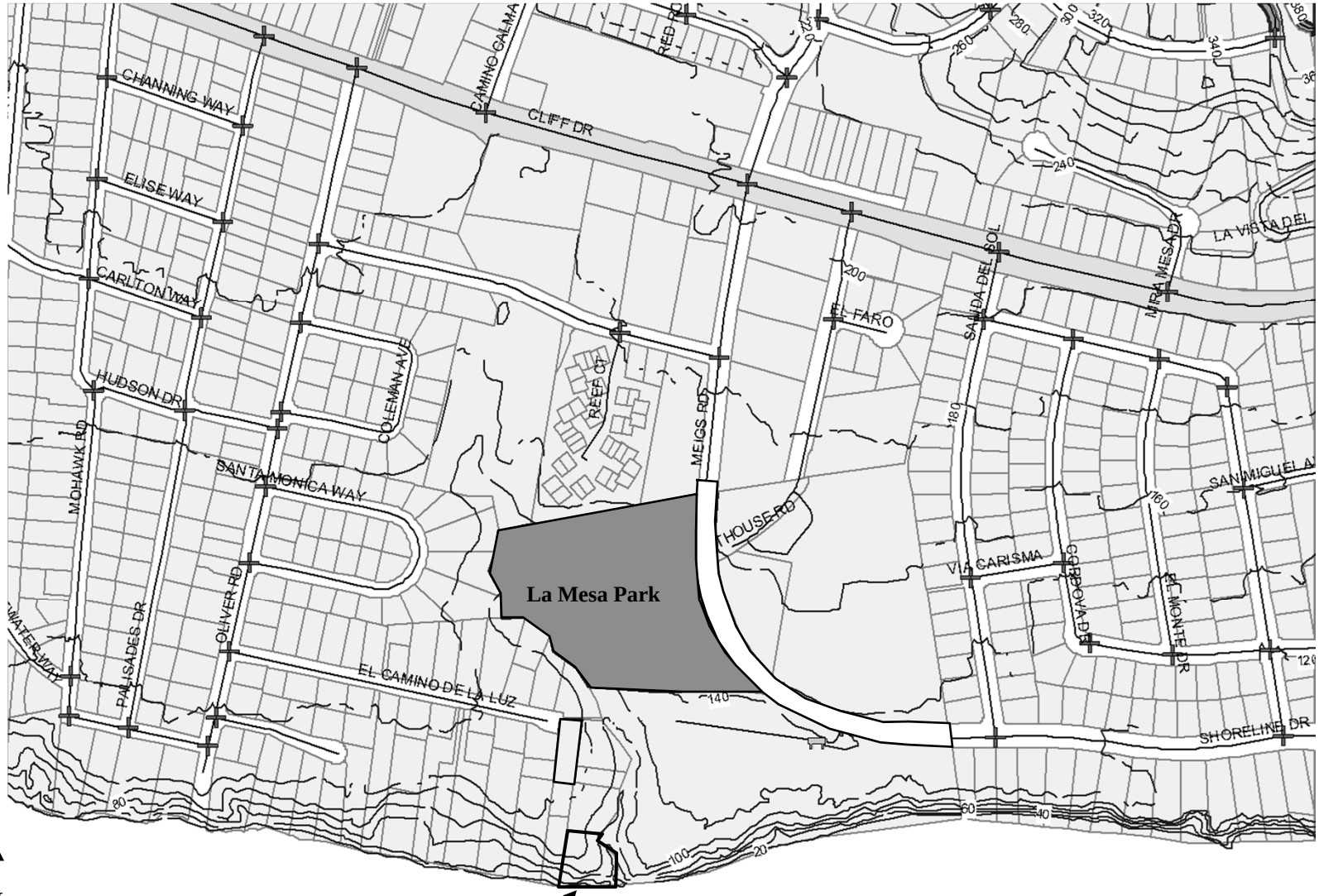


City of Santa Barbara

1837½ El Camino de la Luz

Figure 3.2-1

Regional Topography



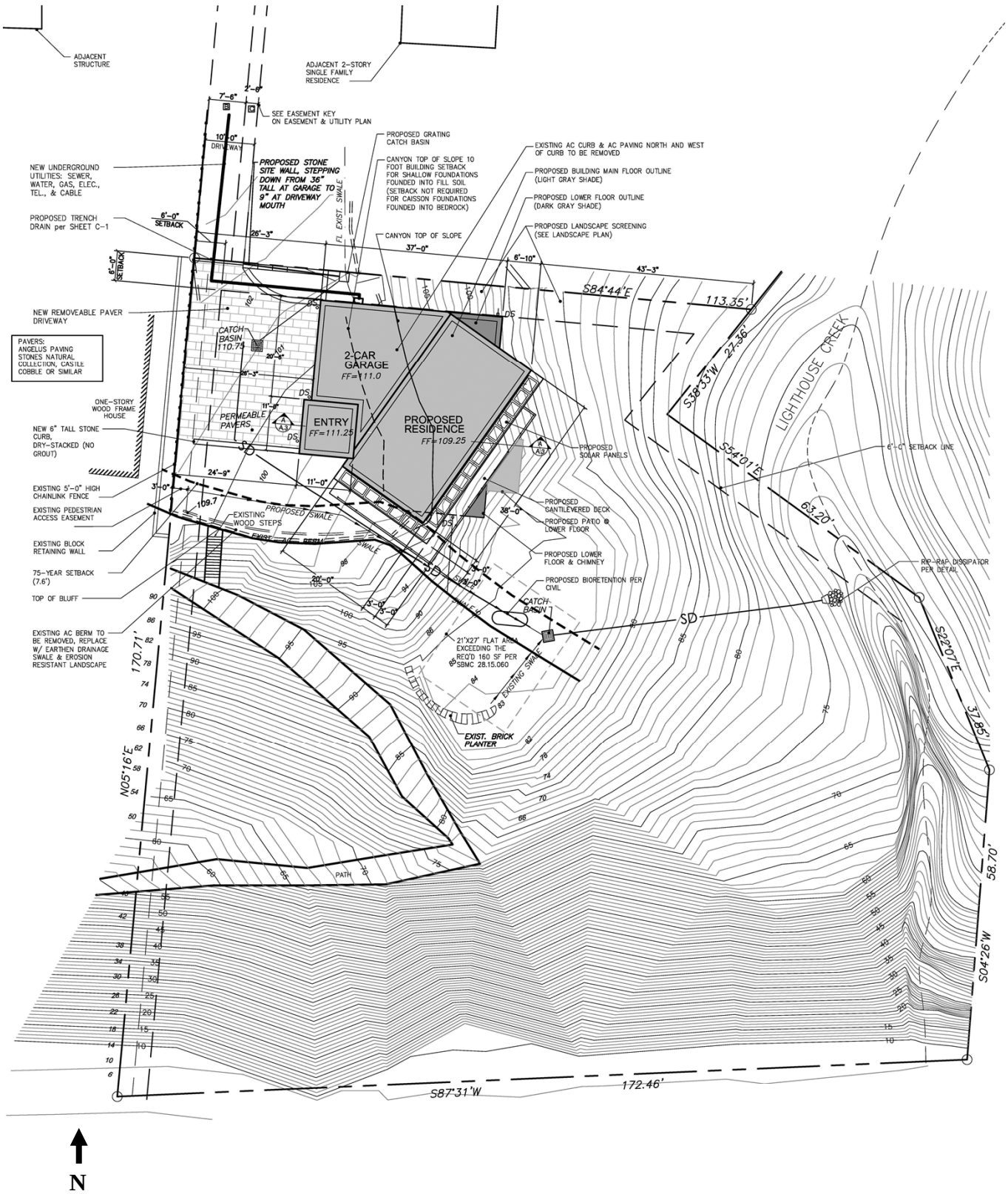
Scale: 1 in. = approx. 600 ft.

Project Parcel

City of Santa Barbara

1837½ El Camino de la Luz

Figure 3.2-2
Project Location



Not to Scale

Source: RRM Design Group, 2017

City of Santa Barbara

1837½ El Camino del la Luz

Figure 3.3-1

Site Plan

3.3.1 Structure Size

The proposed residence would have a total gross building area of 2,089 square feet, consisting of 1,614 gross square feet of livable area and a 475 gross square foot two-car garage. The structure would have a "footprint" area of 1,409 square feet. Project parcel and proposed building size data is summarized on Table 3.3-1.

Table 3.3-1
1837½ El Camino de la Luz
Project Site and Proposed Residence Size Summary

Proposed Residence	Gross (sq. ft.)	Net (sq. ft.)
Main Floor	837	787
Lower Floor	777	718
Total Living Area	1,614	1,505
Garage	475	429
Total Floor Area	2,089	1,934
Site Coverage	**Square Feet**	**% of Project Parcel**
Building	1,409	6
Driveway	793	3
Open Space	21,683	91
Parcel Size	23,885	100

3.3.2 Proposed Residence

The appearance of the proposed residence is depicted on Figures 3.3-2, -3 and -4. As shown, the exterior of the building would have a stone veneer and wood siding. ~~Other~~Another building feature~~s~~ is ~~include~~ the ~~use of a "green" or vegetated roof, and~~installation of solar panels along the eastern and southern edges of the roof. The primary entrance to the residence and the entrance to the garage would be on the west side of the building. As shown on Figure 3.3-5, the main floor of the residence would include living and dining rooms, a kitchen and powder room, and the garage. Figure 3.3-6 depicts the lower floor, which would include two bedrooms and two bathrooms.

The eastern portion of the area that would be used to develop the residence slopes downward to the east towards Lighthouse Creek. As depicted on Figure 3.3-7, the main floor of the residence would be cantilevered over the top of the canyon slope. The eastern portion of the residence would extend approximately 12 to 30 feet beyond (east)

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North Elevation

South Elevation

Not to Scale Source: RRM, 2017

City of Santa Barbara

1837½ El Camino del la Luz

Figure 3.3-2

North and South Elevation Renderings

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East Elevation

West Elevation

Not to Scale Source: RRM, 2017

City of Santa Barbara

1837½ El Camino del la Luz

Figure 3.3-3

East and West Elevation Renderings

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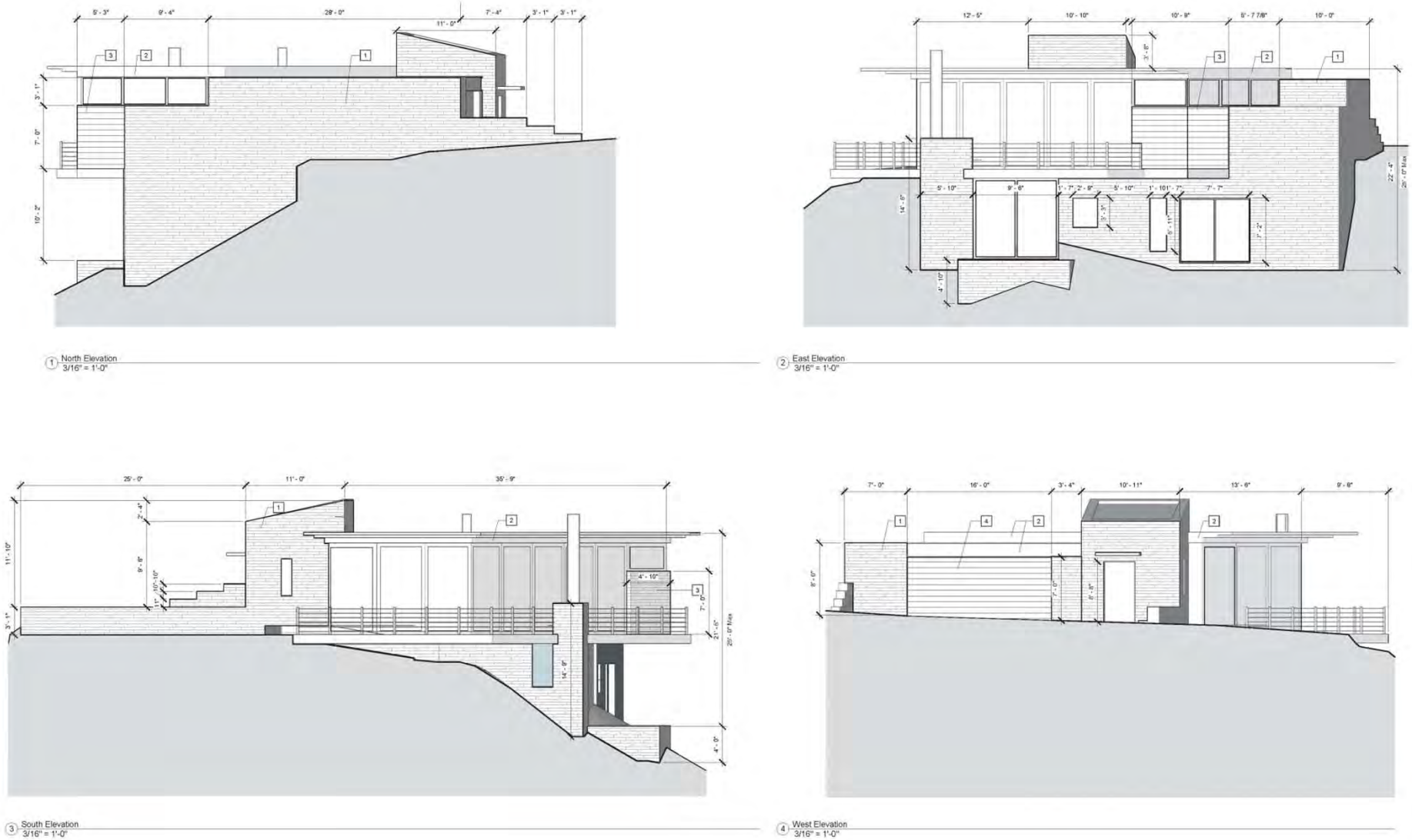


Exterior Materials Schedule

Tag	Material
1	Virginia Ledgestone
2	Copper Flashing
3	Horizontal Wood Siding
4	8'-0" x 16'-0" Garage Door

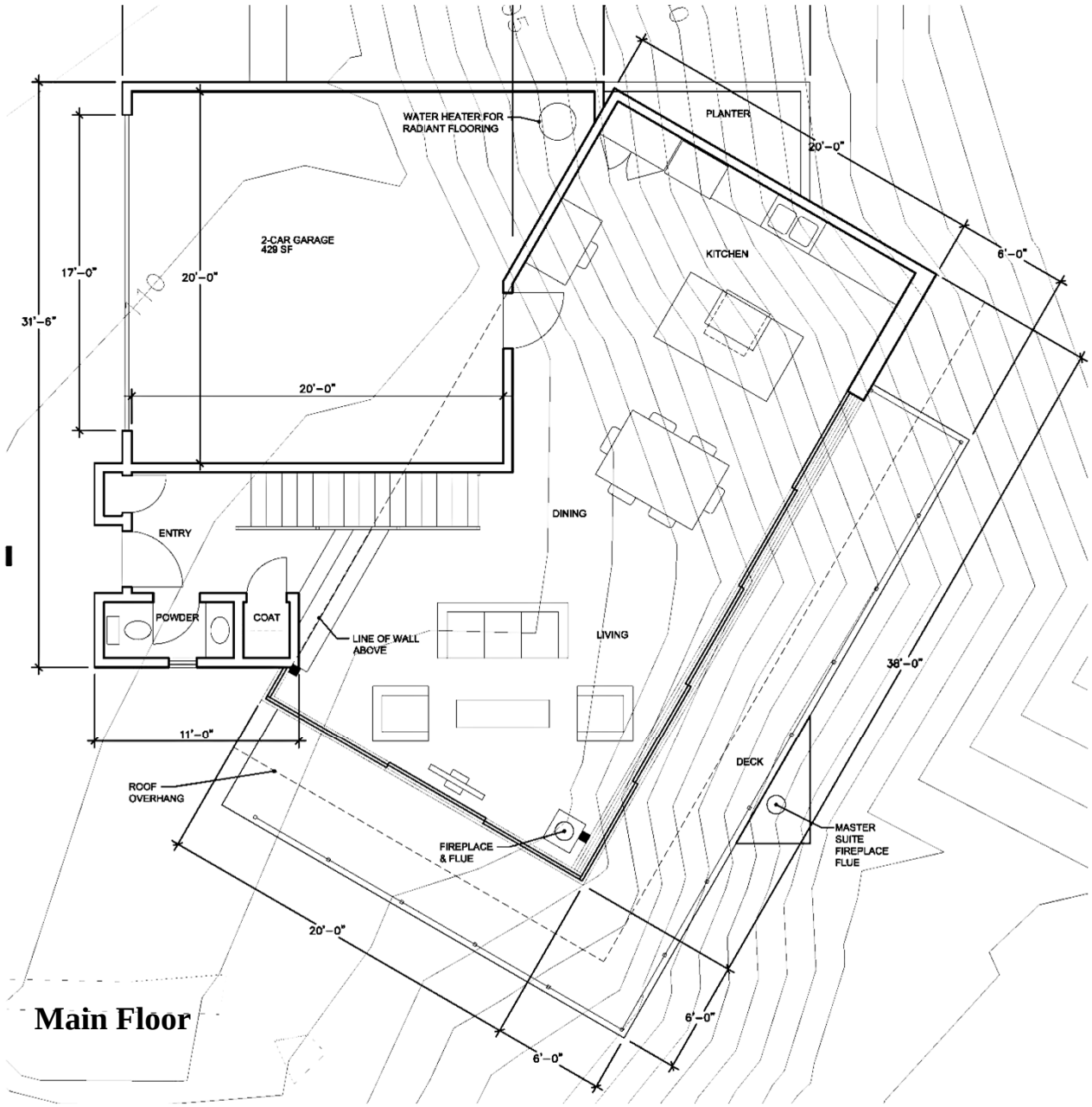
Source: RRM, 2017

City of Santa Barbara

1837½ El Camino de la Luz

Figure 3.3-4

Proposed Residence Elevations



Not to Scale Source: Peikert Group Architects, 2016

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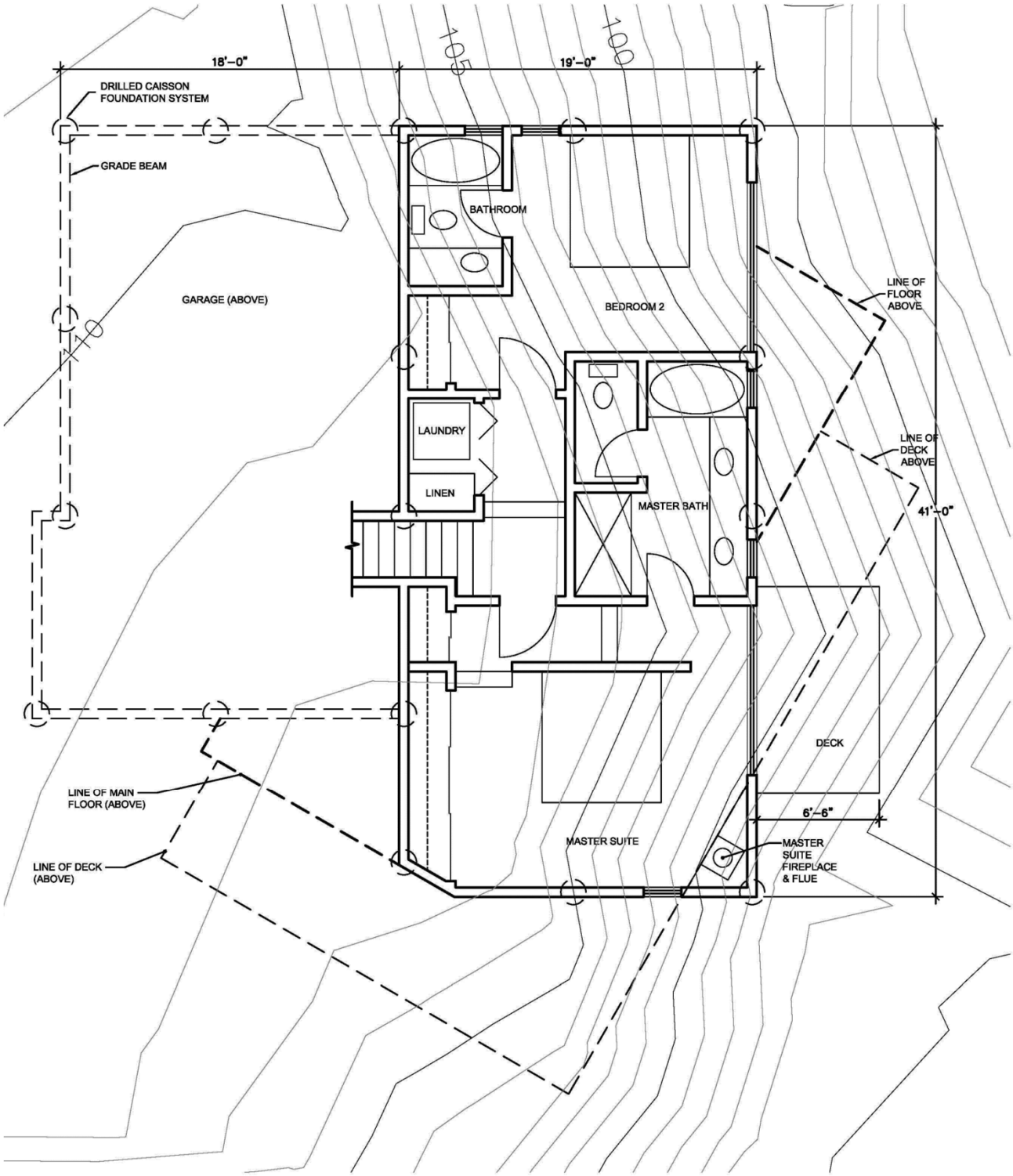
Figure 3.3-5

Floor Plan – Upper Level



Lower Floor

Not to Scale Source: RRM, 2017

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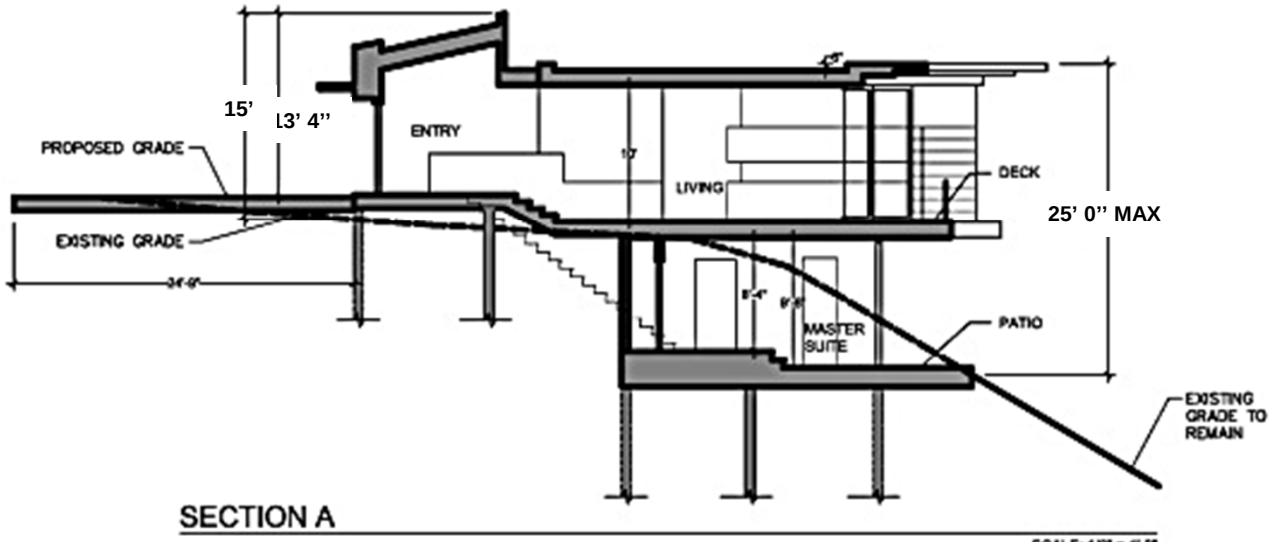
Figure 3.3-6

Floor Plan – Lower Level



Not to Scale Source: Peikert Group Architects, 2016

City of Santa Barbara

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Figure 3.3-7
Cross Section

of the identified top of the Lighthouse Creek canyon slope. The western elevation of the residence would have a maximum elevation of 15 feet above existing grade, and the eastern building elevation would have a maximum elevation of 25 feet above existing grade. The eastern edge of the proposed residence would be approximately 70-90 feet west of the centerline of the Lighthouse Creek channel.

The design of the proposed residence has been substantially revised when compared to the design evaluated by previous EIRs prepared for the project. For comparison purposes, the height of the western elevation of the previous design was 21 feet above existing grade, and the height of the eastern elevation was 35 feet above existing grade. The height of the western elevation of the current project design is 15 feet above grade, which is six feet lower than the previous design. The eastern elevation of the current project design is 25 feet above grade, which is 10 feet lower than the previous design. The reduced structure height has been achieved by reducing building mass from the upper level of the structure, and placing portions of the structure's lower level below the existing grade of the project site. The net total floor areas of the previous and current project designs are not substantially different: the previous design had a net total floor area of 1,942 square feet and the current design has a net total floor area of 1,934 square feet.

3.3.3 Grading

The existing ground surface elevations of the proposed development site range from approximately 112 feet in the northwest corner to approximately 95 feet in the southeast corner. The finished floor elevation of the garage and entry would be at 111 feet, and the finished floor elevation of the lower residence floor would be 109 feet. Grading to construct the residence would require 288 cubic yards of cut under the building and 21 cubic yards of fill under the driveway.

The proposed residence would be supported by a drilled caisson foundation system. To construct the foundation, 17 holes would be drilled within the proposed building footprint area, and the caissons would be constructed of reinforcing steel and concrete. Grade beams would then be used to span between the caissons. The caisson holes would be drilled through unconsolidated fill that has been placed on the project site to competent bedrock. The depth of the caisson holes will vary but would be on the order of seven to eight feet deep. For comparison purposes, the previous design of the residence did not require any grading, other than minor earth movement for foundation preparation purposes.

3.3.4 Drainage

Storm water runoff on the project site would be collected by a series of swales and catch basins, including a vegetated drainage swale along the landward edge of the coastal bluff on the southern portion of the project site. To reduce peak storm water discharges from the project site, the project includes the use of permeable pavers in the

driveway area; ~~a "green" roof, which would temporarily retain storm water prior to being discharged to the on-site storm water collection system;~~ and a small (17 square feet) bioretention pond. Water collected by catch basins and the vegetated swale would be conveyed by underground drains and discharged to Lighthouse Creek. Energy dissipating rip rap would be placed in the creek at the proposed discharge location to minimize the potential for erosion-related impacts. The proposed project site drainage system is depicted on the Figure 3.3-1

3.3.5 Landscaping

Landscaping would be provided along the northern perimeter of the project parcel to screen views of the residence from view points to the north. The proposed landscape screen would consist of four (4) paper bark trees (*melaleuca quinquenervia*) and one (1) coast live oak (*quercus agrifolia*). The drainage swale that would be constructed along the southern perimeter of the proposed development site would be planted with an erosion and drought resistant seed mix. The proposed landscaping plan also identifies an area approximately 8,000 square feet in area located to the east and south of the proposed residence that would be restored by planting a variety of native plant species. The proposed project site landscaping is depicted on Figure 3.3-8.

3.3.6 Other Site Development Elements

Utilities for the proposed residence, including sewer, water, gas, electricity, telephone and cable would be extended underground to the project site.

3.4 REQUIRED APPROVALS

The proposed project would require approvals of the following discretionary permit applications:

1. A City Coastal Development Permit from the Planning Commission to allow construction of a new residence in the appealable jurisdiction of the City's Coastal Zone (SBMC §28.44); and
2. Single Family Design Board design review approval (SBMC §22.69).

3.5 PROJECT OBJECTIVES

For the purposes of this environmental review, it was assumed that the objectives of the proposed project are to develop a residence on the project site that will:

1. Construct a residence on the developable portion of the project site.
2. Minimize environmental impacts related to slope stability and other geological hazards and process.

3. Minimize environmental impacts related to the obstruction of scenic vistas.

Not to Scale

Source: RRM, 2017

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Figure 3.3-8

Landscape and Habitat Restoration Plan

4.0 ENVIRONMENTAL SETTING

This section provides a brief description of the conditions that exist on and near the 1837½ El Camino de la Luz project site.

4.1 PROJECT AREA SETTING

The 1837½ El Camino de la Luz Residence project site is located in the southwestern portion of the City of Santa Barbara in the West Mesa neighborhood. This neighborhood is developed primarily with single-family residences, however, multi-family units and commercial uses are also located in the neighborhood. The area near the project site is developed primarily with single-family residences. Views of the Santa Ynez Mountains to the north and the Pacific Ocean to the south are provided from locations throughout the West Mesa neighborhood.

The West Mesa neighborhood is located on an elevated marine terrace that slopes gently southward until it terminates at a steep coastal bluff adjacent to the Pacific Ocean. The bluffs in this portion of the City generally rise approximately 100 feet above sea level.

Lighthouse Creek is a small drainage located in the southeastern portion of the West Mesa neighborhood. The creek channel begins in an area south of Cliff Drive and extends southward approximately 3,000 feet where it discharges to the Pacific Ocean over the coastal bluff. Base flows in the creek occur throughout most of year and are supplied by groundwater seepage and urban runoff.

4.2 PROJECT SITE SETTING

4.2.1 Existing Conditions

The proposed residence would be developed on a 0.55-acre parcel that is bordered by the Pacific Ocean to the south and Lighthouse Creek to the east. The project property is vacant and has been graded in the past. Previous improvements to the property include an asphalt parking area, concrete drainage swales, and a brick planter. Access to the property is by private driveway easements that extend southward from the El Camino de la Luz cul-de-sac.

An ocean bluff that rises approximately 105 feet above sea level is located on the southern portion of the project property. From the project site the bluff descends southward to the beach and to the east toward Lighthouse Creek. The upper half of the bluff has an approximate slope angle of 35 degrees, and the lower portion of the bluff steepens to about 65 to 75 degrees. The location on the bluff where the slope gradient changes was formerly designated as the top of the bluff by EIRs previously prepared for the proposed project. A narrow trail is located on the bluff face. Wooden stairs located near the southwestern corner of the proposed residence development site lead to the trail,

which switches back across the south exposure of the bluff face and terminates at the beach below the adjacent property west of the project site.

Lighthouse Creek in the vicinity of the project property is located in an incised canyon, and the western slope of the canyon is located on the eastern portion of the project site. On the project property, the western canyon slope has a height that ranges between approximately 25-35 feet above the Lighthouse Creek channel. The upper portion of the slope has a gradient of 1.75:1 (horizontal:vertical) and the lower portion of the slope flattens to a gradient of 3.5:1.

The proposed residence would be located in the northwestern corner of the project property. The proposed building site slopes to the south and east, and has elevations that range from approximately 112 feet above sea level in the northwest corner to approximately 95 feet in the southeast corner. The proposed building site is predominately occupied by an asphalt pad. Vegetation adjacent to the pad generally consists of non-natives such as iceplant, oleander, yucca, castor bean, and English and German ivy.

Native plants on the western slope of the Lighthouse Creek canyon include arroyo willow, California blackberry, poison oak, coyote bush, California sage brush and California fuchsia. Native plants on the ocean bluff include saltbrush, coast goldenbush and lemonade berry. Wildlife observed or expected on the project property includes those species typical of urbanized areas and the urban fringe.

Pictures depicting existing conditions on the project site and the proposed building location are provided on Figure 4.2-1.

4.2.2 Zoning and Land Use Designations

The General Plan land use designation of the project site is “Residential, 5 units per acre.” The project site is in the “E-3” (One-Family Residence) Zone, SD-3 (Coastal Overlay) Zone, and Hillside Design District.

4.2.3 Surrounding Land Uses

Land uses in the vicinity of the project site are generally described on Table 4.2-1 and depicted on Figure 4.2-2.

View of the proposed residence building site looking to the north and northeast. The project site access drive is on the left side of the photo. Vegetation along the upper portion of the Lighthouse Creek canyon slope is shown in the photo center and right.

View of the proposed residence building site looking to the south and southwest. The Lighthouse Creek canyon slope can be seen on the left side of the photo.

City of Santa Barbara

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Figure 4.2-1

Project Site Conditions

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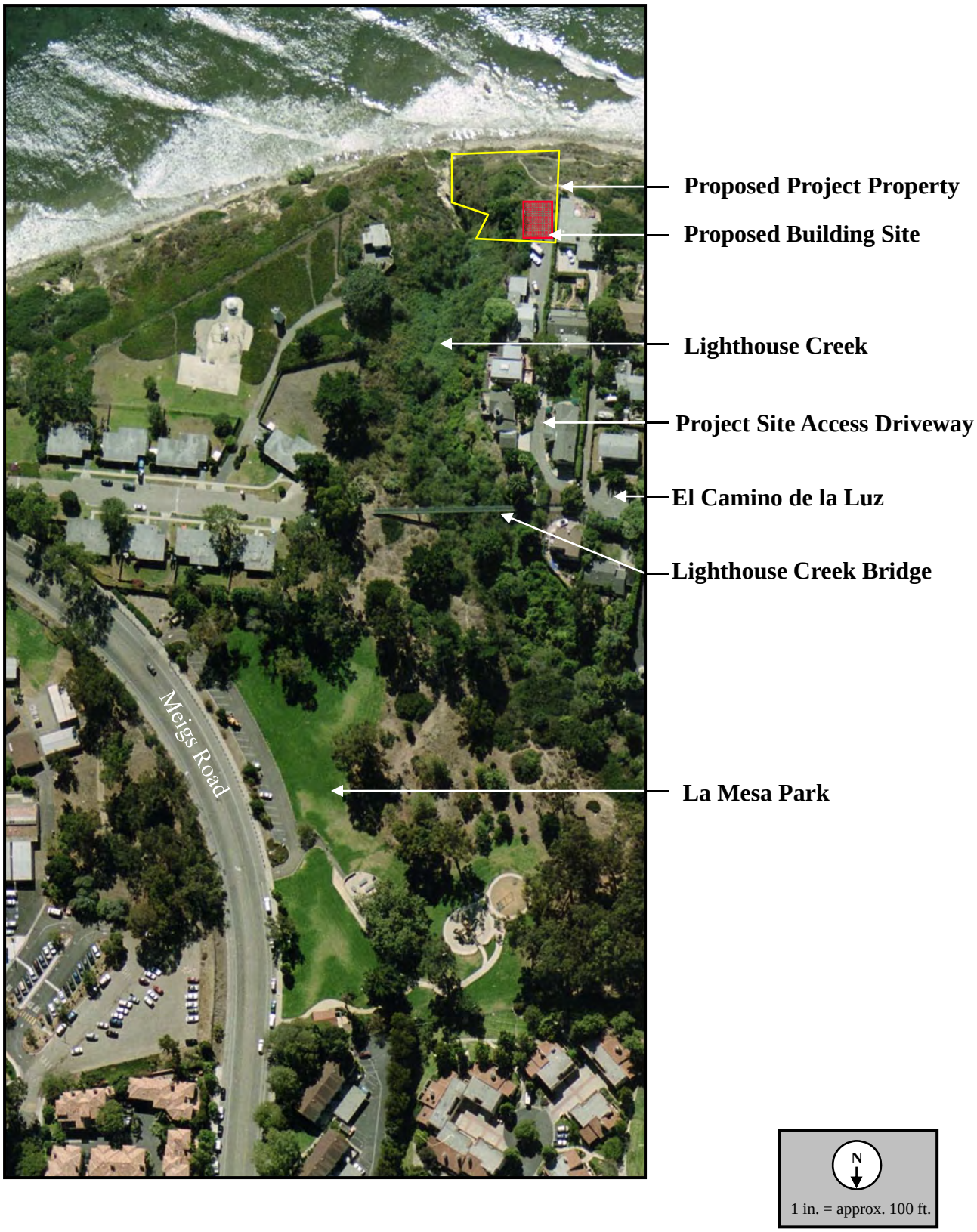

City of Santa Barbara

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Figure 4.2-2
Project Area

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Table 4.2-1
Adjacent Land Uses

Direction	Land Uses
North	The project property is bordered by a single-family residence to the north. Other residences are also located north of the project property along the access drive that extends southward from El Camino de la Luz. The residential areas adjacent to the project property are zoned "E-3/SD-3". The southern boundary of La Mesa Park is located approximately 550 feet north of the project property. The Park is zoned "Parks and Recreation/SD-3."
South	The Pacific Ocean is adjacent to the project property to the south.
East	Lighthouse Creek borders the project property to the east. East of the creek is a U.S. Coast Guard facility that includes a lighthouse and housing. The area to the east of the project property is zoned "Parks and Recreation/SD-3."
West	The project property is bordered by another bluff-top single-family residence to the west. Other residences are also located west of the project property. The residential areas to the west of the project property are zoned "E-3/SD-3".

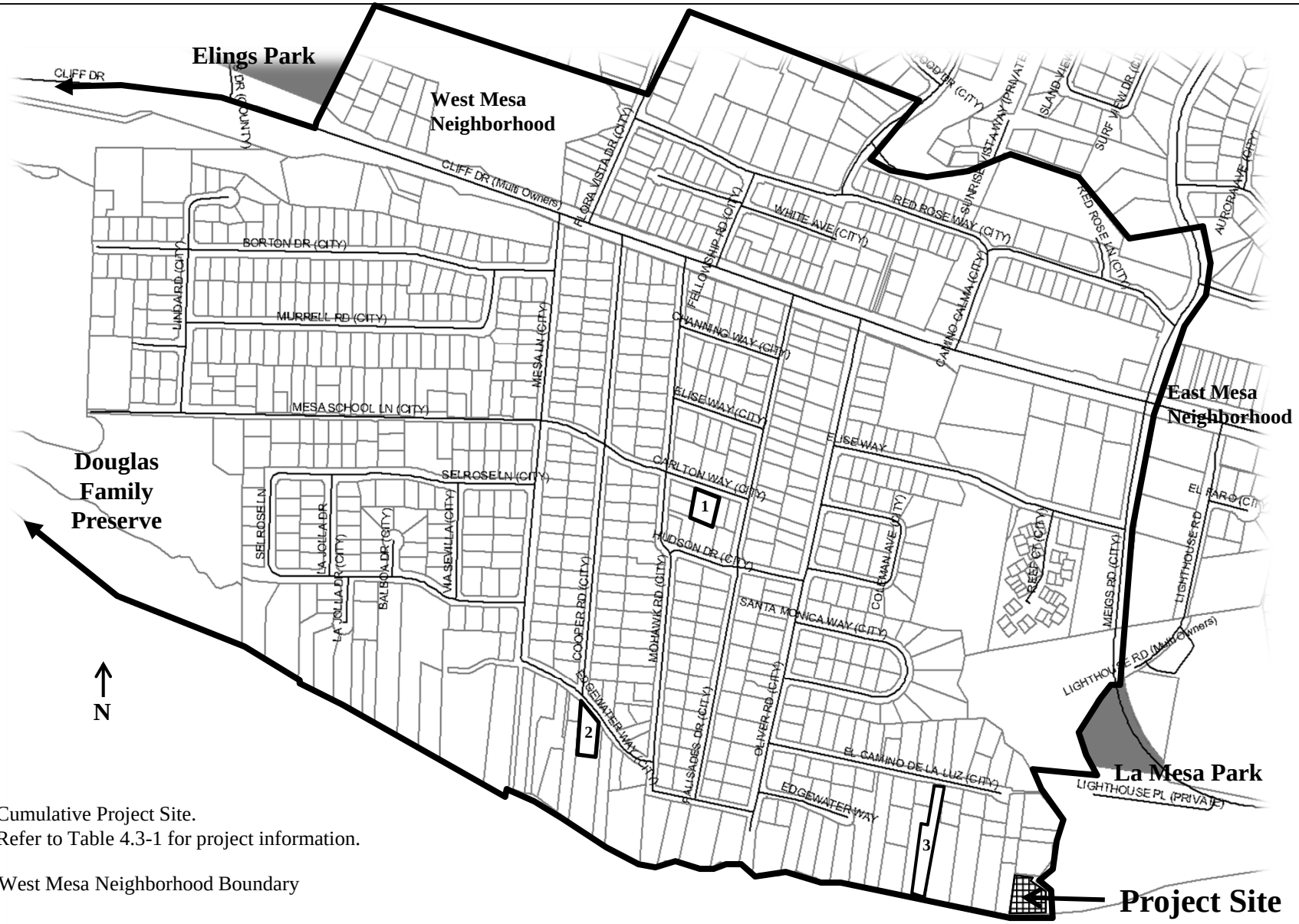
4.3 CUMULATIVE DEVELOPMENT

Other reasonably foreseeable probable future development projects in the vicinity of the 1837½ El Camino de la Luz project site were identified to evaluate the potential for the proposed project together with other development projects to result in significant cumulative impacts. The cumulative development projects identified on Table 4.3-1 are pending and approved projects located in the West Mesa neighborhood that would have the potential to result in substantial changes to existing environmental conditions. The locations of the identified cumulative development projects are depicted on Figure 4.3-1.

Table 4.3-1
Cumulative Development Projects

Map No. (a)	**Project Location**	**Proposed Project**	**Status**
1	2215 Carlton Way	Proposed secondary dwelling unit.	Certificate of Occupancy issued July 2016
2	2321 Edgewater Way	Demolish a 1,945 square foot two-story residence, 300 square foot carport and 350 square foot garage. Construct a 3,650 square foot two-story residence and a 400 square foot attached garage.	Building permit pending.
3	1925 El Camino de la Luz	Construct a 3,101 square foot, three-story single-family residence with a 444 square foot garage.	Denied

(a) Project location Map Numbers are depicted on Figure 4.3-1
Source: http://www.santabarbaraca.gov/services/construction/building/mesa/west/mst.asp. Accessed May 7, 2015.



2 Cumulative Project Site.
Refer to Table 4.3-1 for project information.

West Mesa Neighborhood Boundary

Scale: 1 inch = approx. 500 ft.

City of Santa Barbara
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Figure 4.3-1
Cumulative Project Locations

5.0 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

This section provides an evaluation of the potentially significant environmental effects of the 1837½ El Camino de la Luz Residence project. The term "significant effect" is defined by section 15382 of the *CEQA Guidelines* as "*a substantial, or potentially substantial adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.*"

The 2006 Revised Initial Study for the El Camino de la Luz project (Appendix A) identified potentially significant visual aesthetic and geologic impacts that required additional analysis in this Environmental Impact Report. The Revised Initial Study also identified potentially significant impacts that could be mitigated to less than significant levels with identified measures (Class II impacts) in the areas of biological resources, fire hazards, traffic and circulation, and hydrology/water quality. Less than significant impacts (Class III impacts) were identified in the areas of lighting, air quality, cultural resources, noise, population and housing, public services, recreation, and greenhouse gas emissions, with some recommended measures to further reduce these adverse but less than significant impacts.

The Revised Initial Study was further reviewed as part of this EIR related to proposed project description revisions and to update analysis provided by the Initial Study. The review of the Revised Initial Study provided in the Impacts Found Not to be Significant section (Section 9.0) of this EIR resulted in the identification of several new mitigation measures that supplement the mitigation measures included in the Revised Initial Study. All of the mitigation measures identified by the Revised Initial Study and this EIR are listed in the Summary (Section 2.0) of this EIR. A Mitigation and Monitoring and Reporting Plan for the mitigation measures recommended by the Initial Study and this EIR is provided in Appendix H.

To aid in the description of project-related environmental impacts, four types of impacts may be identified by the EIR impact analysis:

> **Class I. Significant and Unavoidable:** An impact whose effect cannot be avoided or reduced below a level of significance through the implementation of reasonably available and feasible mitigation measures. If a project with significant impacts is approved, CEQA requires that decision-makers adopt findings explaining project impacts and mitigation, and a statement of overriding considerations explaining why project benefits outweigh the environmental effects (CEQA Guidelines §15093).

Class II. Potentially Significant but Mitigable: An impact that can be reduced to below a level of significance by implementing reasonably available and feasible mitigation measures. If a project is approved, CEQA requires that decision-makers adopt findings explaining project impacts and mitigation.

Class III. **Less Than Significant:** A project may result in environmental impacts that are adverse, however, the effect of the impact does not exceed the applicable impact significance criteria. These impacts are considered to be "less than significant." Measures recommended to reduce less than significant impacts are not required under CEQA but may be implemented to minimize environmental effects to the extent possible and project-related contributions to cumulative impacts.

Class IV. Beneficial: An effect that would reduce resource degradation, hazards, or improve the environment may be referred to as a "beneficial" impact.

5.1 VISUAL AESTHETICS

The 2007 DEIR and the 2012 First Revised DEIR prepared for the El Camino de la Luz residence project evaluated the potential for the original project design to result in significant visual aesthetic impacts. The analysis provided by the ~~2007~~ 2006 and 2012 Draft EIRs concluded that the project's original design would result in significant impacts to important public scenic ocean views from areas in and around La Mesa Park. The previous Draft EIRs also concluded that the project's significant impacts to important public scenic ocean views could be reduced to a less than significant level with the implementation of mitigation measures that identified changes to the design of the project. Design changes similar to those recommended by the previous Draft EIRs have been incorporated into the design of the currently proposed project and the potential for the project's current design to result in significant visual aesthetic impacts is evaluated by this ~~Second Revised~~ EIR.

This analysis of the proposed project's visual aesthetic impacts evaluates impacts that would result from the most recent design of the proposed residence, which is substantially different than the design of the project evaluated by the original Draft EIR (2007) and first Revised Draft EIR (2012). The revised proposed design is described in EIR Section 4.0 (Project Description). In general, the design of the proposed residence has been revised so that it has a maximum height of 25 feet above existing grade, which is approximately ten feet lower than the maximum height of the previously proposed residence design.

To assist in the evaluation of the project's visual aesthetic impacts, photo-simulations depicting visual conditions that would exist after the development of the proposed residence were prepared by the project architect (Peikert Group, 2012). The simulations depict existing and post-project development conditions as they would be viewed from representative important public viewpoints located at La Mesa Park and from the Lighthouse Creek footbridge. Ocean views available from the southbound lane of Meigs Road are very limited in extent and are provided through a narrow view corridor framed by trees located on and near La Mesa Park. Views of the project site and the ocean beyond through the view corridor are similar to other views available from locations at La Mesa Park. Therefore, project-related photo-simulations of views from the roadway were not prepared for this EIR.

Conclusions regarding the potential for the proposed project to result in significant impacts to important public scenic views were made by comparing project-related changes to existing visual conditions with visual impact criteria. Project-specific impact evaluations are provided for each significance criterion. The evaluation of potential visual impacts also considers a reasonable range of design alternatives to the proposed project, and that analysis is located in Section 8.0 (Alternatives) of this EIR.

A variety of terms to describe and evaluate the visual conditions of the project area are used in this EIR. Definitions of these terms are provided below:

- **Views**. Anything that can be seen.
- **Public views**. Views experienced from public places.
- **Visual resources**. Items such as natural features, trees, landscaping, or buildings within a view.
- **Important visual resources**. Items within a view deemed to be important.
- **View corridor**. A view almost completely framed on both sides by existing development or landscaping that is large enough to provide a sense of contrast between the area in the foreground and important visual resources in the background.
- **Important public scenic views**. Public views that contain important visual resources, have scenic qualities, and are visible from heavily visited viewing areas.
- **Viewpoint**. The vantage point or location from which a view is experienced.
- **Visual context.** The visual resources associated with and that comprise a particular physical setting. The visual context changes from one location to another. The basis of the visual context stems from both the existing physical setting and the aesthetic expectations as described in existing plans and policies.

5.1.1 Setting

Project Site Conditions. The project site is located on a bluff-top property at the southern end of a private driveway that extends southward from the eastern terminus of El Camino de la Luz. The northwestern portion of the project parcel is the proposed building site for the new residence. Most of the proposed development area is partially paved and relatively level, and unpaved areas support sparse coverage by mostly weedy plant species. The eastern portion of the proposed development area slopes moderately then steeply towards the Lighthouse Creek channel, which is located along the eastern perimeter of the project property. The southern portion of the project property is a steeply sloping ocean bluff that is sparsely covered with native and non-native plants. The proposed development area does not itself have unique or important visual qualities, however, it does provide extensive views of the Pacific Ocean to the south.

Surrounding Conditions. The project parcel is located in an urbanized area developed with generally small- to moderately-sized one- and two-story homes. The parcel west of and adjacent to the project site is occupied by a single-story residence, and the adjacent parcel to the north contains one- and two-story structures. A U.S. Coast

Guard facility is located on the east side of Lighthouse Creek, and the Pacific Ocean borders the project property to the south. Including the residences adjacent to the project site to the west and north, there are six one- and two-story houses located along the southward driveway extension of El Camino de la Luz.

The southern boundary of La Mesa Park is approximately 550 feet north of the project parcel. La Mesa Park is a City-owned park that provides picnic facilities, play equipment, and grass-covered areas for active and passive recreation. The park is bounded by Meigs Road to the east, Lighthouse Creek to the west, residential uses to the north, and Lighthouse Creek and U.S. Coast Guard property to the south. A pathway in the southern portion of the Park leads to the footbridge that crosses Lighthouse Creek.

Important Public Scenic Views. The Revised Initial Study prepared for the proposed project identified three important public scenic views that would be affected by the project. Existing visual conditions for each of the identified views are described below. Pictures of the identified important public scenic views are included on Figures 5.1-2 and 3. Figure 5.1-1 depicts the viewpoint location from which the representative view pictures were taken.

La Mesa Park. Views of the project site and Pacific Ocean are provided from locations throughout the southern half of the park. From the northern half of the park, views of the project site and ocean are generally obscured by trees and bushes. Public views provided from representative locations throughout the park are described below.

"Benches" Area. The most prominent locations in La Mesa Park that provide important public scenic views of the project site and Pacific Ocean are in the southern portion of the park where several benches have been provided to take advantage of the ocean views. From the "benches" area, fore- and mid-ground views consist of the Lighthouse Creek footbridge, vegetation in Lighthouse Creek, and the three residences located on the east side of the project site driveway. Since the project property is vacant, the proposed development area is not generally distinguishable from the open space area within the Lighthouse Creek channel that is to the east. From the "benches" area, background views are dominated by the Pacific Ocean and when atmospheric conditions allow, Santa Cruz Island can be seen. Due to topographic differences, views of the beach are not available from this area. A representative view of the visual resources seen from the "benches" area in the southern portion of La Mesa Park is provided on Figure 5.1-2.

From the "benches" area, a view corridor oriented towards the ocean is framed to the west by the houses along the east side of the project site driveway. The western edge of the view corridor is also partially defined by large bushes and a landscape tree that is seen as projecting above the horizon. Views of the ocean are framed to the east by trees

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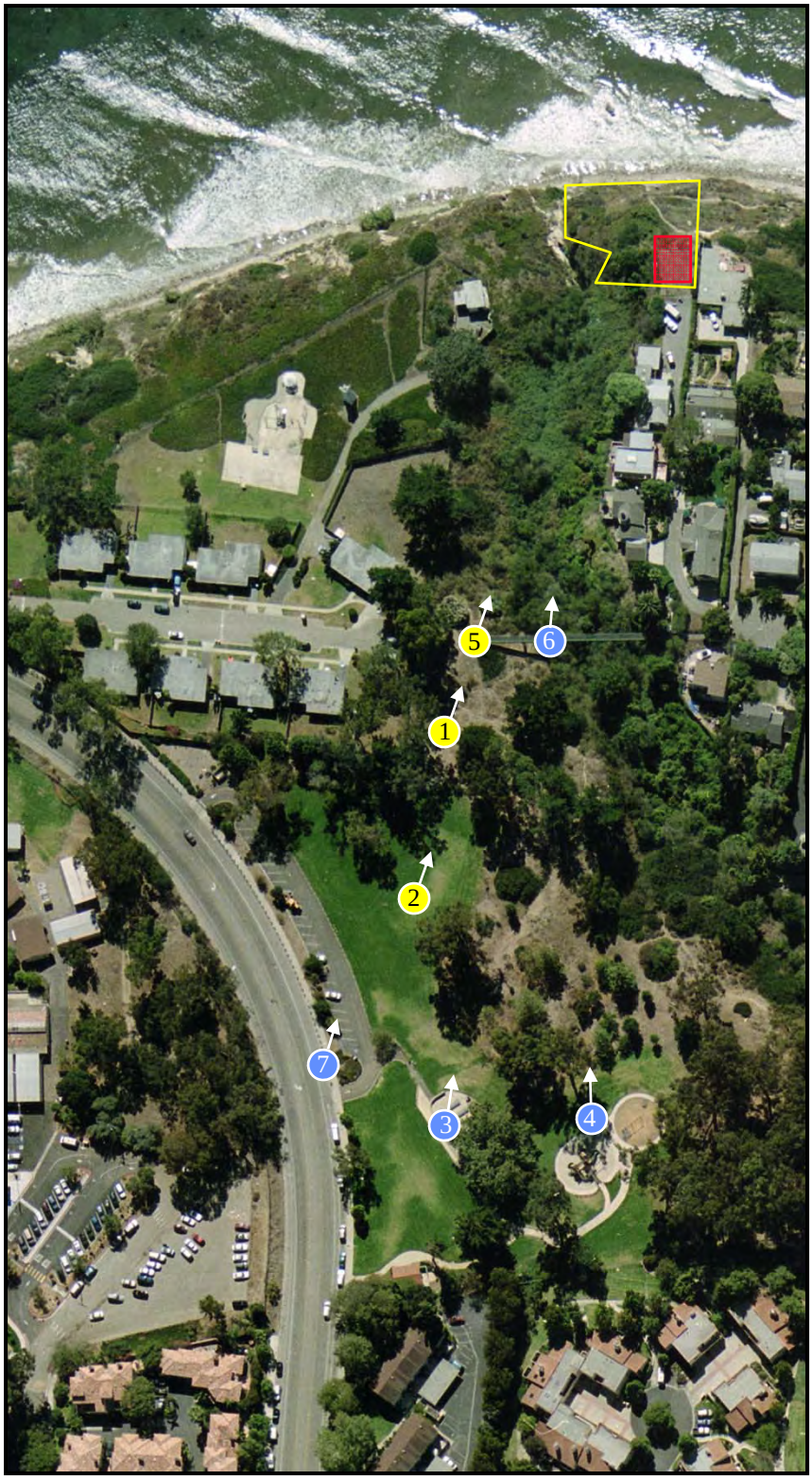

Photo Location

Photo and Visual Simulation Location

1 **La Mesa Park "Benches" Area**

2 **La Mesa Park Southern Lawn Area**

3 **La Mesa Park Picnic Area**

4 **La Mesa Park Playground**

5 **Lighthouse Creek Bridge – East End**

6 **Lighthouse Creek Bridge – Center**

7 **Meigs Road**

N

1 inch = approximately 185 feet

City of Santa Barbara

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Figure 5.1-1

View Corridor Picture Locations

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1 - View From the "Benches" Area

2 - View From the Southern Lawn Area

3 - View From the Picnic Area

4 - View From the Playground

See Figure 5.1-1 for Photo Location Key

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Figure 5.1-2

Existing Views Toward the Project Site from La Mesa Park

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5 – View from East End of Lighthouse Creek Bridge

6 – View from Center of Lighthouse Creek Bridge

7 – View from Meigs Road

See Figure 5.1-1 for Photo Location Key

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Figure 5.1-3

Existing Views Toward the Project Site from Other View Corridor Locations

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and dense vegetation. This vegetation also serves to screen views of structures located on the adjacent Coast Guard property. The importance of the view corridor seen from the "benches" area is increased because views to and through the corridor are from a public park.

Southern Lawn Area. Areas located throughout the southern portion of La Mesa Park also provide important public scenic views of the ocean, Santa Cruz Island when atmospheric conditions allow, and limited views of the project site. Views of the ocean are available from the southern lawn area, but the view corridor is limited in extent by vegetation to the east and west. From the southern lawn area, the proposed project site is generally screened by vegetation but is faintly visible, and homes on the east side of the project site driveway are partially screened by intervening trees and bushes. A representative view of the ocean view corridor as seen from the southern lawn area is included on Figure 5.1-2. The importance of this view corridor is increased due to its location in a public park.

Picnic Area. The northern areas of La Mesa Park provide active recreation facilities, including a large group picnic area. Figure 5.1-2 includes a representative view to the south from the picnic area. As shown, ocean views are predominately screened by vegetation located on and adjacent to the park, and the project site cannot be seen. Therefore, important public scenic views of the ocean are not provided from this area of La Mesa Park.

Playground. Another active recreation facility area in the northern portion of La Mesa Park is the playground, which is located west of the picnic area. Similar to the views from the picnic area, views from the playground towards the project site and ocean are generally obscured by vegetation. Figure 5.1-2 provides a representative view to the south from the playground. As depicted, only isolated and somewhat vague ocean views are available through the vegetation and the project site cannot be seen. Therefore, important public scenic views of the ocean are not provided from this area of La Mesa Park.

<u>Lighthouse Creek Footbridge</u>. The footbridge located south of La Mesa Park crosses the Lighthouse Creek channel and offers a variety of views of the project site and surrounding areas. The most prominent view of the project site is from the eastern end of the bridge. From this view point, fore- to mid- ground views are dominated by vegetation in Lighthouse Creek and three existing residences on the east side of the project site driveway. The location of the project site can be clearly discerned, but it is not visually prominent due to existing vegetation and its generally undeveloped condition. Background views as seen from the bridge include the Pacific Ocean, and when atmospheric conditions allow, Santa Cruz Island. Similar to views from the "benches" area, views of the ocean are framed to the east by vegetation, and to the west by the houses located on the east side of the project site access driveway. Due to topographic differences, views of the beach are not available from the bridge. Figure 5.1-3 includes a representative view from eastern end of the footbridge.

As a viewer moves closer to the center of the bridge, vegetation in Lighthouse creek still dominates foreground views, and background views of the ocean are framed by houses to the west and trees to the east. A representative view from the center of the bridge toward the ocean is provided on Figure 5.1-3.

Since important visual resources (i.e., the ocean) can be viewed from the eastern and central portions of footbridge, those views from the bridge are considered to be important public scenic views. Views of the project site and ocean are not available from the western end of the bridge because of intervening vegetation and the houses along the east side of the project site access driveway.

Meigs Road. Meigs Road is a north-south, two-lane arterial roadway with bike lanes and sidewalks on the east and west sides of the road. South of La Mesa Park, the roadway turns to the east and becomes Shoreline Drive. Meigs Road has not been designated as a scenic roadway by the City.

A representative view toward the project site as seen from the edge of the southbound lane of Meigs Road is provided on Figure 5.1-3. This public view consists of three distinct zones: foreground views of the La Mesa Park parking lot; mid-ground views of the lawn area in the southern portion of the Park; and background views of dense vegetation and the ocean beyond. Views of the project site are not available from the northbound lane of Meigs Road. Views toward the project site from Meigs Road are only briefly available to southbound motorists and bicyclists due to travel speed and the upcoming curve in the road. Pedestrians, however, may take the opportunity to experience the view for an extended period of time. The importance of the ocean views available from the southbound lane of Meigs road are diminished by the narrow view available through a corridor formed by trees located on an near La Mesa Park, and visual distractions that occur in the La Mesa Park parking lot, such as the automobile depicted in Figure 5.1-3. Despite these constraints, views provided from Meigs Road are considered to be important public scenic views.

Other Views. From the beach south of and adjacent to the project property, views towards the project site are primarily of the steep ocean bluff. The neighboring residence to the west of the project site is partially visible. Due to the presence of the steep sea cliff, the Santa Ynez Mountains are not visible from the beach. Since the proposed project development area is only marginally visible from the adjacent beach area, public views toward the project site from the beach are not considered to be important public scenic views.

There are six existing homes along the project site access driveway that extends southward from the terminus of El Camino de la Luz. The homes adjacent to the project site to the north and west have views of the ocean. Ocean views from other homes located along the driveway may be provided from second stories or balconies that extend over the Lighthouse Creek channel.

5.1.2 Impact Significance Criteria

Important visual resources in Santa Barbara include distant scenic views of the ocean and mountains from public viewpoints, and distinctive architecture, landscaping, and community character within urbanized areas. These visual resources are recognized by City policies of the Local Coastal Plan, General Plan, and design review ordinances and guidelines.

Visual aesthetic quality, whether a sight is visually pleasing or displeasing, may be perceived and valued differently from one person to the next, and depends in part on the context of the environment in which a project is proposed.

A *significant* visual aesthetic impact of a project may involve: (A) substantial obstruction or degradation of important distant scenic views from public viewing locations; (B) substantial adverse on-site visual aesthetics change incompatible with the surrounding area; (C) substantial changes in exterior lighting resulting in glare or hazard; or (D) conflict with applicable visual resources policies.

A. Analysis of impacts of a project to important distant public scenic views is considered qualitatively in two steps:

   - First, does the project affect *important public scenic views* or not? As identified in the prior section, the project would affect important distant public scenic views of the ocean from public viewing locations in La Mesa Park, the Lighthouse Creek footbridge, and Meigs Road.

   - If so, would the project result in a *substantial adverse change* in an important public scenic view by (A1) *substantially degrading or (A2) substantially obstructing* the view? The following pages provide analysis of impacts of the current project to the three identified important public scenic views using these criteria. Impacts to important public scenic views as seen from the public view points identified in Section 5.1.1 are described in terms of factors such as the extent of view obstruction, and the compatibility of project-related components with surrounding visual resources that comprise the existing visual context. In general, the extent of view obstruction may range from a determination that project-related features would be easily overlooked by an observer, to a conclusion that a substantial amount of an existing important public scenic view would be obscured. Visual compatibility considers whether the proposed development would appear to be out of place or inconsistent when viewed in the context of existing development.

B. Analysis of public views of the project site itself. The following analysis considers whether there is a substantial adverse effect to on-site visual aesthetics that is incompatible with the surrounding area. It is not the case that because a home or other structure is visible that that inherently represents a negative visual impact. A project's on-site visual effect is considered within the context of the surrounding visual setting. In this case, the proposed on-site

project structures and landscaping are considered within the context of the existing development in the surrounding neighborhood.

C. Analysis of exterior lighting impacts was provided previously as part of the Revised Initial Study (Appendix A). That evaluation concluded:

"Development of the proposed residence would result in additional lighting. Any exterior lighting would be subject to compliance with the requirements of SBMC §22.75, the City's Outdoor Lighting and Design Ordinance, and reviewed by the ABR[1]. The ordinance provides that exterior lighting be shielded and directed to the site such that no undue lighting or glare would affect surrounding residents, roads or habitat areas. Project impacts on lighting and glare would be *less than significant*." (Class III). Therefore, potential lighting-related impacts of the proposed project would not be significant and no additional evaluation of criterion "C" is required.

D. Consistency or conflict with applicable visual resources policies is provided in EIR Section 6.0, Plans and Policies Analysis.

5.1.3 Impact Evaluation

The potential for the proposed project to result in significant aesthetic impacts to the important public scenic views identified in EIR Section 5.1.1 (ocean views from La Mesa Park, the Lighthouse Creek footbridge, and Meigs Road) is evaluated below. The analysis is arranged to consider the potential for significant impacts relative to significance criteria A and B provided in Section 5.1.2.

Criterion A. *Potential for the project to result in a substantial obstruction or degradation of important distant scenic views from public viewing locations.*

View Degradation. This criterion indicates that a project would result in a significant aesthetic impact if it would substantially "degrade" an important public scenic view. For the analysis of this issue, it is not presumed that visible new development in and of itself constitutes a substantial degradation of visual conditions. A new residence is evaluated within the context of existing visual conditions of the area for compatibility or incongruousness.

An important public scenic view would be degraded if the proposed project would introduce visual elements or result in environmental conditions that are visually incompatible with the project site or surrounding area. Visual "incompatibility" includes project-related characteristics such as the size, color, or design that would be out of

[1] Under current regulations the proposed project would now require approval by the Single Family Desgin Board.

character with the existing conditions of the project area, or changes to the appearance of a project site due to grading or the removal of vegetation.

Proposed Residence Size. The proposed residence would be located on northwestern corner of the project property. The residence would have a main and lower level and would have 1,614 gross square feet of livable floor area. With a garage of 475 gross square feet, the total gross building floor area would be 2,089 square feet. Based on archive plan review, the proposed residence would be smaller than four of the six residences adjacent to the project site access drive. Therefore, the size of the proposed residence would not be out of character with the surrounding neighborhood, and the three important public scenic view corridors in the project area would not be substantially degraded as a result of the size of the proposed residence. Therefore, compatibility-related impacts resulting from the size of the proposed residence are **less than significant (Class III).**

Proposed Residence Colors. As depicted Figures 3.3-2 and 3, the exterior of the proposed residence would have a stone veneer and wood siding. The natural color of the stone and wood materials would be compatible with surrounding development and the adjacent open space area of the Lighthouse Creek channel. Although unlikely due to the type of building materials that are proposed, changes to the color of the residence could be made in the future, and the application of bright colors or contrasting combinations of colors would have the potential to be incompatible with adjacent development and open space areas, which could degrade views provided by the important view corridors in the project area. Potentially significant but mitigable impacts to the three important public scenic views in the project area that may be caused by proposed colors or future color changes could be reduced to a less than significant level by requiring Single Family Design Board approval of proposed colors and future building color changes. Proposed mitigation measure AES-1 requires that the proposed structure's exterior colors be neutral or earth-tone, and that any subsequent color changes be approved by the Single Family Design Board. With the implementation of this mitigation measure, color-related visual aesthetic impacts would be a **potentially significant but mitigable (Class II) impact** and would be reduced to a less than significant level.

Proposed Residence Design. As depicted on Figure 3.3-2, the lower wall on the north side of the proposed residence, which would be visible from La Mesa Park and the Lighthouse Creek footbridge, would not be an exposed foundation wall, however, it would not provide the architectural detailing (e.g., windows and decks) that would be provided by the proposed east, west and south elevations (Figures 3.3-2, -3 and -4). Views of the building's northern elevation wall would be substantially screened by vegetation to be provided in a proposed planting area located between the project site's northern property line and the residence. The proposed residence includes a small area of habitable floor space and a small deck on the upper level that would be cantilevered over the Lighthouse Creek canyon slope. Other residences near the project site also have structural elements (decks) cantilevered over the canyon slope (See Figure 5.1-2, photograph No. 1). Therefore, the proposed project's design would not appear to be out

of character with other nearby residences. Overall, the appearance of the proposed residence would generally be comparable to the appearance of houses located on the east side of the project site access driveway when viewed from La Mesa Park and the Lighthouse Creek footbridge. Therefore, project-related impacts related to the general appearance of the proposed residence are **less than significant (Class III).**

Grading and Vegetation Removal. The development of the proposed residence would require approximately 288 cubic yards of grading (cut) under the proposed residence and 21 cubic yards of fill under the on-site driveway, for a total of 309 cubic yards of grading. Therefore, grading required to construct the residence would not substantially alter the configuration or appearance of the project parcel as seen from off-site public viewing locations.

Vegetation on and near the proposed building area consists primarily of weedy plant species and some native plants. The disturbance or removal of vegetation resulting from construction activities, including site clearing, grading, drilling caisson holes, and/or the installation of proposed storm water drainage system pipes on the canyon slope, could result in long-term visual impacts if disturbed vegetation is not restored. Proposed mitigation measure BIO -1was identified by the Revised Initial Study prepared for the proposed project and would require that areas disturbed by grading and construction of the drainage system be replanted with native vegetation, and that the required planting be maintained for the life of the project. Grading would be subject to grading permit standards and with the implementation of mitigation measure BIO-1, potentially significant visual impacts associated with vegetation removal would be **reduced to a less than significant level (Class II).**

View Obstruction. This criterion indicates that the proposed project would result in a significant aesthetic impact if it would substantially obstruct views provided from one or more of the important public scenic viewpoints that have been identified at La Mesa Park or from Meigs Road. For the analysis of this criterion, obstructing an existing important public scenic view could result from the introduction of one or more project-related elements that substantially reduces or interferes with an existing public view of an important visual resource (i.e., ocean views).

Computer-generated photo-simulations depicting post-project development visual conditions were prepared to assist in the evaluation of the potential for the proposed residence to substantially obstruct existing important public scenic views. Visual simulations depicting the proposed residence were prepared to evaluate potential impacts to important public scenic views that are available from the La Mesa Park “benches” and the southern lawn areas, and the eastern end of the Lighthouse Creek footbridge. The locations of visual simulation viewpoints are depicted on Figure 5.1-1.

La Mesa Park. Areas of La Mesa Park that provide views of the proposed project site and ocean are evaluated in this section to determine if the project would have the potential to result in a significant visual impact. As described in Section 5.1.1, the

evaluation areas include the "benches" area near the southern end of the park, and the southern portion of the park's lawn area.

"Benches" Area. A photo depicting an existing public view towards the ocean as seen from the "benches" area of La Mesa Park is provided on Figure 5.1-4, and a simulation of post-project development visual conditions is provided on Figure 5.1-5. As depicted by the photosimulation, from the "benches" area the northern and eastern walls of the proposed residence would be visible in the western portion of the existing ocean view corridor.

The proposed project would result in the development of a new residence within the "benches" area view corridor and would change the appearance of the project site from a vacant appearance to a developed condition. As shown by Figure 5.1-5, the proposed structure would appear to be lower in height than the existing houses that are currently visible within the view corridor. As can be seen by comparing Figures 5.1-4 and 5.1-5, the proposed residence would result in a minor loss in the amount of ocean that is currently visible. The proposed residence would be visible along the western edge of the "benches" area view corridor, however, the structure would not substantially alter the visual extent of the view corridor because the western edge of the corridor would continue to be defined by existing trees, bushes and houses. Therefore, as seen from the Mesa Park "benches" area, the proposed project would not substantially reduce or interfere with existing ocean views, and the project's impact to public views of an important visual resource would be **less than significant (Class III).**

Southern Lawn Area. A photo depicting an existing public view towards the ocean as seen from the southern lawn area of La Mesa Park is provided on Figure 5.1-6, and a simulation of post-project development visual conditions is provided on Figure 5.1-7. As depicted by the photosimulation, the proposed residence would have a very minor effect on existing ocean views, and although the structure would be visible from the southern lawn area, it would not dominate or appear to prominently extend into the existing view corridor. Therefore, as seen from the southern lawn area of the park, the proposed residence would result in a **less than significant (Class III)** visual impact to an existing public view of an important visual resource (ocean views).

The determination that the proposed project's current design would not result in a significant impact to ocean views is similar to the analysis conclusion of the original (2007) and revised (2012) Draft EIRs, which concluded that the project's previous design would not result in a significant impact to existing views of important visual resources that are available from the southern lawn area.

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Source: Hochhauser Blatter, 2006

City of Santa Barbara

1837½ El Camino de la Luz

Figure 5.1-4

Existing Conditions: La Mesa Park "Benches" Area

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Source: Peikert Group Architects, 2012

City of Santa Barbara

1837½ El Camino de la Luz

Figure 5.1-5

Proposed Project Photo-Simulation: La Mesa Park "Benches" Area

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Source: Hochhauser Blatter, 2006

City of Santa Barbara

1837½ El Camino de la Luz

Figure 5.1-6

Existing Conditions: La Mesa Park Southern Lawn Area

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Source: Peikert Group Architects, 2012

City of Santa Barbara

1837½ El Camino de la Luz

Figure 5.1-7

Proposed Project Photo-Simulation: La Mesa Park Southern Lawn Area

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Lighthouse Creek Footbridge. A photo depicting an existing public view towards the ocean as seen from the eastern end of the Lighthouse Creek footbridge is provided on Figure 5.1-8, and a simulation of post-project development visual conditions is provided on Figure 5.1-9. As depicted by the photosimulation, the northern and eastern walls of proposed residence would be visible on the western edge of the view corridor that is visible from the eastern end of the bridge.

As shown by Figure 5.1-9, the proposed structure would be seen as a southward extension of the existing residential development located adjacent to the Lighthouse Creek channel, although the proposed residence would appear to be lower in height than the existing houses. A comparison of Figures 5.1-8 and 5.1-9 indicates that the proposed residence would result in a very small loss of existing views of the ocean. In addition, the top of the proposed structure would appear to be located well below the ocean/sky horizon and would not substantially reduce the visual extent of the existing view corridor. Therefore, the proposed project would not substantially reduce or interfere with existing ocean views provided from a viewpoint at the eastern end of the bridge, and the project's impact to public views of an important visual resource would be **less than significant (Class III).**

Meigs Road. Views of the project site that are available from the southbound lane of Meigs Road are limited due to the distance between the project site and the roadway, and also due to intervening vegetation. Views of the project site from Meigs Road are generally similar to those from the southern lawn area of La Mesa Park, although the roadway is approximately 200 feet farther away from the project site. The analysis for the southern lawn area provided above concluded that the proposed project would not result in a significant impact to ocean views, and impacts to ocean views from Meigs Road would be even less noticeable due to the increased distance from the project site. Therefore, the proposed project would result in a **less than significant (Class III)** visual impact to an important public scenic view as seen from Meigs Road.

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Source: Hochhauser Blatter, 2006

City of Santa Barbara

1837½ El Camino de la Luz

Figure 5.1-8

Existing Conditions: Eastern End of the Lighthouse Creek Bridge

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Source: Peikert Group Architects, 2012

City of Santa Barbara

1837½ El Camino de la Luz

Figure 5.1-9

Proposed Project Photo-Simulation: Eastern End of the Lighthouse Creek Bridge

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Other Views. A visual simulation of the previous design of the proposed residence is included in the Revised Initial Study and depicts how the residence would be seen from the beach south of and adjacent to the project property. That simulation indicates that the upper portions of the proposed structure could be partially visible depending upon the viewpoint location on the adjacent beach. However, the visible portions of the structure would be outlined against the sky and would not block an important public scenic view of the Santa Ynez Mountains. The current design of the proposed residence is approximately 10 feet lower in elevation than the former project design, and as a result, the current design would have a reduced impact when compared to what is depicted by the previously prepared simulation. The currently proposed residence would be visible from viewpoints along the beach, however, the project would not result in the loss of a substantial amount of open space or result in grading or vegetation removal that would adversely affect existing views from the beach. In addition, the proposed residence would have size that is similar to or smaller than other ocean front homes in the project area. Also, the proposed project's design must be approved by the City's Single Family Design Board, which would ensure design consistency with other nearby residences that can be seen from the beach. Therefore, the proposed project would result in a **less than significant (Class III)** impact to important public scenic views (i.e., mountain views) that are available from the beach near the project property.

Development of the proposed residence would have the potential to impair existing ocean views that are presently available to the house directly north of the project site. It is likely, however, that ocean views from the interior of the house would continue to be provided to the southeast, and ocean views would continue to be provided from deck areas that extend over Lighthouse Creek. Ocean views that are presently available to the home that is west of and adjacent to the project site would not be affected by the proposed project. Therefore, the proposed project would result in a **less than significant (Class III)** visual impact as seen from private viewing locations in the project area.

Proposed Landscaping**.** The landscape plan for the proposed project (Figure 3.3-8) indicates that five landscape trees would be planted along the northern property line of the project site. Proposed landscaping includes four (4) paperbark (*Melalueuca quinquenervia)* trees adjacent to the northern wall of the proposed residence, and one coast live oak *(Quercus agrifolia)* located near the northwestern corner of the proposed residence.

Paperbark trees can achieve a height of up to 40 feet, and coast live oak trees can reach a mature height in excess of 50 feet. While the proposed trees would make an effective landscape buffer to screen views of the proposed residence, they could also reach mature heights that result in a blockage of existing ocean views as seen from public view points in and around La Mesa Park. Therefore, the proposed landscaping would have the potential to result in a significant visual impact. Landscape-related visual impacts are **potentially significant but mitigable (Class II)** and would be reduced to a less than significant level by proposed mitigation measure AES-2, which requires that the

project use landscape trees that would not reach a mature height that exceeds the height of the proposed residence**.** Landscaping would also be reviewed and approved by the Single Family Design Board in accordance with City ordinance and design guidelines.

Criterion B. *Potential for the project to result in a substantial adverse on-site visual aesthetic change incompatible with the surrounding area.*

The visual context of the project site is a vacant parcel located in a predominantly built-out residential neighborhood. The project site is zoned "E-3/SD-3," which allows the development of single-family residences. Existing residential development in the project area consists of one- and two-story single-family homes that are generally moderate in size. The eastern portion of the project site is presently overgrown with vegetation, which results in the appearance that the project site is part of the open space area provided by the adjacent channel of Lighthouse Creek.

For the comparison of the proposed project to this significance criterion, the project would have the potential to substantially impair the visual context of the area if the proposed development would introduce development features that are incongruous or that seem "out of place" when viewed from surrounding viewing locations. Examples of development that would seem "out of place" may include a proposed land use that has otherwise not been established in the project area, a residence that is substantially larger than other nearby homes, or architectural styles that are not typically found in residential neighborhoods.

The proposed residence is a land use allowed by the existing project site zoning, and the structure would be developed consistent with applicable zoning regulations. The proposed project would result in the development of a new residence on a presently vacant parcel that has residential development adjacent to it to the north and west, and when viewed from the important public view points described and evaluated above (i.e., the "benches" area, southern lawn area of La Mesa Park, and the footbridge over Lighthouse Creek) the proposed new residence and the existing residences on the east side of the project site access driveway would all be visible within the view corridors that provide views of the ocean. Views of the proposed new residence would be consistent with the visual context of the surrounding area and the use of the project site to develop a new residence would be consistent with other land uses adjacent to and in the vicinity of the project site. Based on archive plan review, the proposed residence would be smaller than four of the six residences adjacent to the project site access drive, and the proposed architectural style would be compatible with the surrounding neighborhood. As a result, the proposed project would not substantially impair the visual context of existing important public scenic views and would result in a **less than significant impact (Class III).**

5.1.4 Cumulative Impacts

Cumulative development projects in the vicinity of the 1837½ El Camino de la Luz project site are described on Table 4.3-1, and the locations of the projects are depicted on Figure 4.3.-1. They consist of small- to moderately-sized residential additions and remodels, and one new single-family residence. The project closest to the 1837½ Camino de la Luz project site is the proposed new residence at 1925 El Camino de la Luz (site of a former residence prior to 1978).

Most of the projects in the area would make relatively minor additions to existing structures and would not substantially change the visual character of the project area. These projects, including the proposed residence at 1925 El Camino de la Luz, would not be visible from La Mesa Park and would not affect the important public views potentially affected by development on the proposed project site. Therefore, development in the project area would not result in cumulatively considerable impacts to important public scenic views, and the proposed project would not substantially contribute to a significant cumulative aesthetic impact. The proposed project's contribution to cumulative impacts to visual aesthetics would be **less than significant (Class III)**.

5.1.5 Mitigation Measures and Residual Impacts

Implementation of the following mitigation measures would reduce the aesthetic impacts of the proposed project to a less than significant level.

IMPACT AES-1. The use of bright colors or contrasting combinations of colors would have the potential to degrade important public scenic views.

AES-1. Color Approval. Colors to be used on the exterior of the proposed residence shall be approved by the Single Family Design Board. Exterior colors shall be neutral or earth-tone tones. Subsequent color changes to the residence shall also be approved by the Single Family Design Board.

IMPACT AES-2. Landscaping used at the project site has the potential to obtain a mature height that would result in additional obstruction of important public scenic views.

AES-2. Landscape Plan Compliance. The Owner shall comply with the Landscape Plan approved by the Single Family Design Board (SFDB). Such plan shall not be modified unless prior written approval is obtained from the SFDB. The landscaping on the Real Property shall be provided and maintained in accordance with said landscape plan, including any tree protection measures. If said landscaping is removed for any reason without approval by the SFDB, the owner is responsible for its

immediate replacement. Proposed landscaping trees and shrubs shall consist of drought-tolerant species that when mature will not attain a height that exceeds the height of the proposed residence roof line. The project site property owner shall be responsible for maintaining landscaping in compliance with this requirement over the life of the project.

Proposed mitigation measure BIO-1 (see the Revised Initial Study in Appendix A) provides examples of native plants that may be used for site restoration purposes, including western sycamore and coast live oak. Those tree species, however, would not comply with the requirements of measure AES-2 because they could achieve a mature height that is greater than the height of the proposed residence and could block existing ocean views from public view points in the project area. Proposed mitigation measure BIO-1 as presented in Summary Table 2.3-1 of this EIR has been modified to omit the use of sycamore and oak trees from the suggested plant list. These tree species do not exist on the project site and their elimination from the suggested plant list would not adversely affect the ability to adequately revegetate the project property.

5.2 GEOLOGY

This section provides an evaluation of geologic hazards that have the potential to significantly affect the 1837½ El Camino de la Luz project, and focuses on the potential for the proposed residence to be adversely affected by slope stability impacts. The analysis is based on the results of previous studies of the project site; conclusions of three reports prepared by Dr. William Anikouchine; and two reports prepared by Earth Systems Pacific. The reports prepared by Dr. Anikouchine and Earth Systems Pacific are listed below and are included in the appendices of this EIR. Brief descriptions of each report are also provided below.

- Peer Review of Geologic Analysis for a Project at 1837½ El Camino de la Luz (Anikouchine, 2005). (Exhibit E of the Revised Initial Study, EIR Appendix A)

- Geological Inspection Trench at 1837½ El Camino de la Luz, (Anikouchine, 2009). (EIR Appendix B)

- Geological Investigation of Slope Stability at 1837½ El Camino de la Luz, (Anikouchine, 2011). (EIR Appendix C)

- Ocean Bluff Erosion Retreat Study, Barthels Residence, 1837½ El Camino de la Luz, Santa Barbara, California (Earth Systems Pacific, Revised March 21, 2013). (EIR Appendix D)

- Canyon Slope Stability Analysis and Erosion Study, Barthels Residence, 1837½ El Camino de la Luz, Santa Barbara, California (Earth Systems Pacific, Revised July 9, 2013). (EIR Appendix E)

The 2005 Anikouchine report provided a review and summary of 17 reports and other correspondence regarding previous geological investigations conducted for the proposed project and project site. The 2005 report also provided an analysis of existing slope stability conditions at the project site. As described in more detail below, the 2005 report concluded that the slope in the immediate area of the project site is stable. The 2005 report is provided in its entirety as an attachment to the Revised Initial Study (2005) prepared for the proposed project (Appendix A).

The 2009 Anikouchine report was prepared to determine if a previously reported bedding plane fracture with the potential to result in significant slope stability impacts actually existed on the project site. As described in more detail below, the 2009 report concluded that the previously reported bedding plane fracture does not exist on the project site. The entire 2009 report is provided in Appendix B of this Revised EIR.

The 2011 Anikouchine report was prepared to evaluate the potential for the proposed project to be adversely affected by slope stability impacts. As described in

more detail below, the 2011 report concluded that the project site would be stable after the development of the proposed project, and that although unlikely to occur, potentially significant slope stability impacts that could result from excessive increases in groundwater levels beneath the project could be reduced to a less than significant level with the implementation of a proposed mitigation measure to provide an adequate storm water drainage system on the project site. The entire 2011 report is provided in Appendix C of this Revised EIR.

The March 2013, Earth Systems Pacific report identified a revised location for the top of the coastal bluff at the project site, and also evaluated the rate of bluff retreat at the project site. As described in more detail below, the revised top of bluff location is consistent with top of bluff location identified by public comments submitted on previous versions of this EIR. The evaluation of bluff retreat rates at the project site was prepared using previous geologic studies, aerial photographs, and digital technology. The evaluation of bluff retreat rates determined that the coastal bluff at the project site is retreating (moving landward) at an average rate that is lower than what has been reported by previous studies. (Appendix D)

The July 2013, Earth Systems Pacific report identified a revised location for the top of the Lighthouse Creek canyon slope on the project site, and evaluated the stability and erosion potential of the creek canyon slope on the project site. The evaluation of the stability of the creek canyon slope was based on a field reconnaissance, subsurface exploration, laboratory testing of soil samples, and a review of aerial photographs. City of Santa Barbara staff concur with the identified top of canyon slope, and California Coastal Commission geologist Mark Johnsson (2013) has also concurred with the location of the top of the canyon slope. The evaluation of the creek canyon slope determined that bedrock and soil comprising the slope are stable under both static conditions and earthquake conditions. (Appendix E)

5.2.1 Setting

Site Conditions. The topography of the 23,885 square foot project parcel varies substantially and includes an east-west trending coastal bluff adjacent to the Pacific Ocean, a north-south trending canyon slope that forms the western bank of Lighthouse Creek, and a relatively level area in the northwestern portion of the project parcel. The top of the coastal bluff is approximately 105 feet above sea level, and the top of the Lighthouse Creek canyon slope is at an elevation of approximately 109 feet above sea level. The elevation of the proposed building site varies between approximately 112 feet above sea level in the northwest corner and approximately 95 feet in the southeast corner. Lighthouse Creek is a small stream that extends southward from an area south of Cliff Drive and discharges to the Pacific Ocean down a steep slope that cuts the ocean bluff face southeast of the project site. The proposed building site is approximately 25 feet above the Lighthouse Creek channel.

The proposed building site is located in the northwestern portion of the project parcel. The western and central portions of the building site are level and have been paved with asphalt. The eastern portion of the building site is located on a slope that is the upper portion of the canyon that contains Lighthouse Creek. The portion of the creek canyon slope located on the building site has an average gradient of approximately 50 percent. Another level area approximately 600 square feet in size is located southeast and adjacent to the proposed building site, and would be used to provide required open yard area to serve the proposed residence. The level portion of the proposed building site and the adjacent yard area were graded in the early 1950's.

The project site is underlain by the Monterey Shale formation. This formation is often thinly bedded, highly fractured and susceptible to wave-caused erosion. In addition, bedding planes in the formation that slope seaward may be prone to block sliding. However, as described in more detail below, the Monterey formation at the project site has characteristics that are more resistant to erosion and the orientation of bedding planes are such that a block slide type of sea cliff failure is not the type of failure most likely to affect the project site.

The geology of the project site is described as artificial fill and terrace sand lying upon shale and claystone bedrock. The sand is reported to underlie the paved portion of the project site and to be five to six feet thick. An angular unconformity (a type of contact between rock layers) exists at the mouth of the Lighthouse Creek channel in the southwest corner of the project parcel. This feature separates the steep dipping strata to the east of the project site from the more gently dipping strata found along the beachfront of the project parcel.

On February 14, 1978, a large landslide, known as the El Camino de la Luz slide, occurred along the coastal bluff west of the project site. The slide affected an area approximately three acres in size and destroyed two homes. The eastern edge of the main portion of the slide was approximately 200 feet west of the project parcel. The probable cause of the slide was determined to be the seaward component of dip of the Monterey formation strata and surface water that was allowed to permeate the ground surface in the slide area. The added weight of the water and the lubrication it provided caused the shear strength of the weakest bedding plane to be exceeded and fail (Anikouchine, 2005).

Previous Geologic Investigations. A peer review of 17 separate reports that evaluated the geologic conditions at and adjacent to the project site was conducted by Dr. William Anikouchine (2005). The project-related geologic reports were prepared between 1971 and 2002 by ten different consulting firms and consulting geologists. Based on the review of the various geologic reports and field investigations, Dr. Anikouchine concluded that the reports prepared by CFG Consultants (1996) and Fisher (2001, 2002) adequately characterized the geological conditions at the project site.

Coastal Bluff Characteristics. The coastal bluff on the southern side of the project property has a compound slope that is generally convex upward. The lower

portion of the bluff has a gradient of 65 to 75 degrees, while the upper portion of the bluff has a gradient of approximately 35 degrees. Anikouchine described the lower portion of the bluff as the "oceanographic bluff edge," which is the most landward point where sea waves have a direct effect on bluff erosion. Monterey Formation bedrock in the lower portions of the bluff dip[1] 25 to 50 degrees to the southwest, and trend sub-parallel along the bluff face. Fisher (2001) stated "rocks comprising the seacliff at El Camino de la Luz are hard, highly siliceous and more resistant to erosion than most locations along the Santa Barbara Coastline."

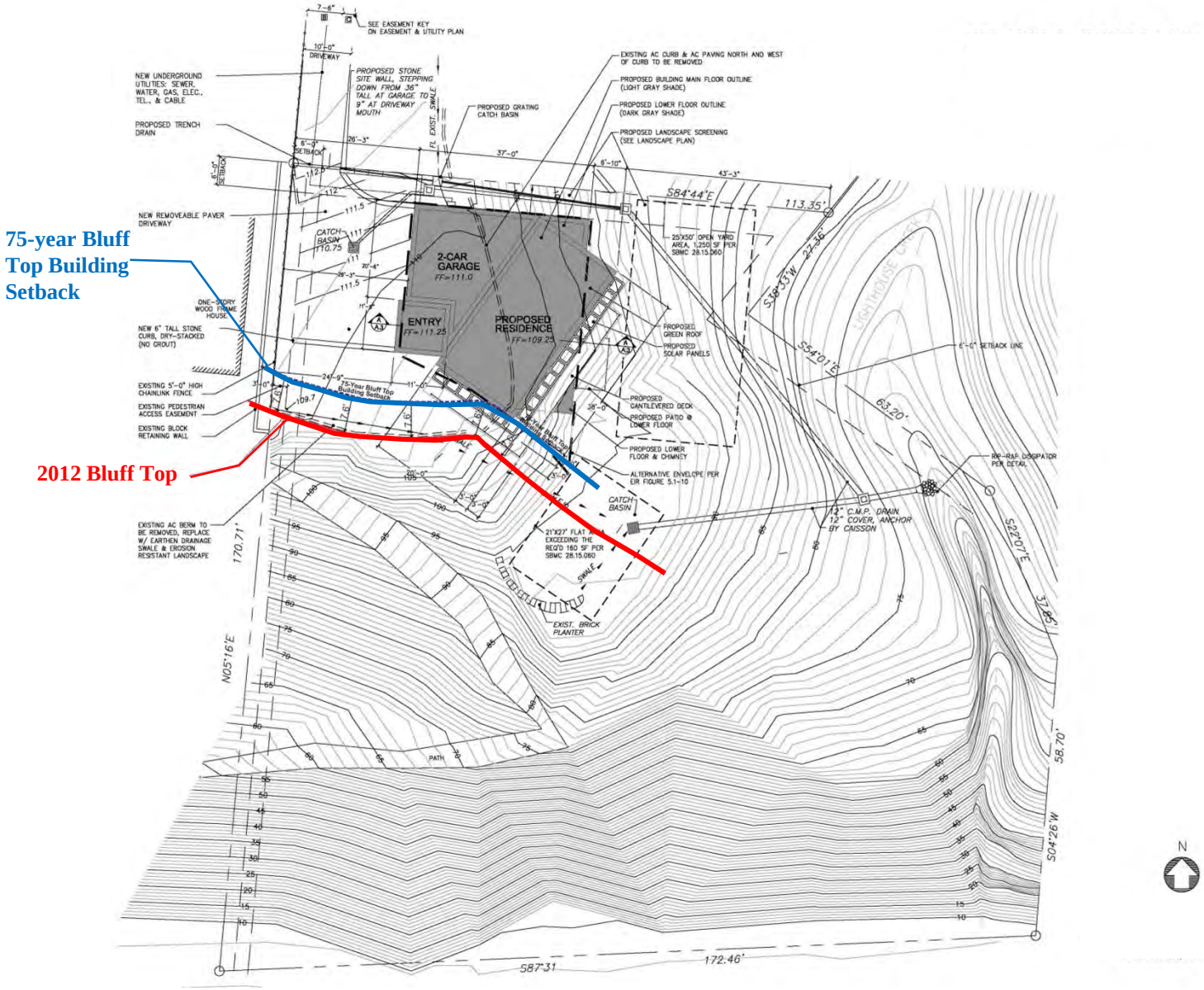
Top of Bluff Designation. The California Coastal Commission's definition of "bluff edge" states: *"In cases where the top edge of the cliff is rounded away from the face of the cliff as a result of erosional processes related to the presence of the steep cliff face, the bluff line or edge shall be defined as that point nearest the cliff beyond which the downward gradient of the surface increases more or less continuously until it reaches the general gradient of the cliff. In a case where there is a step-like feature at the top of the cliff face, the landward edge of the topmost riser shall be taken to the cliff edge…*"(California Code of Regulations, Title 14, Section 13577(h)(2). Based on the convex upward configuration of the bluff, the top of bluff was previously identified as being located where the previously described break in slope gradient occurs between the upper and lower portions of the bluff (Fisher, 2001, and Anikouchine, 2005 and 2009). Based on previous interpretations, the bluff edge was identified as being located approximately 25-50 feet south of the proposed project building site.

The location of the top of bluff was re-evaluated by Earth Systems Pacific (2013a) and determined to be located south of and adjacent to the proposed building pad, generally following the location of an existing concrete curb and drainage swale. At the southeastern corner of the paved area, the bluff top follows a moderately broad ridgeline that trends down to the mouth of Lighthouse Creek. This top of bluff location is consistent with the Coastal Commission definition that refers to the "landward edge of the topmost riser." The revised top of bluff location, and its location in relation to the proposed residence, is depicted on Figure 5.2-1.

Project Site Coastal Bluff Retreat. Coastal bluff retreat is an erosion- and landslide-related hazard that affects the bluffs along the City's coast. Coastal bluff retreat is a continual, natural process caused by both marine and terrestrial erosion process that cause the bluffs to "retreat" or move landward. The bluff environment is very dynamic and there can be great variation in the composition, structure and strength of the rocks and soil that form the bluffs.

The City of Santa Barbara Safety Element (2013) indicates that several studies of sea cliff retreat rates have been conducted in the Santa Barbara area. One study evaluated erosion rates over a 70-year period and determined that the highest retreat rate was approximately 12 inches per year, while the average erosion rate is eight inches per year. The estimated rates of sea cliff retreat vary due to local differences in the composition

[1] The angle the strata forms with a horizontal plane.



Source: Earth Systems, 2013

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Figure 5.2-1

Revised Top of Bluff Location

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and structure of the cliffs, the effects of bluff-top development, and barriers located at the base of the cliffs such as cobbles, boulders, or rip rap.

City LCP, Safety Element, and Master Environmental Assessment policies and procedures include requirements for conducting site-specific geologic investigations of seacliff retreat rates. Several studies have been conducted at the El Camino de la Luz project site to estimate the rate at which the top of the bluff at the project site erodes landward (*i.e.*, the rate of bluff retreat). The most recent evaluation of project site bluff retreat rates was conducted by Earth Systems Pacific (2013a). Information provided by the Earth Systems Pacific report is summarized below.

K-C Geotechnical (1987) indicated a retreat rate of six to eight inches per year at the project site based on a report by Thomas W. Dibble Jr. (1986), which was prepared for the parcel at 1837 El Camino de la Luz. Norris (1988) estimated a rate of four inches of bluff retreat per year at the project site based on the review of aerial photographs taken in 1943, 1954 and 1986. CGG Consultants (1996) reviewed aerial photographs dated 1928, 1938, 1947, 1954, 1959, 1969, 1972 and 1995, and concluded that the top of the bluff at the paved parking area had not changed in over 65 years, and estimated the bluff retreat rate to be "less than four inches per year." Fisher (2001) reported that a site 0.56 miles to the west of the project site (station WHEELER) had zero inches of retreat since 1927.

The Earth Systems Pacific evaluation of the rate of bluff retreat at the project site was based upon a comparison of the conditions shown on a 1953 aerial photograph and a current topographic map, with stereographic interpretation of the 1953 photograph performed using manual and digital/computer stereo-scope techniques. The results were then geo-registered and plotted onto a 2010 digital Las Mesa ortho photograph using the computer program Global Mapper. This methodology resulted in a digitally-aided plot that is more accurate than previous bluff retreat analyses based on manual methods. The new analysis determined that the maximum bluff erosion retreat over the 59-year period between 1953 and 2012 was five feet, or an average rate of 1.02 inches of retreat per year.

Top of Bluff Setback Requirements. Coastal Act policies and regulations, and City LCP and Safety Element policies address top of bluff setbacks. The LCP policy (Seacliff Retreat Section) states "New development on the top of a cliff shall be placed at such distance away from the edge of the cliff that normal rates of erosion and cliff material loss will not seriously affect the structure during its expected lifetime." A 75-year timeframe was used to evaluate the effects of bluff retreat because this is the period of time generally used by the City as the expected design life of new residential structures.

Lighthouse Creek Canyon Slope Characteristics. Lighthouse Creek in the vicinity of the project site is incised into a canyon that begins in La Mesa Park and

terminates at the ocean bluff. The western bank of the canyon is located on the eastern portion of the project property. On the project site, the western stream canyon bank is approximately 25-35 feet in height, with an average gradient of 1.75:1 (horizontal:vertical) in the upper half of the slope. The lower half of the slope flattens to a 3.5:1 gradient.

Site investigation borings determined that four to five feet of fill soil have been placed on the upper portion of the canyon slope. The locations of the borings are depicted on Figure 5.2-2. The fill soil is underlain by moderately hard, fractured, weathered, interbedded shale and claystone bedrock of the Monterey Formation. No evidence of gross slope instability was observed in the on-site canyon slope during the site investigation. The Monterey Formation bedrock at the site is considered to be grossly stable due to its favorable cross bedding strength characteristics and its bedding orientations of 28 to 34 degrees dipping into the slope face. Additional information regarding the stability of the Lighthouse Creek canyon slope on the project site is provided in the "Landslide Hazards" subsection below. Figure 5.2-3 provides a cross section drawing of the project site canyon slope, and depicts the orientation of the bedding planes and the location of fill soil that has been placed on the slope.

Erosion along Lighthouse Creek appears to be limited to areas adjacent to the active creek channel. No defined eroded banks were observed within the bottom of the creek adjacent to the proposed building area. In addition, no significant erosion has occurred along the top edge of the canyon slope during the last 60 years. In the vicinity of the creek mouth, the channel is incised to a depth of approximately 10 feet. The incised erosion in this area may have been caused by drainage flowing from a 24-inch culvert that discharges surface drainage from the Coastguard Lighthouse area on the east side of the creek (Earth Systems Pacific, 2013b).

<u>Top of Canyon Slope</u>. The top of bank for Lighthouse Creek at the project site was previously identified as being located where the gradient of the western creek bank changes from approximately 1.75:1 (horizontal:vertical) to 3.5:1. Based on this interpretation, the top of bank was previously interpreted to be approximately 50 feet east of the proposed building site.

City of Santa Barbara Zoning Ordinance Section 28.87.250 (Development Along Creeks) defines "top of bank" as "*the line formed by the intersection of the general plane of the sloping side of the watercourse with the general plane of the upper generally level ground along the watercourse*." Based on this definition, the top of the canyon that contains Lighthouse Creek on the project site is generally located east of and adjacent to the existing asphalt pad that has been installed on the relatively level portion of project site. The revised top of canyon slope location and its location in relation to the proposed residence is depicted on EIR Figure 5.2-2. As depicted on Figure 5.2-2, the identified top of slope extends roughly north to south across the central portion of the proposed building area.

Source: Earth Systems, 2013

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Figure 5.2-2

Canyon Top of Slope and Borehole Locations

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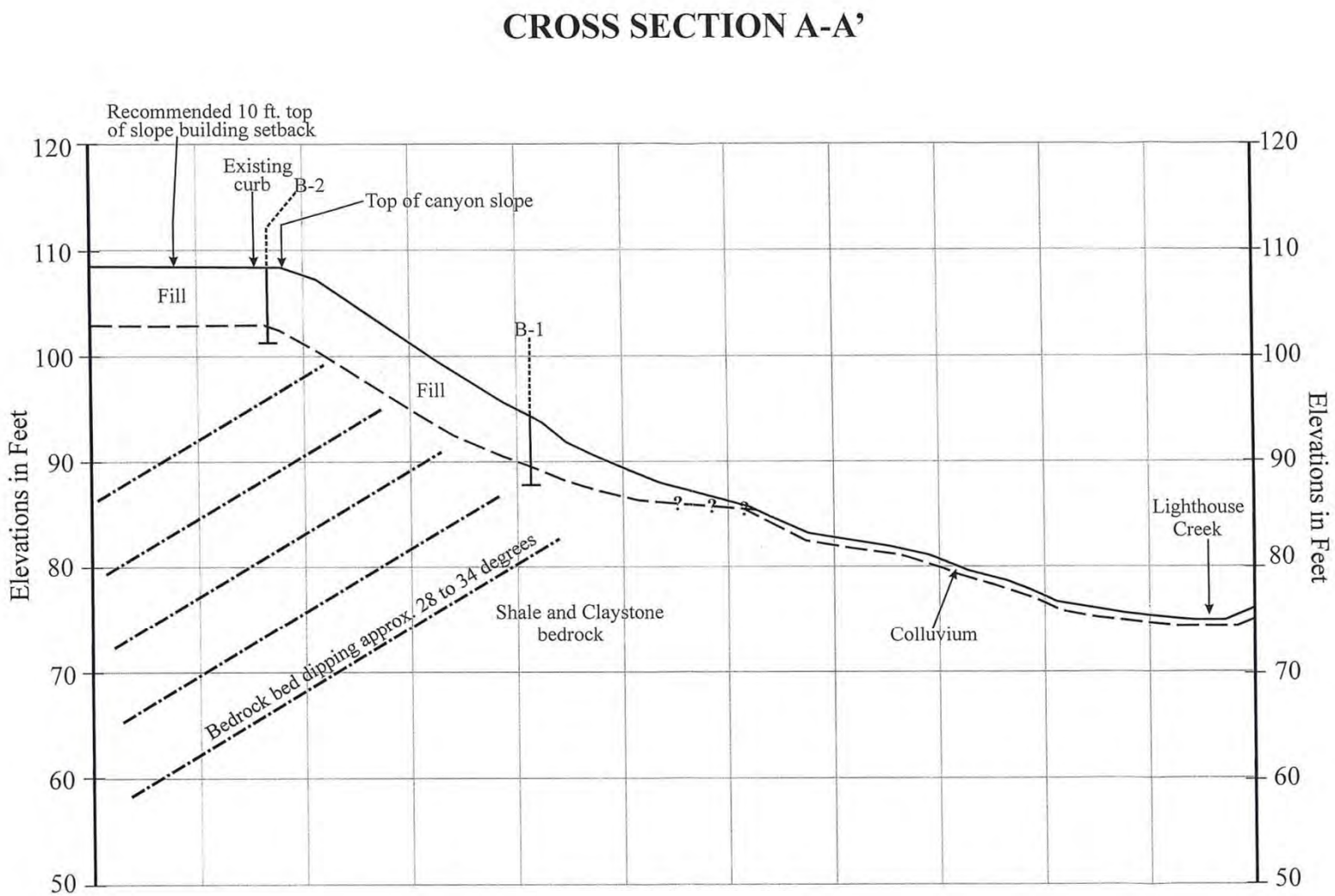

Source: Earth Systems, 2013

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Figure 5.2-3

Project Site Geology Cross Section

Landslide Hazards. Landslide conditions associated with the on-site coastal bluff and Lighthouse Creek canyon slope are described below.

Coastal Bluff. Landslides affecting the coastal bluff on the project parcel are reported to have occurred in the 1970's. Soil slumps have also occurred near the edge of the cliff. The scarp left by one of these slumps is still visible just below the base of the wooden stairs leading to the concrete-lined swale in western portion of the project site. Another landslide at 1839 El Camino de la Luz, west of the proposed project site, occurred in November 1995. That slide did not alter the form of the upper edge of the cliff.

Anikouchine, along with others, identified evidence of a large landslide that affected the coastal bluff in the southeast corner of the project property. The direction of movement for this slide was to the southwest, nearly perpendicular to the dip direction of the Monterey formation strata. This failure might have been exacerbated by the removal of lateral support by erosion in Lighthouse Creek.

Soil creep (the slow down slope movement of soil) is reported to be a minor concern at the project site. Previous geologic investigations of the project site suggested that the use of caissons set into the shale bedrock and the control of runoff water would minimize the effects of soil creep.

The peer review of the previous geologic investigations conducted by Anikouchine (2005) noted several disagreements between the various reports regarding conclusions pertaining to the geologic conditions of the project site. These disagreements included discrepancies regarding the reporting of the orientation (strike and dip) of the Monterey formation strata at the project site and conclusions regarding the ability of the Monterey formation at the project site to resist erosion. Another area of disagreement is in regard to the presence of an open bedding plane fissure on the project site. Smith (1980) indicated that he observed the fissure from the beach and projected it northward. The building envelope recommended by Smith is located east of the fissure where the bedrock was found to be "extremely competent and of high strength." CFG Consultants (1996) indicates that the "open bedding plane fracture" is actually a one-inch thick asphaltum bed. In his review of these reports, Anikouchine concurred with the findings by CFG Consultants, except in the matter of the existence of an open bedding plane fracture versus an asphaltum bed. Heavy vegetation prohibited examination of the ground surface at the building site, precluding the ability to confirm previous determinations.

The original Draft and Proposed Final EIRs prepared for the proposed project recommended the implementation of a mitigation measures to address the issue of the previously reported bedding plane fracture on the project site. However, in their consideration of the original Proposed Final EIR, the Planning Commission requested that additional information regarding the presence or absence of the fracture be included in the EIR, and if necessary, an assessment of the potential for the fracture to result in a

significant project-related slope stability impact also be addressed. Additional information regarding the suspected bedding plane fracture and the potential for the project site to be adversely affected by slope stability impacts is provided in Section 5.2.3 below.

Lighthouse Creek Canyon Slope. The Monterey Formation bedrock that comprises the creek canyon's western slope is considered to be grossly stable due to its favorable cross bedding strength characteristics and its bedding orientation dipping into the slope face. The colluvial soils (material that has washed down from the slopes above) located on the lower half of the canyon slope and in the bottom of the creek are expected to be stable due to their location on the flatter portion of the slope and because the soil is only one to two feet thick (Earth Systems Pacific, 2013b). Fill material, consisting of clayey sand and gravel, was placed on the upper portion of the creek channel bank in the 1950's, and the eastern portion of the proposed residence would be constructed over this material. Information regarding a site-specific evaluation of the stability of the fill soil is provided in Section 5.2.3 below.

5.2.2 Impact Significance Criteria

A project would have the potential to cause a significant geologic hazard if it would result in:

A. Exposure to or creation of unstable earth conditions due to seismic conditions, such as earthquake faulting, groundshaking, liquefaction, or seismic sea waves.

B. Exposure to or creation of unstable earth conditions due to geologic or soil conditions, such as landslides, settlement, or expansive, collapsible/compressible, or expansive soils.

C. Extensive grading on slopes exceeding 20%, substantial topographic change, destruction of unique physical features; substantial erosion of soils, overburden, or sedimentation of a water course.

Criterion A. Potential impacts related to seismic hazards under criterion "A" were evaluated by the Revised Initial Study prepared for the proposed project (ENV2002-00214). That evaluation concluded:

> "The property is not subject to fault rupture, seiche, or tsunami, and has minimal liquefaction potential because there are no known faults on the project site, the site is not near an enclosed body of water that could subject it to a seiche, soils at the site are not saturated sand (necessary prerequisites for liquefaction) and the site is well above the tsunami run-up area. Therefore, there would be no impacts from seiche, fault rupture, tsunami, or liquefaction. Future development on the site would be subject to requirements of the Uniform Building Code, which includes provisions to ensure that proposed structures withstand the effects of ground shaking, resulting in a *less than significant impact*."

Therefore, potential seismic hazard impacts of the proposed project would not be significant and no additional evaluation of significance criterion "A" is required.

5.2.3 Impact Evaluation

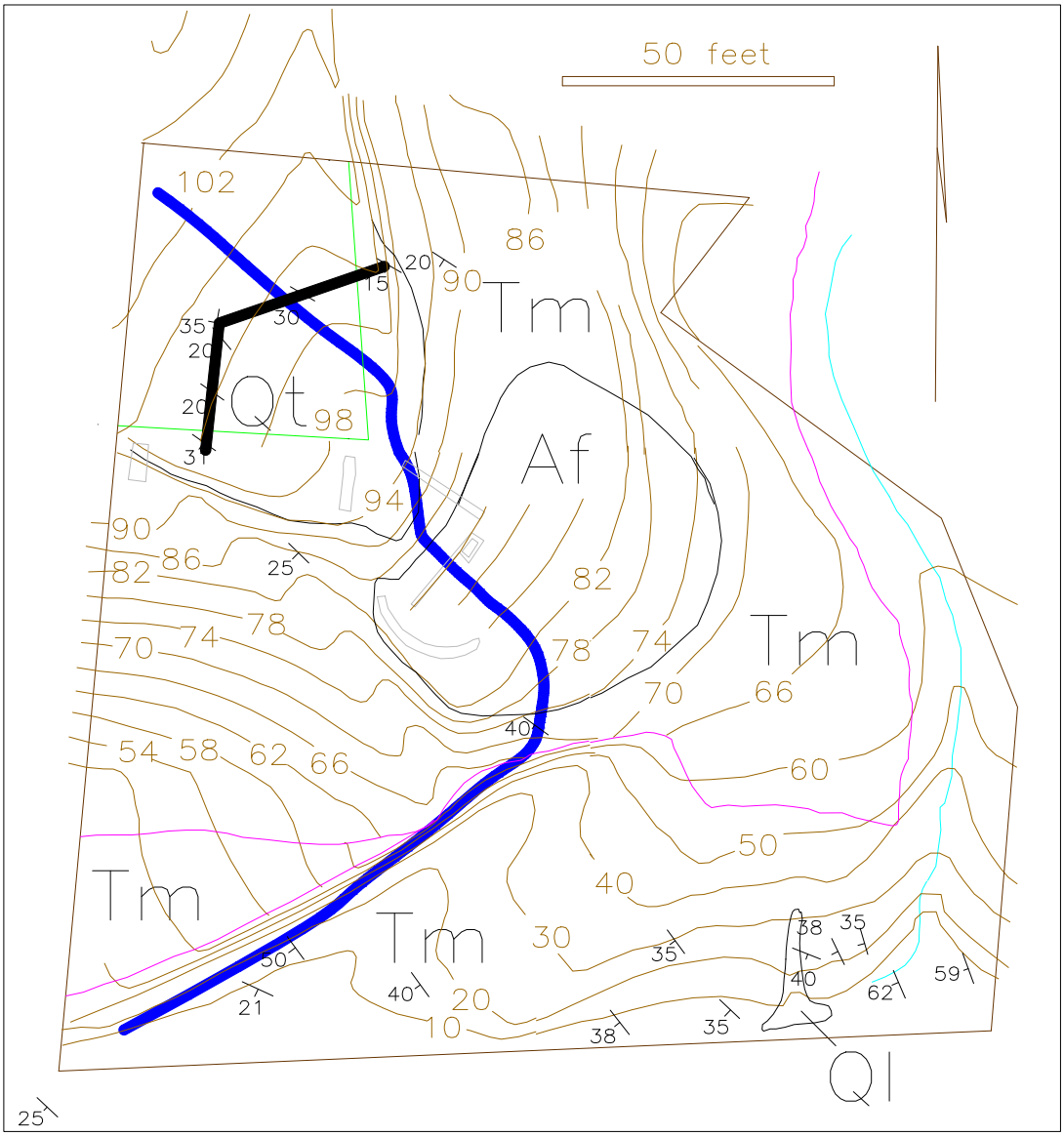
Criterion B. *Exposure to or creation of unstable earth conditions due to geologic or soil conditions, such as landslides, settlement, or expansive, collapsible/compressible, or expansive soils.*

Coastal Bluff Slope Stability

Bedding Plane Fracture Investigation. In response to direction provided by the Planning Commission, an additional geological investigation of the project site was conducted in 2009 by Dr. Anikouchine to determine if the suspected bedding plane fracture that had been reported by others existed on the project site. It was important to determine if the fracture is present because previous reviews of the project site geology indicated that the fracture could be a plane of weakness along which a block slide slope failure could occur, and that such a block slide could involve movement of all of the material west of the fracture, potentially resulting in a significant impact to the proposed project.

To confirm the presence or absence of the bedding plane fracture, a geologic inspection trench was developed on the project site. The location of the trench is depicted on Figure 5.2-4. The trench was excavated using a backhoe and consisted of two segments: an east-west segment 45 feet long, and a north-south segment 31 feet long. Both segments were approximately 2.5 feet wide and eight feet deep. The trench was excavated to a depth that encountered a subcrop of Monterey formation strata. The walls of the trench were inspected and mapped, and rock samples were collected from the trench for laboratory testing. Additional information regarding the characteristics of rock and soil observed in the trench is provided in Appendix B.

Inspection of the trench concluded that there was no evidence of the suspected bedding plane fracture. Therefore, the proposed building site would not be affected by the type of block slide slope failure previously described by other investigators. No springs or shallow groundwater were encountered in the trench, which indicates that groundwater levels are not located near the ground surface and it is unlikely that the project site would be affected by liquefaction.



Map of the parcel at 1837½ Camino de la Luz. The position and orientation of the geologic exploratory trench is shown by the heavy black line. The trench is in two segments. The east-west segment is 45 feet long. The north-south segment is 31 feet long. Both segments are approximately 2½ feet wide by 8 feet deep. The heavy blue line marks the expected position of the subcrop of the Monterey formation bedding plane that was encountered at the bottom of the trench.

Source: Anikouchine, 2009

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Figure 5.2-4

Project Site Geologic Exploration Trench

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As part of the 2009 site investigation, the rock strata at the base of the coastal bluff where the open bedding plane fracture was reported to exist were inspected. It was observed that a seam of fissle (capable of being split along the bedding planes) shale approximately 1.5 inches thick was interbedded between strata of thick marl (calcareous and siliceous shale). The marl is more resistant to wave erosion than the shale, and as a result, the shale strata had been scoured out to a depth of approximately one inch. Based on this evidence, it appears that the wave scour of the interbedded shale had been misinterpreted as an open fracture or a petroliferous seam by previous investigators.

The geologic inspection trench was excavated, inspected and backfilled in a single day. The soil excavated from the trench was placed back into the trench and compacted to approximately 95 percent relative compaction. The trench area was replanted with the vegetation that had been removed from the east and south ends of the trench segments, and other portions of the trench were repaved with asphalt, similar to pre-inspection conditions. Curbs that were disturbed by the trenching process were reconstructed with concrete.

The 2009 site investigation concluded that strata under the project site dip southward and that the strike (the compass direction at a right angle to the dip) of the strata is not parallel to the east-west trend of the toe of the coastal bluff. Due to this orientation, the rock strata that form the coastal bluff at the project site are buttressed to west. Conditions similar to this have resulted in failures of the coastal bluff elsewhere along the shoreline in the project area. The 2009 site investigation concluded that additional analysis would be required to evaluate the slope stability of the project site.

As recommended by the 2009 geological investigation, an additional slope stability analysis of the project site was conducted by Dr. Anikouchine in 2011. The results of that study are summarized below and the complete report is provided in EIR Appendix C.

<u>Additional Slope Stability Analysis (2011)</u>. As part of his review of the proposed project conducted in 2005, Dr. Anikouchine evaluated the stability of the project site bluff. That analysis evaluated the overall stability of the slope based on its topographic profile, bedding plane orientation, shear strength characteristics of the Monterey formation, and other factors. The evaluation indicated that the entire slope of undisturbed Monterey shale is stable under conditions of a severe earthquake. The results of the 2005 slope stability analysis are attached to the Revised Initial Study prepared for the proposed project (Appendix A). The 2005 slope stability analysis concluded that the project site bluff was stable, however, site-specific data regarding the shear strength and other characteristics of rocks on the project site were not available when the analysis was prepared.

In response to the recommendation provided by Dr. Anikouchine in his 2009 report, an additional slope stability evaluation of the project site was completed in 2011. The objective of the 2011 slope stability analysis was to supplement the previous slope

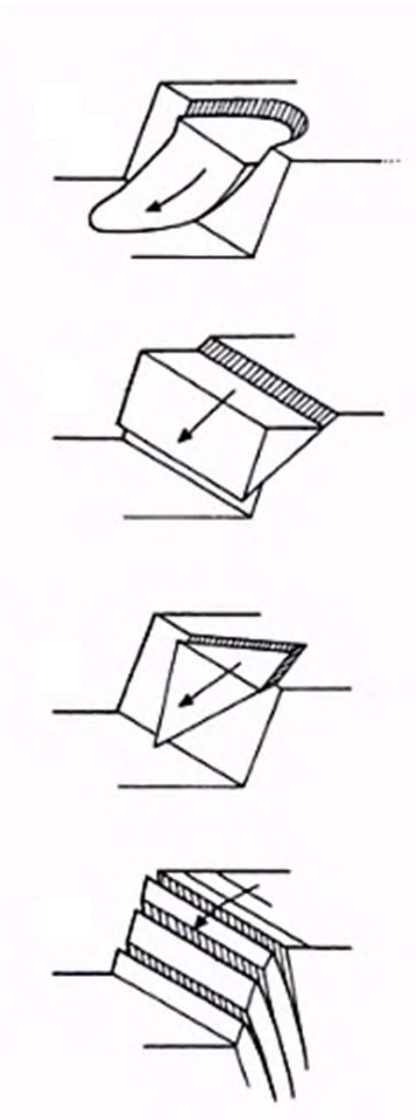
stability evaluation by using site-specific laboratory testing data obtained from rock samples collected during the 2009 site investigation. The 2011 analysis evaluated the project site conditions to determine the type of slope failure mechanisms that could affect the project site, and based on the results of that analysis, evaluated the likelihood for a slope failure to occur. Four potential types of slope movement were evaluated:

- A plane failure down a single bedding plane.
- A wedge-type failure on two intersecting planes, such as a bedding plan and a fracture.
- A toppling failure of nearly vertical beds or jointed slabs of bedrock.
- A circular failure where only unconsolidated sediment or highly fractured rock form the bluff.

Each of the slope movement mechanisms described above have occurred in the Santa Barbara County coastal bluffs and, the type of rock movement associated with each type of failure mechanism is depicted graphically on Figure 5.2-5.

The 2011 slope stability evaluation included an inspection of the project site and surrounding bluffs to assess the following conditions that could contribute to slope instability:

- The attitude of the Monterey formation strata in the bluff face and on the wave-cut platform fronting the bluff at the project parcel.
- Persistent fractures located in the bluff or wave-cut beach terrace.
- Evidence of previous slope failures in the bluff located at the project site and near the project site.
- Bedrock exposures were inspected for asperities in the bedding planes and in fracture surfaces. Asperities are irregularities in the bedding planes such as roughness, which can be measured in millimeters; and waviness, which can be measured in inches or feet.



Source: Modified from Anikouchine, 2011

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Figure 5.2-5

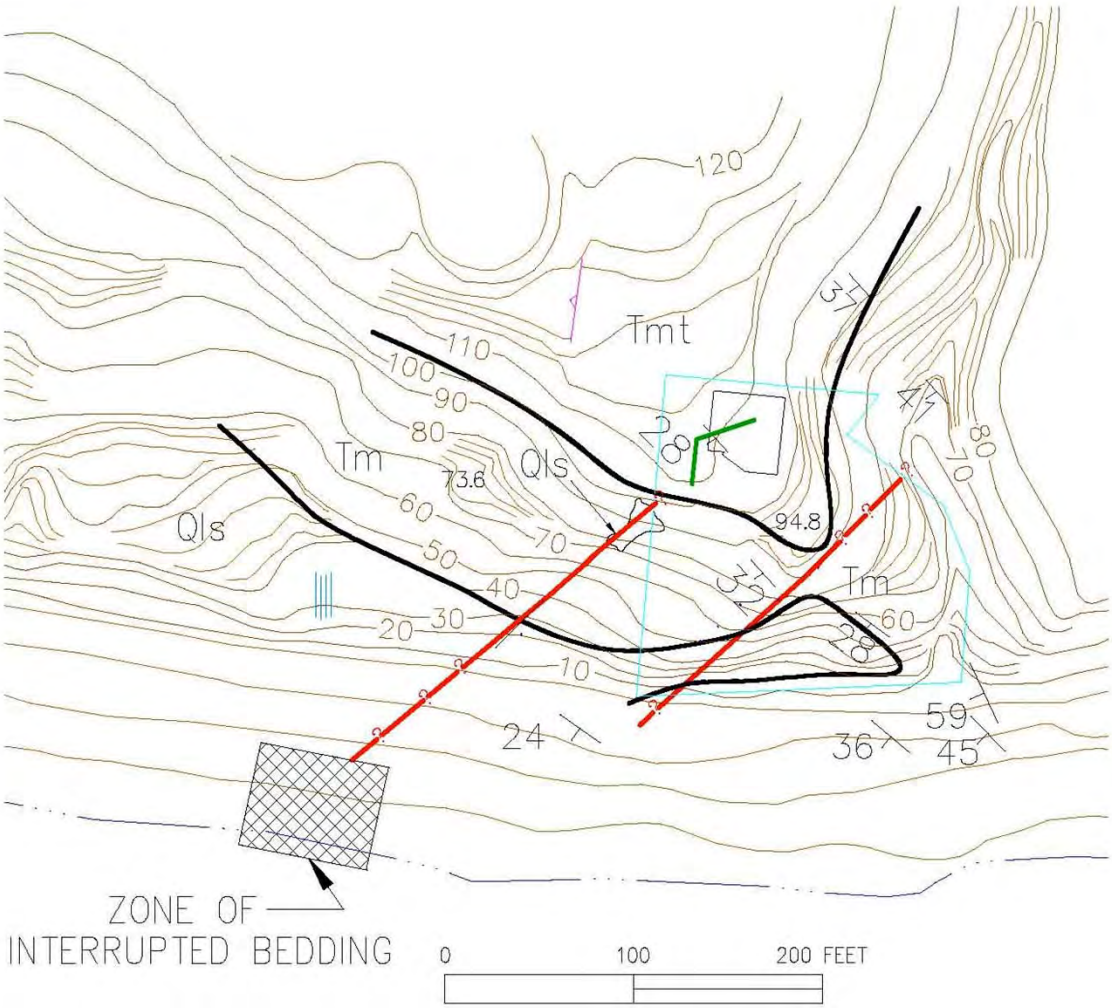
Generalized Types of Slope Failures

The 2011 slope stability analysis also considered the effects of placing additional weight (a residential structure) on the project site. The 2011 slope stability analysis evaluated existing and proposed project site conditions to derive a slope stability "factor of safety." A factor of safety less than 1.0 indicates unstable conditions, while a factor of safety greater than 1.5 indicates stable slope conditions under static conditions. A factor of safety between 1.0 and 1.5 indicates "metastable" conditions, or stable provided the slope is subjected to no more than small disturbances. A factor of safety of 1.5 or greater under static conditions is generally required for a project site to be considered suitable for a proposed development and the issuance of a building permit. A factor of safety of 1.1 or greater is generally required for the project site to be considered stable during an earthquake (pseudo-static conditions).

Geologic conditions at and adjacent to the project site pertinent to the evaluation of potential slope stability impacts are depicted and described on Figure 5.2-6. In summary, the 2011 slope stability analysis identified two prominent fractures cutting the bluff in the study area: one of the fractures is located on the project site; the second fracture is visible in an area to the west of the project parcel and may also extend onto the project site. It is possible that a zone of interrupted bedding that was observed on the beach west of the project site is a seaward extension of the fracture that was identified to the west of the project site.

*Plane Failure***.** The 2011 slope stability analysis evaluated the potential for the project site to be affected by a plane-type slope failure. That analysis evaluated factors that could result in a plane failure, including bedding plane orientation (strike and dip), topography of the project site and surrounding areas, characteristics of on-site bedding planes (e.g., rock material type and asperities), and data regarding the characteristics of the rock formations that were obtained from samples taken from the investigation trench developed on the site in 2009. The analysis also included an estimate of the additional weight that would be placed on the bluff by the proposed project, and evaluated the slope stability impacts of an earthquake (pseudo-static analysis). The analysis of these conditions concluded that the project site bluff would be stable after the development of a residence on the project site and during a seismic event.

Wedge Failure. Figure 5.2-7 depicts the proposed project site, the area approximately 600 feet west of the project site, and the outline of recent and historic landslides that have occurred in the project area. The area affected by the 1978 El Camino de la Luz slide is outlined in the central portion of the figure. The ancient



Topographic map showing geological data used in the assessment of the potential for slope failure at 1837½ Camino de la Luz. The parcel boundary is outlined with a thin cyan line. The heavy black lines are contacts between relatively undisturbed Monterey formation beds (Tm), the unconsolidated materials capping the elevated marine terrace (Tmt), and landslide debris (Qls). The heavy red lines mark the location of fractures seen cutting the bluff. They are dashed and queried where uncertain. Bedding attitudes are shown by strike and dip symbols and dip values in degrees. The light blue lines are drainage tubes extending towards the beach. The approximate building footprint is outlined with a thin black line. The geologic exploration trench is shown by a heavy green line.

Source: Modified from Anikouchine, 2011

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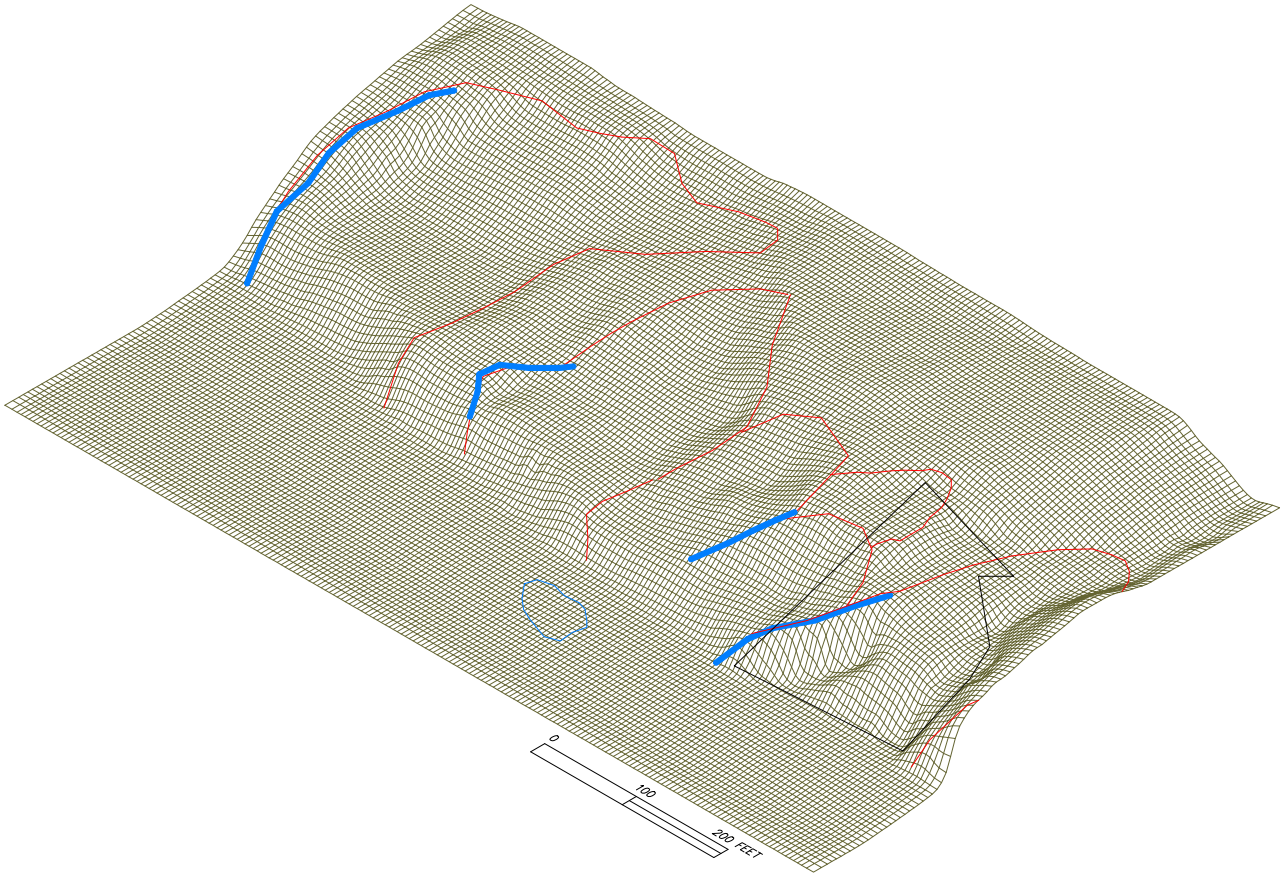

Isometric representation of the coast from Lighthouse Creek to about Oliver Street viewed toward the northwest. The project parcel boundary is shown by the black outline in the lower right corner of the figure. The lowest plane represents sea level. North is parallel to the short axis of the lower plane. The mesh size is 5 feet. The landslide features are shown as red lines and include the Camino de la Luz landslide of February 14, 1978, which lies west of the zone of interrupted bedding is indicated by the closed blue figure on the beach. The heavy blue lines represent steep bluffs that might be fracture planes.

Source: Modified from Anikouchine, 2011

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slide on the southeast portion of the project parcel is depicted on the right side of the figure. Steep bluffs are depicted on the Figure by blue lines. The steep bluffs are likely the result of slope failures caused, in part, by fractures on the west side of individual wedge-type slope failures.

Based on the geological conditions of the project site and surrounding area, the 2011 slope stability analysis concluded that a wedge-type failure would be the type of slope movement most likely to affect the project parcel. The ancient landslide in the southeast corner of the project parcel and the El Camino de la Luz slide of 1978 also appear to be wedge-type slope failures.

The fracture depicted on Figure 5.2-6 as being located just west of the project parcel has the potential to cause a wedge-type slope failure, similar to other landslides that have occurred in the project area. A wedge-type failure affecting the project site would most likely occur at the intersection of a bedding plane having the least shear strength on the eastern side of the project site and the fracture identified west of the site (refer to Figure 5.2-8). The 2011 slope stability analysis evaluated the fractures located on and near the project site and assessed the potential for those fractures to result in a wedge-type failure. That analysis determined that after the implementation of the proposed project, the project site coastal bluff would have a slope stability factor of safety of 2.6, which indicates stable slope conditions. Therefore, the fractures that have been identified on and near the project site would not result in a significant slope stability impact.

The wedge failure slope stability analysis for the project site was repeated to evaluate what effects rising groundwater levels caused by winter storms may have on project site slope stability conditions. This additional analysis was conducted to provide a very conservative evaluation of potential slope stability impacts, and because it is thought that the large El Camino de la Luz slide of 1978 was caused by an increase in ground water pressure resulting from excessive uncontrolled storm water runoff with consequent infiltration into a pre-existing slide mass. It should be recognized, however, that the geologic conditions at the project site are substantially different from the conditions that contributed to the 1978 El Camino de la Luz landslide. The slope failure that occurred in 1978 affected a pre-existing slide mass, while the geologic substrate at the proposed project site is intact marl strata of the Monterey formation. Furthermore, the slope stability analysis conducted for the project site indicates that the site is stable, which is supported by the fact that the project site remained stable when the bluff area to the west failed in 1978.

The additional slope stability analysis showed that the stability of the coastal bluff is more sensitive to the amount of water infiltrating into the ground than the weight of a structure placed on the site. The possibility of a wedge-type slope failure at the project site is increased when the groundwater level is increased. Groundwater levels at the project site are controlled by a variety of factors, including topography, rainfall amounts and intensity, evapotranspiration by vegetation, and the manner in which groundwater

moves through bedrock material. Additional information regarding how these factors affect groundwater levels at the project site is provided in Appendix C.

Based on the absence of observed seeps or springs in the project site bluff, or evidence of seeps or springs such as plant growth or water-stained rock, it is likely that groundwater beneath the project site is located at or near the base of the bluff (sea level). The effects of increasing groundwater levels on the stability of the project site coastal bluff are summarized on Tables 5.2-1 and 5.2-2. The tables indicate that a one-foot

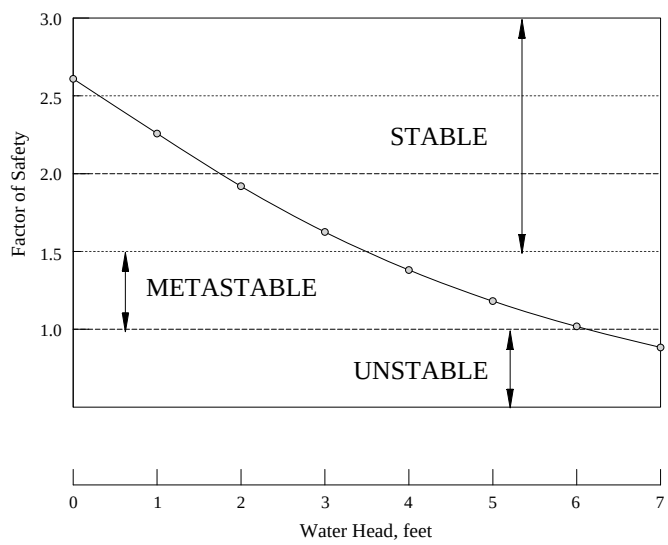
Table 5.2-1
Effects of Groundwater Levels on Project Site Slope Stability

Increase in Groundwater Head (ft) (1)	Calculated Slope Stability Factor of Safety
0	2.609
1	2.258
2	1.919
3	1.625
4	1.381
5	1.181
6	1.018
7	0.883

Source: Anikouchine, 2011

(1) The increase in groundwater head is an increase in the elevation of the ground water surface. It is expected that groundwater levels at the project site are generally at or near the base of the coastal bluff.

Table 5.2-2
Slope Stability Dependence on Groundwater Levels



Source: Anikouchine, 2011

increase in the groundwater level at the project site would decrease the project site slope stability factor of safety from 2.6 to 2.3, which is still a stable slope condition. If groundwater levels were to increase by more than three feet, the slope stability factor of safety would drop below 1.5, indicating a potentially unstable slope condition.

The potential for groundwater levels at the project site to increase sufficiently to result in unstable slope stability conditions was evaluated by the 2011 slope stability analysis. In summary, the analysis concluded that only a small portion of rain water actually infiltrates into the ground to become groundwater. For example, based on annual average precipitation in the project region (approximately 18 inches per year), it is estimated that about five inches of that water is stored as groundwater, and that a 100-year storm event would be expected to result in a four-inch increase in groundwater levels. Additional information regarding water infiltration and historic storm conditions in the Santa Barbara area is provided in Appendix C. Therefore, it is unlikely that a major storm or that annual rainfall conditions would raise groundwater levels beneath the project site sufficiently (i.e., more than three feet) to result in an unstable slope stability condition.

Although the 2011 slope stability analysis indicates that the project site bluff is stable, an analysis of how a wedge-type failure, should one occur, might affect the project site and proposed residence was provided. This analysis was conducted because the fracture to the west of the project site dips steeply enough to act as a potential release plane for a plane failure (see analysis provided above) as well as acting as part of a large wedge failure. For this analysis, it was assumed that the east side of a wedge failure would be formed by a bedding plane having low shear strength. The bedding plane that crops out at the lowest elevation of the bluff would be under the maximum stress caused by the weight of the overlying wedge block material. The location of the Monterey formation bedding plane most likely to meet these requirements is depicted as the heavy blue line on Figure 5.2-8. A potential wedge failure block could exist between the lowest exposed Monterey formation bed (the blue line on Figure 5.2-8) and the fracture to the west of the project site that is also depicted on Figure 5.2-8. The fracture to the west does not appear to extend across the proposed building envelope and it was not observed in the geologic inspection trench that was developed on the project site. Furthermore, there is no surface expression of the fracture on the project parcel. Slight soil creep was observed in the southeast corner of the proposed building envelope, but no tension fracture release surface appears to transect the top of the wedge. Based on the conditions described above, Figure 5.2-8 depicts the largest wedge block area that would likely impact the project site. As depicted on Figure 5.2-8, the possible wedge failure area could adversely affect the project site, but does not include the proposed building footprint.

In conclusion, the wedge failure analysis concluded that the project site is stable; it is unlikely that increases in groundwater levels would adversely affect the stability of the project site; and even if a slope failure were to occur, it is unlikely that the proposed building pad would be affected such that a catastrophic failure of the proposed residence

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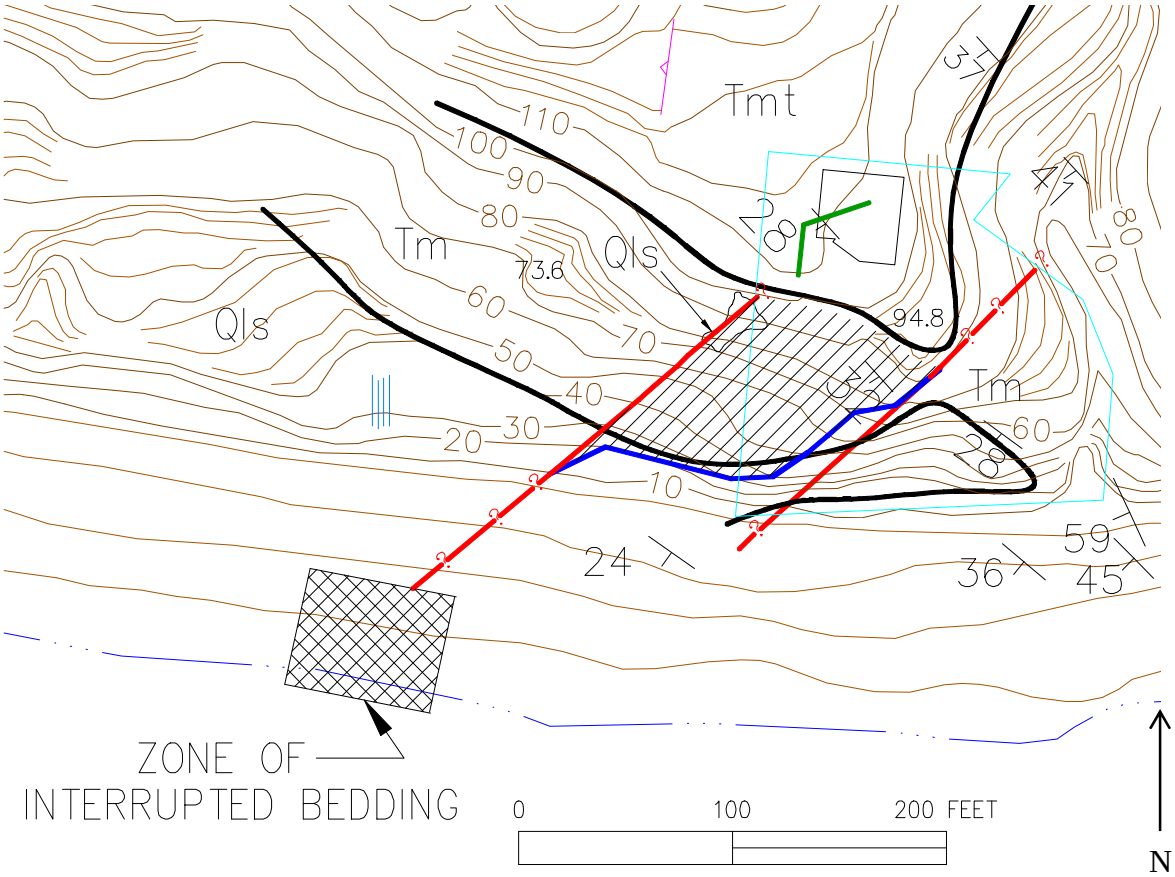

The heavy red lines mark the location of fractures seen cutting the bluff. The heavy blue line shows the outcrop of the lowest bed in the Monterey formation that intersects the fracture in the bluff just west of the subject parcel. The approximate building footprint is outlined with a thin black line. The geologic exploration trench is shown by a heavy green line. The kinematically possible wedge failure area is depicted as the hatched area between the western fracture (heavy red line) and the bedding outcrop (heavy blue line). Hatching is limited to the observable extent of the fracture.

Source: Modified from Anikouchine, 2011

City of Santa Barbara

Figure 5.2-8

1837½ El Camino del la Luz

Project Site Geology and Theoretical Wedge Failure Area

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would result. The analysis does emphasize, however, the importance of controlling runoff on the project site to minimize the infiltration of water into the bluff, because the addition of excessive amounts of water and resulting increase in groundwater pressure has the potential to result in a slope failure impact. This potentially significant impact can be feasibly reduced to a less than significant level by installing and maintaining an adequate storm water runoff system on the project site, and limiting landscape irrigation to the maximum extent possible.

Circular and Toppling Failure. The 2011 slope stability analysis evaluated the potential for the project site to be impacted by circular and toppling slope stability failures, and concluded that those types of slope movement mechanisms are unlikely to affect the site. A circular failure would be unlikely because such a slope failure could only occur in the unconsolidated material overlying the Monterey strata that underlies most of the project site, or in landslide debris that lacks the cohesion of intact rocks. The unconsolidated material at the project site is only about seven feet thick, therefore, only minor material movement at the project site would be subject to this type of slope failure. A toppling failure typically occurs in rocks having fractures or bedding planes that are dipping nearly vertically, and such a condition does not exist at the project site.

Conclusion. The 2011 slope stability analysis concluded that the project property coastal bluff would remain stable after the development of the proposed residence, and the slope would remain stable under earthquake conditions. The probability of a wedge-type slope failure at the project site would be increased if storm water runoff and/or landscape irrigation water is allowed to infiltrate into the ground in amounts sufficient to result in a substantial rise in local groundwater levels. However, it is unlikely that increases in groundwater levels resulting from major storms, annual rainfall and/or landscape irrigation would be sufficient to result in a significant slope instability impact, especially if storm water runoff is managed in a manner to convey water off of the project site in a controlled manner, and landscape irrigation is minimized. Therefore, project-related slope stability impacts would be a **potentially significant but mitigable (Class II) impact,** and can be reduced to a less than significant level by implementing proposed mitigation measures GEO-1 and GEO-2. Proposed mitigation measure GEO-1 specifies standards related to the design of the proposed residence foundation, and site drainage and landscaping, and GEO-2 pertains to structure foundation design approval.

Based on a review of project site topography, it appears that most project site runoff is presently directed to Lighthouse Creek, and some of the project site runoff sheet flows over the coastal bluff. The proposed project site drainage system would implement the requirements of EIR mitigation measure GEO-1 to construct and operate an on-site drainage system by directing drainage from the project site to Lighthouse Creek. Providing an on-site drainage system would also have the beneficial effect of reducing erosion that may result from existing runoff discharges over the creek bank and/or coastal bluff. Initial Study mitigation measures GEO-1 and BIO-1 require the use of drought tolerant landscaping on the project site, and mitigation measure BIO-3 requires that any drip irrigation system installed on the bluff be removed after two full seasons of plant

growth. Similarly, EIR mitigation measure GEO-1 prohibits the long-term use of an irrigation system on the project site.

Lighthouse Creek Canyon Slope Stability

The stability of the Lighthouse Creek canyon slope located on the project site was evaluated by Earth Systems Pacific and the study conclusions are presented in a report titled *Canyon Slope Stability Analysis and Erosion Study, Barthels Residence 1837-1/2 El Camino De La Luz, Santa Barbara, California (2013).* Conclusions of this report are summarized below and the complete report is provided in Appendix E of this EIR. The 2013 slope stability report was reviewed by California Coastal Commission geologist Mark Johnsson (2013) who concurred with the report's conclusions.

Earth Systems Pacific concluded that the Monterey Formation bedrock at the project site is grossly stable due to its favorable cross bedding strength characteristics and its bedding orientation dipping into the slope face. Due to the presence of the favorable bedding orientation, the potential for block and cross bedding rotational failures within the shale and claystone bedrock is very slight. The colluvial soils on the lower half of the canyon slope and in the bottom of the creek are expected to be stable due to their location on the flatter portion of the slope and because the soil is only one to two feet thick.

The fill soils that were placed on the upper canyon slope in the 1950's appear to be grossly stable due to their apparent age and the lack of evidence of slope instability. However, an evaluation of the stability of the fill soil was conducted to identify potential failure surfaces within the fill that may be present under saturated soil conditions. The slope stability analysis concluded that the fill soil has a factor of safety of 1.53 under static conditions, and a 1.16 factor of safety when seismic forces are considered. A factor of safety of 1.1 or greater is generally required for a project site to be considered stable during an earthquake, and a factor of safety greater than 1.5 indicates stable slope conditions under static conditions. Since the fill soil was determined to have a static condition factor of safety above 1.5 and a dynamic factor of safety of greater than 1.1, the evaluation concluded that the fill soils on the project site canyon slope are stable.

The slope stability analysis determined that the top of the critical failure plane[2] in the fill soil is located approximately five (5) feet west of the top of the canyon slope. While a failure along this plane is not expected, the evaluation concluded that it would be "imprudent" to build a structure right at or within the critical failure plane. Therefore, a 10-foot setback from the top of the canyon slope was recommended if the proposed residence would be developed using a conventional foundation constructed on the fill soil.

[2] Slope stability analyses evaluate the effects of driving forces vs. resisting forces acting along potential planes of failure. The plane identified with the lowest factor of safety, which is derived by dividing resisting force by the driving force, is considered to be the "critical failure plane."

The slope stability evaluation also indicates that it is unlikely that the soil placed on the canyon slope is an engineered fill, and as a result a conventional foundation could be damaged due to soil density and moisture content variations within the fill material. Typically, remediation of undocumented fill requires that the fill material be excavated and replaced in a controlled and engineered manner.

As an alternative to the removal and replacement of the fill material, a drilled caisson foundation system could be used, which involves constructing reinforced concrete posts in vertical holes drilled into the bedrock. Beams are then constructed to span between the caissons so that the structure's foundation is supported by the underlying bedrock rather than relying on fill material for support. In addition, a caisson foundation system would require less disturbance of the canyon slope when compared to the effects of removing the previously placed fill soil. With the use of a caisson foundation system, the potential for instability of the fill, although remote, becomes moot because the fill would not be used to support the foundation. Also, with the use of a caisson system, a setback from the top of the canyon slope would not be required.

The project has proposed to use a caisson foundation system, which would reduce the potential for impacts related to the presence of undocumented fill on and near the building site. Proposed mitigation measure GEO-2 requires that the building foundation design be approved by a licensed Engineering Geologist or Geotechnical Engineer, which would ensure that a foundation adequate for the project and project site conditions is constructed. With the implementation of mitigation measure GEO-2, potential canyon slope stability impacts, and impacts that may be caused by the presence of fill material on the canyon slope, would be **potentially significant but mitigable (Class II)** and would be reduced to a less than significant level.

Coastal Bluff Retreat

As described in Section 5.2.1 above, a review of aerial photos determined that five (5) feet of bluff retreat occurred at the project site over a 59-year time span from 1953 to 2012. This rate of bluff retreat is equal to an average rate of 1.02 inches per year, which is considerably less than the average city-wide rate of retreat of eight (8) inches per year reported by the City's 2013 Safety Element. The primary reason for the reduced rate of retreat is that the Monterey Formation bedrock material at the project site is highly siliceous and resistant to erosion. Also, the bedding trends sub-parallel along the bluff face, which increases the rock's resistance to sea wave erosion. No sea caves were observed in the bluff face and only minor undercutting along the bottom of the bluff was observed, further illustrating that the bedrock exposed in the bluff face is resistant to sea wave erosion (Earth Systems Pacific, 2013a). California Coastal Commission geologist Mark Johnsson (2013) concurred with the methodology used to determine bluff retreat rates at the project site.

Using an average rate of bluff retreat of 1.02 inches per year, the bluff edge at the project site would retreat landward approximately 6.4 feet over a 75-year period. The

calculated annual rate of bluff retreat of 1.02 inches per year reflects environmental conditions that have existed in the recent past, and may not adequately predict rates of bluff erosion that could occur in the future due to a climate change induced rise in sea level. A rise in sea level and an increase in storm and wave intensity could accelerate the erosion of the bluff at the project site. While many factors would affect how sea level rise and wave action could impact the bluff at the project site, the *California Climate Adaptation Strategy* (2009) indicates that a recent study of southern California concluded that erosion rates "are expected to accelerate by 20 percent for a sea-level rise of 39.4 inches (100 cm)." A 39-inch rise in sea level would be near the mid-range of future sea level conditions recommended by the California Coastal Commission (2015), which indicate that sea level conditions in 2100 could be 17-66 inches higher than sea level conditions in 2000. California Coastal Commission geologist Mark Johnsson (2013) concurred with the use of a 20 percent increase in bluff erosion rates to evaluate sea level rise impacts on the proposed project. With a 20 percent increase in the project site bluff retreat rate, the annual rate of retreat would be approximately 1.22 inches per year and the existing edge of the bluff would retreat landward approximately 7.6 feet over a 75-year planning period.

The existing (2012) bluff edge at the project site, and the projected future (2087) bluff edge, are depicted on Figure 5.2-1. As shown, the proposed residence would be located a minimum of approximately eight (8) to 17 feet landward of the current bluff edge. Assuming that the bluff edge retreats landward a total of 7.6 feet over a 75-year period, the future bluff edge would be approximately nine (9) feet to less than one foot from the proposed residence. A future bluff edge setback of less than one foot could render the proposed residence unsafe, however, the project would implement and be consistent with the provisions of the Coastal Act and LCP policies as well as Safety Element Policy S23.b, which requires a setback from the bluff edge to accommodate 75 years of bluff retreat. It should be recognized that the Earth Systems Pacific (2013a) evaluation of coastal bluff retreat at the project site agreed with conclusions previously stated by Anikouchine (2005, 2011) that sea wave-related erosion will be confined to the lower, steep part of the bluff. The lower portion of the bluff was described by Anikouchine as the "oceanographic bluff edge." The conclusions by Earth Systems Pacific and Anikouchine are further supported by the findings of other previous studies, which found that virtually no retreat at the top of the bluff has occurred over the past 65 years. Therefore, the analysis of potential coastal bluff retreat impacts conducted by Earth Systems Pacific (2013a) concluded "*it is reasonable to infer that it will likely be well over 100 years before retreat of the oceanographic bluff edge would impact the bluff top…*"

The proposed project would result in an increase in impermeable area, and new landscaping irrigation would have the potential to result in an increase in non-storm runoff water. Increased storm and non-storm runoff from the project site would have the potential to result in an increase in terrestrial erosion of the coastal bluff if it were to flow over bluff edge and down the bluff face. However, the proposed project's storm water drainage system includes a drainage swale located north of and adjacent to the bluff edge,

which would collect water before it flows over the bluff edge, and would convey the collected runoff to Lighthouse Creek. Therefore, the project would not result in an increase in the amount of runoff water that flows over the bluff edge. In addition, the landscaping requirements of proposed mitigation measure GEO-1 would further minimize the amount of irrigation water used at the project site. Therefore, based on the conclusions of site-specific evaluations of coastal bluff retreat, the proposed project would result in **less than significant (Class III)** bluff retreat impacts and no additional mitigation measures are required.

Subsidence. Based on a laboratory evaluation of on-site soils conducted by Buena Engineers (1971), it was concluded that the project site is subject to soil settlement-related impacts. The report indicates that potential subsidence impacts can be adequately addressed using a properly engineered foundation design. Proposed mitigation measure GEO-2 requires that the proposed project provide an appropriate structure foundation. With the implementation of the mitigation measure GEO-2, potential subsidence impacts are **significant but mitigable (Class II)** and would be reduced to a less than significant level**.**

Expansive Soils. An evaluation of the project site conducted by Smith (1980) concluded that soils at the project site are expansive. This potentially significant impact can be reduced to a less than significant level by the use of a caisson foundation as proposed by the project, rather than foundation footings. Proposed mitigation measure GEO-2 requires that the proposed project provide an appropriate structure foundation and that the foundation be approved by a licensed Engineering Geologist or Geotechnical Engineer. With the implementation of mitigation measure GEO-2, potential expansive soil impacts would be **significant but mitigable (Class II)** and would be reduced to a less than significant level.

Criterion C. *Extensive grading on slopes exceeding 20%, substantial topographic change, destruction of unique physical features; substantial erosion of soils, overburden, or sedimentation of a water course.*

Proposed construction activities at the project site would occur in the area of the relatively level building pad in the northwest corner of the project property, and on the upper portion of the Lighthouse Creek canyon slope. The gradient of the canyon slope on the proposed building site is approximately 50 percent.

Short-Term Impacts. The proposed project would require approximately 288 cubic yards of cut and 21 cubic yards of fill (309 total cubic yards). Grading for the project would be minimized by the proposed use of a caisson foundation, which would avoid the need to remove fill soil that was placed on the canyon slope in the 1950's. The amount of grading at the project site would not be extensive, however, due to the proximity to Lighthouse Creek, project-related ground disturbance would have the potential to result in a significant short-term erosion impact. This potential impact would be minimized by preparing and implementing an on-site erosion control plan that

implements the requirements of Building and Safety Division's Erosion/Sedimentation Control Policy and the City's Storm Water Management Program. Compliance with existing policy requirements would prevent short-term erosion-related impacts from becoming significant and no mitigation measures are required. Therefore, potential short-term grading impacts would be **less than significant (Class III).**

Long-Term Impacts. The disturbance or removal of vegetation resulting from construction activities at the project site, such as the drilling of caisson holes and/or the installation of proposed storm water drainage system pipes on the creek canyon slope, could result in long-term erosion-related impacts if disturbed vegetation is not restored. Proposed mitigation measure BIO-1 was identified by the Revised Initial Study prepared for the proposed project and requires that areas disturbed by grading and construction of the drainage system be replanted with native vegetation, and that the required planting be maintained for the life of the project. With the implementation of mitigation measure BIO-1, potential construction-related long-term erosion impacts are **significant but mitigable (Class II)** and would be reduced to a less than significant level**.**

Runoff water from the project site would be collected by a series of catch basins and underground pipes, and conveyed to a proposed discharge point located in the Lighthouse Creek channel. A substantial increase in the amount of storm water discharged from the project site and/or the concentrated discharge of collected runoff would have the potential to result in a significant increase in the erosion of the Lighthouse Creek channel. However, as shown on EIR Table 9.1-1 (Project Site Storm Water Runoff Characteristics), the proposed project would result in a small decrease in peak storm water flows from the project site. To minimize the potential for concentrated flow-related erosion impacts to the creek channel, the proposed drainage system includes the installation of a rip-rap energy dissipater at the proposed discharge location. In addition, proposed mitigation measure BIO-5 was identified by the Revised Initial Study prepared for the proposed project and requires that a Streambed Alteration Agreement be obtained from the California Department of Fish and Wildlife prior to the installation of the proposed drainage devices in the creek channel. With the implementation of mitigation measure BIO-5, potential long-term storm water discharge-related erosion impacts are **significant but mitigable (Class II)** and would be reduced to a less than significant level**.**

5.2.4 Cumulative Impacts

Cumulative development projects in the vicinity of the 1837½ El Camino de la Luz project site are described on Table 4.3-1, and the locations of the projects are depicted on Figure 4.3.-1. They consist of small- to moderately-sized residential additions and remodels, and one new single-family residence. The project closest to the 1837½ Camino de la Luz project site is the proposed new residence at 1925 El Camino de la Luz. A significant cumulative slope stability impact would involve the combined projects resulting in a change to the configuration of the bluff at or near the proposed

project site, or a substantial increase in storm water runoff and/or a substantial increase in groundwater levels.

The project proposal at 1925 El Camino de la Luz would be a new residence on property subject to the 1978 landslide that swept away the prior residence on the site. This prior unstable slope activity raises the question of whether there is potential that the combined effects of the pending projects could substantially affect area slope stability, bluff configuration, and/or runoff or groundwater levels. The 1978 landslide did not affect the project site at 1837½ El Camino de la Luz. Also, based on regulatory requirements, it can be reasonably expected that the project at 1925 El Camino de la Luz will be required to demonstrate that its effects on slope stability, surrounding bluffs, runoff, and groundwater would not be significant before the project would receive discretionary permit approval, or a grading or building permit. Incremental geologic effects from the project at 1925 El Camino de la Luz would not have the potential to result in a significant combined effect.

Other pending projects in the area consist of residential remodels or small additions to existing structures. These projects would be located approximately 1,000 feet from the proposed project site and would not result in a cumulatively substantial increase in runoff or increased groundwater levels. The area projects would together add weight to the ground surface, however the increased weight would not represent a significant cumulative impact because of the relatively small scope of the projects and distance between sites.

All cumulative projects would be required to comply with State and City site development and building regulations, including erosion and water quality protection requirements. Consequently, the pending project in the area do not have the potential for significant cumulative geological hazard impacts, and the project proposed at 1837½ Camino de la Luz would not have a considerable contribution to a significant cumulative effect. The project contribution to cumulative geologic hazard risks would be **less than significant (Class III)**.

5.2.5 Mitigation Measures and Residual Impacts

Implementation of the following mitigation measures would reduce potential slope stability and soil-related impacts of the proposed project to a less than significant level.

IMPACT GEO-1. An inadequate storm water drainage system or a substantial increase in landscape irrigation on the project site would have the potential to result in a significant slope stability impact.

GEO-1 Storm Water Pollution Control, Drainage Systems Maintenance and Project Site Landscaping. Owner shall maintain the drainage system and storm water pollution control devices in a functioning state and in accordance with the Storm Water BMP Guidance

Manual and Operations and Maintenance Procedure Plan approved by the Creeks Division. Should any of the project's surface or subsurface drainage structures or storm water pollution control methods fail to capture, infiltrate, and/or treat water, or result in increased erosion, the Owner shall be responsible for any necessary repairs to the system and restoration of the eroded area. Should repairs or restoration become necessary, prior to the commencement of such repair or restoration work, the Owner shall submit a repair and restoration plan to the Community Development Director to determine if an amendment or a new Building Permit and Coastal Development Permit is required to authorize such work. The Owner is responsible for the adequacy of any project-related drainage facilities and for the continued maintenance thereof in a manner that will preclude any hazard to life, health, or damage to the Real Property or any adjoining property.

All project site landscaping shall be designed to use native species that do not require irrigation except for their propagation. Limited areas of non-native plants may be used if long-term irrigation is not required.

IMPACT GEO-2. The proposed residence has the potential to be adversely affected by fill soil previously placed at the project site, subsidence and expansive soil impacts.

GEO-2 **Foundation Design Approval.** The location and design of the proposed structure foundation, which implements a caisson supported foundation system, shall be approved by a licensed Engineering Geologist or Geotechnical Engineer.

6.0 PLANS AND POLICY ANALYSIS

This section provides a preliminary evaluation of the El Camino de la Luz Residence project's compliance with applicable requirements of the California Coastal Act and the City's Local Coastal Plan, Zoning Ordinance and Single-Family Residence Design Guidelines. The Santa Barbara Planning Commission will make the final determination regarding the project's consistency with applicable plans and policies.

6.1 ZONING ORDINANCE REQUIREMENTS

The project site is located in an area zoned "E-3" (One-Family Residence) with an SD-3 (Coastal Overlay) Zone, and is also located within the Hillside Design Overlay area. The project site conforms to the "E-3" zone minimum parcel size requirement of 7,500 square feet per lot; conforms to Zoning Ordinance requirements related to development standards; and would be consistent with the site's residential land use designation.

6.2 COASTAL ACT and LOCAL COASTAL PLAN (LCP) POLICIES

6.2.1 Water and Marine Environments

California Coastal Act Section 30230. *Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.*

Potentially Consistent. The proposed project would not result in development that would directly affect the marine environment or marine organisms. Potentially significant indirect effects to marine resources could result if the project were to result in substantial discharges of pollutants to the ocean. As described in EIR Section 9.1.5 (Impacts Found Not to be Significant, Water Environment) the project's potential short- and long-term water quality impacts would be reduced to a less than significant level with the implementation of mitigation measures W-1 (Drainage and Water Quality) and GEO-1 (Storm Water Pollution Control, Drainage Systems Maintenance and Project Site Landscaping). Therefore, the proposed project is potentially consistent with this Coastal Act Section.

California Coastal Act Section 30231*. The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing*

depletion of ground water supplies and encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Potentially Consistent. The proposed project would implement a variety of design measures that would minimize impacts to coastal waters, and proposed mitigation measures would reduce the potential for impacts to coastal waters to a less than significant level. Wastewater from the project would be discharged to the City sewer system, and development regulations and proposed mitigation measures GEO-1 (Storm Water Pollution Control, Drainage Systems Maintenance and Project Site Landscaping) and BIO-4 (Erosion Control/Water Quality Plan) require the implementation of short- and long-term erosion control best management practices. The project proposes to convey collected storm water runoff to Lighthouse Creek and as shown on EIR Table 9.1-1, the proposed development would not result in an increase in existing runoff flows. The proposed project would not impact native habitat located on the project site ocean bluff and would minimize disturbance to native habitat on the Lighthouse Creek canyon slope. Habitat areas impacted by the proposed storm water discharge pipe that would discharge to Lighthouse Creek would be restored consistent with the requirements of proposed mitigation measure BIO-1 (Habitat Restoration) and requirements that may be specified by the California Department of Fish and Wildlife in the Streambed Alteration Agreement that would be required for the project. Therefore, the project would not result in significant impacts to water quality or natural habitat, would maintain the biological productivity and quality of coastal waters, and is potentially consistent with this Coastal Act Section.

LCP Goal. *Enhance and preserve the City's critical ecological resources in order to provide a high quality environment necessary to sustain the City's ecosystem.* This LCP goal is also a 1994 Conservation Element, Biological Resources Section goal.

Potentially Consistent. A 2013 biological evaluation of the project property found that the proposed building site and the upper slopes of the Lighthouse Creek canyon are predominately covered with a variety of ruderal (weedy) plant species, although some native plants are interspersed along the upper slope of the Lighthouse Creek canyon. While the level portion of the project site and the upper slopes of the Lighthouse Creek canyon provide little biological value, the middle and lower portions of the Lighthouse Creek canyon slope support native, woody scrub vegetation.

The eastern portion of the proposed residence would extend approximately 12 to 30 feet beyond (east) of the designated top of the Lighthouse Creek canyon slope, however, the residence would be approximately 70-80 feet west of the Lighthouse Creek channel. The vegetation on the Lighthouse Creek canyon slope that would be directly impacted (i.e., removed) by the project consists mostly of non-native species that provide little biological value. The construction of the proposed project site drainage system, which includes a pipe that would discharge runoff to Lighthouse Creek, would result in a small area of temporary disturbance on the lower and more biologically-sensitive slope of

the Lighthouse Creek canyon. Proposed mitigation BIO-1 requires that project site areas disturbed by grading and the installation of the drainage system be replanted with appropriate native plants, and that invasive plants located between the building site and Lighthouse Creek be removed and those areas be replanted with appropriate native plants. Other mitigation measures are also proposed, including requirements to limit site disturbance and to prevent short- and long-term erosion that could adversely affect the water quality of Lighthouse Creek.

The project would not result in new development on the coastal bluff located on the southern portion of the project site. Therefore, the project would not disturb any coastal bluff scrub habitat located on that portion of the project site.

Therefore, the proposed project is potentially consistent with this LCP goal.

LCP Policy. *The habitats of rare and endangered species shall be preserved.* This LCP policy is also Policy 5.0 from the 1994 Conservation Element, Biological Resources Section.

Potentially Consistent**.** Protocol surveys to detect the presence of California red legged frog (CRLF), a federally "threatened" species, were conducted in Lighthouse Creek adjacent to the project site in 2006. No CRLF were observed and the survey report concluded that based on aquatic conditions in the creek there is a low probability the CRLF inhabit Lighthouse Creek near the project site (Tierney, 2006). Therefore, the proposed project is potentially consistent with this LCP policy.

LCP Policy 6.8*. The riparian resources, biological productivity, and water quality of the City's coastal zone creeks shall be maintained, preserved, enhanced, and, where feasible, restored.*

Potentially Consistent. A 2013 biological evaluation of the project property found that the proposed building site and the upper slopes of the Lighthouse Creek canyon are covered with a variety of ruderal (weedy) plant species. Imbedded in the non-native plants are sparse stands of native plants, including blackberry, toyon, lemonadeberry, poison oak, and wild rye. While the level portion of the project site and the upper slope of the Lighthouse Creek canyon provide little biological value, the middle and lower portions of the Lighthouse Creek canyon slope support native, woody scrub vegetation.

The eastern portion of the proposed residence would extend approximately 12 to 30 feet beyond (east) of the designated top of the Lighthouse Creek canyon slope, however, the residence would be approximately 70-80 feet west of the Lighthouse Creek channel. The vegetation on the Lighthouse Creek canyon slope that would be directly impacted (i.e., removed) by the project consists mostly of non-native species that provide little biological value. The construction of the proposed project site drainage system, which includes a pipe that would discharge runoff to Lighthouse Creek, would result in a small area of temporary disturbance on the lower and more biologically-sensitive slope of the Lighthouse Creek canyon. The Revised Initial Study prepared for the proposed

project includes mitigation measures to minimize potential impacts to biological resources on and near the project site, and to the water quality of Lighthouse Creek. Also, the 2013 biological evaluation recommended several new mitigation measures to further reduce potential impacts to biological and water resources. Proposed mitigation measures that would reduce the project's impacts to biological resources and water quality are included in Sections 2.0 (Summary) and 9.0 (Impacts Found Not to be Significant), and are summarized below:

- Disturbed areas are to be restored consistent with the requirements of an approved restoration plan (Mitigation Measure BIO-1);

- Appropriate landscaping plants are to be used on the project site (Mitigation Measure BIO-2);

- An appropriate irrigation system is to be used at the project site (Mitigation Measure BIO-3);

- Appropriate water quality protection measures are to be implemented and maintained during project construction (Mitigation Measure BIO-4);

- A Streambed Alteration Agreement is to be obtained from the California Department of Fish and Game (now the California Department of Fish and Wildlife) (Mitigation Measure BIO-5);

- Implement specified active bird nest protection measures if construction occurs during the breeding season (Mitigation Measure BIO-6);

- A biologist shall be present during initial vegetation removal and grading activities to salvage and relocate wildlife that may be encountered (Mitigation Measure BIO-7);

- Proposed construction/disturbance areas are to be temporarily fenced to minimize impacts to surrounding areas (Mitigation Measure BIO-8).

In addition to the above requirements, any exterior lighting on the project site would be subject to compliance with the requirements of SBMC §22.75, the City's Outdoor Lighting and Design Ordinance. The ordinance requires that exterior lighting be shielded and directed to the site such that no undue lighting or glare would affect surrounding residents, roads or habitat areas.

The implementation of the proposed mitigation measures, as well as adopted City standards and construction site requirements, such as the Building and Safety Division's Erosion/Sedimentation Control Policy, and other agency regulations, would reduce the potential for project-related impacts to biological resources, and minimize the potential

for erosion, sedimentation and other discharges to the creek. Therefore, the proposed project is potentially consistent with this LCP policy.

LCP Policy 6.10. *The City shall require a setback buffer for native vegetation between the top of the bank and any proposed project. This setback will vary depending upon the conditions of the site and the environmental impact of the proposed project.*

Potentially Consistent. The eastern portion of the proposed residence would extend approximately 12 to 30 feet beyond (east) of the designated top of the Lighthouse Creek canyon slope, however, the residence would be approximately 70-80 feet west of the Lighthouse Creek channel. The vegetation on the Lighthouse Creek canyon slope that would be directly impacted (i.e., removed) by the project consists mostly of non-native species that provide little biological value. Native vegetation on the mid- and lower-portions of the Lighthouse Creek canyon slope and in the creek channel provides "moderately high" quality habitat for amphibians, reptiles, birds and small mammals. Wildlife expected to use on-site native habitat, however, would generally be species tolerant of nearby urban uses. The proposed residence would generally be located approximately 20 to 30 feet, at minimum, from the middle portions of the Lighthouse Creek canyon slope where native vegetation is located. This setback from the existing native vegetation would be adequate given the predominate use of the area by wildlife that is tolerant of urban uses and the low-intensity characteristics of the proposed single-family residence. Therefore, the proposed project is potentially consistent with this LCP policy.

6.2.2 Visual Quality

California Coastal Act Section 30251. *The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas.*

Potentially Consistent. The proposed residential structure would not affect public views along the ocean (i.e., views to the east and west from locations on the beach), and as described in the "Other Views" subsection of EIR Section 5.1.3, the proposed residence would not adversely affect views available to persons on the beach looking towards the project site. Extensive analysis of the proposed project's impacts to existing ocean views from viewpoints located in and near La Mesa Park is provided in Section 5.1.3 of this EIR, and that analysis concluded the project would have less than significant impacts to ocean views.

The exterior of the proposed residence would have a stone veneer and wood siding, and those materials would have earth-tone colors that are compatible with surrounding development and the adjacent open space area of Lighthouse Creek. Although unlikely to occur, changes to the color of the residence could be made in the

future, and the use of bright colors or contrasting combinations of colors would have the potential to be incompatible with adjacent development and open space areas. To minimize the potential for future building color-related conflicts, proposed mitigation measure AES-1 requires that the proposed structure's exterior colors be neutral or earth-tone, and that any subsequent color changes be approved by the Single Family Design Board.

The project's landscaping plan (Figure 3.3-8) proposes that trees would be planted along the northern perimeter of the project property, and the proposed Melaleuca and oak trees have the potential to achieve a mature height of 40-50 feet, respectively. A vegetative screen along the project site's northern property line would have the beneficial effect of providing a visual buffer for the proposed structure, however, if the landscape trees are allowed to reach their maximum height, they would have the potential to obstruct views of the ocean from viewpoints in and near La Mesa Park. To protect the existing views of the ocean, proposed mitigation measure AES-2 requires that landscaping trees and shrubs on the project site consist of drought-tolerant species that when mature will not attain a height that exceeds the height of the proposed residence. The landscape plan also requires approval by the Single Family Design Board as required by City ordinance provisions and design guidelines.

Implementation of the proposed project would require 288 cubic yards of excavation within the new residence footprint area, and 21 cubic yards of fill under the project site driveway. The amount of proposed grading would not be extensive; would not result in long-term significant changes to existing visual conditions; and would not substantially alter natural landforms. Therefore, the proposed project is potentially consistent with this Coastal Act Section.

LCP Goal. *Restore where feasible, maintain, enhance and manage the creekside environments within the City as visual amenities, where consistent with sound flood control management and soil conservation techniques.* This LCP goal is also a 1994 Conservation Element, Visual Resources Section goal.

Potentially Consistent. Lighthouse Creek is adjacent to the project property and in the vicinity of the project site is located in a steep, incised canyon. The western canyon slope is located on the project site and has a height of approximately 25-35 feet. The upper portion of the slope has a gradient of 1.75:1 (horizontal:vertical) and the lower portion of the slope flattens to a gradient of 3.5:1. Due to the deeply incised creek channel, the project site is not subject to a significant flooding hazard.

As required by proposed mitigation measure BIO-1, the project would be required to restore areas disturbed by construction, and to conduct restoration of the creek canyon slope by removing invasive plants and planting native vegetation. Other proposed mitigation measures are proposed to limit site disturbance during construction and to prevent short- and long-term erosion that could adversely affect the water quality of Lighthouse Creek. Therefore, the proposed project is potentially consistent with this LCP goal.

LCP Policy. *Development on hillsides shall not significantly modify the natural topography and vegetation.* This LCP policy is also Policy 2.0 from the 1994 Conservation Element, Visual Resources Section.

Potentially Consistent. Implementation of the proposed project would require 288 cubic yards of excavation within the new residence footprint area, and 21 cubic yards of fill under the project site driveway. Other minor grading/ground disturbance would be required to install the proposed drainage system. Therefore, the project would not significantly alter the topography of the project site or remove a substantial amount of vegetation, and would be potentially consistent with the LCP policy.

LCP Policy. *New development shall not obstruct scenic view corridors, including those of the ocean and lower elevations of the City viewed respectively from the shoreline and upper foothills, and of the upper foothills and mountains viewed respectively from the beach and lower elevations of the City.* This policy is also Policy 3.0 from the 1994 Conservation Element, Visual Resources Section.

Potentially Consistent. Extensive analysis of the proposed project's impacts to existing ocean views from viewpoints located in and near La Mesa Park is provided in Section 5.1.3 of this EIR. That analysis concluded the project would have less than significant impacts to ocean views. Therefore, the proposed project is potentially consistent with this LCP policy.

LCP Policy 9.1. *The existing views to, from, and along the ocean and scenic coastal areas shall be protected, preserved, and enhanced.*

Potentially Consistent. The proposed residential structure would not affect public views along the ocean (i.e., views to the east and west from locations on the beach), and as described in the "Other Views" subsection of EIR Section 5.1.3, the new residence would not adversely affect views available to persons on the beach looking towards the project site. Extensive analysis of the proposed project's impacts to existing ocean views from viewpoints located in and near La Mesa Park is provided in Section 5.1.3 of this EIR, and that analysis concluded the project would have less than significant impact to ocean views.

The exterior of the proposed residence would have a stone veneer and wood siding, and those materials would have earth-tone colors that are compatible with surrounding development and the adjacent open space area of Lighthouse Creek. Although unlikely to occur, changes to the color of the residence could be made in the future, and the use of bright colors or contrasting combinations of colors would have the potential to be incompatible with adjacent development and open space areas. To minimize the potential for future building color-related conflicts, proposed mitigation measure AES-1 requires that the proposed structure's exterior colors be neutral or earth-tone, and that any subsequent color changes by approved by the Single Family Design Board.

The project's proposed landscaping plan (Figure 3.3-8) indicates that trees would be planted along the northern perimeter of the project property, and the proposed Melaleuca and oak trees have the potential to achieve a mature height of 40-50 feet, respectively. A vegetative screen along the project site's northern property line would have the beneficial effect of providing a visual buffer for the proposed structure, however, if the landscape trees are allowed to reach their maximum height, they would have the potential to obstruct views of the ocean from viewpoints in and near La Mesa Park. To protect the existing views of the ocean, proposed mitigation measure AES-2 requires that landscaping trees and shrubs on the project site consist of drought-tolerant species that when mature will not attain a height that exceeds the height of the proposed residence. Therefore, the proposed project is potentially consistent with this LCP policy.

6.2.3 Hazards

California Coastal Act Section 30253*. New Development shall:*

(1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.

(2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural conditions along bluffs and cliffs.

The intent of the Coastal Act is to safeguard lives and property when planning for new development in high hazard areas, assure that new development does not significantly contribute to the deterioration of the general area of the proposed development, and prohibit construction of protective devices which would "...substantially alter natural landforms along bluffs and cliffs."

LCP Policy. *New development on the top of a cliff shall be placed at such distance away from the edge of the cliff that normal rates of erosion and cliff material loss will not seriously affect the structure during its expected lifetime.* This LCP policy is also a 1978 Seismic Safety/Safety Element policy.

LCP Implementation Strategy. *Restrict clifftop development on the Mesa by appropriate setbacks (determined by site specific geological surveys required as part of subdivision) to prevent acceleration of cliff erosion. Mitigation measures to prevent cliff-face "weeping" should also be instituted.*

Potentially Consistent. This policy is intended to reduce geologic hazard risk to bluff top development resulting from slope instability and the landward erosion of the bluff. In regard to slope stability, a project-specific evaluation of potential slope stability impacts has been conducted (Anikouchine, 2011; EIR Appendix C). The slope stability analysis concluded that the project site coastal bluff would remain stable after the development of the proposed residence, and the slope would remain stable under

earthquake conditions. The evaluation assessed the potential for various types of slope failure to occur, and concluded that the probability of a wedge-type slope failure would be increased if storm water runoff and/or landscape irrigation water was allowed to infiltrate into the ground in amounts sufficient to result in a substantial rise in local groundwater levels. However, it is unlikely that increases in groundwater levels resulting from major storms, annual rainfall and/or landscape irrigation would be sufficient to result in a significant slope instability impact, especially with the implementation of the proposed storm water runoff drainage system.

A site-specific evaluation of the rate of bluff retreat at the project site (Earth Systems Pacific, 2013a; EIR Appendix D) determined that over a 59-year time span from 1953 to 2012 the bluff eroded landward an average of 1.02 inches per year, which is considerably less than the average city-wide rate of retreat of eight (8) inches per year reported by the City's 2013 Safety Element and the previous Seismic Safety/Safety Element. The primary reason for the reduced rate of retreat is that the Monterey Formation bedrock material at the project site is highly siliceous and resistant to erosion. To address the potential for accelerated rates of bluff retreat that may result from a climate change induced rise in sea level, the historic rate of bluff retreat was increased by 20 percent to approximately 1.22 inches per year. Using an average rate of bluff retreat of 1.22 inches per year, the existing bluff edge at the project site would retreat landward approximately 7.6 feet over a 75-year planning period. EIR Figure 3.3-1 (Site Plan) and Figure 5.2-1 (Revised Top of Bluff Location) depict the location of the existing coastal bluff edge and the projected landward location of the bluff edge in 75 years based on an average retreat rate of 1.22 inches per year. As depicted by Figures 3.3-1 and 5.2-1, the proposed residence would be located landward of the 75-year bluff retreat setback, with the exception of the southern portions of the residence's deck and roof eves. Therefore, the structure would comply with this policy's requirement that proposed new development provide an "appropriate" setback to prevent the acceleration of bluff erosion.

Proposed landscaping and required restoration planting that would be installed on the project site would predominately consist of drought tolerant plant species, which would minimize the need for the long-term application of irrigation water. In addition, the proposed storm water drainage system would include a vegetated swale along the landward side of the bluff edge that would minimize the potential for runoff water to flow over the bluff edge. The proposed irrigation and drainage systems would minimize the potential for water infiltration at the site, which would also reduce the potential for water to seep (or "weep") from the cliff face and accelerate the rate of bluff erosion.

The analysis demonstrates consistency with geologic policies of the Coastal Act and policies and implementation strategies referenced in the LCP, as well as current California Coastal Commission guidelines (Johnsson, 2003) and the City General Plan Safety Element Update (2012).

LCP Policy. *The addition of water to the seacliff can significantly lower inherent cliff stability and cause a stable cliff to become unstable. Therefore:*

- *Erosion caused by rainwater collecting on the top of the seacliff and then running over the edge can be minimized by installing lateral or "French" drains to collect and control the water. The water can then be piped off the property and properly disposed of in storm sewers. New development shall be required to install some satisfactory means of removing water from the cliff top. Owners of existing structures should be encouraged to install their own drainage devices to protect their homes and property.*
- *To prevent excess water from being applied to the top of the cliff for gardening purposes, the planting of lawns, gardens, etc., should be discouraged. Instead, native vegetation that is drought resistant, and that has deep strong root systems to aid in stabilizing the cliff material should be planted. Most of these plants will grow rapidly but are small or medium in size, so as not to obstruct views.*

This LCP policy is also a 1978 Seismic Safety/Safety Element policy.

Potentially Consistent. Project site runoff would be collected by a series of on-site vegetated swales, catch basins, and by a small (17 square foot) vegetated bioretention pond. Collected water would be conveyed by an underground pipe to Lighthouse Creek where it would be discharged in a non-erosive manner and flow a short distance to the creek's terminus and to the ocean. The project would not direct any uncontrolled runoff water over the bluff face. Decorative landscaping on the project site would be minimal and does not include high water plantings such as lawns. Most of the vegetation that would be planted on the project site would be native plant species located in the proposed restoration area to be located on the Lighthouse Creek canyon slope. The proposed restoration area would not require the application of a substantial amount of water to establish the new planting, and would not result in a substantial increase in long-term irrigation water use at the project site. Therefore, the proposed project is potentially consistent with this LCP policy.

LCP Policy. *In an attempt to impede the cliff retreat process, programs to control or prohibit the following activities that can significantly alter the rates of seacliff erosion and retreat shall be implemented.*

- *Improper Access - Improper access may be discouraged by providing existing, established official beach access routes with additional parking, improved access facilities, and publicizing their locations. The use of unmaintained, improvised access routes that have the potential or are creating a serious erosion problem should be discouraged. This could be done by posting informational signs at the top of the cliff near the access route, describing the adverse effects that improper access can cause and where the nearest maintained access routes are located.*
- *Loading - Development that will add adverse amounts of excessive weight to the top of the cliff (i.e., large structures, swimming pools, artificial fill, etc.) shall be discouraged.*

- *Improper Vegetation - Where feasible, existing non-native vegetation that requires large amounts of water, such as ice plant and annual grass, shall be replaced with native vegetation.*
- *Trash Disposal - The disposal of any material onto the face of the cliff, including brush clippings from landscape vegetation, shall be prohibited.*

This policy is also a 1978 Seismic Safety/Safety Element policy.

Potentially Consistent. An existing pedestrian trail that leads to the beach is located on the project site coastal bluff. The trail is steep, however, there are no obvious signs that it is causing substantial erosion of the bluff face. It is not expected that the project would substantially increase the use of the trail.

The proposed residence would not place excessive weight on the bluff, and the weight of the new structure would be offset by the proposed excavation of 288 cubic yards of soil from the project site. The proposed bioretention basin would be approximately 17 square feet in area and could temporarily retain up to three cubic feet of water. Due to the small size and temporary water storage characteristics of the proposed bioretention basin, it would not add excessive weight to bluff.

Proposed landscaping would include native and drought tolerant species, which would minimize the application of irrigation water. The project would not be a substantial source of vegetation or other debris that would have the potential to be improperly disposed on the bluff face.

Therefore, the proposed project is potentially consistent with this LCP policy.

LCP Policy. *To protect seacliffs and the structures placed on them from erosion caused by wave action, retaining walls, sea walls, broken concrete or stone revetment, breakwaters, and groins are sometimes used. Before the construction of these or any other shoreline protection structure is allowed, the need, and potential for adverse environmental impacts of the project, shall be evaluated by appropriate engineers as designated by the Building Official.* This policy is also a 1978 Seismic Safety/Safety Element policy.

Potentially Consistent. The project does not propose the use of retaining walls or other structures to minimize the effects of wave erosion. Therefore, the proposed project is potentially consistent with this LCP policy.

LCP Policy 8.1. *All new development of bluff top land shall be required to have drainage systems carrying run-off away from the bluff to the nearest public street or, in areas where the landform makes landward conveyance of drainage impossible, and where additional fill or grading is inappropriate or cannot accomplish landward drainage, private bluff drainage systems are permitted if they are: 1) sized to accommodate run-off from all similarly drained parcels bordering the subject parcel's property lines; 2) the owner of the subject property allows for the permanent drainage of*

those parcels through his/her property, and; 3) the drainage system is designed to be minimally visible on the bluff face.

Potentially Consistent. Project site runoff, as well as water that flows onto the project site from the adjacent driveway, would be collected by a series of on-site vegetated swales, catch basins, and by a small (17 square foot) vegetated bioretention pond. Collected water would be conveyed by an underground pipe to Lighthouse Creek where it would be discharged in a non-erosive manner and flow a short distance to the creek's terminus and to the ocean. Due to the topography of the project site and the adjacent properties to the north, landward drainage of project site runoff would not be feasible. The proposed drainage swales, the biorention pond, and the underground pipe that would discharge to Lighthouse Creek would be located landward of the ~~on the~~ coastal bluff face (i.e., ~~on the ocean side~~ to the north of the designated top of bluff). ~~The underground drainage pipe would not be visible on the bluff face, and the vegetated swales and bioretention basin would be below surrounding grade and minimally visible on the bluff face.~~ Therefore, the proposed project is potentially consistent with this LCP policy.

LCP Policy 8.2*. With the exception of drainage systems identified in Policy 8.1, no development shall be permitted on the bluff face except for engineered staircases or accessways to provide public beach access…*

Potentially Consistent. The project does not include new development on the bluff face other than the drainage facilities described by the evaluation of Policy 8.1. Therefore, the proposed project is potentially consistent with this LCP policy.

6.2.4 Shoreline Access

LCP Policy 2.1. *Public access in the coastal bluff areas of the City shall be maximized consistent with the protection of natural resources, public safety, and private property rights.*

Potentially Consistent. The project site includes an informal access path that extends down the coastal bluff to the beach, and access to the path is provided by a three-foot wide easement located along the western perimeter of the project site. This easement, however, only provides access for adjacent residents and does not provide coastal access for the general public. The proposed project would not make any alterations to the existing beach access pathway or impede use of the existing access easement. Therefore, the proposed project is potentially consistent with this LCP policy.

LCP Policy 2.4. *New development projects shall provide vertical access to the shoreline consistent with stipulations set forth in Section 30212 of the Coastal Act.*

California Coastal Act Section 30212. *Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where: (1) it is inconsistent with public safety, military security needs, or*

the protection of fragile coastal resources, (2) adequate access exists nearby, or, (3) agriculture would be adversely affected. Dedicated accessway shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway.

Potentially Consistent. A steep and narrow dirt path has been worn onto the project site bluff face. Wooden stairs near the southwestern corner of the proposed residence development site lead to the path, which switches back across the south exposure of the bluff face and terminates at the beach below the adjacent property west of the project site. The location of the path is depicted on EIR Figure 3.3-1 (Site Plan). Due to its informal construction characteristics, it does not provide engineered drainage or safety (i.e., handrails) improvements.

Each of the five properties that use the project site access driveway has a recorded beach access easement over the project site. There is no evidence of a public beach access easement on the project site. The use of the path by the public would have the potential to result in significant erosion and/or safety impacts. The proposed project (a single-family residence) would not result in a substantial increase in the demand for coastal access in the project area by the public or result in a substantial increase in the use of the path by neighbors that have easement rights to use the path. Therefore, there would not be a sufficient nexus to require the proposed project to form a private association to accept responsibility for maintenance and liability of the accessway for the benefit of the public.

The LCP identifies two existing coastal access points located near the project site that provide public beach access: Mesa Lane Trail, approximately 3,000 feet west of the project site; and Oliver Road, approximately 1,500 feet west of the project site. Other public coastal access points are also located in the project site area.

Based on the potential safety and environmental impacts that could result from the use of the existing path by the public, the inability to require the formation of a private association to maintain the path and accept liability, and the availability of other public access points within one-half mile of the project site, the project would not be required to provide a public access to the beach in accordance with the requirements of Coastal Act Section 30212.

Policy 2.5. *Vista points shall be provided and maintained in areas where such use by the public has been established.*

Potentially Consistent. A public vista point has not been established on the project site. Due to access and parking constraints, it would not be feasible to provide a vista point on or near the project site.

6.2.5 Housing

LCP Policy 5.3. *New development in and/or adjacent to existing residential neighborhoods must be compatible in terms of scale, size, and design with the prevailing character of the established neighborhood. New development which would result in an overburdening of public circulation and/or on-street parking resources of existing residential neighborhoods shall not be permitted.*

Potentially Consistent. As described in EIR Section 5.1.3, the size and general appearance of the proposed residence would be consistent with existing development located along El Camino de la Luz and the driveway that extends southward to the project site. Two parking spaces would be provided on the project site consistent with zoning requirements, therefore, the project would not overburden public on-street parking resources. The project would be subject to City design review approval per City design guidelines to assure visual compatibility. Therefore, the proposed project is potentially consistent with this LCP policy.

6.2.6 Locating New Development

California Coastal Act Section 30250. *(a) New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. In addition, land divisions, other than leases for agricultural uses, outside existing developed areas shall be permitted only where 50 percent of the usable parcels in the area have been developed and the created parcels would be no smaller than the average size of surrounding parcels.*

Potentially Consistent. The proposed single-family residence would be located contiguous with an existing residential neighborhood on a parcel that is zoned for residential development. As described in EIR Section 9.2.6 (Impacts Found Not to be Significant: Public Services), adequate fire, police, schools, utilities, water and sewer services are available to serve the proposed project. The proposed project does not include a request for a land division. Therefore, the proposed project is potentially consistent with this Coastal Act Section.

California Coastal Act Section 30252. *The location and amount of new development should maintain and enhance public access to the coast by (1) facilitating the provision or extension of transit service, (2) providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads, (3) providing non-automobile circulation within the development, (4) providing adequate parking facilities or providing substitute means of serving the development with public transportation, (5) assuring the potential for public transit for high intensity uses such as high-rise office buildings, and by (6) assuring that the recreational needs of new residents will not overload nearby coastal recreation areas by correlating the amount of development with local park acquisition and development plans with the provision of onsite recreational facilities to serve the new development.*

Potentially Consistent. The proposed project would result in the development of one single-family residence. Due to the small size of the project, it would not result in additional population that would substantially increase the demand for transit services or commercial services, and would not adversely affect existing pedestrian or alternative transportation modes in the project area. The project would provide required on-site parking and would not substantially increase the demand for off-site parking; and would not substantially increase the use of recreation facilities in the project area. Therefore, the proposed project is potentially consistent with this Coastal Act Section.

6.3 SINGLE FAMILY RESIDENCE DESIGN GUIDELINES

The Single Family Residence Design Guidelines provide a variety of measures to blend homes into the natural surroundings and to reduce the "apparent height" (the lowest point of contact with grade to the highest point of the building dimension) of the structure. Prescribed measures applicable to the proposed project are listed below:

27.1 Balance stepping the building up or down the hill with avoiding excessive spill down.

27.2 Balance setting the building into the hillside with minimizing grading.

27.3 Avoid large continuous paved areas. Paved areas should be broken up by using colored or textured materials.

27.4 Natural earth tone colors that blend with the surrounding topography and vegetation are encouraged.

27.5 Fit in with hillside topography and background.

27.6 Avoid interrupting natural ridgelines and skylines. Set the house below these.

27.7 Use landscaping to blend the structure with the environment.

27.8 Use materials and colors to reduce the apparent bulk.

27.9 Minimize exposed foundations and undersides of structures (e.g., underside of buildings or decks).

27.8 Avoid these design mistakes which raise both aesthetic and fire safety concerns:

- Exposed underfloor areas

- Large downhill cantilevers
- Tall support columns for overhanging areas

29.1 Homes with an apparent height less than 30 feet are preferable. Design review boards will carefully consider appropriateness of homes exceeding an apparent height of 30 feet.

29.2 Although the Municipal Code height limit is 30 feet in single family residential zones, appropriate hillside project proposals usually have a height of 25 feet or less, especially where the slope is less than 25%.

Potentially Consistent. The proposed residence would be stepped down the Lighthouse Creek canyon slope by constructing a portion of the building's lower level below existing grade. A small amount (288 cubic yards) of grading would be required to implement this design. By placing a portion of the structure below grade the apparent maximum height of the residence (25 feet above grade) would be minimized. As depicted on EIR Figures 5.1-5, 7 and 9, when seen from public viewing locations in and near La Mesa Park, the roof of the proposed residence would not project above the ocean/sky horizon.

The proposed residence would extend beyond the top of the Lighthouse Creek canyon slope, and an approximately 10-foot portion of the upper level of the residence would be cantilevered over the canyon slope. The cantilevered portion of the building would include habitable area and a deck. Most of the cantilevered floor area would be directly above an on-grade deck extending from the building's lower level, and the cantilever would not result in a large or highly visible underfloor area, or require the use of support columns.

The proposed building's northern elevation would not be an exposed foundation wall, but would not provide the architectural detailing (e.g., windows and decks) that would be provided by the proposed east, west and south elevations (Figures 3.3-2, -3 and -4). Views of the building's northern elevation would be substantially screened by vegetation to be provided in a proposed adjacent planting area located between the project site's northern property line and the residence.

7.0 GROWTH INDUCING IMPACTS

Section 15126.2(d) of the CEQA Guidelines requires an EIR to "*discuss the ways in which the project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth...*" In general terms, a project may result in a significant growth inducing impact if it individually or cumulatively with other projects results in any of the actions described in the following examples:

- The project removes an obstacle to growth, such as: the establishment of an essential public service, the provision of new access to an area, or a change in zoning or general plan designation.

- The project results in economic expansion, population growth or the construction of additional housing occurs in the surrounding environment in response to the project, either directly or indirectly.

The El Camino de la Luz residence project would be served by sewer, water and other utility services that have been established in the project area. Access to the project site is proposed to be provided by an existing substandard-sized easement. No road improvements would be required to obtain access to the project site. Therefore, the proposed project would not require an extension of public services that have the potential to result in or facilitate unplanned growth in the project area.

The proposed project would result in the development of one single-family residence. The project could generate short-term construction employment opportunities, but would not result in substantial population growth in the project region. Therefore, the proposed project would not result in significant growth inducing impacts.

8.0 ALTERNATIVES

Section 15126.6(a) of the *CEQA Guidelines* states that "*an EIR shall describe a range of reasonable alternatives to the project or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives*." The EIR is to consider a "reasonable range" of alternatives to foster informed decision-making and public participation. Section 15126.6(b) of the *CEQA Guidelines* indicates that the EIR "*shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly*."

Two alternatives to the El Camino de la Luz residence project have been evaluated by this EIR:

- **No Project Alternative.** This alternative assumes that the project site would remain in its present condition and the proposed residence would not be developed.

- **Smaller Project Alternative.** The objective of this alternative is to evaluate an alternative design to the proposed project to determine if it would reduce project-related impacts.

Alternative locations for the development of a new single-family home exist in the City of Santa Barbara. However, alternative locations were not evaluated as they would not meet the project objective of developing a new residence on the project site. Developing an alternative use on the project site was not considered to be a feasible alternative due to the land use requirements of the project site's existing residential (E-3) zoning designation.

An alternative that would move the residence to the west to minimize the structure's encroachment into the view corridor provided from La Mesa Park and to increase the setback from the top of the Lighthouse Creek canyon slope was considered but not evaluated because placing a residence closer to the western property line would substantially constrain vehicle access to and from the project site. The only point of vehicle access to the project site is from the project site access driveway that extends southward from El Camino de la Luz. The existing driveway cannot be relocated and enters the northwestern corner of the project site. Moving the residence to the west would not leave adequate area for vehicle access or maneuvering area for parked vehicles on the project site. In addition, the project site driveway provides a view corridor towards the ocean, and this view corridor would be maintained by the proposed project but blocked by an alternative that moved the structure closer to the western property line of the project site. Therefore, it was concluded that an alternative that would place a residence further to the west on the project site would not be feasible.

Other alternative locations on the project site were not evaluated because top of bluff setback requirements prevent moving the building site to the south, and property line setback requirements prevent moving the structure to the north. Moving the building site to the east would make any structure on the project site more visible from La Mesa Park, which would have the potential to increase the visibility of the structure from public viewing locations.

8.1 NO PROJECT ALTERNATIVE

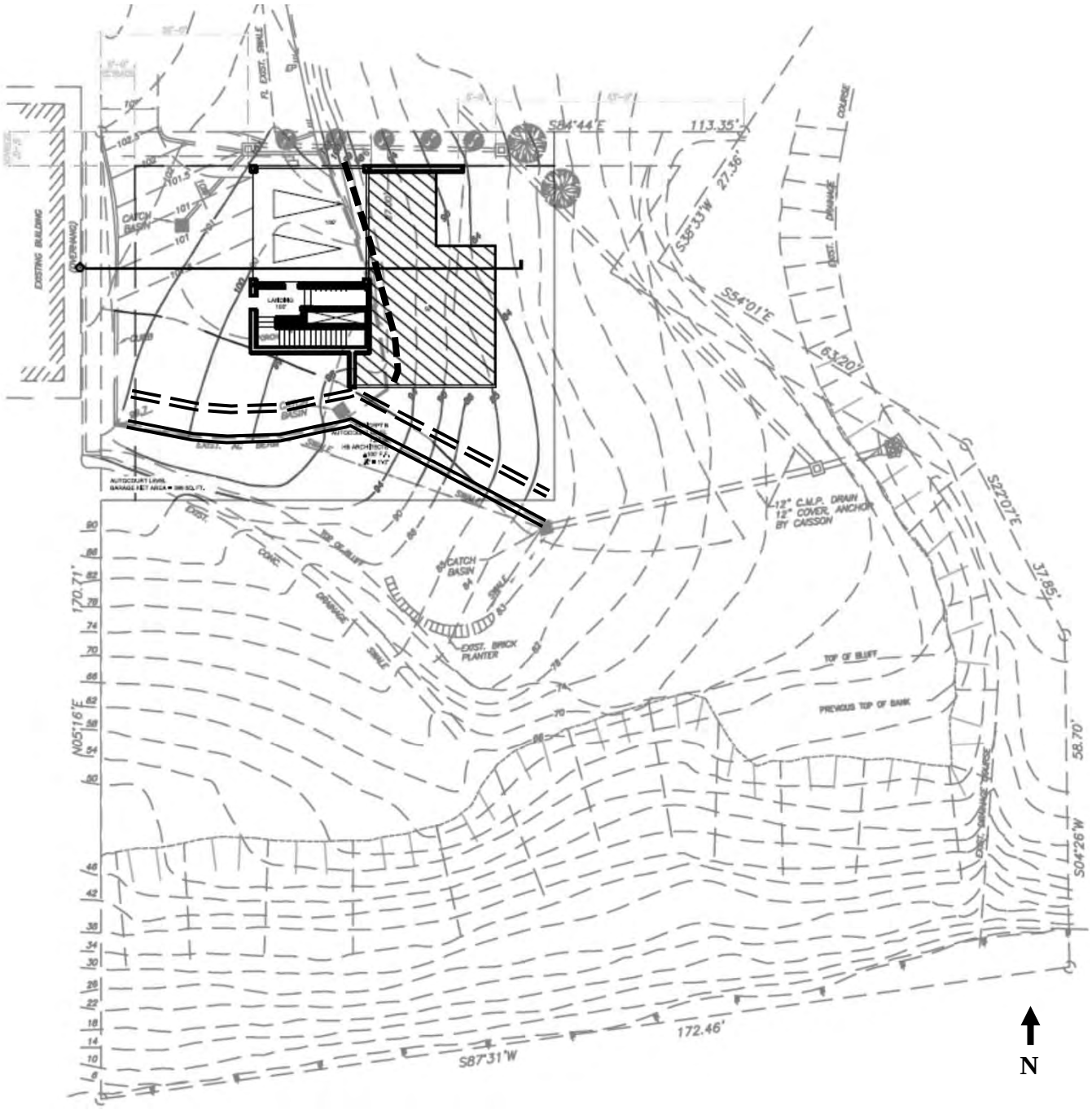
CEQA Guidelines Section 15126.6(e) requires that an EIR evaluate a "No Project" alternative. The purpose of this alternative is to "*allow decision-makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project.*" This alternative analysis compares the environmental effects of the project site remaining in its existing condition against environmental effects that would occur if the proposed project were approved.

The No Project Alternative would result in the project site being maintained in its current vacant condition, and a new residence would not be developed on the property. Implementation of this alternative would avoid the potential for significant aesthetic and geologic impacts associated with development of the proposed project. Implementation of this alternative, however, would not be required to reduce the proposed project's aesthetic and geologic impacts to a less than significant level. Implementation of the No Project Alternative alternative would avoid the potential environmental impacts of the proposed project, but would not achieve the primary objective of the project to develop a single-family residence on the project site.

8.2 SMALLER PROJECT ALTERNATIVE

8.2.1 Alternative Description

The objective of Smaller Project Alternative is to minimize project-related impacts by constructing a smaller residence on the project site. A site plan for the Smaller Project Alternative is provided on Figure 8.2-1, and elevations depicting an alternative residence design are provided on Figures 8.2-2 and 3. A cross section through the alternative residence is provided on Figure 8.2-4. Similar to the proposed project, the Smaller Project Alternative residence would be a two- level structure, however, the alternative would have approximately ~~300~~ 400 fewer square feet of livable floor area than the proposed project. The square footage characteristics of the Smaller Project Alternative are summarized on Table 8.2-1. The table also compares the floor area of the alternative design to the floor area characteristics of the proposed project.



Top of Coastal Bluff

75-year Setback

Top of Lighthouse Creek Canyon Slope

Sources: Modified from Hochhauser Blatter, 2006
Earth Systems Pacific, 2013a and 2013b

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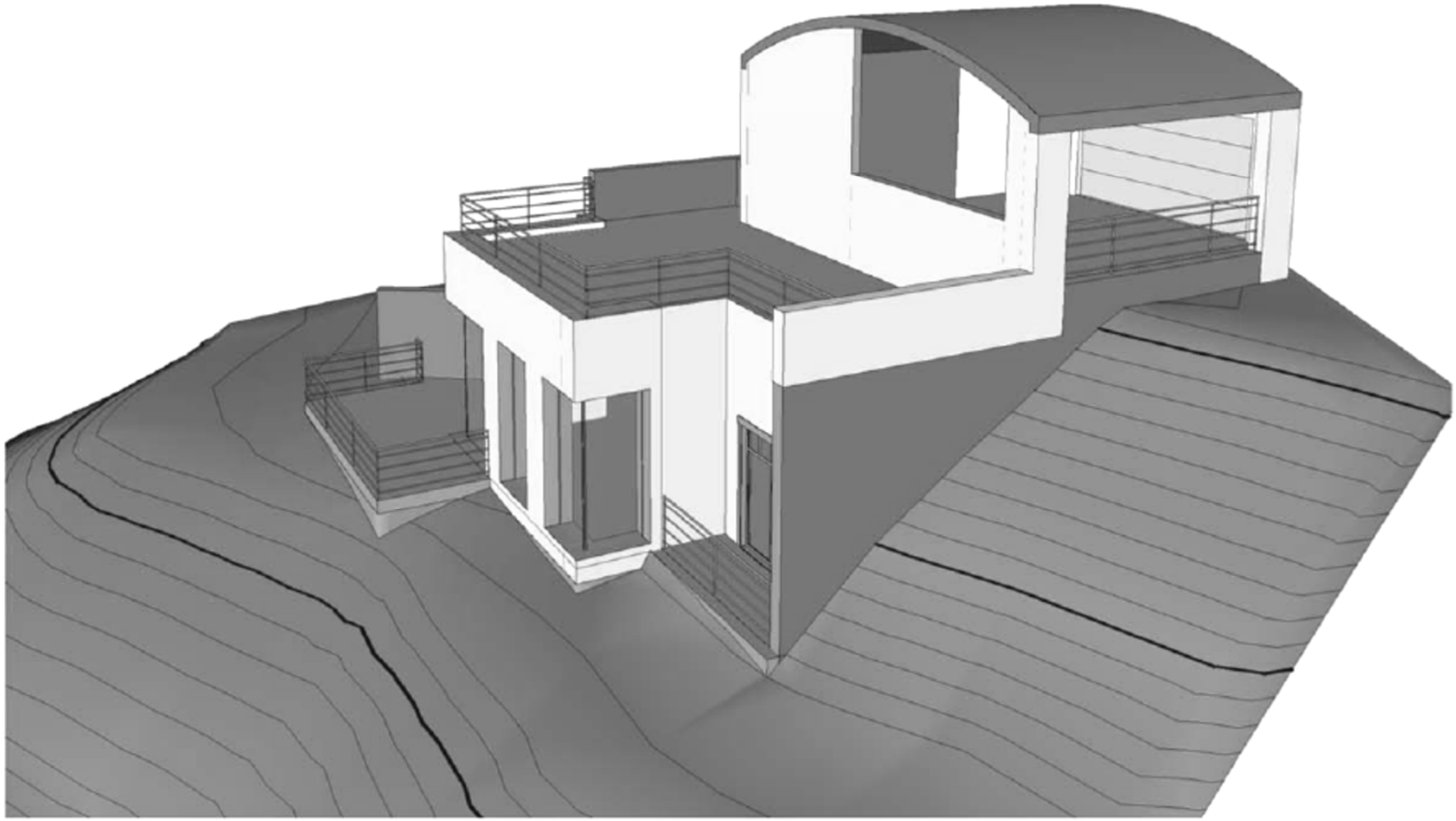
Figure 8.2-1

Smaller Project Alternative – Site Plan



Source: Hochhauser Blatter, 2006

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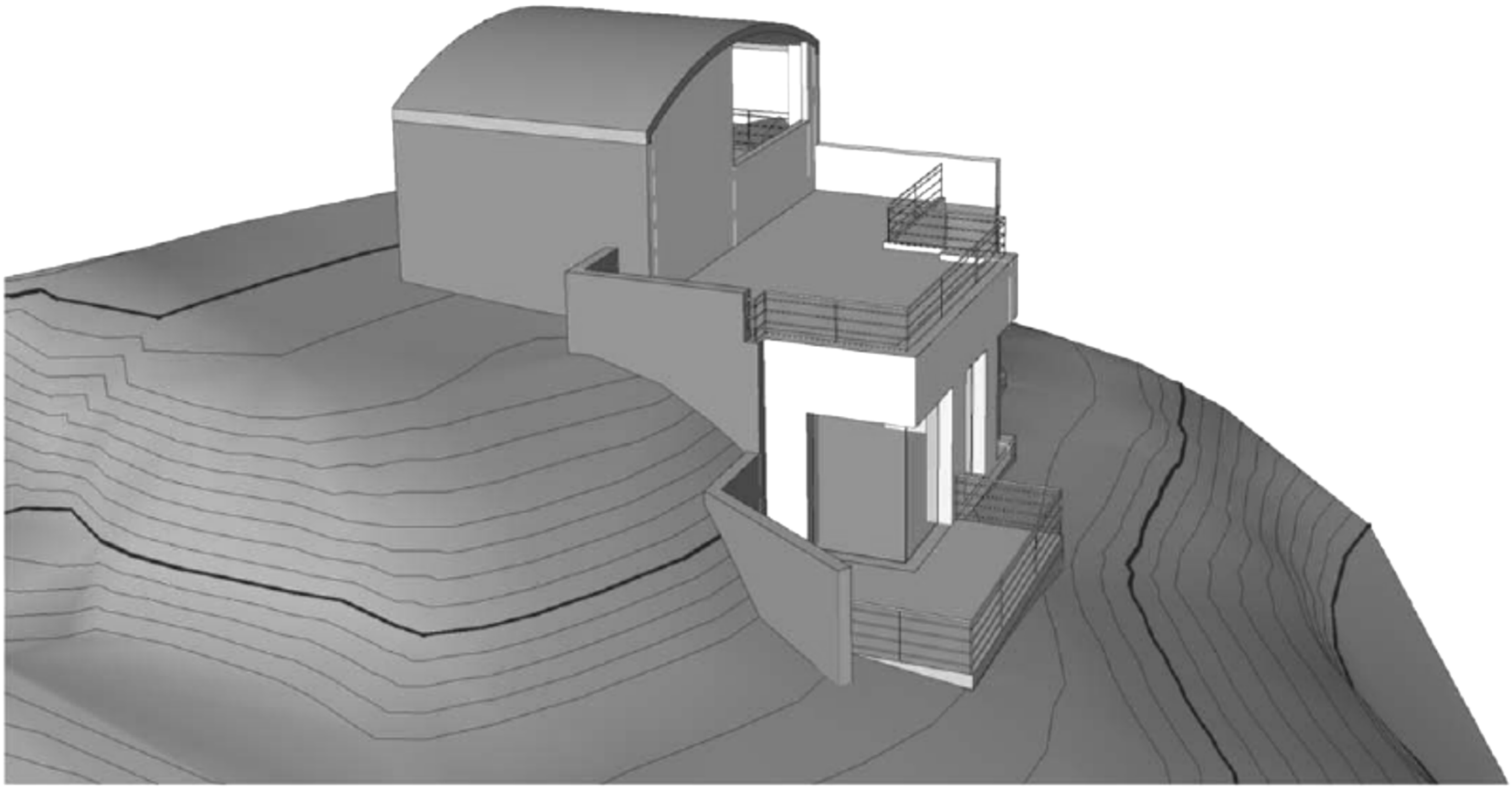
Figure 8.2-2

Smaller Project Alternative – View From the Northeast



Source: Hochhauser Blatter, 2006

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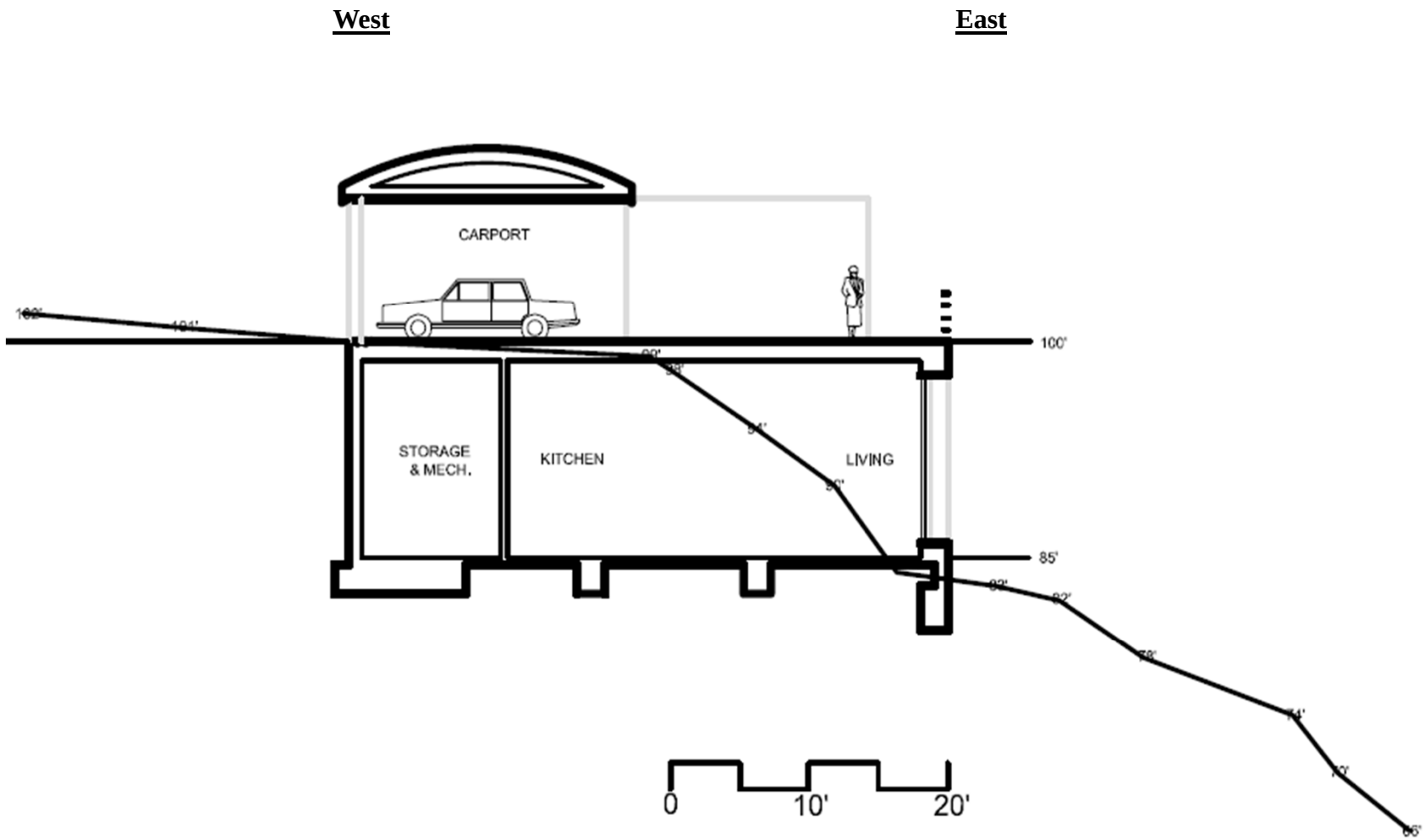
Figure 8.2-3

Smaller Project Alternative – View From the Southeast



Source: Hochhauser Blatter, 2006

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Figure 8.2-4

Alternative Project Design – Cross Section

Table 8.2-1
Smaller Project Alternative
Size Summary and Comparison

	Smaller Project Alternative	**Proposed Project**
Upper Level Livable Area	0	837 gross sq. ft
Lower Level Livable Area	1,204	777 gross sq. ft.
Total Liveable Floor Area	1,204	1,614 gross sq. ft.
Garage Area	400	475 gross sq. ft.
Total Floor Area	1,604	2,089 gross sq. ft.

Similar to the proposed project, the Smaller Project Alternative structure's lower level would be developed below existing grade. The alternative design differs from the proposed project in that all of the alternative design livable floor area would be located on the structure's lower level. When compared to the proposed project, the alternative design reduces the amount of building area on the structure's second level. The Smaller Project Alternative also results in a small increase in on-site grading. As depicted on the cross-section provided on Figure 8.2-4, the maximum depth of excavation for the alternative design would be approximately 15 feet, compared to approximately eight (8) feet for the proposed project. Approximately 500 cubic yards of excavation would be required to implement the alternative design concept, compared to approximately 288 cubic yards of excavation for the proposed project.

The eastern elevation of the alternative design residence would have a height of approximately 28 feet above existing grade, although the height of the eastern elevation could feasibly be reduced to approximately 25 feet if a flat roof were to be constructed over the garage on the upper level. For comparison, the height of the eastern elevation of the proposed project would be 25 feet above existing grade. The western elevation of the alternative design residence would be approximately 13 feet above existing grade, which could be reduced to a height of approximately 10 feet with a flat roof over the garage. For comparison, the height of the western elevation of the proposed project would be 15 feet above grade.

The Smaller Project Alternative places the residence in the same portion of the project site as the proposed project. As shown on Figure 8.2-1, setbacks from the top of the coastal bluff, the top of the Lighthouse Creek canyon slope, and setbacks from property lines would be generally similar to the setbacks provided by the proposed project.

8.2.2 Aesthetics

Criterion A. *Potential for the project to result in a substantial obstruction or degradation of important distant scenic views from public viewing locations.*

View Degradation. The Smaller Project Alternative would provide approximately 1,204 square feet of livable floor area, which is approximately 410 fewer square feet than the proposed project. The reduction in the size of the residence is achieved by reducing building area on the structure's upper level, which would be used only for parking and would not provide any livable floor area. Based on archive plan review, the size of the alternative design would be smaller than other residences located along the project site access driveway, and the multi-level design would be consistent with existing residences. Therefore, the size of the Smaller Project Alternative would not be out of character with the surrounding neighborhood and the three important public scenic views in the project area would not be substantially degraded as a result of the size of alternative project. Similar to the proposed project, building size-related impacts associated with this alternative would be **less than significant (Class III).**

The use of neutral or earth-tone colors on the exterior of the residence would minimize the potential for the structure to be out of character with surrounding development, and would be consistent with other visual elements located in the three important public scenic views in the vicinity of the project site. Similar to the proposed project, potentially significant impacts that may result from the use of exterior colors in the future that are incompatible with the surrounding neighborhood could be **significant but mitigable (Class II)** and reduced to a less than significant level by requiring ABR approval of proposed colors and future building color changes.

The Smaller Project Alternative would not result in the use of large understory walls to facilitate the development of the residence on the sloping, building area portion of the project site. This would be accomplished by placing the lower level of the structure below existing grade. Therefore, similar to the proposed project, potentially significant visual impacts resulting from the use of understory walls would **be less than significant (Class III)** and no additional mitigation measures would be required.

The development of Smaller Project Alternative would require approximately 500 cubic yards of grading and the grading would occur within the structure's footprint area. Therefore, earthwork required to implement this alternative would not substantially alter the appearance of the project parcel as seen from off-site locations. After construction activities are complete, no ground disturbance areas (i.e., grading scars) would be visible. Vegetation located on the building pad area and adjacent to the building pad consists primarily of weedy plant species and the removal of those plants would not result in a substantial alteration to the appearance of the project site.

The disturbance or removal of vegetation resulting from construction activities, including grading, drilling caisson holes for the structure's foundation, and/or the installation of proposed storm water drainage system pipes on the creek canyon slope, could result in long-term visual impacts if disturbed vegetation is not restored. Proposed mitigation measure BIO-1was identified by the Revised Initial Study prepared for the proposed project and requires that areas disturbed by grading and construction of the drainage system be replanted with native vegetation; and that the required planting be maintained for the life of the project. A similar mitigation measure would be required for the proposed project, and the implementation of the mitigation requirement would reduce potential vegetation removal-related visual impacts to a less than significant level. Therefore, similar to the proposed project, potential vegetation removal impacts of the Smaller Project Alternative are **significant but mitigable (Class II).**

In conclusion, the floor area of the Smaller Project Alternative is reduced when compared to the floor area of the proposed project. Similar to the proposed project, the alternative design would not be out of character with the surrounding neighborhood, would require mitigation related to possible future building color changes, and would require mitigation to restore areas disturbed by construction activities. The Smaller Project Alternative would not reduce the potential for development on the project site to substantially degrade an important public scenic view when compared to the impacts of the proposed project, and similar mitigation measures are required for the proposed project and this alternative. Therefore, the proposed project and the Smaller Project Alternative would result in **similar** significant but mitigable impacts related to this criterion.

View Obstruction. This criterion indicates that the proposed project would result in a significant aesthetic impact if it would substantially obstruct views provided from one or more of the important public scenic viewpoints that have been identified at La Mesa Park or from Meigs Road.

La Mesa Park. Areas of La Mesa Park that provide public views of the project site and ocean include the "benches" area near the southern end of the park, and the southern portion of the park's lawn area.

"Benches" Area. A simulation of post-development visual conditions as would be seen from the "benches" area after the development of Smaller Project Alternative is provided on Figure 8.2-5. The photosimulation shows that the alternative design residence would appear to be lower in height than the existing houses that are currently visible within the view corridor, and the alternative design would result in a minor loss in the amount of ocean view that is currently visible. The alternative design residence would be visible along the western edge of the "benches" area view corridor, however, the structure would not substantially alter the visual extent of the view corridor because the western edge of the corridor would continue to be defined by existing trees, bushes and houses. Therefore, as seen from the Mesa Park "benches" area and similar to the proposed project, the Smaller Project Alternative would not substantially reduce or

interfere with existing ocean views and impacts to public views of an important visual resource (the ocean) would be **less than significant (Class III).**

A comparison of post-development visual conditions of the Smaller Project Alternative (Figure 8.2-5) to post-development visual conditions of the proposed project (Figure 5.1-5) shows that the Smaller Project Alternative would result in a slight reduction in the loss of ocean views. This small reduction is due to the reduced amount of building area on the upper level of the alternative design residence. Therefore, the Smaller Project Alternative's impacts related to this criterion would be slightly **reduced** when compared to the less than significant impacts of proposed project.

Southern Lawn Area. A simulation of post-development visual conditions as would be seen from the southern lawn area of La Mesa Park after the development of Smaller Project Alternative is shown on Figure 8.2-6. As would be seen from the southern lawn area, the alternative design residence would have a minor effect on existing ocean views, and although the structure would be visible from the southern lawn area, it would not dominate or appear to prominently extend into the existing view corridor. Therefore, similar to the proposed project, the Smaller Project Alternative would result in a **less than significant (Class III)** impact to ocean views as seen from the southern lawn area.

A comparison of post-development visual conditions of the Smaller Project Alternative (Figure 8.2-6) to post-development visual conditions of the proposed project (Figure 5.1-7) shows that the Smaller Project Alternative would result in a slight reduction in the loss of ocean views due to the reduced amount of building area on the upper level of the alternative design residence. Therefore, the Smaller Project Alternative's impacts related to this threshold would be slightly **reduced** when compared to the less than significant impacts of proposed project.

Lighthouse Creek Footbridge. A simulation of post- development visual conditions as would be seen from a view point at the eastern end of the footbridge after the development of Smaller Project Alternative is provided on Figure 8.2-7. As would be seen from the eastern end of the footbridge, the alternative design residence would appear to be lower in height than the existing nearby houses and would result in a very small loss of existing views of the ocean. In addition, the top of the proposed structure would appear to be located well below the ocean/sky horizon and would not substantially reduce the visual extent of the existing view corridor. Therefore, similar to the proposed project, the Smaller Project Alternative would not substantially reduce or interfere with existing ocean views provided from a viewpoint at the eastern end of the bridge and would result in a **less than significant (Class III**) impact to public views of an important visual resource (the ocean)**.**

Source: Hochhauser Blatter, 2006

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Figure 8.2-5

Smaller Project Alternative Photo-Simulation: La Mesa Park "Benches" Area

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Source: Hochhauser Blatter, 2006

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Figure 8.2-6

Smaller Project Alternative Photo-Simulation: La Mesa Park Southern Lawn Area

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Source: Hochhauser Blatter, 2006

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Figure 8.2-7

Smaller Project Alternative Photo-Simulation: Eastern End of the Lighthouse Creek Bridge

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A comparison of post-development visual conditions of the Smaller Project Alternative (Figure 8.2-7) to post-development visual conditions of the proposed project (Figure 5.1-9) shows that the Smaller Project Alternative would result in a slight reduction in the loss of ocean views due to the reduced amount of building area on the upper level of the alternative design residence. Therefore, the Smaller Project Alternative's impacts related to this criterion would be slightly **reduced** when compared to the less than significant impacts of proposed project.

Meigs Road. Views of the project site from the southbound lane of Meigs Road are limited in term of site visibility and duration. Similar to the proposed project, the Smaller Project Alternative residence would be visible from Meigs Road, but would not prominently extend into the ocean view corridor that is provided across the park. As a result, the structure could be overlooked by automobile passengers and would not substantially block important public scenic ocean views that are available from this view point. Therefore, this alternative would result in a **less than significant (Class III)** visual impact as seen from Meigs Road. Impacts to the Meigs Road viewing area resulting from the Smaller Project Alternative would be **similar** to the impacts of the proposed project.

Criterion B. *Potential for the project to result in a substantial adverse on-site visual aesthetic change incompatible with the surrounding area.*

The development of a residence on the project site is a land use allowed by the existing project site zoning, and the Smaller Project Alternative residence would be developed consistent with zoning regulations.

The Smaller Project Alternative would result in the development of a new residence on a presently vacant parcel, and the residence would be visible from the "benches" area and southern lawn area of La Mesa Park, and the footbridge over Lighthouse Creek. The existing houses along the east side of the project site access driveway are prominently visible from the "benches" area and the Lighthouse Creek footbridge. From the southern lawn area of La Mesa Park, however, the houses are partially screened from view by vegetation. Views of the project site and the alternative design residence from the "benches" area and from the footbridge would be consistent with the visual context of the surrounding area because other houses are clearly visible from those view points. Although the existing homes are partially screened from public views provided from the southern lawn area of La Mesa Park, views of the alternative desgin residence from the lawn area would be consistent with the urban context of the project area. Therefore, the use of the project site to develop the Smaller Project Alternative residence would be consistent with other land uses adjacent to and in the vicinity of the project site. The size of the residence would be smaller than other residences located along the east side of the project site driveway, and the architectural style would be compatible with the surrounding neighborhood. Therefore, the Smaller Project Alternative would not substantially impair the visual context of existing important public scenic views and would result in a **less than significant (Class III)** impact.

The Smaller Project Alternative would not reduce the potential for development on the project site to substantially impair the visual context of the project area when compared to the impacts of the proposed project. Therefore, the proposed project and the Smaller Project Alternative would result in **similar** less than significant impacts related to this threshold.

8.2.3 Geology

Criterion B. *Exposure to or creation of unstable earth conditions due to geologic or soil conditions, such as landslides, settlement, or expansive, collapsible/compressible, or expansive soils.*

Landslides. The 2011 slope stability analysis described in Section 5.1 of this EIR evaluated the potential for the proposed project to be adversely affected by slope stability impacts associated with the project site coastal bluff. That analysis determined that the slope would remain stable after the implementation of the proposed project. The 2011 slope stability analysis also indicated that while unlikely to occur, a substantial increase in groundwater beneath the project site would have the potential to result in a significant slope stability impact. This **significant but mitigable (Class II)** impact could be feasibly reduced to a less than significant level by implementing proposed mitigation measure GEO-1, which requires the installation of an appropriate storm water collection system on the project site. Other proposed mitigation measures, including BIO-1 and BIO-2, would minimize the use of landscape irrigation on the project site.

The 2013 evaluation of the stability of the Lighthouse Creek canyon slope concluded that the proposed project would not result in a significant slope stability impact because of the project's use of a caisson foundation. Proposed mitigation measure GEO-2 requires that the final project include an approved foundation design. Therefore, potential canyon slope stability impacts of the proposed project would be **significant but mitigable (Class II)**.

The Smaller Project Alternative would generally result in site development characteristics that are similar to those of the proposed project. Impacts of the Smaller Project Alternative that could adversely affect slope stability, such as construction-related disturbances of the site, an increase in impermeable area, and an increase in runoff water, would be potentially **significant but mitigable (Class II)** impacts that could be reduced to a less than significant level using building methods similar to those of the proposed project (e.g., the use of a caisson support foundation design), and the implementation of site restoration and drainage control mitigation measures similar to those required for the proposed project. Therefore, potential slope stability impacts of the Smaller Project Alternative would be **similar** to the impacts of the proposed project.

Bluff Retreat. An evaluation of how coastal bluff erosion could affect the project site was provided by the *Ocean Bluff Erosion Retreat Study* (2013). This study

determined that between 1953 and 2012, bluff retreat at the project site was equivalent to approximately one inch per year, and that an increase in sea level due to climate change could result in an accelerated rate of bluff retreat to approximately 1.2 inches per year. Consistent with the requirements of the Safety Element, it was determined that over a 75-year period the coastal bluff at the project site could move landward approximately 7.6 feet. The proposed project residence would be located behind the required coastal bluff retreat setback (7.6 feet) from the existing bluff edge, therefore, project-related coastal bluff retreat impacts would be **less than significant (Class III)**.

As depicted on Figure 8.2-1, the Smaller Project Alternative residence would be setback from the existing bluff edge a minimum of 7.6 feet, which would accommodate the estimated amount of bluff retreat over a 75-year planning period. Therefore, the bluff retreat impacts of the Smaller Project Alternative would be **less than significant (Class III)** and **similar** to the impacts of the proposed project.

Subsidence. Based on a laboratory evaluation of on-site soils conducted by Buena Engineers (1971), it was concluded that the project site is subject to soil settlement-related impacts. The report indicates that potential subsidence impacts can be adequately addressed using a properly engineered foundation design. A proposed mitigation measure (GEO-2) requires that the proposed project to provide an approved structure foundation, which would reduce potential subsidence impacts to a less than significant level. Therefore, potential subsidence-related effects would be a **significant but mitigable (Class II)** impact.

The Smaller Project Alternative would also be subject to subsidence-related impacts and would require the implementation of mitigation requirements similar to those specified for the proposed project. Therefore, potential subsidence-related impacts of the Smaller Project Alternative would be **significant but mitigable (Class II)** and **similar** to the impacts of the proposed project.

Expansive Soils. An evaluation of the project site conducted by Smith (1980) concluded that soils at the project site are expansive. This potentially significant impact can be reduced to a less than significant level by the use of a caisson foundation rather than footings. A proposed mitigation measure (GEO-2) requires the proposed project to provide an approved structure foundation, which would reduce potential expansive soil impacts to a less than significant level. Therefore, potential expansive soil effects would be a **significant but mitigable (Class II)** impact.

The Smaller Project Alternative would also be subject to expansive soil impacts and would require the implementation of mitigation requirements similar to those specified for the proposed project. Therefore, potential expansive soil impacts of the Smaller Project Alternative would be **significant but mitigable (Class II)** and **similar** to the impacts of the proposed project.

Criterion C. *Extensive grading on slopes exceeding 20%, substantial topographic change, destruction of unique physical features; substantial erosion of soils, overburden, or sedimentation of a water course.*

Project-related construction activities would occur on the relatively level portion of the project property, and on the upper portion of the Lighthouse Creek canyon slope. The gradient of the canyon slope on the proposed building site is approximately 60%. The proposed project would require approximately 288 cubic yards of excavation. Although the amount of grading at the project site would not be extensive, due to the project site's proximity to Lighthouse Creek, project-related ground disturbance would have the potential to result in a significant short-term erosion impact. This potential impact would be reduced to a less than significant level by complying with existing grading and erosion control requirements. Therefore, potential short-term grading impacts of the proposed project would be **less than significant (Class III).**

The disturbance or removal of vegetation resulting from construction activities at the project site could result in long-term erosion-related impacts if disturbed vegetation is not restored. Proposed mitigation measure BIO-1 requires that areas disturbed by construction activities be replanted with native vegetation. With the implementation of this mitigation measure, long-term erosion impacts of the project would be **significant but mitigable (Class II).**

The Smaller Project Alternative residence would be located in the same area of the project parcel as the proposed project, and grading to implement the alternative would affect a similar portion of the project site. The alternative project would require approximately 500 cubic yards of excavation, which would be approximately 212 cubic yards more than the proposed project. Grading required to construct the Smaller Project Alternative would have the potential to result in short- and long-term impacts that are similar to the impacts of the proposed project, and would be reduced to a less than significant level with the implementation of existing grading and erosion control requirements and proposed mitigation measure BIO-1. Therefore, grading impacts of the Smaller Project Alternative would be **significant but mitigable (Class II)** and **similar** to the impacts of the proposed project**.**

8.3 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Table 8.3-1 summarizes the potential for the alternatives evaluated by this EIR to avoid, or result in reduced, similar or increased environmental impacts when compared to the impacts of the proposed project.

If the No Project Alternative were to be implemented, the project site would remain in a vacant condition and the potential environmental impacts associated with the proposed project would be avoided. Therefore, the No Project Alternative is the environmentally superior alternative. The No Project Alternative, however, would not attain the primary objective of the project, which is to develop a single-family dwelling

on the project site. CEQA Guidelines Section 15126.6(e)(2) indicates that "*if the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.*"

The Smaller Project Alternative would incrementally reduce aesthetic impacts that would result from the proposed project due to the obstruction of existing ocean views. The design of this alternative would minimize impacts to ocean views by reducing the amount of structural development on the upper level of the building, which would result in a minor decrease in the amount of ocean water that is obscured by the structure when compared to the amount of view obstruction that would result from the proposed project. Similar to the proposed project, the Smaller Project Alternative requires the implementation of mitigation measures to review and approve building colors and landscape materials.

The portion of the project parcel that would be used to develop the Smaller Project Alternative residence would be similar to the area that would be used to develop the proposed project. Construction-related disturbances of the project site resulting from the development of the Smaller Project Alternative would also be similar to the area that would be disturbed by the proposed project. Therefore, the Smaller Project Alternative and the proposed project would have a similar potential to result in impacts related to landslides, bluff retreat, subsidence and expansive soils.

Since the Smaller Project Alternative would result in a slight reduction in aesthetic impacts (impacts to ocean views) the alternative design would be environmentally superior to the proposed project. The reduction in aesthetic impacts provided by the alternative is very minor and not required to reduce any aesthetic impacts of the proposed project to a less than significant level. The Smaller Project Alternative would achieve the primary objective of the proposed project, which is to develop a single-family residence on the project site.

Table 8.3-1
Alternatives Impact Comparison Summary

Evaluation Criteria	No Project Alternative	Smaller Project Alternative
Aesthetics		
A. Substantially Degrade an Important Scenic View	Avoided	Similar
A. Substantially Obstruct an Important Scenic View	Avoided	Reduced
B. Substantial Adverse Visual Aesthetic Change	Avoided	Similar
Geology		
B. Exposure to Unstable Earth Conditions	Avoided	Similar
C. Extensive Grading or Erosion Impacts	Avoided	Similar

KEY
Avoided = The impacts associated with this impact evaluation criterion would not occur under this alternative. This alternative, however, would not implement any of the objectives of the proposed project.
Reduced = This alternative's impacts would be reduced when compared to the impacts of the proposed project.
Similar = This alternative would result in impacts similar to the impacts of the proposed project.

9.0 IMPACTS FOUND NOT TO BE SIGNIFICANT

An Initial Study was prepared for the 1837½ El Camino de la Luz project in accordance with the requirements of *CEQA Guidelines* section 15063 to evaluate the potential for the project to result in significant environmental impacts. The Initial Study was originally prepared in 2005 and was revised in 2006. A copy of the Revised Initial Study (2006) is provided in Appendix "A" of this EIR.

The Revised Initial Study identified potentially significant adverse environmental impacts that could result from the implementation of the proposed project; potentially significant adverse impacts that could feasibly be reduced to a less than significant level with the implementation of mitigation measures identified by the Revised Initial Study; and project-related impacts that would be less than significant. Since the Revised Initial Study determined that the proposed project would have the potential to result in significant aesthetic impacts resulting from changes to existing visual conditions as seen from selected important public scenic viewpoints, the preparation of an Environmental Impact Report was required pursuant to *CEQA Guidelines* sections 15080 *et seq*. Subsequent to the preparation of the Revised Initial Study, it was determined by the City staff environmental analyst that the project EIR should also evaluate the potential for the proposed residence to result in significant impacts related to the stability of the ocean bluff located on the project site.

This EIR section provides a summary of the conclusions of the Revised Initial Study's evaluation of environmental impacts that were determined to be significant but could be reduced to a less than significant level with the implementation of proposed mitigation measures, and project-related impacts that were determined to be less than significant. Where necessary, the environmental impact analysis provided by the Revised Initial Study is updated in this section to address changes that have been made to the design of the proposed project, or to incorporate new information regarding environmental conditions at the project site**.** This section also provides analysis of CEQA issues (greenhouse gas emission and forest resources) that were added to the CEQA Guidelines Appendix G checklist as CEQA-related issues after the Revised Initial Study was prepared.

9.1 IMPACTS THAT CAN BE REDUCED TO A LESS THAN SIGNIFICANT LEVEL

9.1.1 Biological Resources

A description of the biological resources of the project site and surrounding areas, and evaluation the potential impacts to sensitive species that would result from the development of the proposed residence was originally provided by a biological assessment report prepared in 2002, and by an updated assessment prepared in 2006. The evaluation of project-related impacts to biological resources provided by the Revised Initial Study was based on information provided by the 2006 report.

The 2006 biological assessment indicates that vegetation on the proposed building site and the upper portions of the Lighthouse Creek canyon slope are dominated by non-native plant species. The 2006 assessment and Revised Initial Study focus on the potential for the proposed project to adversely affect native plant habitat and wildlife species located on the lower portion of the Lighthouse Creek canyon slope. In summary, the 2006 biological assessment and Revised Initial Study indicate that:

- A variety of native plant species are located on the project site sea cliff and on the lower portion of the Lighthouse Creek canyon slope.

- Native vegetation on the Lighthouse Creek canyon slope and in the creek channel provides "moderately high" quality habitat for amphibians, reptiles, birds and small mammals. Wildlife expected to use on-site native habitat, however, would generally be species tolerant of nearby urban uses.

- Surveys did not detect the presence of California red legged frog in Lighthouse Creek, and the steep drop of the creek bed from the project site to the ocean would preclude the presence of steelhead trout.

- The proposed project would not result in impacts to known monarch butterfly roosting sites located in the project area.

- Construction of the proposed project, particularly the project site storm water drainage system, would have the potential to result in significant impacts to native vegetation located on the Lighthouse Creek canyon slope and in the creek channel, and could also result in short-term water quality impacts. These potentially significant impacts would be reduced to a less than significant level with the implementation of proposed mitigation measures that require:

    - The restoration of disturbed areas consistent with the requirements of an approved restoration plan (Revised Initial Study Mitigation Measure BIO-1);
    - The installation of appropriate landscaping plants on the project site (Mitigation Measure BIO-2);

    - The use of an appropriate irrigation system at the project site (Mitigation Measure BIO-3);

    - The implementation of appropriate water quality protection measures during project construction (Mitigation Measure BIO-4); and

- A requirement to obtain a Streambed Alteration Agreement from the California Department of Fish and Game (now the California Department of Fish and Wildlife, Mitigation Measure BIO-5).

Due to the amount of time that has passed since the 2006 biological assessment was prepared, and to evaluate changes to the design of the proposed project, an updated evaluation of existing biological conditions and potential project-related impacts to biological resources has been prepared (Hunt, 2013). Information provided by the updated evaluation is summarized below and a copy of the report is provided in EIR Appendix G.

Existing Biological Conditions

Vegetation. The 2013 biological evaluation of the project site indicates that the proposed building site and the upper slopes of the Lighthouse Creek canyon slope on the project site are covered with a variety of ruderal (weedy) plant species. Imbedded in the non-native plants are sparse stands of native plants, including blackberry, toyon, lemonadeberry, poison oak, and wild rye. While the upper portions of the project site provide little biological value, the middle and lower portions of the east-facing slope of the Lighthouse Creek channel and the upper portion of the south-facing project site seacliff support native, woody scrub vegetation. Dominant plant species in these areas include coastal sunflower, saltbush, coastal sagebrush, toyon, poison oak, lemonadeberry, coastal goldenbush, blackberry, giant wild rye and coyote brush.

Special Status Vegetation. A native plant community referred to as Coastal Bluff Scrub is present on the mid- and lower-slopes of the Lighthouse Creek canon slope, and the upper portions of the project site seacliff. Coastal Bluff Scrub habitat is located on the middle portion of the Lighthouse Creek slope in two small areas: an area approximately 150 square feet in size in an area shown on project plans as a required flat area, and an area approximately 250 square feet in size in an area designated on project plans as open yard. Both of the Coastal Bluff Scrub habitat areas are surrounded by ruderal and ornamental plant species, which substantially reduces their biological value. More extensive areas of Coastal Bluff Scrub habitat are located on the lower slopes of the creek canyon slope and the upper portions of the project site seacliff. The Revised Initial Study does not specifically identify the presence of Coastal Bluff Scrub habitat on the project site, however, plants that comprise much of the habitat, such as saltbush, poison oak, lemonadeberry, coast goldenbush and blackberry, are identified as being present on the project site.

Wildlife. Hunt (2013) reported that wildlife conditions on the project site remain similar to those reported by the Revised Initial Study, and previous conclusions that the proposed project would not result in significant impacts to monarch butterflies, California red-legged frog and steelhead trout remain valid primarily due to the lack of suitable habitat on and near the project site. Hunt indicates that on-site Coastal Bluff Scrub habitat and the lower portions of the Lighthouse Creek channel provide areas suitable for

two-striped garter snake, which is known to exist in the project region. Hunt also reported that suitable nesting habitat is present in the willow woodland and trees located on the project property and surrounding areas for a variety of California Species of Special Concern, including raptors.

Project-Related Impacts to Biological Resources

The Revised Initial Study and Hunt (2013) determined that the proposed project would have the potential to result in construction-related water quality impacts, and impacts to wildlife and wildlife habitat located in the Lighthouse Creek channel and on the mid- and lower-portions of the Lighthouse Creek channel slope. Revised Initial Study mitigation measure BIO-4 specifies various regulatory requirements and site-specific erosion control measures that would reduce the potential for water quality-related impacts to a less than significant level. Hunt (2013) identifies three additional water quality protection measures that would further reduce the potential for project-related water quality impacts. Measures recommended by Hunt are provided below as proposed mitigation measures BIO-4.9, 4.10 and 4.11.

The Revised Initial Study indicates that "moderately high" quality habitat is provided along the Lighthouse Creek corridor that is capable of supporting a variety of bird species. Since the project would not result in the removal of any of this habitat, the Revised Initial Study did not identify significant impacts to nesting birds. Hunt (2013) indicates that project-related construction activity would have the potential to result in a significant impact if construction were to occur near an occupied nest. This potentially significant impact can be reduced to a less than significant level by a mitigation measure recommended by Hunt, which is provided below as mitigation measure BIO-6.

The Revised Initial Study and Hunt (2013) indicate that project-related construction activities have the potential to remove or disturb native vegetation, and Hunt indicates that the project could result in impacts to Coastal Bluff Scrub habitat located on the project site. This potential impact could result from construction-related disturbance, the installation of the proposed storm water drainage system, or the establishment and maintenance of required yard areas. Revised Initial Study mitigation measure BIO-1 requires the restoration of disturbed or removed native plant areas and provides specific requirements regarding appropriate plant materials and other required restoration activities. To implement this mitigation measure, the project includes the restoration of approximately 8,000 square feet of the project site located to the south and east of the proposed residence with a variety of native plants (see EIR Figure 3.3-8, Landscape Plan). The implementation of the proposed restoration plan in accordance with the requirements of mitigation measure BIO-1 would be adequate to reduce potentially significant habitat disturbance or removal impacts to a less than significant level.

Hunt (2013) identifies additional measures to further minimize impacts to native habitat and impacts to wildlife species, including the installation and maintenance of temporary fencing along the edge of specified ground disturbance areas during project

construction, and project site monitoring during initial grading activities by a qualified biologist to relocate displaced animals. The additional wildlife and habitat protection measures recommended by Hunt are provided below as measures BIO-7 and BIO-8.

Another potential impact to native plants and habitat identified by the Revised Initial Study and Hunt (2013) could occur if the removal of non-native plants from the proposed building site were to result in the spread (i.e., seed dispersal) of invasive plants. This potentially significant impact would be reduced to a less than significant level by Revised Initial Study mitigation measure BIO-1, which specifies methods to be used to remove non-native plants from the project site, and that native plants be used for restoration purposes. Hunt (2013) recommends similar mitigation requirements. No new mitigation measures are required to reduce this potentially significant impact to a less than significant level.

Implementation of each of the mitigation measures proposed by the Revised Initial Study and Hunt would reduce the presence of non-native and invasive plants on the project site. This effect would result in a beneficial environmental impact.

Additional Mitigation Measures

~~The following m~~Mitigation measures 9, 10 and 11 below are identified by Hunt (2013); and mitigation measure 12 is provided in response to California Coastal Commission comments on the Second Revised Draft EIR (Comment Letter No. 2, dated December 1, 2016). The additional mitigation measures provided below ~~and~~ supplement mitigation measures proposed by the Revised Initial Study. The additional measures further reduce the proposed project's significant but mitigable short-term water quality impacts.

BIO-4 Erosion Control/Water Quality Plan

9. Implement applicable BMPs to prevent, control, and contain soil erosion, as detailed in SWPPP to be developed for the project.

10. Time grading and soil disturbance to occur during the dry season (May-Nov) and hydromulch all disturbed soils at onset of rainy season.

11. A qualified biologist shall periodically check maintenance of erosion control measures and hydromulch during construction and suggest remedies where necessary.

12. The use of herbicides for the removal of non-native plants in the proposed habitat restoration area shall be minimized to the extent practical. If herbicides must be used to ensure the removal of non-native plants, herbicide use shall be limited to the application of Glyphosate Aquamaster.™

Herbicide use on the project site shall occur only in the proposed habitat restoration area.

The following mitigation measure would reduce the potential for the proposed project to result in significant impacts to nesting birds to a less than significant level.

BIO-6 Active Bird Nest Protection. Time grading to occur when birds are not nesting (July- February). A qualified biologist shall conduct a pre-construction survey within 500 feet of the project site for nesting birds if initial grading is to occur between February and July. The results of the survey shall be submitted to the City. If active bird nests are detected by the survey, construction shall be delayed until birds have fledged the nest or until the biologist determines that construction will not disturb nesting behavior.

The following mitigation measures supplement measures identified by the Revised Initial Study and further minimize the proposed project's significant but mitigable impacts to sensitive habitat and wildlife species, including two-striped garter snake should it be located on the project site.

BIO-7 Wildlife Protection. A qualified biologist shall be present at the onset of initial site grading to salvage and relocate any animals displaced by grading and vegetation grubbing.

BIO-8 Sensitive Habitat Protection. A qualified biologist shall supervise installation of orange construction fence and silt fence around the surveyed construction disturbance limits prior to initial site grading and vegetation removal. This fencing shall be maintained for the duration of construction.

9.1.2 Geology

The Revised Initial Study determined that the proposed single-family residence would result in less than significant impacts due to earthquake-related geologic hazards such as fault rupture, ground shaking, seiche, tsunami and liquefaction. Proposed revisions to the design of the project since the Revised Initial Study was prepared would not adversely affect the potential for the project to be affected by these types of geologic hazards. Therefore, as concluded by the Revised Initial Study, no mitigation measures are required for earthquake-related geologic hazard impacts.

The Revised Initial Study indicates that the project site is located on a coastal bluff and determined that based on the results of previous site investigations, project-related impacts to the stability of the bluff would be reduced to a less than significant level with the implementation of a proposed mitigation measure to control on-site drainage (Revised Initial Study Mitigation Measure G-1/EIR Mitigation Measure GEO-1). Since the Revised Initial Study was prepared, additional analysis of the project site coastal bluff has been conducted, including evaluations of the stability of the bluff

provided by the Draft EIRs prepared in 2006 and 2012. The evaluation provided by the 2012 Draft EIR determined that with the implementation of the proposed drainage control mitigation measure, the project would not result in a significant bluff stability impact. The revised project design places proposed development in locations that are similar to the development locations evaluated by the Revised Initial Study, the 2006 Draft EIR and the 2012 Draft EIR. A design difference between the previous project design and the current design is that the current design results in the export of approximately 267 cubic yards of soil from the project site (288 cubic yards of cut – 21 cubic yards of fill). Removing soil from the proposed development site would reduce the amount of weight on the top of the coastal bluff, and as such would not have an adverse effect on the stability of the bluff.

Subsequent to the preparation of the 2012 Draft EIR, additional analysis regarding the location of the top of coastal bluff on the project site, the location of the top of the canyon slope along Lighthouse Creek at the project site, and the stability of the Lighthouse Creek channel slope on the project site has been conducted. That information and analysis is provided in Sections 5.2.1 and 5.2.3 of this EIR.

The Revised Initial Study indicates that proposed development on the project site could be adversely affected by expansive soils, however, this potentially significant impact would be reduced to a less than significant level by a proposed mitigation measure (Revised Initial Study Mitigation Measure G-2/EIR Mitigation Measure GEO-2), which requires the proposed building's foundation be approved by a licensed Engineering Geologist or Geotechnical Engineer. The Revised Initial Study also indicates that the use of a caisson foundation rather than footings could be a foundation design method that would reduce potential expansive soil impacts to a less than significant level. The revised design of the proposed residence still requires the implementation of this proposed mitigation measure for the potential adverse effects of expansive soils.

9.1.3 Hazards

The Revised Initial Study determined that the proposed single-family residence would not result in significant impacts related to the use of hazardous materials or other health hazards. However, the project would have the potential to result in significant fire protection hazard due to its location adjacent to native vegetation in Lighthouse Creek and the narrow width of the access driveway. This impact would be reduced to a less than significant level with the implementation of proposed mitigation measures that require:

- The proposed structure be provided with automatic fire sprinklers (Revised Initial Study Mitigation Measure H-1);

- The proposed structure be provided with a monitored fire alarm system (Mitigation Measure H-2);

- The proposed structure comply with applicable high fire hazard area construction requirements (Mitigation Measure H-3); and

- The maintenance of required sprinkler and alarm systems (Mitigation Measure H-4).

The previous design of the proposed residence included a "green" or vegetated roof, however, that feature has been removed from the project to comply with Fire Department requirements. The removal of the vegetated roof further reduces the potential for fire-related hazards at the project site. The revised design of the proposed residence still requires the implementation of the proposed fire hazard reduction mitigation measures.

9.1.4 Transportation/Circulation

The Revised Initial Study determined that the proposed single-family residence would not generate a substantial amount of vehicle traffic, result in traffic-related hazards, or result in long-term parking-related impacts. The proposed project would have the potential to result in a significant vehicle access-related impact because the legal adequacy of the driveway providing access to the project site has been disputed. To resolve this issue and reduce potential access-related impacts to a less than significant level, Revised Initial Study mitigation measure T-1 requires the project parcel owner to provide the City with satisfactory evidence that "the required amount of legal access that formed the basis for the original lot split" is available to serve the project. The width of the access driveway varies from 15 feet to 7.5 feet.

Recommended mitigation measures provided by the Revised Initial Study would further reduce less than significant, short-term construction-related traffic impacts by requiring City approval of travel routes for large project-related construction vehicles (Mitigation Measure T-2), and the implementation of measures to minimize construction vehicle and material storage conflicts with properties near the project site (Mitigation Measure T-3).

The revised design of the proposed residence still requires the implementation of mitigation measure T-1. Implementation of recommended mitigation measures T-2 and T-3 also continues to be warranted.

9.1.5 Water Environment

The Revised Initial Study determined that the proposed single-family residence would result in less than significant storm water drainage and flooding-related impacts. However, to address new storm water management regulations, City staff requested that an updated evaluation of the project's drainage-related impacts be prepared. In response to the request, a new Hydrology and Storm Water Quality Report has been prepared and submitted to the City (RRM Design Group, 2016). The revised report describes the

project's proposed drainage and water quality system, which in general would consist of a series of drainage swales, catch basins, underground storm drains, ~~a "green" roof on the proposed residence,~~ the use of permeable pavers in the proposed driveway area, a small (17 square foot) bioretention pond that could retain up to three cubic feet of water, and a new pipe that would discharge storm water to the Lighthouse Creek channel. The previous design of the proposed residence included a "green" or vegetated roof, however, that feature has been removed from the project to comply with Fire Department requirements. Table 9.1-1 shows runoff flows and volumes generated from the project site under existing and proposed development conditions. As depicted by the table, the post-development condition would result in a small decrease in storm water discharges from the project site. The removal of the vegetated roof from the project would result in a small decrease in storm water retention capabilities at the project site, which could result in a minor increase in post-project development runoff characteristics shown on EIR Table 9.1-1 (Project Site Storm Water Runoff Characteristics). However, compliance with the requirements of mitigation measure W-1 (Drainage and Water Quality) will ensure that the final project site drainage system implements and complies with the City's storm water management standards, and that potential project-related drainage impacts are reduced to a less than significant level.

Table 9.1-1
Project Site Storm Water Runoff Characteristics

Storm Event	Peak Flows (cubic feet per second)		Runoff Volume(cubic feet)	
	Existing	Proposed	Existing	Proposed
1-inch	0.02	0.02	149	117
2-year	0.15	0.13	970	885
5-year	0.26	0.25	1,671	1,570
10-year	0.35	0.33	2,175	2,066
25-year	0.45	0.44	2,821	2,706
50-year	0.53	0.52	3,307	3,188
100-year	0.61	0.59	3,783	3,662

Source: RRM Design Group, 2016

The Revised Initial Study determined that the project ~~would~~ could ~~not~~ result in significant long-term storm water quality impacts, ~~but~~ and proposed construction activities would have the potential to result in significant short-term water quality impacts to Lighthouse Creek. ~~This~~ These potentially significant impacts would be reduced to a less than significant level with the implementation of proposed mitigation measure W-1, which requires City approval of proposed grading, drainage, storm water and project development plans; and ~~. Recommended~~ mitigation measure ~~W-2~~GEO-1, which requires the property owner to perform maintenance operations on the project site drainage system to~~, which would~~ further reduce the potential for project-related long-term water quality impacts. The revised design of the proposed residence still requires the implementation of mitigation measure W-1, and ~~. Implementation of recommended~~ mitigation measure ~~W-2~~GEO-1 also continues to be warranted. The design, construction and operation of the proposed storm water management system in accordance with the City's building and

storm water quality standards and requirements, along with the requirements of proposed and recommended mitigation measures, would reduce the project's drainage-related impacts to a less than significant level.

Stage Three Drought. The City's Water Shortage Contingency Plan states that the City Council should consider regulations of water use and suspension of permit approvals during Stage Two and Stage Three Drought Conditions. The City is currently in a Stage Three Drought Emergency condition, with some water use regulations and development restrictions in effect that restrict how water can be used during the drought. For more information, visit www.SantaBarbaraCA.gov/Drought.

Currently, irrigation with potable water of landscapes outside of newly constructed homes and buildings must be accomplished in a manner consistent with regulations and other requirements established by the California Building Standards Commission and the Department of Housing and Community Development. The City recommends that projects design their landscape/irrigation to comply with this requirement.

Additionally, a Staff team has been considering possible development restrictions in order to appropriately manage this critical water shortage while balancing possible effects on the local economy. These restrictions, as well as additional water use regulations, could be implemented by City Council as part of a phased approach. Potential development restrictions could include, but are not limited to, mandatory landscape deferral, suspension of building permits for new pools, and suspension of building permits for projects that result in net new water use (generally, an increase in number of units or commercial floor area). These actions could be implemented as part of future phases of the Stage Three Drought Emergency.

9.2 LESS THAN SIGNIFICANT IMPACTS

9.2.1 Aesthetics - Lighting

The Revised Initial Study determined that the proposed project would result in less than significant lighting-related impacts because it would be required to comply with the City's Outdoor Lighting and Design Ordinance. The proposed project would still be required to comply with applicable lighting-related requirements. Other potential aesthetic impacts of the project, including potential impacts to views provided from identified important public viewpoints, are evaluated in Section 5.1.3 of this EIR.

9.2.2 Air Quality

The Revised Initial Study determined that the proposed single-family residence would not result in significant short- or long-term air quality impacts. To further reduce the potential for construction-related air quality impacts, mitigation measures AQ-1 through AQ-6 are recommended to reduce dust emissions and emissions from

construction equipment. Implementation of the recommended mitigation measures to reduce construction-related emissions continues to be warranted with the revised design of the proposed project.

9.2.3 Cultural Resources

A previous survey of the project site did not detect the presence of cultural resources. Therefore, the Revised Initial Study concluded that the proposed project would not result in significant impacts to cultural resources, and this determination remains applicable to the redesigned project. Recommended mitigation measure CR-1 provides measures to be implemented in the unlikely event that previously undetected cultural resources are uncovered during the construction of the project. The implementation of recommended mitigation measure CR-1 continues to be warranted.

9.2.4 Noise

The Revised Initial Study determined that construction activities at the project site, such as the use of earthmoving equipment and drilling to install foundation caissons as recommended by the evaluation of potential expansive soil impacts (Section 9.1.2) would result in a temporary increase in noise levels in areas adjacent to the project site. Although construction activities would result in an adverse increase in noise levels, the project would not result in a significant short-term noise impact due the limited extent and duration of construction activities. This determination remains applicable to the revised project design and the grading and foundation preparation operations (i.e., drilled caissons) that would be used to construct the proposed residence. The Revised Initial Study provides recommended construction noise reduction measures to further reduce short-term noise impacts, including requirements to notify nearby property owners and residents prior to the start of construction activities (Mitigation Measure N-1); limitations on the days and hours that construction operations may occur (Mitigation Measure N-2); and a requirement that construction equipment be provided with appropriate noise reduction devices (Mitigation Measure N-3). The implementation of recommended construction noise reduction mitigation measures continues to be warranted.

The Revised Initial Study concluded that the proposed project would not be a substantial long-term source of noise. This conclusion remains appropriate for the revised design of the proposed single-family dwelling.

9.2.5 Population and Housing

The Revised Initial Study concluded that the proposed project would result in less than significant growth inducing or housing-related impacts. This determination remains appropriate for the revised design of the proposed single-family dwelling.

9.2.6 Public Services

The Revised Initial Study concluded that the proposed project would result in less than significant impacts to public services, including fire and police protection, schools, utilities, water and sewer service. This determination remains appropriate for the revised design of the proposed single-family dwelling.

9.2.7 Recreation

The Revised Initial Study concluded that the proposed project would not result in a substantial increase in the demand for recreation facilities or impacts to existing facilities. Therefore, the project's impacts to recreation facilities would be less than significant. This determination remains appropriate for the revised design of the proposed single-family dwelling.

9.2.8 Greenhouse Gas Emission

After the Revised Initial Study for the El Camino de la Luz residence project was prepared, the State adopted legislation that requires CEQA evaluations to include an assessment of a project's potential to contribute to global climate change impacts. CEQA Guidelines Section 15064.4(b) now indicates that a Lead Agency should consider the following factors when assessing the significance of a project's climate impacts: assess the extent to which a project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting; determine if a project would exceed an applicable threshold of significance; and the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional or local plan for the reduction or mitigation of greenhouse gas emissions.

Thresholds for evaluating the significance of a project's greenhouse gas emissions and resulting global climate change impacts have not been adopted on a local level, however, the County and City of Santa Barbara has used on an interim basis a significance threshold that was adopted by the Bay Area Air Quality Management District (BAAQMD) in June 2010. The BAAQMD threshold and supporting analysis are considered appropriate for land use projects in Santa Barbara because the County's population growth, land use patterns, General Plan policies and average commute patterns and times are similar to certain Bay Area counties. Based on the BAAQMD threshold, a project's contribution to cumulative impacts to greenhouse gas emissions and climate change impacts would be cumulatively considerable if the project would produce in excess of 1,100 metric tons of carbon dioxide equivalents per year.

Existing Greenhouse Gas Emissions. The proposed project site is vacant. Therefore, the site is not a substantial source of greenhouse gas emissions. There is not a substantial amount of vegetation on the approximately one-half acre project site, therefore, the site is not a substantial source of carbon dioxide sequestration.

Short-Term Greenhouse Gas Emissions. Short-term construction-related emissions of carbon dioxide that would result from the development of the proposed project were estimated using the URBEMIS 2007 computer program. Sources of carbon

dioxide emissions include the use of on- and off-road construction equipment and construction worker trips. It was estimated that project-related construction activities would result in the emission of approximately 70 tons of carbon dioxide without the implementation of any mitigation measures.

Construction-related emissions of greenhouse gases required to develop the proposed project would occur over a relatively limited period of time (approximately one year) and result from the implementation of a small, single-family residence project. Due to the "one-time" nature of the project-related construction emissions and the small amount of emissions that would result, the proposed project would not result in the generation of greenhouse gases that would substantially contribute to climate change impacts or result in a significant impact on the environment. The small project-related emissions of greenhouse gases would not impede the attainment of greenhouse gas emission reduction goals. Therefore, the proposed project's construction-related emissions would not substantially contribute to global climate change impacts.

Long-Term Greenhouse Gas Emissions. Long-term emissions of carbon dioxide that would result from project-related mobile sources and area sources (i.e., natural gas combustion and landscape maintenance) were estimated using the URBEMIS 2007 computer program. Long-term indirect emissions of carbon dioxide that would result from project-related use of electricity were estimated using emissions factors provided by the Santa Barbara County Air Pollution Control District (*Scope and Content of Air Quality Sections in Environmental Documents, 2010*). The project's long-term emissions of carbon dioxide from mobile and area sources were estimated to be approximately 12.97 tons per year without the implementation of mitigation measures. Indirect emissions from electricity use were estimated to be approximately 1.84 tons per year. The total carbon dioxide emitted by the proposed project would be approximately 14.81 tons per year, which is equivalent to 13.4 metric tons per year. Other indirect greenhouse gas emissions that would also result from the project, such as emissions associated with the disposal and decomposition of solid waste generated by the project and potable water delivery, would be very minor compared to the estimated emissions from mobile and area sources and would not substantially contribute to the project's emissions of greenhouse gases. Long-term greenhouse gas emissions of the project would be substantially below the threshold of 1,100 metric tons of carbon dioxide equivalents per year. Therefore, the project would result in less than significant greenhouse gas emission impacts (Class III).

Other Climate Change-Related Impacts. The effects of climate change may include a rise in sea level caused by an expansion of the ocean water volume caused by warming, melting glaciers and melting polar ice caps. Estimates of future sea level elevations vary considerably based on assumptions regarding greenhouse gas emission control effectiveness and other factors. Sea level rise predictions recommended for use by the California Coastal Commission (2015) indicate that compared to 2000 conditions, sea level could rise two (2) to 12 inches by 2030; five (5) to 24 inches by 2050; and 17-66 inches by 2100. The proposed residence on the project site is located at an elevation

of approximately 100 feet above sea level. Therefore a rise in sea level of 66 inches by 2100 would not inundate a structure developed on the project site.

9.2.9 Agriculture and Forestry Resources

Amendments to Appendix G, Section II (Agriculture and Forestry Resources) of the CEQA Guidelines were adopted because forests serve as a substantial carbon dioxide sink (i.e., rather than emitting carbon dioxide, forests remove carbon dioxide from the atmosphere). There are no agriculture or forest resources located on or near the project site. Therefore, the project would have no impact related to this environmental issue area.

10.0 REFERENCES and PREPARERS

10.1 REFERENCES

Anikouchine, William, 2006, *Geologic Review - 1837½ El Camino De La Luz EIR.*

Anikouchine, William, 2009, *Geological Inspection Trench at 1837½ El Camino De La Luz.*

Anikouchine, William, 2011 *Geological Investigation of Slope Stability at 1837½ El Camino De La Luz.*

Bay Area Air Quality Management District, 2010, *Air Quality Guidelines*

California Coastal Commission, August 12, 2015, *Sea Level Rise Policy Guidance, Interpretive Guidelines for Addressing Sea Level Rise in Local Coastal Programs and Coastal Development Permits.*

California Coastal Commission, January 16, 2003, *Establishing development setbacks from coastal bluffs*, Mark Johnsson, Staff Geologist.

California Ocean Protection Council, 2011a, *Resolution of the California Ocean Protection Council on Sea-Level Rise.*

California State Lands Commission, 2011b, Letter to John Bridely, Waterfront Director.

California, 2010, *State of California Sea-Level Rise Interim Guidance Document*.

California, 2009, *California Climate Adaptation Strategy*.

California, 2008, AB 32 Climate Change Scoping Plan.

City of Santa Barbara General Plan, October, 2013, *Safety Element*.

City of Santa Barbara General Plan, 2011, *Environmental Resources Element.*

City of Santa Barbara Coastal Plan, July 1994.

City of Santa Barbara General Plan, August, 1979, *Seismic Safety-Safety Element*.

City of Santa Barbara, 2011, *Single Family Residence Design Guidelines.*

City of Santa Barbara, 2005, *Revised Initial Study – ENV2002-00214, 1837½ El Camino De La Luz.*

Earth Systems Pacific, 2013a, *Ocean Bluff Erosion Retreat Study, Barthels Residence, 1837½ El Camino de la Luz, Santa Barbara California.*

Earth Systems Pacific, 2013b, *Canyon Slope Stability Analysis and Erosion Study, Barthels Residence, 1837½ El Camino de la Luz, Santa Barbara California.*

Hunt, Lawrence, 2013, *Updated Biological Evaluation of Proposed Residential Development on APN 045-100-065, 1837½ El Camino de la Lux, Santa Barbara, California.*

interacta, 2004, *Barthels Residence Photo Simulations, 1837½ El Camino De La Luz.*

RRM Design Group, 2016, *Barthels Residence Storm Water Quality Report.*

Santa Barbara County Air Pollution Control District (*Scope and Content of Air Quality Sections in Environmental Documents, 2010*).

10.2 CONTACTS

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10.3 EIR PREPARERS

This Environmental Impact Report was prepared by Rodriguez Consulting, Inc., under contract to the City of Santa Barbara. The evaluation of potential geologic impacts is based on assessments provided by Mr. William Anikouchine, Ph.D. The alternative project design concepts and photo-simulations were provided by Hochhauser Blatter Architecture and Planning.

Appendix A

Revised Initial Study
Notice of Preparation
Comments Received

CITY OF SANTA BARBARA
COMMUNITY DEVELOPMENT DEPARTMENT
REVISED INITIAL STUDY – ENV2002-00214

On April 6, 2005, the Community Development Department released a Draft Mitigated Negative Declaration evaluating potential impacts associated with the development of a single family residence at **1837 ½ El Camino de la Luz**. The Draft Mitigated Negative Declaration was prepared pursuant to the State of California Public Resources Code and the "Guidelines for Implementation of the California Environmental Quality Act of 1970," as amended to date.

An environmental hearing to receive comments on the Draft Mitigated Negative Declaration was held before the City Planning Commission on June 16, 2005. At that time, the Planning Commission determined that the preparation of a Focused Environmental Impact Report (EIR) was required to fully evaluate the significance of project impacts on public views to the ocean.

In order to proceed with preparation of a Focused EIR, the Community Development Department ~~has~~ prepared ~~this~~ a revised initial study. The ~~revised~~ August 31, 2005 initial study include~~s~~d revisions to address the public comments received on the Draft Mitigated Negative Declaration. The biological resources section of the August 31, 2005 initial study has been further revised to address comments received in response to the Notice of Preparation. This October 16, 2006 revised initial study ~~would also~~ will be incorporated into the Focused EIR and serve to analyze all issue areas with the exception of aesthetics/visual resources and geologic resources.

CITY OF SANTA BARBARA
COMMUNITY DEVELOPMENT DEPARTMENT, PLANNING DIVISION

INITIAL STUDY/ ENVIRONMENTAL CHECKLIST MST2002-00214

PROJECT: 1837½ El Camino de la Luz

~~April 4~~~~August 31, 2005~~ October 16, 2006

This Initial Study has been completed for the project described below because the project is subject to review under the California Environmental Quality Act (CEQA) and was determined not to be exempt from the requirement for the preparation of an environmental document. The information, analysis and conclusions contained in this Initial Study are the basis for deciding whether a Negative Declaration (ND) is to be prepared or if preparation of an Environmental Impact Report (EIR) is required to further analyze impacts. Additionally, if preparation of an EIR is required, the Initial Study is used to focus the EIR on the effects determined to be potentially significant.

APPLICANT/ PROPERTY OWNER

Applicant/Owner: Dr. Herb Barthels, 1851 Cliff Drive, Santa Barbara, CA 93109

Agent: Brent Daniels, L&P Consultants, 3 West Carrillo Street, Suite 205, Santa Barbara, CA 93101

PROJECT ADDRESS/LOCATION (See **Exhibit A-Vicinity Map**)

The subject property is located at 1837 ½ El Camino de la Luz, an ocean bluff-top property located approximately 370 feet south of the terminus of the public street, in the West Mesa neighborhood of the City. Lighthouse Creek borders the property to the east and La Mesa Park is located to the northeast. The site is 23,885 square feet (0.55 acres) in size and approximately 95 feet above sea level.

PROJECT DESCRIPTION (See **Exhibit B-Project Plans**)

The project consists of the construction of a 1,499 square foot, 2-story single family residence with an attached 443 square foot garage, on a 23,885 square foot vacant bluff-top lot. Access to the site would be provided by private easements extending south from the terminus of the paved public road (El Camino de la Luz). The proposed development would require the following discretionary applications:

1. A Coastal Development Permit to allow construction of a new residence in the appealable jurisdiction of the City's Coastal Zone (SBMC §28.45.090); and
2. A Modification to allow construction of the new residence on a lot without the required 60-foot frontage on a public street (SBMC §28.15.080).

ENVIRONMENTAL SETTING

Existing Site Characteristics

Topography: The project site is a bluff-top lot bordered by the Pacific Ocean to the south and Lighthouse Creek to the east. The bluff-top area is characterized by an average slope of approximately 25%. The seacliff portion of the property includes several sections with varying slopes, ranging from approximately 65-94%. The eastern portion of the site includes slopes of approximately 25% to the top of the bank of Lighthouse Creek, which is deeply incised.

Seismic/Geologic Conditions: The project site is subject to low level hazards associated with seismic activity and minimal liquefaction potential. The project site is located in an area of historically active landslides with high potential for erosion.

Biological Resources: The project site is currently vacant. There is evidence of past improvements including an asphalt parking area, and brick planter and concrete drainage swales near the bluff edge. Vegetation is primarily comprised of non-native species typical of disturbed areas. Native plants include California blackberry, poison oak, California sage brush and California fuchsia. Wildlife observed or expected on this site includes those species typical of urbanized areas and the urban fringe. Trees on-site and in the area are used for roosting and nesting by native raptors.

Archaeological Resources: The project site is located in the Prehistoric Sites and Watercourses area of potential archaeological sensitivity as identified on the City's Master Environmental Assessment map. A Phase I archaeological investigation was performed in February 1996 by Larry Wilcoxon. No resources were identified on the site.

Existing Land Use

Existing Facilities and Uses: The project site is currently vacant. Past improvements to the site include an asphalt parking area, concrete drainage swales, and a brick planter. Access to the site is via private easements extending south from the El Camino de la Luz cul-de-sac.

PROPERTY CHARACTERISTICS

Assessor's Parcel Number:	045-100-065	**General Plan Designation:**	Residential, 5 units per acre
Zoning:	E-3/SD-3	**Parcel Size:**	23,885 square feet
Existing Land Use:	Vacant	**Proposed Land Use:**	Residential
Slope:	25% in upland area to the south and east; 65-94% on bluff faces to the south		
SURROUNDING LAND USES:			
North:	Residential		
South:	Pacific Ocean		
East:	Lighthouse Creek, La Mesa Park, Coast Guard Station		
West:	Residential		

PLANS AND POLICY DISCUSSION

Land Use and Zoning Designations: The project site has a General Plan land use designation of Residential, 5 units per acre. The site is in the E-3 (One-Family Residence) Zone and SD-3 (Coastal Overlay) Zone. The project site conforms to the minimum parcel size requirement of 7,500 square feet per lot, but does not meet the requirement for provision of a minimum of 60 feet of frontage on a public street. The applicant has requested approval of a modification to the frontage requirement. Development of a single family residence as proposed generally conforms to Zoning Ordinance requirements and would be consistent with the site's residential land use designation.

Local Coastal Plan (LCP) Policies: The project site is located in the West Mesa neighborhood, which is primarily developed with single family residences. The major coastal issues in this area are hazards of sea cliff retreat and flooding; maintaining and providing access, both vertically and laterally, along the bluffs; protection of archaeological resources; and maintenance of existing coastal views and open space. The following LCP policies are applicable to this project:

Policy 2.1 – Public access in the coastal bluff areas of the City shall be maximized consistent with the protection of natural resources, public safety, and private property rights.

Policy 2.5 - Vista points shall be provided and maintained in areas where such use by the public has been established.

Policy 5.3 - New development in and/or adjacent to existing residential neighborhoods must be compatible in terms of scale, size, and design with the prevailing character of the established neighborhood. New development which would result in an overburdening of public circulation and/or on-street parking resources of existing residential neighborhoods shall not be permitted.

Policy 6.8 – The riparian resources, biological productivity, and water quality of the City's coastal zone creeks shall be maintained, preserved, enhanced, and, where feasible, restored.

Policy 6.10 – The City shall require a setback buffer for native vegetation between the top of the bank and any proposed project. This setback will vary depending upon the conditions of the site and the environmental impact of the proposed project.

Policy 8.1 – All new development of bluff top land shall be required to have drainage systems carrying run-off away from the bluff to the nearest public street or, in areas where the landform makes landward conveyance of drainage impossible, and where additional fill or grading is inappropriate or cannot accomplish landward drainage, private bluff drainage systems are permitted if they are: 1) sized to accommodate run-off from all similarly drained parcels bordering the subject parcel's property lines; 2) the owner of the subject property allows for the permanent drainage of those parcels through his/her property, and; 3) the drainage system is designed to be minimally visible on the bluff face.

Policy 8.2 – With the exception of drainage systems identified in Policy 8.1, no development shall be permitted on the bluff face except for engineered staircases or accessways to provide public beach access...

Policy 9.1 – The existing views to, from, and along the ocean and scenic coastal areas shall be protected, preserved, and enhanced.

General Plan Policies: The following General Plan policies are applicable to this project:

Conservation Element: Visual Resources Policy 2.0 – Development on hillsides shall not significantly modify the natural topography and vegetation.

Conservation Element: Visual Resources Policy 3.0 – New development shall not obstruct scenic view corridors, including those of the ocean and lower elevations of the City viewed respectively from the shoreline and upper foothills, and of the upper foothills and mountains viewed respectively from the beach and lower elevations of the City.

Conservation Element: Visual Resources Policy 6.0 – Ridgeline development which can be viewed from large areas of the community or by significant numbers of residents of the community shall be discouraged.

For purposes of CEQA review, the project may be found consistent with applicable policies ~~of the LCP~~ through adherence to the identified project design and mitigation measures, such that potential significant adverse impacts to the City's environmental resources are avoided and minimized to the maximum extent feasible. Potential inconsistencies with policies related to effects on ocean views may result from the project. The Focused EIR will evaluate potential visual resource policy inconsistencies in the assessment of aesthetic impacts. Additionally, a complete analysis of the project's consistency with the LCP and other applicable City policies will be provided in the Planning Commission Staff Report for the project for final consistency determination by decision-makers.

MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)

A draft Mitigation Monitoring and Reporting Program ~~has~~ will ~~been~~ prepared for the project in compliance with Public Resources Code §21081.6. ~~The draft MMRP is attached here as *Exhibit C*.~~ as part of the Environmental Impact Report.

ENVIRONMENTAL CHECKLIST

The following checklist contains questions concerning potential changes to the environment that may result if this project is implemented. If no impact would occur, **NO** should be checked. If the project might result in an impact, check **YES** indicating the potential level of significance as follows:

Significant: Known substantial environmental impacts. Further review needed to determine if there are feasible mitigation measures and/or alternatives to reduce the impact.

Potentially Significant: Unknown, potentially significant impacts that need further review to determine significance level and whether mitigable.

Potentially Significant, Mitigable: Potentially significant impacts that can be avoided or reduced to less than significant levels with identified mitigation measures agreed-to by the applicant.

Less Than Significant: Impacts that are not substantial or significant.

1. AESTHETICS Could the project:	NO	YES *Level of Significance*
a) Affect a public scenic vista or designated scenic highway or highway/roadway eligible for designation as a scenic highway?		Potentially Significant~~, Mitigable~~
b) Have a demonstrable negative aesthetic effect in that it is inconsistent with Architectural Board of Review or Historic Landmarks Guidelines or guidelines/criteria adopted as part of the Local Coastal Program?		Less than Significant
c) Create light or glare?		Less Than Significant

Visual Aesthetics - Discussion

Issues: Issues associated with visual aesthetics include the potential blockage of important public scenic views, project on-site visual aesthetics and compatibility with the surrounding area, and changes in exterior lighting.

Impact Evaluation Guidelines: Aesthetic quality, whether a project is visually pleasing or unpleasing, may be perceived and valued differently from one person to the next, and depends in part on the context of the environment in which a project is proposed. The significance of visual changes is assessed qualitatively based on consideration of the proposed physical change and project design within the context of the surrounding visual setting. First, the existing visual setting is reviewed to determine whether important existing visual aesthetics are involved, based on consideration of existing views, existing visual aesthetics on and around the site, and existing lighting conditions. The importance of existing views is assessed qualitatively based on whether important visual resources such as mountains, skyline trees, or the coastline, can be seen, and the extent and scenic quality of the views. The visual changes associated with the project are then assessed qualitatively to determine whether the project would result in substantial effects associated with important public scenic views, on-site visual aesthetics, and lighting.

Significant visual aesthetics impacts may potentially result from:

- Substantial obstruction or degradation of important public scenic views, including important views from scenic highways; extensive grading and/or removal of substantial amounts of vegetation and trees visible from public areas without adequate landscaping; or substantial loss of important public open space.
- Substantial negative aesthetic effect or incompatibility with surrounding land uses or structures due to project size, massing, scale, density, architecture, signage, or other design features.
- Substantial light and/or glare that poses a hazard or substantial annoyance to adjacent land uses and sensitive receptors.

Visual Aesthetics – Existing Conditions and Project Impacts

1.a,b) Scenic Views and On-Site Aesthetics

Existing Conditions: The project site is located on a bluff-top property. There is existing single family residential development directly to the north and west of the project site. Lighthouse Creek borders the site to the east and La Mesa Park is located to the north and east of the site. La Mesa Park and the foot bridge over Lighthouse Creek (connecting El Camino de la Luz to La Mesa Park) offer public views across the project site to the Pacific Ocean. Views from the park itself include green space in the foreground with a view of the ocean and Santa Cruz Island over the creek canyon, framed by dense tree growth on the east and less dense vegetation screening residences on the west. Views from the eastbound lane of Shoreline Drive include the public parking lot, green space, and an ocean view framed by vegetation. However, bicyclists and motorists experience a fleeting view of the ocean in this area due to vehicle speeds and the approaching curve in the road. Pedestrians have the opportunity to experience a more significant ocean view from this area. Ocean views from the footbridge are more open and residences on the west side of Lighthouse Creek are more plainly visible. Views of the project site from the sandy beach below are of rocky cliff and vegetated bluff. The neighboring residence to the west of the site is partially visible against the skyline from the beach below. Otherwise, bluff top development is not visible from the beach at this section of the coast. The height of the bluffs precludes mountain views from this portion of the beach.

Ocean views from La Mesa Park and the foot bridge are considered a significant visual resource as they afford scenic public views of the ocean and Santa Cruz Island. Much of the existing development in the area is screened by vegetation, which helps to frame the ocean view from the northern portion of the park. This particular view is also the only view corridor from the park to the ocean.

Project Impacts: The proposed project would result in the construction of a 1,932 square foot, two-story structure. The proposed residence would intrude into ocean views from Shoreline Drive, La Mesa Park and the Lighthouse Creek foot bridge, as demonstrated by the visual simulations prepared by interacta and dated June 11, 2004 (see Exhibit ~~D~~C for selected views). The view from the La Mesa Park parking lot~~, and~~ the lawn area, and benches placed at viewpoints would change from a view of green space, the ocean and Santa Cruz Island, to a view that includes a ~~significant~~ portion of the ~~first floor of the~~ proposed residence (Exhibit ~~D~~C, MP2). ~~Thus, the project's impact on scenic views from the La Mesa Park lawn area is considered a *potentially significant, mitigable impact*.~~

The loss of ocean view from ~~Shoreline Drive~~ Meigs Road would result in an adverse impact to visual resources (Exhibit ~~D~~C, MP1). A larger portion of the scenic view from this location, not already blocked by vegetation, would be blocked by the development~~, resulting in a *potentially significant, mitigable impact*~~. Although the view is fleeting for motorists, bicyclists and pedestrians have the opportunity to stop and view the ocean from this location.

The ocean view from the footbridge over Lighthouse Creek would be diminished ~~the most~~ by development of the site as proposed (Exhibit ~~D~~C, WB1). Existing residential development on the west side of Lighthouse Creek can be seen from the footbridge and the proposed residence would be highly visible from this location. Although visibility of residential development, in and of itself, is not necessarily an adverse impact, the location of the proposed residence would block a substantial portion of a significant public scenic view~~, which represents a *potentially significant, mitigable impact*~~. While installation of vegetation could soften the view of the residence, this portion of the ocean view would be lost indefinitely. ~~Mitigation Measure A-1 requires that the residence be redesigned to minimize intrusion into public views of the ocean as seen from Shoreline Drive and the Lighthouse Creek foot bridge.~~

The project's impact on scenic views available to the public from La Mesa Park, Meigs Road, and the footbridge over Lighthouse Creek is considered a *potentially significant impact*, and will be further evaluated in a Focused Environmental Impact Report (EIR).

The proposed development would also be visible on the bluff-top as viewed from the sandy beach below (Exhibit ~~D~~C, B1 and B2). This view is currently comprised of natural bluff faces, but includes some development on the property immediately west of the site. While the proposed residence would be partially visible from the beach below, other development is currently visible from the beach in this area, so it would not result in a significant change to a public view. Thus, the impact to visual resources from the beach is considered *less than significant*.

The scale and design of the proposed development is generally compatible with existing single family residential development in the immediate area. The design concept for the house has been considered by the Architectural Board of Review (ABR) on several occasions. The ABR expressed concerns regarding the visual prominence of the structure and its effect on public views. Final architectural plans would be subject to review and approval by ABR. With the exception of adverse effects on public views, the proposed design would be compatible with and would not adversely affect surrounding land uses or structures.

Cumulative Impacts: The proposed project would result in infill development of an existing legal lot adjacent to existing residences. Although site development would adversely affect public views of the ocean, substantial additional development that would further degrade ocean views in the immediate area is not anticipated. Cumulative visual impacts are considered *less than significant*.

1.c) Lighting

Development of the proposed residence would result in additional lighting. Any exterior lighting would be subject to compliance with the requirements of SBMC §22.75, the City's Outdoor Lighting and Design Ordinance, and reviewed by the ABR. The ordinance provides that exterior lighting be shielded and directed to the site such that no undue lighting or glare would affect surrounding residents, roads or habitat areas. Project impacts on lighting and glare would be *less than significant*.

Visual Aesthetics – Required Mitigation

~~**A-1 House Design.** Prior to final review and approval by the Architectural Board of Review, the residence shall be redesigned to minimize intrusion into public views of the ocean as seen from La Mesa Park, Shoreline Drive and the Lighthouse Creek foot bridge. The redesign shall consider lowering the profile of the residence by cutting the first floor into the existing grade, reducing the massing of the second story by limiting building height and locating development~~

~~further to the west. Landscaping shall be provided to soften views of the residence from public viewing areas while minimizing intrusion into existing ocean views.~~

Mitigation measures intended to minimize this impact would be identified in a Focused EIR.

Visual Aesthetics - Residual Impacts

~~With implementation of Mitigation Measure A-1, project effects on public scenic views would be *less than significant*.~~ Residual impacts would be determined upon further evaluation of the visual effects of the project and the effectiveness of proposed mitigation measures in reducing said impacts. This evaluation will be provided in a Focused EIR.

2. AIR QUALITY Could the project:	NO	YES *Level of Significance*
a) Violate any air quality standard or contribute to an existing or projected air quality violation?		Less Than Significant
b) Expose sensitive receptors to pollutants?		Less Than Significant
c) Create objectionable odors?		Less Than Significant
Is the project consistent with the County of Santa Barbara Air Quality Attainment Plan? Yes		

Air Quality - Discussion

Issues. Air quality issues involve pollutant emissions from vehicle exhaust and industrial or other stationary sources that contribute to smog, particulates and nuisance dust associated with grading and construction processes, and nuisance odors.

Smog, or ozone, is formed in the atmosphere through a series of photochemical reactions involving interaction of oxides of nitrogen [NO_x] and reactive organic compounds [ROC] (referred to as ozone precursors) with sunlight over a period of several hours. Primary sources of ozone precursors in the South Coast area are vehicle emissions. Sources of particulate matter (PM_{10}) include demolition, grading, road dust, and vehicle exhaust, as well as agricultural tilling and mineral quarries.

The City of Santa Barbara is part of the South Coast Air Basin. The City is subject to the California Ambient Air Quality Standards (CAAQS), which are more stringent than the national standards, for six pollutants: photochemical ozone, carbon monoxide, sulfur dioxide, nitrogen dioxide, particulate matter, and lead. The Santa Barbara County Air Pollution Control District (SBCAPCD) provides oversight on compliance with air quality standards and preparation of the County Clean Air Plan. Presently, the County of Santa Barbara is in non-attainment with the CAAQS for ozone (O_3) and particulate matter (PM_{10}). An area is in nonattainment for a pollutant if the applicable CAAQS for that pollutant has been exceeded more than once in three years. There are also heavily congested intersections within the City that may approach the California 1-hour standard of 20 parts per million for carbon monoxide (CO) during peak traffic hours.

Impact Evaluation Guidelines. A project may create a significant air quality impact from the following:

- Exceeding an APCD pollutant threshold; inconsistency with District regulations; or exceeding population forecasts in the adopted County Clean Air Plan.
- Exposing sensitive receptors, such as children, the elderly, or sick people to substantial pollutant exposure.
- Substantial unmitigated nuisance dust during earthwork or construction operations.
- Creation of nuisance odors inconsistent with APCD regulations.

Long-Term (Operational) Impact Guidelines: The City of Santa Barbara uses the SBCAPCD thresholds of significance for evaluating air quality impacts. The APCD has determined that a proposed project will not have a significant air quality impact on the environment if operation of the project will:

- Emit (from all project sources, both stationary and mobile) less than 240 pounds per day for ROC and NO_x, and 80 pounds per day for PM_{10};
- Emit less than 25 pounds per day of ROC or NO_x from motor vehicle trips only;
- For CO, contribute less than 800 peak hour trips to an individual intersection;

- Not cause a violation of any California or National Ambient Air Quality Standard (except ozone); and not exceed the APCD health risks public notification thresholds adopted by the APCD Board; and
- Be consistent with the adopted federal and state air quality plans for Santa Barbara.

Short-Term (Construction) Impacts Guidelines: Projects involving grading, paving, construction, and landscaping activities may cause localized nuisance dust impacts and increased particulate matter (PM_{10}). Substantial dust-related impacts may be potentially significant, but are generally considered mitigable with the application of standard dust control mitigation measures. Standard dust mitigation measures are applied to projects with either significant or less than significant effects.

Exhaust from construction equipment also contributes to air pollution. As a guideline, SBCAPCD Rule 202.F.3 identifies a substantial effect associated with projects having combined emissions from all construction equipment that exceed 25 tons of any pollutant except carbon monoxide) within a 12-month period.

Cumulative Impacts and Consistency with Clean Air Plan: If the project-specific impact exceeds the significance threshold, it is also considered to have a considerable contribution to cumulative impacts. When a project is not accounted for in the most recent Clean Air Plan growth projections, then the project's impact may also be considered to have a considerable contribution to cumulative air quality impacts. The Santa Barbara County Association of Governments and Air Resources Board on-road emissions forecasts are used as a basis for vehicle emission forecasting. If a project provides for increased population growth beyond that forecasted in the most recently adopted CAP, or if the project does not incorporate appropriate air quality mitigation and control measures, or is inconsistent with APCD rules and regulations, then the project may be found inconsistent with the CAP and may have a significant impact on air quality.

Air Quality – Existing Conditions and Project Impacts

2.a-b) Air Pollutant Emissions

Long-Term (Operational) Emissions: Emissions associated with the generation of 10 average daily trips and the ongoing use of one new single family residence would not exceed established thresholds for long-term impacts. These impacts are considered *less than significant*.

Short-Term (Construction) Emissions: The proposed project would involve grading, paving and landscaping activities which could cause localized fugitive dust and an increase in particulate matter (PM_{10}). Dust related impacts are considered *less than significant*. Recommended dust control mitigation measures include sprinkling the site during earth moving activities to control dust, covering of trucks transporting soil/building materials, and stabilization of disturbed areas with seeding and watering, soil binders, etc. Mitigation Measure AQ-6 is also recommended to reduce NOx and particulate emissions from construction equipment:

Sensitive Receptors: Sensitive receptors are defined as children, elderly, or ill people that can be more adversely affected by air quality problems. Land uses typically associated with sensitive receptors include schools, parks, playgrounds, childcare centers, retirement homes, convalescent homes, hospitals, and clinics. Stationary sources are of particular concern to sensitive receptors, as is construction dust and particulate matter. Nuisance dust and particulates would be reduced to a *less than significant* level through application of dust control mitigation measures. The insignificant amounts of these pollutants would result in an insignificant exposure of sensitive receptors to pollutants.

2.c) Odors

The project is limited to residential use, and would not include land uses involving odors. Smoke emitted from the proposed fireplace would result in a *less than significant impact*; however, to minimize emissions, Mitigation Measure AQ-7 is recommended.

Consistency with the Clean Air Plan: Direct and indirect emissions associated with the project are accounted for in the CAP emissions growth assumptions. Appropriate air quality mitigation measures, including construction dust suppression, would be applied to the project, consistent with CAP and City policies. The project could be found consistent with the Clean Air Plan.

Air Quality – Recommended Mitigation

AQ-1 Construction Dust Control - Watering. During site grading and transportation of fill materials, regular water sprinkling shall occur using reclaimed water whenever the Public Works Director determines that it is reasonably available. During clearing, grading, earth moving or excavation, sufficient quantities of water, through use of either water trucks or sprinkler systems, shall be applied to prevent dust from leaving the site. Each day, after construction activities cease, the entire area of disturbed soil shall be sufficiently moistened to create a crust.

Throughout construction, water trucks or sprinkler systems shall also be used to keep all areas of vehicle movement damp enough to prevent dust raised from leaving the site. At a minimum, this will include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency will be required whenever the wind speed exceeds 15 mph.

AQ-2 **Construction Dust Control – Tarping.** Trucks transporting fill material to and from the site shall be covered from the point of origin.

AQ-3 **Construction Dust Control – Gravel Pads.** Gravel pads shall be installed at all access points to prevent tracking of mud on to public roads.

AQ-4 **Construction Dust Control – Disturbed Area Treatment.** After clearing, grading, earth moving or excavation is completed, the entire area of disturbed soil shall be treated to prevent wind pickup of soil. This may be accomplished by:

1. Seeding and watering until grass cover is grown;
2. Spreading soil binders;
3. Sufficiently wetting the area down to form a crust on the surface with repeated soakings as necessary to maintain the crust and prevent dust pickup by the wind;
4. Other methods approved in advance by the Air Pollution Control District.

AQ-5 **Construction Dust Control – Paving.** All roadways, driveways, sidewalks, etc., should be paved as soon as possible. Additionally, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.

AQ-6 **Construction Equipment Requirements.** The following shall be adhered to during project grading and construction to reduce NOx and particulate emissions from construction equipment:

1. Heavy-duty diesel-powered construction equipment manufactured after 1996 (with federally mandated "clean" diesel engines) shall be utilized wherever feasible.
2. Clean diesel fuel (Ultra-Low Sulfur Diesel) fuel shall be used.
3. The engine size of construction equipment shall be the minimum practical size.
4. The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest practical number is operating at any one time.
5. Construction equipment shall be maintained in tune per the manufacturer specifications.
6. Construction equipment operating onsite shall be equipped with two to four degree engine timing retard or precombustion chamber engines.
7. Catalytic converters shall be installed on gasoline-powered equipment, if feasible.
8. Diesel catalytic converters, diesel oxidation catalysts and diesel particulate filters as certified and/or verified by EPA or California shall be installed, if available.
9. Diesel powered equipment shall be replaced by electric equipment whenever feasible.
10. Construction worker trips shall be minimized by requiring carpooling and by providing for lunch onsite.

~~AQ-7 **Fireplaces.** Wood-burning fireplaces and wood stoves shall be prohibited.~~

Air Quality - Residual Impacts

Short-term construction related impacts and long-term operational impacts would be *less than significant*. Short-term construction related impacts would be further minimized by recommended mitigation measures for dust control and equipment maintenance.

3. BIOLOGICAL RESOURCES Could the project result in impacts to:		NO	YES *Level of Significance*
a)	Endangered, threatened or rare species or their habitats (including but not limited to plants, fish, insects, animals, and birds)?	✓	
b)	Locally designated historic, Landmark or specimen trees?	✓	
c)	Natural communities (e.g. oak woodland, coastal habitat, etc.).		Potentially Significant, Mitigable
d)	Wetland habitat (e.g. marsh, riparian, and vernal pool)?	✓	Potentially Significant, Mitigable
e)	Wildlife dispersal or migration corridors?	✓	Potentially Significant, Mitigable

Biological Resources - Discussion

Issues: Biological resources issues involve the potential for a project to substantially affect biologically-important natural vegetation and wildlife, particularly species that are protected as rare, threatened, or endangered by federal or state wildlife agencies and their habitat, native specimen trees, and designated landmark or historic trees.

Impact Evaluation Guidelines: Existing native wildlife and vegetation on a project site are qualitatively assessed to identify whether they constitute important biological resources, based on the types, amounts, and quality of the resources within the context of the larger ecological community. If important biological resources exist, project effects to the resources are qualitatively evaluated to determine whether the project would substantially affect these important biological resources. Significant biological resource impacts may potentially result from substantial disturbance to important wildlife and vegetation in the following ways:

- Elimination or substantial reduction or disruption of important natural vegetative communities and wildlife habitat or migration corridors, such as oak woodland, coastal strand, riparian, and wetlands.
- Substantial effect on protected plant or animal species listed or otherwise identified or protected as endangered, threatened or rare.
- Substantial loss or damage to important native specimen trees or designated landmark or historic trees.

Biological Resources – Existing Conditions and Project Impacts

3.a,c,d,e) Native Wildlife and Habitat

A Revised Biological Assessment dated January-February 2006 was prepared for the project applicant by Rachel Tierney (Exhibit ~~E~~D). On-site vegetation is generally characterized by non-native species in the upland areas and on the upper reaches of the slope down to Lighthouse Creek, and the lower portion of the ocean bluff face. Vegetation on the ocean bluff face includes species typical to coastal bluffs, such as lemonadeberry, salt bush and coast goldenbush. Native vegetation along the slope down to the creek includes California blackberry, poison oak, saltbush, and California fuchsia. The riparian area includes willow woodland. The lowest portion of the creek slope is exposed, steeply sloping Monterey shale.

According to the biological assessment, Lighthouse Creek provides dense, spatially variable, and moderately high quality cover and food resources for a variety of amphibians, reptiles, birds, and small mammals~~is considered to have limited habitat value due to the absence of sediment and the steepness of the rocky creek banks~~. The creek's steep drop to the beach is considered to preclude steelhead use. Wildlife expected on-site and in the adjacent creek includes urban-associated species or generalist species that can withstand high degrees of habitat disturbance and abundant ~~is limited to species typical of urban settings and appears to support rich~~ bird life. Area residents have noted the presence of a red fox den, coyotes, and frog species along the Lighthouse Creek corridor.

Protocol level surveys for California red-legged frogs (CRLF) were conducted in January and February of 2006. Other special status wildlife species and their habitat were evaluated at this time. CRLF were not observed in the area of Lighthouse Creek surveyed (from the beach to the southern end of La Mesa Park). The upper creek banks adjacent to the project site provide adequate vegetative cover for CRLF, however, pools are not of adequate depth to provide habitat adjacent to the site. The biological assessment did not identify any other endangered, threatened or rare species or

habitats that would be impacted by the proposed project. Lighthouse Creek is not considered to provide an important wildlife corridor due to the steep drop-off above the beach ~~for the reasons state above~~.

Tierney concludes that the proposed project would not adversely affect wildlife use of the creek due to the distance of the building site from the creek channel and that the steepness of the slopes and creek bank would limit human intrusion into the creek. Long-term impacts to biological resources are considered *less than significant*.

The project site is located approximately 600 feet from La Mesa monarch butterfly roost. The project would not impact this roost due to the distance from the roost and because no removal of roost or adjacent vegetation is proposed.

The proposed drainage design involves collection of site runoff in two catch basins, where it would be conveyed via underground pipes, to Lighthouse Creek. Drain pipes would be located across the steep slope down to the creek in two locations, converging above the creek bed. A rip rapped dissipater would be constructed in the creek bed at the terminus of the drainage pipe. Construction of these facilities would result in disturbance and vegetation removal on the hillside and within the creek bed. Work within the creek would require a Streambed Alteration Agreement from the California Department of Fish and Game. Impacts to native vegetation and creek habitat associated with installation of the drainage system are considered *potentially significant, mitigable*. Mitigation Measures BIO-1 through BIO-4~~5~~ are required to reduce the biological impacts associated with construction activities and vegetation removal and installation to a *less than significant level*.

Project construction could result in the introduction of sediment and pollutants such as oil, paint or concrete into the creek or down the bluff face. The incorporation of erosion control measures and designation of concrete washing locations to preclude runoff into the creek would ensure that impacts remain *less than significant*.

3.b) Specimen Trees

The project would have *no impact* on any locally designated historic, Landmark or specimen trees because none are located in the project construction area.

Biological Resources – Required Mitigation

BIO-1 Habitat Restoration. Areas between the proposed building site and Lighthouse creek ~~on the creek slope, bank and channel~~ disturbed by project grading and construction of the drainage system shall be replanted with native plants appropriate to coastal riparian and upland areas. Iceplant, oleander, yucca, castor bean, English ivy, German ivy, and other invasive, non-native species shall be removed from this area using hand and chemical methods. Vegetation removal shall be by hand and dragged upslope to the building pad. All vegetation removal and initial site grading shall be under the supervision of a qualified habitat restoration biologist. Removed material shall be disposed of in a manner that will not result in further spread of these species. Native material used for replanting may include western sycamore, coast live oaks, encelia, California blackberry, California sage, California fuchsia, saltbush, coast goldenbush, elderberry, and lemonadeberry. Plans shall include the use of erosion control blankets and seeding of bare slopes to prevent short-term erosion The replanting plan shall be developed by a qualified botanist or landscape architect and shall include provisions for installation and maintenance until plantings are established. This plan shall be provided to the Community Development Department Staff and the Architectural Board of Review for review and approval prior to issuance of building permits. The plan shall be implemented prior to issuance of the Certificate of Occupancy and plantings maintained for the life of the project.

BIO-2 Appropriate Plants/Hardscape on Bluff. Special attention shall be paid to the appropriateness of the existing and proposed plant material, and to the sloped areas. All existing succulent plants that add weight to the bluff and/or contribute to erosion shall be removed in a manner that does not disturb the root system and replaced with appropriate plant material in a manner that does not increase the rate of erosion. Plant material to be removed shall be replaced with native, drought tolerant, low water using vegetation that requires only a temporary irrigation system to establish the plantings. Replacement vegetation shall be consistent with the recommendations of the biologist's report, dated ~~December 12, 2002~~January-February 2006.~~, and include: 1) Addition of native trees and shrubs along the mid point of the slope to improve habitat value; 2) Removal of iceplant, oleander, yucca, caster bean, English and German ivy; 3) Replacement with natives such as western sycamore, coast live oaks, encelia, California blackberry, California sage, California fuchsia, saltbush, coast goldenbush, elderberry, and lemonadeberry; and 4) Use of erosion control blankets and seeding on bare slopes to prevent short-term erosion~~. The landscape plan shall be provided to the Community Development Department Staff and the Architectural Board of Review for review and approval prior to issuance of building permits. The plan shall be implemented prior to issuance of the Certificate of Occupancy and plantings maintained for the life of the project.

BIO-3 Irrigation System. The irrigation system shall be designed and maintained with the most current technology to prevent a system failure, and watering of vegetation on the bluff edge shall be kept to the minimum necessary for plant survival. The drip system along the bluff edge shall be removed after two full seasons of plant growth.

BIO-4 Erosion Control/Water Quality Plan. An Erosion Control/Water Quality Plan shall be developed for construction activities to maintain all sediment on-site and out of the drainage system. The plan shall include Best Management Practices approved by the City and Regional Water Quality Control Board, and shall include, at a minimum, the following:

1. Minimize the area of bare soil exposed at one time (phased grading).
2. Install silt fence, sand bag, hay bale or silt devices where necessary around the project site to prevent offsite transport of sediment.
3. Bare soils shall be protected from erosion by applying heavy seeding, within five days of clearing or inactivity in construction.
4. Construction entrances should be stabilized immediately after grading and frequently maintained to prevent erosion and control dust.
5. During construction of the homes, the contractor and/or property owner shall protect the storm drain inlets from sediment-laden runoff.
6. Erosion control materials (i.e. sandbags, strawbales, and silt fencing) shall be used to trap and filter sediment before entering the storm drain.
7. Establish fuel and vehicle maintenance staging areas located away from all drainage courses, and design these areas to control runoff.
8. Maintain and wash equipment and machinery in confined areas specifically designed to control runoff. Thinners or solvents should not be discharged into sanitary or storm sewer systems. Washout from concrete trucks should be disposed of at a location not subject to runoff and more than 50 feet away from a storm drain, open ditch or surface water.

BIO-5 Streambed Alteration Agreement. The applicant shall obtain a Streambed Alteration Agreement from the Department of Fish and Game, prior to ~~approval~~ submittal of a building permit, for grading and installation of drainage devices within the banks of Lighthouse Creek.

Biological Resources - Residual Impacts

Potentially significant impacts to biological resources would be reduced to a *less than significant level* with the incorporation of the identified mitigation measures.

4. CULTURAL RESOURCES Could the project:		**NO**	**YES** *Level of Significance*
a)	Disturb archaeological resources?		Less Than Significant
b)	Affect a historic structure or site designated or eligible for designation as a National, State or City landmark?	✓	
c)	Have the potential to cause a physical change which would affect ethnic cultural values or restrict religious uses in the project area?	✓	

Cultural Resources - Discussion

Issues: Archaeological resources are subsurface deposits dating from Prehistoric or Historical time periods. Native American culture appeared along the channel coast over 10,000 years ago, and numerous villages of the Barbareno Chumash flourished in coastal plains now encompassed by the City. Spanish explorers and eventual settlements in Santa Barbara occurred in the 1500's through 1700's. In the mid-1800's, the City began its transition from Mexican village to American city, and in the late 1800's through early 1900's experienced intensive urbanization. Historic resources are above-ground structures and sites from historical time periods with historic, architectural, or other cultural importance.

The City's built environment has a rich cultural heritage with a variety of architectural styles, including the Spanish Colonial Revival style emphasized in the rebuilding of Santa Barbara's downtown following a destructive 1925 earthquake.

Impact Evaluation Guidelines: Archaeological and historical impacts are evaluated qualitatively by archeologists and historians. First, existing conditions on a site are assessed to identify whether important or unique archaeological or historical resources exist, based on criteria specified in the State CEQA *Guidelines* and City Master Environmental Assessment *Guidelines for Archaeological Resources and Historical Structures and Sites*, summarized as follows:

- Contains information needed to answer important scientific research questions and there exists a demonstrable public interest in that information.
- Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- Is directly associated with an important prehistoric or historic event or person.

If important archaeological or historic resources exist on the site, project changes are evaluated to determine whether they would substantially affect these important resources.

Cultural Resources – Existing Conditions and Project Impacts

4.a) Archaeological Resources

The project site is located in the Prehistoric Sites and Watercourses area of potential archaeological sensitivity as identified on the City's Master Environmental Assessment map. A Phase I archaeological investigation was performed in February 1996 by Larry Wilcoxon to determine whether cultural resources were present on site. The survey did not locate any cultural resources and thus, impacts are considered *less than significant*. However, in the unlikely event that cultural resources are found during site preparation or construction, a recommended mitigation measure has been included for resources evaluation and impact mitigation per the Master Environmental Assessment.

4.b) Historic Resources

There are no historic resources on the project site. Development of a single family residence would have *no impact* on any historic resources in the project vicinity.

4.c) Ethnic/Religious Resources

There is no evidence that the site involves any ethnic or religious use or importance. The project would have *no impact* on historic, ethnic or religious resources.

Cultural Resources – Mitigation

CR-1 Discovery Procedures and Mitigation. Standard discovery measures shall be implemented per the City Master Environmental Assessment throughout grading and construction:

Prior to the start of any vegetation or paving removal, demolition, trenching or grading, contractors and construction personnel shall be alerted to the possibility of uncovering unanticipated subsurface archaeological features or artifacts.

If during any grading or construction on the site such archaeological resources are encountered or suspected, work shall be halted immediately, the City Environmental Analyst shall be notified and a City-approved archaeologist shall be employed to assess the nature, extent and significance of any discoveries and to develop appropriate management recommendations for archaeological resource treatment, including but not limited to redirection of grading and/or excavation activities. If the findings are potentially significant, further analysis and/or other mitigation shall be prepared and accepted by the Environmental Analyst and the Historic Landmarks Commission, and implemented by the project. Work in the area may only proceed after the Environmental Analyst grants authorization.

If prehistoric or other Native American remains are encountered, a Native American representative shall be consulted, and the archaeologist and Native American representative shall monitor all further subsurface disturbances in the area of the find.

If the discovery consists of potentially human remains, the Santa Barbara County Coroner and the California Native American Heritage Commission must also be contacted.

A final report on the results of the archaeological monitoring shall be submitted by the City-approved archaeologist to the Environmental Analyst within 180 days of completion of the monitoring and prior to the issuance of final City permits.

Residual Impacts:

Impacts to cultural resources would be *less than significant*.

5. GEOPHYSICAL CONDITIONS Could the project result in or expose people to:		*NO*	*YES* *Level of Significance*
a)	Seismicity: fault rupture?	✓	
b)	Seismicity: ground shaking or liquefaction?		Less Than Significant
c)	Seismicity: seiche or tsunami?	✓	
d)	Landslides or mudslides?		Potentially Significant, Mitigable
e)	Subsidence of the land?		Potentially Significant, Mitigable
f)	Expansive soils?		Potentially Significant, Mitigable
g)	Excessive grading or permanent changes in the topography?	✓	

Geophysical Conditions - Discussion

Issues: Geophysical impacts involve geologic and soil conditions and their potential to create physical hazards affecting persons or property; or substantial changes to the physical condition of the site. Included are earthquake-related conditions such as fault rupture, groundshaking, liquefaction (a condition in which saturated soil looses shear strength during earthquake shaking); or seismic sea waves; unstable soil or slope conditions, such as landslides, subsidence, expansive or compressible/collapsible soils; or erosion; and extensive grading or topographic changes.

Impact Evaluation Guidelines: Potentially significant geophysical impacts may result from:

- Exposure to or creation of unstable earth conditions due to seismic conditions, such as earthquake faulting, groundshaking, liquefaction, or seismic waves.
- Exposure to or creation of unstable earth conditions due to geologic or soil conditions, such as landslides, settlement, or expansive, collapsible/compressible, or expansive soils.
- Extensive grading on slopes exceeding 20%, substantial topographic change, destruction of unique physical features; substantial erosion of soils, overburden, or sedimentation of a water course.

Geophysical Conditions – Existing Conditions and Project Impacts

5.a-c) Seismic and Ground Shaking/Liquefaction Hazards

The property is not subject to fault rupture, seiche, or tsunami, and has minimal liquefaction potential because there are no known faults on the project site, the site is not near an enclosed body of water that could subject it to a seiche, soils at the site are not saturated sand (necessary prerequisites for liquefaction) and the site is well above the tsunami run-up area. Therefore, there would be no impacts from seiche, fault rupture, tsunami, or liquefaction. Future development on the site would be subject to requirements of the Uniform Building Code, which includes provisions to ensure that proposed structures withstand the effects of ground shaking, resulting in a *less than significant impact*.

5.d-f) Geologic or Soil Instability

Landslides:

The project site is located on a coastal bluff in an area characterized by landslides in the recent past. The peer review of prior geological studies of the site by Dr. William Anikouchine (Exhibit FE), included an analysis of the potential for landslides on the project site. The report concludes that the project site is stable in the short term and that there could be stability problems on the site in the long term. The City requires that geological information be provided to verify that the portion of the site including any primary structures would not erode in a 75-year period. Dr. Anikouchine also verified

the accuracy of the top of bluff identified on the plans, determined by Fisher Geologic in December 2001. The top of bluff was determined based on the California Coastal Commission's definition of "bluff edge." This definition states that, "when the top edge of the cliff is rounded away from the face of the cliff as a result of erosional processes related to the presence of the steep cliff face, the edge shall be defined as that point nearest the cliff beyond which the downward gradient of the land surface increases more or less continuously until it reaches the general gradient of the cliff. In a case where is a steplike feature at the top of the cliff face, the landward edge of the topmost riser shall be taken to be the cliff edge."

The peer review indicates that the project development would not be susceptible to slope failure during the life of the structure, provided that surface runoff is captured and conveyed away from the bluff face and use of irrigation in this area is minimized. The proposed project could result in increased runoff being directed onto the bluff face and this could cause slope failure, a *potentially significant, mitigable* impact. A mitigation measure to minimize the amount of water in the underlying soils would reduce the impact of landslides to a *less than significant level*.

Subsidence:

The Buena Engineers (1971) report found that the project site is subject to some settlement based on laboratory testing of soils from the site. The report indicates that the subsidence can be adequately addressed using a properly engineered foundation design. The potentially significant impact can be reduced to a *less than significant level* using an appropriate foundation design, included in Mitigation Measure G-2.

Expansive Soils:

According to Smith (1980) soils at the site are expansive and can be addressed by use of a caisson foundation rather than footings. Expansive soils could cause a *potentially significant, mitigable impact*. This impact can be reduced to a *less than significant level* by having the structural foundation designed by an engineering geologist.

5.g) Topography; Grading/ Erosion

As proposed, the topography of the site would be slightly modified to direct the runoff from the driveway and garage back-out area to a catch basin. Project grading is proposed to be balanced on site and construction of the residence is expected to generate a minimal amount of cut and/or fill and re-compaction of soil, resulting in a *less than significant impact*.

Geophysical Conditions – Required Mitigation

G-1 All surface drainage from the site shall be intercepted as soon as possible, collected, and conveyed (using impervious facilities designed to minimize infiltration into site soils) to the ravine east of the parcel or the beach. Landscaping shall be designed to use native species that do not require irrigation except for their ~~probogation~~ propagation. Limited areas of non-native plants may be used if long-term irrigation is not required.

G-2 The location and design of structural foundations on the site shall be approved by a licensed Engineering Geologist or Geotechnical Engineer.

Geophysical Conditions – Residual Impacts

Potentially significant impacts to geophysical conditions would be reduced to a *less than significant level* with the incorporation of the identified mitigation measures.

6. HAZARDS Could the project involve:		NO	YES *Level of Significance*
a)	A risk of accidental explosion or release of hazardous substances (including, but not limited to: oil, pesticides, chemicals or radiation)?		Less than Significant
b)	The creation of any health hazard or potential health hazards?	✓	
c)	Exposure of people to existing sources of potential health hazards?	✓	
d)	Increased fire hazard in areas with flammable brush, grass, or trees?		Potentially Significant, Mitigable

Hazards - Discussion

Issues: Hazardous materials issues involve the potential for public health or safety impacts from exposure of persons or the environment to hazardous materials or risk of accidents involving combustible or toxic substances.

Impact Evaluation Guidelines: Significant impacts may result from the following:

- Siting of incompatible projects in close proximity to existing sources of safety risk, such as pipelines, industrial processes, railroads, airports, etc.
- Exposure of project occupants or construction workers to unremediated soil or groundwater contamination.
- Exposure of persons or the environment to hazardous substances due to improper use, storage, or disposal of hazardous materials.
- Siting of development in a high fire hazard areas or beyond adequate emergency response time, with inadequate access or water pressure, or otherwise in a manner that creates a fire hazard

Hazards – Existing Conditions and Project Impacts

6.a,b,c) Public Health and Safety

The project site has no known contamination and is not listed on the County Fire Department Hazardous Materials parcel listings. The project site is not located close to sources of public safety or health hazards, such as pipelines. Hazardous materials use and storage would be limited to small amounts of common household, automotive, and gardening supplies, such as cleansers, paint, motor oil, and pesticides. *Less than significant impacts* due to the use of oils, paint, and cleaners during construction activities would be present during development of a single family residence on this property. Mitigation required in the Biological Resources section of this study would further reduce this impact.

6.d) Fire Hazard

The project site is located outside of the High Fire Hazard area but is located upslope from a brush covered creek channel. The development of a single family residence would not increase fire hazards in the area; however, emergency access to the site does not meet Fire Department standards. Four existing residences are accessed from the existing private driveway proposed to access the new residence at 1837½ El Camino de la Luz. Three of these residences would receive emergency access from the private driveway and conform to current fire protection standards. A fire hydrant is located within 500 feet of the rear of the proposed residence.

The vehicle access easements to the subject site from the cul-de-sac of El Camino de la Luz vary in width from 10 to 15 feet over a distance of approximately 370 feet. Fire Department standards require provision of a 20 foot wide access to within 150 feet of the furthest exterior wall of any building when that access serves four or more residences. As proposed, the development would not meet these requirements. The inability to achieve standards for the provision of emergency fire services is considered a *potentially significant impact*. Substandard access width can be compensated by installing fire sprinklers if the closest fire engine can gain adequate access to within 250 feet of the exterior of all structures. The Fire Department has stated that the northernmost portion of the existing driveway, which provides a 15-foot wide access to within 250 feet of the furthest exterior wall of the proposed building, would serve as adequate access to the subject site if the mitigation measures identified below were implemented. These measures would reduce the impact to a *less than significant level* (see the Transportation/Circulation section of this study for more information about vehicle access).

Hazards – Required Mitigation

H-1 **Automatic Fire Sprinklers.** New structures shall be equipped with an automatic fire sprinkler system in accordance with NFPA 13D. The automatic fire sprinkler system shall be submitted to the City Fire Department for review and approval under separate permit.

H-2 **Monitored Fire Alarm System.** A monitored fire alarm system shall be designed and installed throughout the new structure as approved by the Fire Department. The fire alarm system shall be submitted under separate permit.

H-3 **Compliance with High Fire Construction Requirements.** The new residence shall be build in accordance with the City's High Fire Construction requirements.

H-4 **Fire Protection System Maintenance.** The property owner shall enter into a written agreement, binding on the owner and all successors, that requires continual maintenance of the automatic fire sprinkler system and monitoring of the fire alarm system.

Hazards – Residual Impacts

Potentially significant, mitigable impacts associated with fire hazards due to substandard access for emergency vehicles can be reduced to a *less than significant* level with the provision automatic fire sprinklers, a monitored fire alarm system, compliance with high fire construction requirements, and appropriate maintenance of fire protection systems.

7. NOISE Could the project result in:		NO	YES *Level of Significance*
a)	Increases in existing noise levels?		Less than Significant
b)	Exposure of people to severe noise levels?	✓	

Noise - Discussion

Issues: Noise issues are associated with siting of a new noise-sensitive land use in an area subject to high ambient background noise levels, siting of a noise-generating land use next to existing noise-sensitive land uses, and/or short-term construction-related noise.

The primary source of ambient noise in the City is vehicle traffic noise. The City Master Environmental Assessment (MEA) *Noise Contour Map* identifies average ambient noise levels within the City.

Ambient noise levels are determined as averaged 24-hour weighted levels, using the Day-Night Noise Level (L_{dn}) or Community Noise Equivelence Level (CNEL) measurement scales. The L_{dn} averages the varying sound levels occurring over the 24-hour day and gives a 10 decibel penalty to noises occurring between the hours of 10:00 p.m. and 7:00 a.m. to take into account the greater annoyance of intrusive noise levels during nighttime hours. Since L_{dn} is a 24-hour average noise level, an area could have sporadic loud noise levels above 60 dB(A) which average out over the 24-hour period. CNEL is similar to L_{dn} but includes a separate 5 dB(A) penalty for noise occurring between the hours of 7:00 p.m. and 10:00 p.m. CNEL and L_{dn} values usually agree with one another within 1 dB(A). The Equivalent Noise Level (L_{eq}) is a single noise level, which, if held constant during the measurement time period, would represent the same total energy as a fluctuating noise. L_{eq} values are commonly expressed for periods of one hour, but longer or shorter time periods may be specified. In general, a change in noise level of less than three decibels is not audible. A doubling of the distance from a noise source will generally equate to a change in decibel level of six decibels.

Guidance for appropriate long-term background noise levels for various land uses are established in the City General Plan Noise Element Land Use Compatibility Guidelines. Building codes also establish maximum average ambient noise levels for the interiors of structures.

High construction noise levels occur with the use of heavy equipment such as scrapers, rollers, graders, trenchers and large trucks for demolition, grading, and construction. Equipment noise levels can vary substantially through a construction period, and depend on the type of equipment, number of pieces operating, and equipment maintenance. Construction equipment generates noise levels of more than 80 or 90 dB(A) at a distance of 50 feet, and the shorter impulsive noises from other construction equipment (such as pile drivers and drills) can be even higher, up to and exceeding 100 dB(A). Noise during construction is generally intermittent and sporadic, and after completion of the initial demolition, grading and site preparation activities, tends to be quieter.

The Noise Ordinance (Chapter 9.16 of the Santa Barbara Municipal Code) governs short-term or periodic noise, such as construction noise, operation of motorized equipment or amplified sound, or other sources of nuisance noise. The ordinance establishes limitations on hours of construction and motorized equipment operations, and provides criteria for defining nuisance noise in general.

Impact Evaluation Guidelines: A significant noise impact may result from:

- Siting of a project such that persons would be subject to long-term ambient noise levels in excess of Noise Element land use compatibility guidelines as follows:
  - Residential: Normally acceptable maximum exterior ambient noise level of 60 dB(A); maximum interior noise level of 45 dB(A).
- Substantial noise from grading and construction activity in close proximity to noise-sensitive receptors for an extensive duration.

Noise – Existing Conditions and Project Impacts

7.a,b) Increased Noise Level; Exposure to High Noise Levels

Long-Term Operational Noise: The City's Master Environmental Assessment maps indicate the property is located in an area where noise levels are 60 dBA or less. The Noise Element establishes 60 dBA as the acceptable exterior noise level for residential uses. No substantial noise generation is anticipated to occur as a result of the proposed residential use. Therefore, the project site would not be subject to high noise levels, nor would the project cause high operational noise levels.

Temporary Construction Noise: Noise during construction is generally intermittent and sporadic, and after completion of initial grading and site clearing activities, tends to be quieter. Noise generated during project grading activities would result in a short-term adverse construction impact to residential receptors in the area. Construction of the residence is anticipated to result in use of heavy equipment. Construction noise is limited by City ordinance to the hours between 7:00 a.m. and 8:00 p.m. daily for noise generating activities that would increase noise levels at the nearest residential property line by 5 decibels. The project is limited in scope and the potential impact due to construction noise would be *less than significant*. However, the level of potential adverse effect would be further reduced through recommended measures below, including careful construction scheduling, further limiting construction activities to daytime hours on weekdays, and use of equipment mufflers.

Noise - Mitigation

N-1 **Construction Notice.** At least 20 days prior to commencement of construction, the contractor shall provide written notice to all property owners and residents within 450 feet of the project area. The notice shall contain a description of the proposed project, a construction schedule including days and hours of construction, the name and phone number of the Project Environmental Coordinator (PEC) who can answer questions, and provide additional information or address problems that may arise during construction. A 24-hour construction hot line shall be provided. Informational signs with the PEC's name and telephone number shall also be posted at the site.

N-2 **Construction Hours.** Noise-generating construction activities (which may include preparation for construction work) shall be permitted weekdays between the hours of 8:00 a.m. and 5:00 p.m., excluding holidays observed by the City as legal holidays: New Year's Day (January 1st); Martin Luther King Jr.'s Birthday (3rd Monday in January); President's Day (3rd Monday in February); Memorial Day (Last Monday in May); Independence Day (July 4th); Labor Day (1st Monday in September); Thanksgiving Day (4th Thursday in November); Day Following Thanksgiving Day (Friday following Thanksgiving); Christmas Day (December 25th). *When a holiday falls on a Saturday or Sunday, the preceding Friday or following Monday respectively shall be observed as a legal holiday.

Occasional night work may be approved for the hours between 5 p.m. and 8 a.m. by the Chief of Building and Zoning (per Section 9.16.015 of the Municipal Code) between the hours of 5 p.m. and 8 a.m. weekdays. In the event of such night work approval, the applicant shall provide written notice to all property owners and residents within 450 feet of the project property boundary and the City Planning and Building Divisions at least 48 hours prior to commencement of any. Night work shall not be permitted on weekends and holidays.

N-3 **Construction Equipment Sound Control.** All construction equipment, including trucks, shall be professionally maintained and fitted with standard manufacturers' muffler and silencing devices.

Noise – Residual Impact

Impacts associated with long and short term noise sources are considered *less than significant*. Recommended mitigation measures would minimize the nuisance associated with construction noise.

8. POPULATION AND HOUSING Could the project:		NO	YES Level of Significance
a)	Induce substantial growth in an area either directly or indirectly (e.g. through projects in an undeveloped area or extension of major infrastructure)?		Less Than Significant
b)	Displace existing housing, especially affordable housing?	✓	

Population and Housing - Discussion

Impact Evaluation Guidelines: Issues of potentially significant population and housing impacts may involve:

- Growth inducement, such as provision of substantial population or employment growth or creation of substantial housing demand; development in an undeveloped area, or extension/ expansion of major infrastructure that could support additional future growth.
- Loss of a substantial number of housing units, especially loss of more affordable housing.

Population and Housing – Existing Conditions and Project Impacts

8.a) Growth-Inducing Impacts

The project would not involve a substantial increase in major public facilities such as extension of water or sewer lines or roads that would facilitate other growth in the area. The project would not involve substantial employment growth that would increase population and housing demand. Growth-inducing impacts would be *less than significant*.

8.b) Housing Displacement

The project would not involve any housing displacement. *No impact* would result from the project.

Population and Housing - Mitigation

No mitigation is required.

Population and Housing – Residual Impact

Project effects on population and housing would be *less than significant*.

9. PUBLIC SERVICES Could the project have an effect upon, or result in a need for new or altered services in any of the following areas:	NO	YES *Level of Significance*
a) Fire protection?		Less than Significant
b) Police protection?		Less than Significant
c) Schools?		Less than Significant
d) Maintenance of public facilities, including roads?		Less than Significant
e) Other governmental services?		Less than Significant
f) Electrical power or natural gas?		Less than Significant
g) Water treatment or distribution facilities?		Less than Significant
h) Sewer or septic tanks?		Less than Significant
i) Water distribution/demand?		Less than Significant
j) Solid waste disposal?		Less than Significant

Public Services - Discussion

Issues: This section evaluates project effects on fire and police protection services, schools, road maintenance and other governmental services, utilities, including electric and natural gas, water and sewer service, and solid waste disposal.

Impact Evaluation Guidelines: The following may be identified as significant public services and facilities impacts:

- Creation of a substantial need for increased police department, fire department, road maintenance, or government services staff or equipment.
- Generation of substantial numbers of students exceeding public school capacity where schools have been designated as overcrowded.
- Inadequate water, sewage disposal, or utility facilities.

- Substantial increase in solid waste disposal to area sanitary landfills.

Public Services – Existing Conditions and Project Impacts

9.a,b) Fire and Police Protection

The property is served by City Fire and Police Departments. Project development would result in construction and habitation of a residence that would not generate a substantial demand for increased police services, but is in a location that does not have adequate access for emergency services. In order to compensate for inadequacies in emergency services access, the installation of a monitored fire alarm system would be required. The increased service demand associated with monitoring the alarm system for this project alone is considered *less than significant*.

9.c) Schools

The project site is served by the Santa Barbara Elementary and High School Districts. The project would provide a net increase of one residential unit, which could generate additional students. None of the school districts in the South Coast have been designated "overcrowded" as defined by California State law. School impact fees would be applied to the project in accordance with State law. Project impacts to schools would be *less than significant*.

9.d,e,f) Public Facilities/Roads/Governmental Service/ Utilities

The proposed project would not significantly impact public facilities, roads, government services or utilities as these services are adequate to accommodate an additional single family residence. Project impacts would be *less than significant.*

9.g,h,i) Water and Sewer

Water

The City of Santa Barbara's water supply comes from the following sources, with the actual share of each determined by availability and level of customer demand: Cachuma Reservoir and Tecolote Tunnel, Gibraltar Reservoir and Mission Tunnel, 300 Acre Feet per Year (AFY) of contractual transfer from Montecito Water District, groundwater, State Water Project entitlement, desalination, and recycled water. Conservation and efficiency improvements are projected to contribute to the supply by displacing demand that would otherwise have to be supplied by additional sources. In 1994, based on the comprehensive review of the City's water supply in the Long Term Water Supply Alternatives Analysis (LTWSAA), the City Council approved the Long Term Water Supply Program (LTWSP). The LTWSP outlines a strategy to use the above sources to meet the projected demand of 17,900 AFY (including 1,500 AFY of demand projected to be met with conservation) plus a 10 percent safety margin for a total of 19,700 AFY. Therefore, the target for the amount of water the system will actually have to supply, including the safety margin, is 18,200 AFY. The 2003 Water Supply Management Report documents an actual system demand of 13,460 AFY and a theoretical commitment of 16,170 AFY. Of the total system production, 95% was potable water and 5% was reclaimed water.

The existing development on the site receives water service from the City of Santa Barbara water supply, treatment, and distribution system. The proposed project is estimated to demand 0.74 AFY of potable water. The City's long-term water supply and existing water treatment and distribution facilities with proposed facility hook-ups for the new structures and landscaping would adequately serve the project. The potential increase in demand would constitute a *less than significant* impact to the City water supply.

Sewer

The project site is currently served by City sewer system. The project would include one new residence, which is estimated to demand 571 gallons/day or 0.64 AFY (87% of water demand). The maximum capacity of the El Estero Treatment Plant is 11 million gallons per day, with average daily flow millions of gallons per day less than the capacity. Increased sewage treatment associated by the project can be accommodated by the existing City sewer system and sewage treatment plant, and would represent a *less than significant* impact.

9.j) Solid Waste Generation/ Disposal

Most of the waste generated in the City is transported on a daily basis to seven landfills located around the County. The County of Santa Barbara, which operates the landfills, has developed impact significance thresholds related to the impacts of development on remaining landfill capacity. The County thresholds are based on the projected average solid waste generation for Santa Barbara County from 1990-2005. The County assumes a 1.2% annual increase (approximately 4000 tons per year) in solid waste generation over the 15-year period.

The County's threshold for project specific impacts to the solid waste system is 196 tons per year (this figure represents 5% of the expected average annual increase in solid waste generation [4000 tons/year]). Source reduction, recycling, and composting can reduce a project's waste stream by as much as 50%. If a proposed project generates 196 or more tons per year after reduction and recycling efforts, impacts would be considered significant and unavoidable.

Proposed projects with a project specific impact as identified above (196 tons/year or more) would also be considered cumulatively significant, as the project specific threshold of significance is based on a cumulative growth scenario. However, as landfill space is already extremely limited, any increase in solid waste of 1% or more of the expected average annual increase in solid waste generation [4000 tons/year], which equates to 40 tons per year, is considered an adverse cumulative impact.

Long-Term (Operational). The proposed project use is estimated to generate 2.38 TPY of solid waste (2.51 persons/household[1] x 1 unit x 0.95 TPY), which is a *less than significant impact*. With application of source reduction, reuse, and recycling, landfill disposal of solid waste could be reduced to 1.2 TPY.

Short-Term (Demolition and Construction). Project grading is proposed to be balanced on site. Construction-related waste generation would be short-term and *less than significant*. Application of recommended standard mitigation to reduce, re-use, and recycle construction waste to the extent feasible would minimize this effect.

Public Services - Mitigation

PS-1 Construction Materials Recycling. Construction-related solid waste shall be minimized through source reduction, re-use and recycling. Collection bins for these materials shall be provided on the site.

Public Services – Residual Impacts

Project effects on public services would be *less than significant*. A recommended mitigation measure would further reduce less than significant impacts associated with solid waste generation during construction.

10. RECREATION Could the project:		NO	YES *Level of Significance*
a)	Increase the demand for neighborhood or regional parks or other recreational facilities?		Less Than Significant
b)	Affect existing parks or other public recreational facilities?		Less Than Significant

Recreation - Discussion

Issues: Recreational issues are associated with increased demand for recreational facilities, or loss or impacts to existing recreational facilities.

Impact Evaluation Guidelines: Recreation impacts may be significant if they result in:

- Substantial increase in demand for park and recreation facilities in an area under-served by existing public park and recreation facilities.
- Substantial loss or interference with existing park space or other public recreational facilities such as hiking, cycling, or horse trails.

Recreation – Existing Conditions and Project Impacts

10.a) Recreational Demand

The development of one additional single family residence would not significantly affect demand for recreational facilities. Impacts are *less than significant*.

10.b) Existing Recreational Facilities

The project, as proposed, could significantly impact existing public views of the ocean from La Mesa Park. These adverse visual effects would diminish the public's recreational experience from the park; however, these facilities would

[1] Based on data obtained from the U.S. Census Bureau (Census 2000), the average household size of owner-occupied units in the City of Santa Barbara is 2.51 persons per household.

still remain available for public use and this impact is considered to be *less than significant*. Please refer to the Visual Aesthetics section of this document for further discussion of this issue.

Recreation - Mitigation

Please refer to the Visual Aesthetics section for proposed mitigation measures to reduce visual impacts from public viewing areas.

Recreation – Residual Impacts

Implementation of proposed mitigation measures requiring a redesign of the house to minimize intrusion into public views from La Mesa Park would further reduce this *less than significant impact*.

11. TRANSPORTATION/CIRCULATION Could the project result in:		NO	YES *Level of Significance*
a)	Increased vehicle trips?		Less Than Significant
b)	Hazards to safety from design features (e.g. sharp curves, inadequate sight distance or dangerous intersections)?	✓	
c)	Inadequate emergency access or access to nearby uses?		Potentially Significant, Mitigable
d)	Insufficient parking capacity on-site or off-site?	✓	
e)	Hazards or barriers for pedestrians or bicyclists?	✓	

Transportation - Discussion

Issues: Transportation issues include traffic, access, circulation, safety, and parking. Vehicle, bicycle and pedestrian, and transit modes of transportation are all considered, as well as emergency vehicle access. The City General Plan Circulation Element contains policies addressing circulation, traffic, and parking in the City.

Impact Evaluation Guidelines: A proposed project may have a significant impact on traffic/ circulation/ parking if it would:

Vehicle Traffic

- Cause an increase in traffic that is substantial in relation to the existing traffic load and street system capacity (see traffic thresholds below).
- Cause insufficiency in transit system.
- Conflict with the Congestion Management Plan (CMP) or Circulation Element or other adopted plan or policy pertaining to vehicle or transit systems.

Circulation and Traffic Safety

- Create potential hazards due to addition of traffic to a roadway that has design features (e.g., narrow width, roadside ditches, sharp curves, poor sight distance, inadequate pavement structure) or that supports uses that would be incompatible with substantial increases in traffic.
- Diminish or reduce safe pedestrian and/or bicycle circulation.
- Result in inadequate emergency access on-site or to nearby uses.

Parking

- Result in insufficient parking capacity for the projected amount of automobiles and bicycles.

Traffic Thresholds of Significance: The City uses Levels of Service (LOS) "A" through "F" to describe operating conditions at signalized intersections in terms of volume-to-capacity (V/C) ratios, with LOS A (0.50-0.60 V/C) representing free flowing conditions and LOS F (0.90+ V/C) describing conditions of substantial delay. The City General Plan Circulation Element establishes the goal for City intersections to not exceed LOS C (0.70-0.80 V/C).

For purposes of environmental assessment, LOS C at 0.77 V/C is the threshold Level of Service against which impacts are measured. An intersection is considered "impacted" if the volume to capacity ratio is .77 V/C or greater.

Project-Specific Significant Impact: A project-specific significant impact results when:

(a) Project peak-hour traffic would cause a signalized intersection to exceed 0.77 V/C, or

(b) The V/C of an intersection already exceeding 0.77 V/C would be increased by 0.01 (1%) or more as a result of project peak-hour traffic.

For non-signalized intersections, delay-time methodology is utilized in evaluating impacts.

Significant Cumulative Contribution: A project would result in a significant contribution to cumulative traffic impacts when:

(a) Project peak-hour traffic together with other cumulative traffic from existing and reasonably foreseeable pending projects would cause an intersection to exceed 0.77 V/C, or

(b) Project would contribute traffic to an intersection already exceeding 0.77 V/C.

Transportation – Existing Conditions and Project Impacts

11.a) Traffic

Long-Term Traffic

The project site is located in the West Mesa neighborhood and is accessed from local roads, El Camino de la Luz and Oliver Road. Cliff Drive, located to the north of the site, is the closest arterial and provides access to Meigs Road/Carrillo Boulevard to the east and Las Positas Road to the west. With the exception of the Cliff Drive/Las Positas Road intersection, which operates at LOS F, all the nearby intersections operate at LOS A or B. The project is expected to generate approximately one p.m. peak hour trip and ten average daily trips. When these trips are added to the existing street network they would not result in significant traffic impacts.

Short-Term Construction Traffic

Based on the limited scope of the project, potential temporary construction related traffic impacts would be *less than significant*. Standard mitigation measures are recommended to minimize adverse impacts to the neighborhood. These include restrictions on the hours permitted for construction trips and approval of routes for construction traffic.

11.c) Access

The subject parcel was part of a 2-lot subdivision approved by the City in 1958. The conditions of that approval have created much confusion over the years, the most significant of which is the width of the vehicle access easement serving the property.

On May 29, 1958, the City Council approved a request for a two-lot subdivision of the property at 1837 El Camino de la Luz, resulting in the creation of the subject property and the lot directly to the north. The minutes of that Council meeting (Exhibit ~~G~~F) state that the subdivision was approved as submitted by the applicant. It is not clear, based on City records, what plan was submitted by the applicant and approved by the Council. The minutes of the City Council meeting and two previous Planning Commission hearings consistently refer to a proposed 15-foot easement serving the subject property. Yet, the plan attached as Exhibit ~~H~~G of this study represents our best understanding of what was approved, given that a Planning Commission receipt date stamp is on it, as well as a City Council approval stamp, although this stamp is not signed and dated. This plan indicates that the existing parcel (Parcel 1) was served by a 15-foot wide private easement from the end of El Camino de la Luz and the proposed parcel (Parcel 2) would be served by a 10-foot wide easement for vehicular access purposes.

In 1958, the City required the recordation of a written instrument within one year of approval to validate a lot split. This never occurred in this case. In 1963, a Grant Deed conveyed the subject parcel from Gertrude E. Eaton to Ed. R. and Joanne F. Brewer, which was illegal since the second parcel created by the lot split was never validated. Per an allowance by the Subdivision Map Act, the City issued a Conditional Certificate of Compliance (CCC) for the subject parcel, which was recorded in December 1999. The CCC allows for the property to be legally sold, leased, or financed, pursuant to the Subdivision Map Act; however, development proposed of the real property must meet the following condition of the CCC (Gov't Code §66410):

> *"Provide evidence, satisfactory to the City Engineer that the owner of the parcel described herein substantially possesses the required amount of legal access that formed the basis of the original lot split."*

The outstanding question is "the required amount of legal access that formed the basis of the original lot split." Based on the City Attorney's review of applicable materials, the required access to the subject parcel is not clearly and definitely established from a legal standpoint. Thus, any development of the subject parcel without adequate legal access to satisfy the requirement of the CCC is a *potentially significant impact*. The condition of the CCC, included as Mitigation Measure T-1, must be satisfied in order to reduce this impact to a *less than significant level*.

Adequate access must also be provided to the project site for construction equipment necessary to build the residence. Given that the owner must provide evidence of adequate access to the site for general circulation purposes, per required Mitigation Measure T-1, it is assumed that access would also be found adequate to allow for construction equipment to traverse the private easements to access the subject property, resulting in a *less than significant impact* in that regard.

11.b,d,e) Circulation/Parking/Safety

No sharp curves, inadequate sight distance or dangerous intersections are present in this area. Parking for the proposed residence would be accommodated in a proposed two-car garage on-site. *No significant impacts* to the street network or parking supply would occur.

Transportation – Required Mitigation

T-1 Evidence of Adequate Access. Provide evidence, satisfactory to the City Engineer and City Attorney, that the owner of the subject parcel substantially possesses the required amount of legal access that formed the basis of the original lot split.

Transportation – Recommended Mitigation

T-2 Construction Traffic. The haul routes for all construction-related trucks, three tons or more, entering or exiting the site, shall be approved by the Transportation Engineer. Construction-related truck trips shall not be scheduled during peak hours (7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m.) to help reduce truck traffic and noise on adjacent streets and roadways. The route of construction-related traffic shall be established to minimize trips through surrounding residential neighborhoods.

T-3 Construction Parking. Construction parking and vehicle/equipment/materials storage shall be provided as follows:

1. During construction, free parking spaces for construction workers shall be provided on-site or off-site in a location subject to the approval of the Transportation and Parking Manager.
2. On-site or off-site storage shall be provided for construction materials, equipment, and vehicles. Storage of construction materials within the public right-of-way is prohibited.

Transportation – Residual Impact

Residual circulation impacts would be *less than significant*.

12. WATER ENVIRONMENT Could the project result in:		NO	YES *Level of Significance*
a)	Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff?		Potentially Significant, Mitigable
b)	Exposure of people or property to water related hazards such as flooding?	✓	
c)	Discharge into surface waters?		Less Than Significant
d)	Change in the quantity, quality, direction or rate of flow of ground waters?		Less Than Significant
e)	Increased storm water drainage?		Less Than Significant

Water – Discussion

Issues: Water resources issues include changes in offsite drainage and infiltration/groundwater recharge; storm water runoff and flooding; and water quality.

Impact Evaluation Guidelines: A significant impact would result from:

Water Resources and Drainage

- Substantially changing the amount of surface water in any water body or the quantity of groundwater recharge.
- Substantially changing the drainage pattern or creating a substantially increased amount or rate of surface water runoff that would exceed the capacity of existing or planned drainage and storm water systems.

Flooding

- Locating development within 100-year flood hazard areas; substantially altering the course or flow of flood waters or otherwise exposing people or property to substantial flood hazard

Water Quality

- Substantial discharge of sediment or pollutants into surface water or groundwater, or otherwise degrading water quality, including temperature, dissolved oxygen, or turbidity.

Water Resources – Existing Conditions and Project Impacts

12.a,d,e) Drainage

The majority of the upland portion of the site is currently covered by asphalt. The project site currently drains by sheet flow across the asphalt area, to the south over the ocean bluff face and to the east into Lighthouse Creek. Off-site drainage from the property to the west is conveyed in a concrete drainage swale across a portion of the subject site to the top of the ocean bluff. Off-site drainage from the private road area to the north flows across the site to the ocean bluff.

Development of the project would result in a negligible difference in impervious surface coverage, so the change in quantity of water is considered *less than significant*. The proposed drainage design would collect some flows from off-site to the north, and from the proposed residence and paved areas. This drainage would be filtered in catch basins and conveyed by underground pipes to Lighthouse Creek. This would result in a change to the direction and flow of runoff water, but would be considered an improvement to current conditions since the site is located on a sensitive bluff-top. While the changes to existing drainage patterns would be substantial, they are considered a *less than significant* environmental effect because the proposed drainage system would adequately control runoff water and reduce erosion of the sea cliff. A rip rap dissipater would be constructed in the creek channel to minimize erosion. This conceptual drainage design has been reviewed by the Building & Safety Division and generally meets City standards. Development of a final engineered design would be required prior to issuance of building permits. Mitigation Measure W-2 is recommended to ensure that the proposed drainage system continues to be maintained and functional.

12.b) Flooding

According to the FEMA Federal Flood Insurance Program Flood Insurance Rate Map for the City of Santa Barbara, the project site is not located within the 100-year floodplain or an area otherwise subject to flooding. Flooding impacts are considered *less than significant*.

12.c,d) Water Quality

Long-Term (Operational) Impacts. Site drainage would be collected, filtered and conveyed to Lighthouse Creek. The use of an appropriate filtration system coupled with a maintenance program would provide treatment of drainage waters before they reach the creek or ocean. Therefore, with adequate maintenance of the filtration system, impacts from discharge into surface waters would be *less than significant*.

Short-Term (Construction) Impacts. Grading activities and construction of the residence would result in a *potentially significant, mitigible impact* to water quality. With the implementation of an Erosion Control/Water Quality Plan (Mitigation Measure BIO-4), the potential for short-term water quality impacts due to erosion and sedimentation during grading and construction would be reduced to a *less than significant level*.

Water Resources – Required Mitigation

W-1 **Drainage and Water Quality.** Project plans for grading, drainage, stormwater facilities, and project development shall be subject to review and approval by City Building Division and Public Works Department per City regulations. Sufficient engineered design and adequate measures shall be employed to ensure that no significant construction-related or long-term effects from increased runoff, erosion and sedimentation, urban water quality pollutants, or groundwater pollutants would result from the project.

See also **Bio-4** for additional mitigation measures.

Water Resources – Recommended Mitigation

W-2 **Drainage System Maintenance.** The Owner shall maintain the drainage system consistent with an approved maintenance plan. The maintenance plan shall include periodic clean-out of inlets and filters and filter replacement as necessary. This plan shall be provided with the building plan submittal for review and approval by Community Development prior to approval of building permits.

Water Resources – Residual Impact

Implementation of the identified mitigation measures would reduce water resource impacts to a *less than significant level*.

MANDATORY FINDINGS OF SIGNIFICANCE.		*YES*	*NO*
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildfire population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		✓
b)	Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?		✓
c)	Does the project have potential impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?		✓
d)	Does the project have potential environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?		✓

INITIAL STUDY CONCLUSION

On the basis of this initial evaluation, it has been determined that the proposed project MAY have a significant effect on the environment in terms of aesthetic resources, and further study in an ENVIRONMENTAL IMPACT REPORT is required for this ~~single~~ issue area. ~~w~~With identified mitigation measures agreed-to by the applicant, potentially significant impacts in all other issue areas, would be avoided or reduced to less than significant levels. ~~A Mitigated Negative Declaration will be prepared.~~

Initial Study Preparer: Renee Brooke, AICP, Project Planner Revised 10/16/06 by Victoria Greene, Project Planner

D A Andalero — October 18, 2006

Environmental Analyst — Date

EXHIBITS:

A. Vicinity Map

B. Project Plans

~~C.Mitigation Monitoring and Reporting Program~~

~~D.~~C. Visual Simulations prepared by interacta, dated June 11, 2004

~~E.~~D. Biological Assessment prepared by Rachel Tierney, dated December 12, 2002

~~F.~~E. Peer Review of Geologic Analysis prepared by Dr. William Anikouchine, dated March 16, 2005

~~G.~~F. City Council Minutes dated May 29, 1958

~~H.~~G. Plan showing Proposed Division of the Property of Fred D. Eaton

LIST OF SOURCES USED IN PREPARATION OF THIS INITIAL STUDY

The following sources used in the preparation of this Initial Study are located at the Community Development Department, Planning Division, 630 Garden Street, Santa Barbara and are available for review upon request.

"Biological Assessment," prepared by Rachel Tierney (December 12, 2002 and revised January-February 2006)

California Environmental Quality Act (CEQA) & CEQA Guidelines

"Engineering Geologic Update Report," prepared by Fisher Geologic (December 1, 2001)

General Plan Circulation Element

General Plan Conservation Element

1995 Housing Element

General Plan Land Use Element

General Plan Noise Element w/appendices

General Plan Map

General Plan Seismic Safety/Safety Element

Geology Assessment for the City of Santa Barbara

Institute of Traffic Engineers Parking Generation Manual

Institute of Traffic Engineers Trip Generation Manual

Local Coastal Plan *(Main or Airport)*

Master Environmental Assessment

Parking Design Standards

"Peer Review of Geologic Analysis for a Project at 1837 1/2 El Camino de la Luz," prepared by Dr. William Anikouchine (March 16, 2005)

"Phase I Archaeological Investigation," prepared by Larry Wilcoxon (February 1996)

Santa Barbara Municipal Code & City Charter

Special District Map

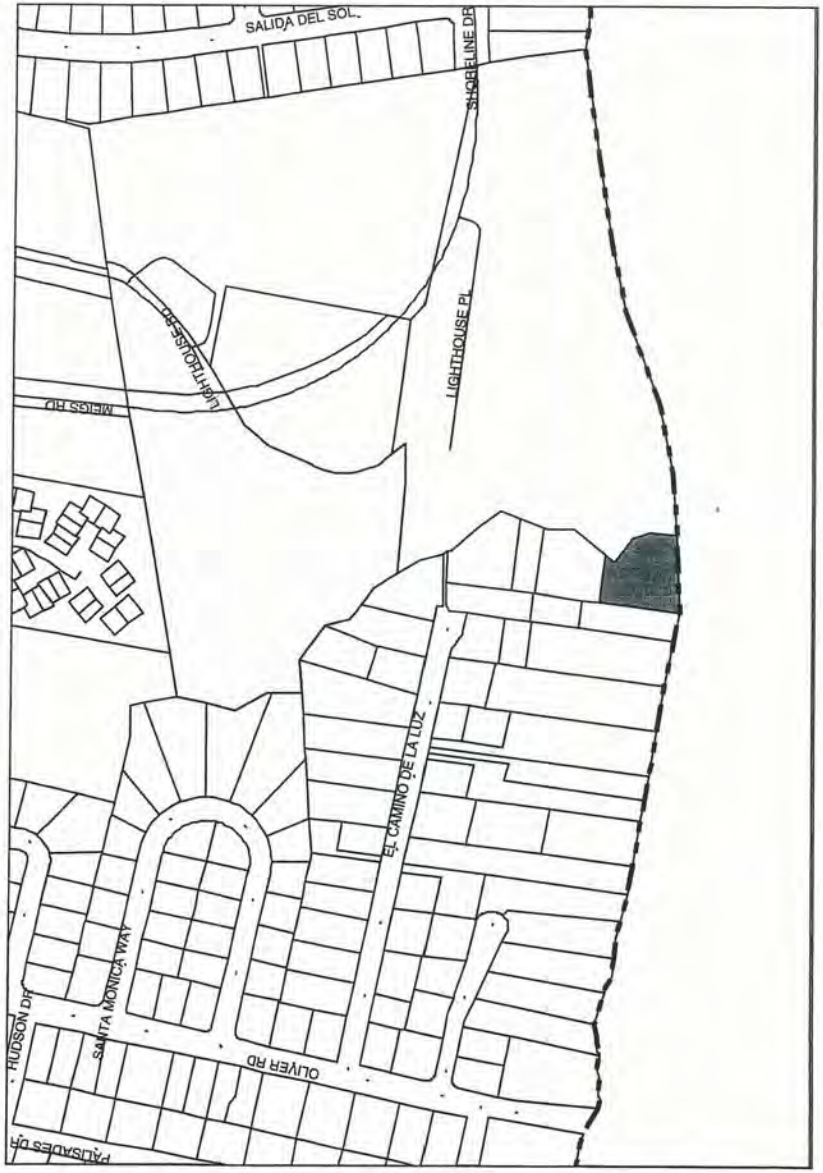
Uniform Building Code as adopted by City

Visual Simulations, prepared by interacta, dated June 11, 2004

Zoning Ordinance & Zoning Map

F:\USERS\PLAN\Environ. Review\Initial Studies\1837.5 El Camino de la Luz Revised Initial Study 10.16.06.doc

Exhbit A


SALIDA DEL SOL
SHORELINE DR
LIGHTHOUSE PL
LIGHTHOUSE RD
MEIGS RD
EL CAMINO DE LA LUZ
OLIVER RD
SANTA MONICA WAY
HUDSON DR
PALISADES DR

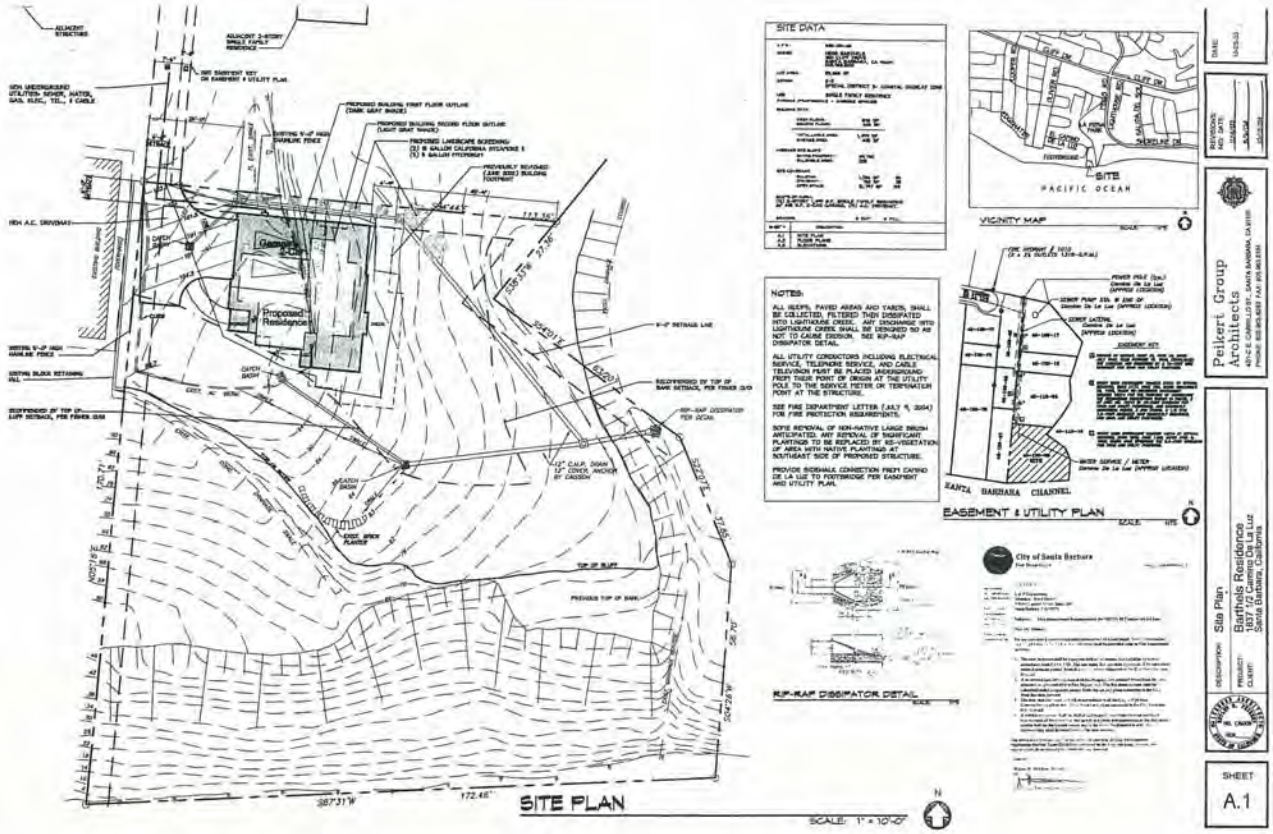

SITE PLAN
SCALE: 1" = 10'-0"
SITE DATA
NOTES:
VICINITY MAP
PACIFIC OCEAN
SITE
EASEMENT & UTILITY PLAN
SANTA BARBARA CHANNEL
RIP-RAP DISSIPATOR DETAIL
City of Santa Barbara
Peikert Group Architects
DESCRIPTION: Site Plan
PROJECT: Barthels Residence
1837 1/2 Camino De La Luz
Santa Barbara, California
SHEET
A.1

Exhibit B

interacta

Barthels Residence

Photo Simulation
1837 1/2 El Camino De La Luz

Exhibit C

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PLANNING

Prepared for
L&P Consultants

Prepared by
interacta
11 June 2004

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Barthels Residence

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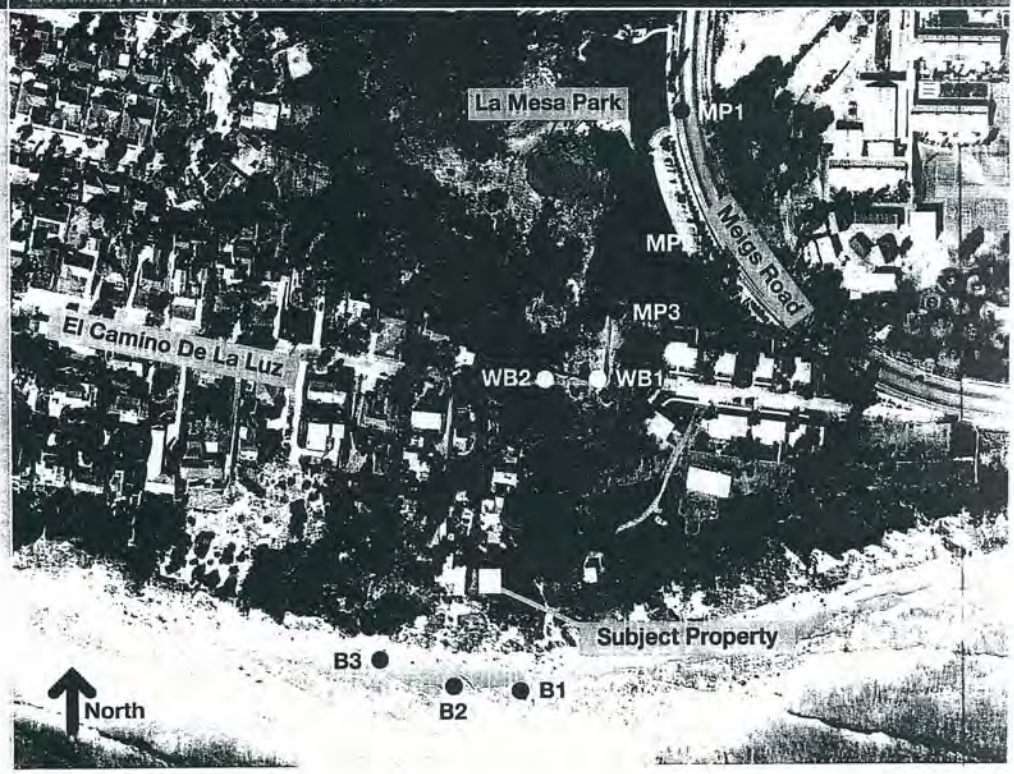
Location Map - Camera Locations

Camera Locations:

Mesa Park Views
- MP1 - Entrance to Parking Lot
- MP2 - Lawn
- MP3 - Bench

Walking Bridge Views
WB1 - Bridge 1
WB2 - Bridge 2

Beach Views
- B1 - Beach 1
- B2 - Beach 2
- B3 - Beach 3



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Location Map - Camera View Corridors

Camera Locations:

Mesa Park Views
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- MP3 - Bench

Walking Bridge Views
WB1 - Bridge 1
WB2 - Bridge 2

Beach Views
- B1 - Beach 1
- B2 - Beach 2
- B3 - Beach 3

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MP1 - Entrance to Parking Lot

6

Location: Entrance to La Mesa Park at Meigs Road. In bike path before sidewalk.

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MP1 - Entrance to Parking Lot

6

Location: Entrance to La Mesa Park at Meigs Road. In bike path before sidewalk.

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MP2 - Lawn

7

Location: Upper portion of lower grass area oriented for maximum ocean view.

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MP2 - Lawn

8

Location: Upper portion of lower grass area oriented for maximum ocean view.

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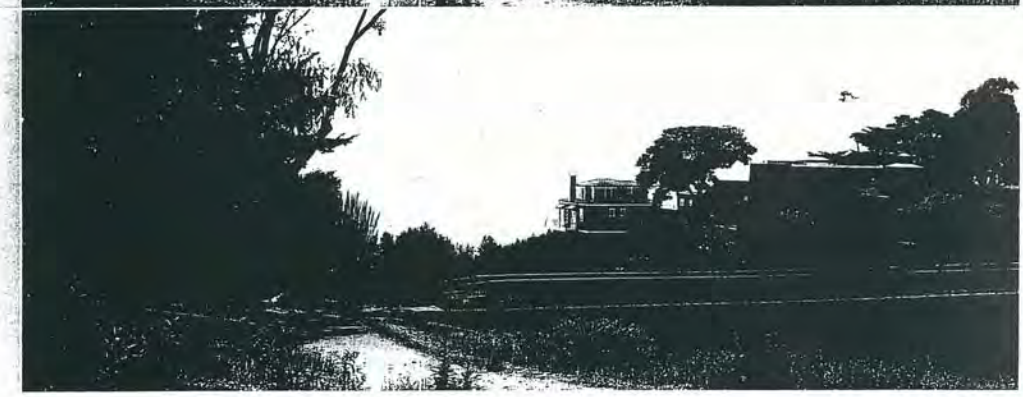
MP3 - Bench

Location: Sitting on Northerly bench in La Mesa Park at East end of bridge.



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MP3 - Bench

Location: Sitting on Northerly bench in La Mesa Park at East end of bridge.

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WB1 - Bridge 1

11

Location: East end of footbridge/bike path.

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WB1 - Bridge 1

12

Location: East end of footbridge/bike path.

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WB2 - Bridge 2

Location: Halfway point of footbridge/bike path.

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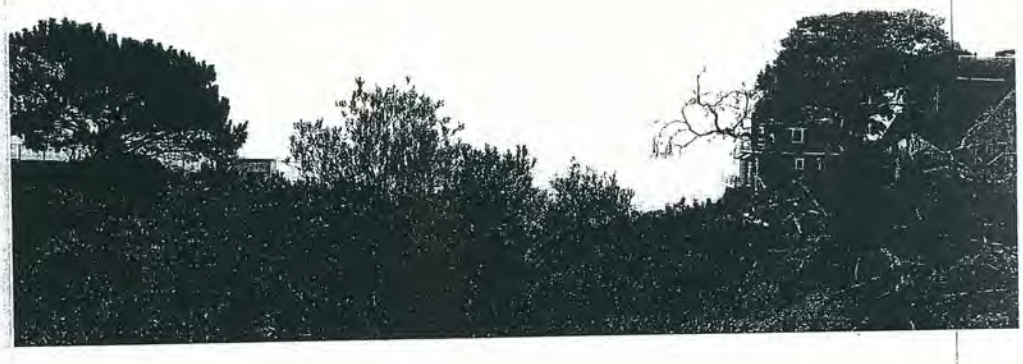
WB2 - Bridge 2

Location: Halfway point of footbridge/bike path.



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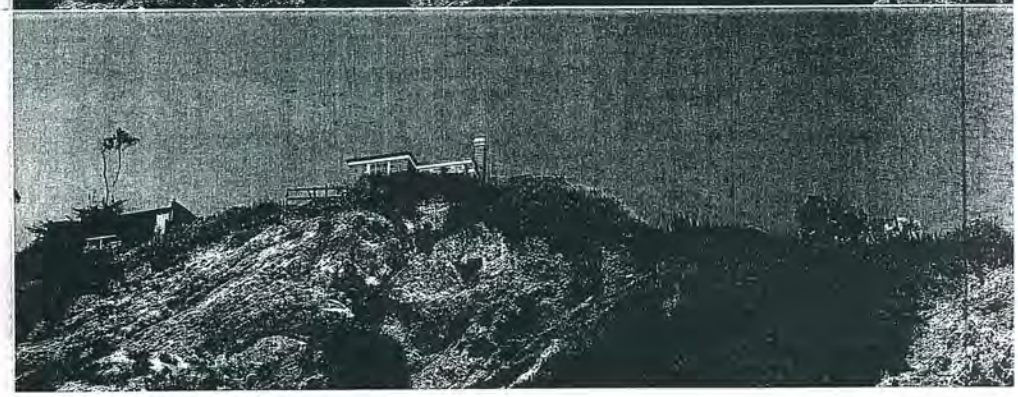
B1 - Beach 1

Location: South East side of property, standing on beach.

View: Upper level of structure exposed.



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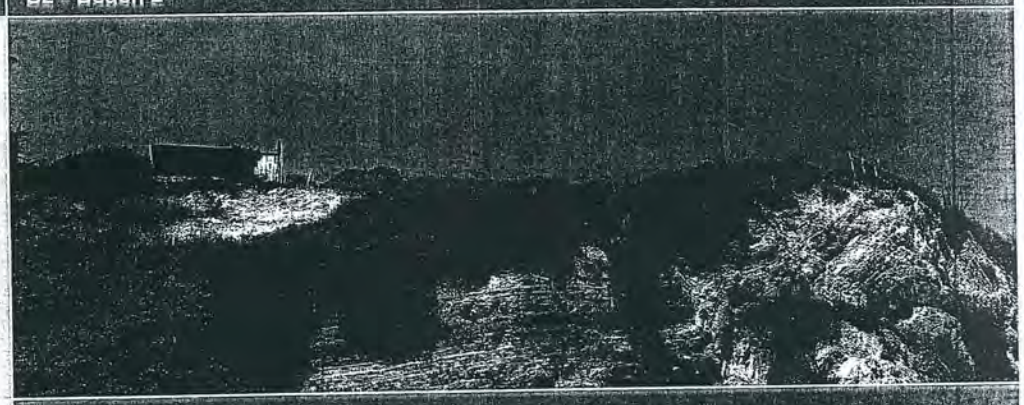
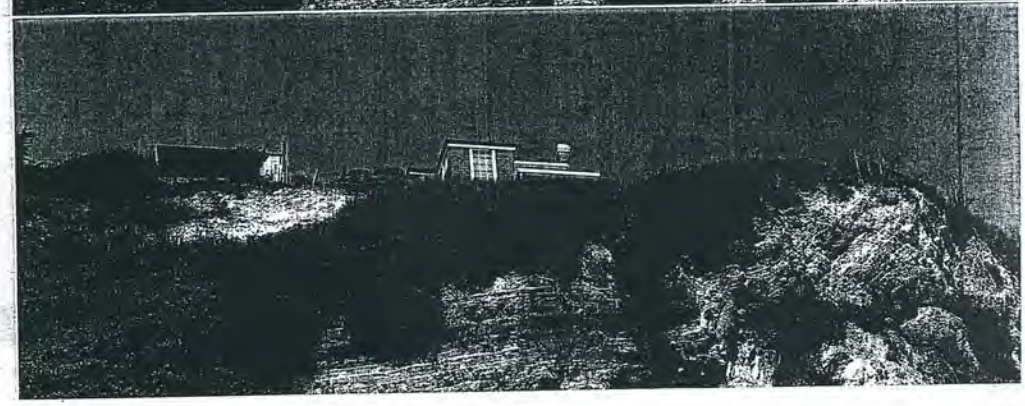
B2 - Beach 2

Location: South West side of property, standing below project site on outcrop on beach.



View: Upper level of structure exposed.



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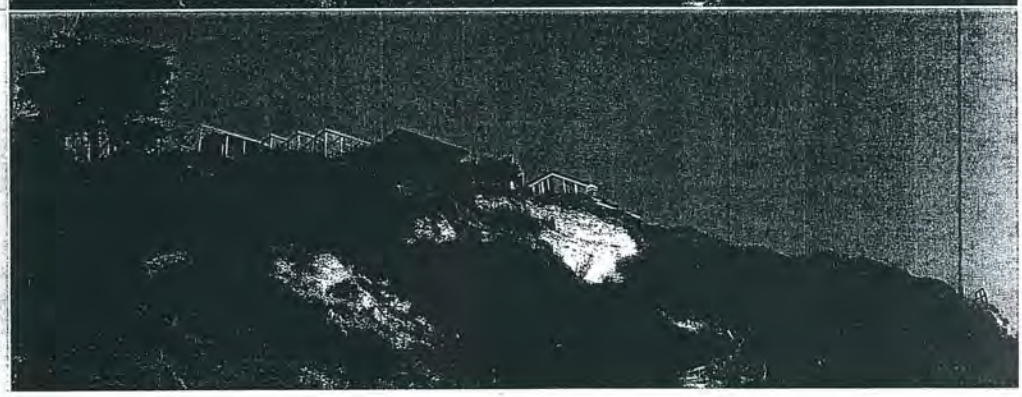
B3 - Beach 3

Location: South West of property, standing on beach below property West of project.

View: Upper level of structure exposed.



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Appendix A

These photo simulations were developed using:

- Architectural CAD files from Peikert Group Architects - Dated 11/4/03
- Topo CAD file provided by L&P Consultants
- Aerial photograph provided by L&P Consultants

Landscaping:

- Screen trees in photo simulations represent California Sycamores and Myoporum hedges at approximately 5 years growth.

Disclaimer

- The photo simulations were developed using interacta's methodology process as described in appendix B.
- Interacta's methodology uses high end 3D software for generating simulated objects based on architectural CAD files, terrain surfaces based on topo data files and simulated camera locations based on actual photographs taken.
- Every effort has been made to make these photo simulations as accurate as possible based on the data provided.

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TIERNEY

CONSULTING

Exhibit D

Biological Assessment
1837½ El Camino de la Luz
Santa Barbara, California
August 22, 2002
Revised December 12, 2002
Revised January-February 2006

Submitted by Rachel Tierney and Lawrence Hunt
Submitted to L&P Consultants. 3 West Carrillo Street, Ste 205. Santa Barbara, CA 93101

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I. Introduction

The project consists of construction of a new residence on a bluff-facing parcel in the Mesa neighborhood of the City of Santa Barbara (see Figure 1). The proposed home would include a 443-square foot garage and a 1,499-square foot residence consisting of a main and lower floor. The total footprint would be 1,400 square feet. *Revisions, requested in the 30-day development application review team comments dated September 25, 2002, are in Italics. Additional information appears in Sections IV (top of bank determination); V (impacts) and VI (mitigations).*

II. Study Methodology

The site was visited by Rachel Tierney on September 14, 2001, and again on July 18, 2002 to confirm that conditions had not changed since the initial survey. The entire site was walked on foot, including the steep south- and east-facing slopes. Plant and animal species located during the site survey were identified. The quality of the existing habitat was evaluated based on size, continuity with adjacent parcels, species composition, and degree of disturbance.

In January and February 2006, Lawrence E. Hunt, wildlife biologist and herpetologist, conducted several protocol-level surveys for California red-legged frogs (CRLF) (*Rana aurora draytonii*) along Lighthouse Creek adjacent to the subject parcel. Other special-status wildlife species and their habitats also were evaluated at this time. The survey reach extended from the southern edge of La Mesa Park downstream to the mouth of the watercourse, a distance of approximately 1,000 feet. Two daytime and four nighttime surveys were conducted over a period of six weeks, according to U.S. Fish and Wildlife Service protocol (USFWS, 2005). The daytime surveys were conducted between 1300 hrs and 1600 hrs and consisted of walking the survey reach along the middle and edge of the creek and noting existing habitat conditions for amphibians in general and CRLF in particular. The nighttime surveys were conducted between 1800 hrs and 2000 hrs and used a headlamp to detect amphibian eyeshine. Binoculars were used to identify eyeshine and/or individuals to species. The survey reach was walked twice during each daytime and nighttime survey. Details on dates, times, existing habitat conditions, and wildlife observations are summarized on data sheets in Appendix 1.

Information on sensitive resources within the project area was gathered from a review of previous biological reports and an examination of the Resource Maps housed at the Santa Barbara County Division of Environmental Review. These maps contain locations of sensitive species found in the herbaria of the Santa Barbara Botanic Garden and the University of California at Santa Barbara, as well as those recorded by the Natural Diversity Data Base (a statewide computerized inventory of location information on rare species and communities). The potential occurrence of special-status species in the project area was evaluated based on existing habitat conditions and known, nearby locations.

III. Environmental Setting and Biotic Resources

The subject parcel lies on a bluff overlooking the Pacific Ocean, just west of Lighthouse Creek and La Mesa Park. It is presently vacant, but shows evidence of past improvements, including a brick planter and asphalt parking area. The proposed residential building site is more or less level, but the parcel is bordered on the south by an almost vertical bluff face that drops at least 60 feet to the beach below. Similarly, the eastern edge of the building site drops steeply (greater than 45 degree slope) to the nearly vertical banks of the channel of Lighthouse Creek. Existing residential development borders the subject parcel on the north and west.

Lighthouse Creek. Lighthouse Creek drains the smallest watershed found within the City of Santa Barbara (0.4 square miles) (URS, 2000). The creek extends from an apartment complex near Cliff Drive through La Mesa Park to the Pacific Ocean, a distance of less than 3,000 feet. Base flows occur throughout most of the year in the creek and are due to groundwater seepage and urban runoff (URS, 2000). The survey reach of the creek supported surface flows at the time of the field surveys for this document. The portion of the creek adjacent to the subject property is particularly steep due to a raised culvert upstream and bluff retreat at the beach. A terminal lagoon, characteristic of other creeks in the City, such as Arroyo Burro, Mission, Sycamore Canyon, and Laguna Channel, is absent here because the creek reaches the beach via a 15- to 20-foot drop from the bluff. The overall topographic gradient of this watercourse averages 6.7%, which is far steeper than other watercourses within the City limits (URS, 2000). Consequently, Lighthouse Creek tends to entrap little sediment and the reach between La Mesa Park and the beach is incised to a depth of at least 20 feet through Monterey shale bedrock.

Overall, canopy cover along Lighthouse Creek averages 90% according to the URS (2000) study, the highest of any of the urban creek they evaluated. Tree canopy consists largely of ornamental trees, particularly blue gum (*Eucalyptus globulus*). Canopy cover along the reach adjacent to the subject parcel is provided by intermittent, dense patches of arroyo willow (*Salix lasiolepis*) along the creek channel, as well as a variety of native and non-native, low-growing woody shrubs and herbaceous vegetation along the banks and upper slopes of the creek invert. In combination, these different types of vegetation in close proximity to each other provide dense, spatially variable, and moderately high quality cover and food resources for a variety of amphibians, reptiles, birds (including a wide variety of migratory passerines), and small mammals.

Flora. With the exception of the native plants found on the steep slopes facing the ocean and approaching the creek, the majority of vegetation on the subject parcel consists of species found on disturbed lots, including common garden escapees or remnants from previous use of the parcel. Outside the edges of the asphalt, the plateau is vegetated with a thick cover of iceplant and other non-native ornamental species such as oleander and yucca. Castor bean, English and German ivy form a thick mantle on the upper and mid-slopes leading to Lighthouse Creek. Native species seen on the upper and mid-level slope include arroyo willow, California blackberry (*Rubus ursinus*),

poison oak (*Toxicodendron diversilobum*), coyote bush (*Baccharis pilularis*), California sagebrush (*Artemisia californica*), and California fuchsia (*Epilobium canum*). Native plants become more common near the upper slopes of the creek invert.

The south-facing bluff contains a similar mix of ornamentals and garden escapes. Native plants become more common towards the top of the bluff where saltbush (*Atriplex breweri* and *A. californica*), coast goldenbush (*Isocoma vernonioides* ssp. *menziesii*) and lemonadeberry (*Rhus integrefolia*) dominate. Sensitive plants potentially occurring onsite are listed in the Appendix.

Fauna. Wildlife observed or expected to frequent this parcel are composed of species that are typically found in urbanized settings dominated by ornamental and/or ruderal vegetation. Common resident birds include mourning dove (*Zenaida macroura*), Anna's hummingbird (*Calypte anna*), acorn (*Melanerpes formicivorus*) and Nuttall's woodpeckers (*Picoides nuttallii*), northern flicker (*Colaptes auratus*), Pacific-slope flycatcher (*Empidonax difficilis*), northern mockingbird (*Mimus polyglottos*), western scrub-jay (*Aphelocoma californica*), American crow (*Corvus brachyrhynchos*), Bewick's (*Thryomanes bewickii*) and house wrens (*Troglodytes aedon*), Hutton's vireo (*Vireo huttoni*), European starling (*Sturnus vulgaris*), California towhees (*Pipilo crissalis*), song sparrow (*Melospiza melodia*), Brewer's blackbird (*Euphagus cyanocephalus*), house sparrow (*Passer domesticus*), lesser goldfinch (*Carduelis psaltria*), and house finch (*Carpodacus mexicanus*). Eucalyptus trees, pines, and coast live oaks near the property are used for roosting and nesting by a number of urban raptor species, including turkey vulture (*Cathartes aura*), American kestrel (*Falco sparverius*), Cooper's hawk (*Accipiter cooperi*), red-shouldered and red-tailed hawks (*Buteo linearus* & *B. jamaicensis*), barn owl (*Tyto alba*), and great-horned owl (*Bubo virginianus*). These trees are probably also occasionally frequented by wintering sharp-shinned hawks (*Accipiter striatus*).

Amphibian, reptile, and land mammal diversity on the subject parcel is expected to be low and comprise urban-associated species or generalist species that can withstand high degrees of habitat disturbance. Species observed (bolded entries) or expected to occur within or adjacent to the subject parcel include: black-bellied slender salamander (*Batrachoseps nigriventris*), arboreal salamander (*Aneides lugubris*), western toad (*Bufo boreas*), Pacific treefrog (*Hyla regilla*), western fence lizard (*Sceloporus occidentalis*), southern alligator lizard (*Elgaria multicarinata*), gopher snake (*Pituophis catenifer*), ring-necked snake (*Diadophis punctatus*), broad-footed mole (*Scapanus latimanus*), California ground squirrel (*Spermophilus californicus*), Botta's pocket gopher (*Thomomys bottae*), deer mouse (*Peromyscus maniculatus*), dusky-footed woodrat (*Neotoma fuscipes*), house mouse (*Mus musculus*), black rat (*Rattus rattus*), Virginia opossum (*Diadophis virginiana*), raccoon (*Procyon lotor*), and possibly red fox (*Vulpes vulpes*), and coyote (*Canis latrans*). Because of the location at the coast and the presence of large, dense eucalyptus groves nearby, a variety of species of bats are expected to inhabit the Lighthouse Creek riparian corridor on a regular or seasonal basis, however, the subject parcel itself does not provide roosting or foraging habitat for bats.

IV. Special Studies

California Red-legged Frog. California red-legged frogs (CRLF) were not observed during the field surveys conducted for this document along the reach of Lighthouse Creek between the beach and the southern end of La Mesa Park. The amount of bank cover and the incidence of overhanging banks, formed either from vegetation or substrate, is high and generally provides good cover for CRLF. In-stream pools are generally lacking along the surveyed reach and those that are present are too shallow to support CRLF. URS (2000) indicates that more extensive pooled water occurs further upstream in this drainage, but these were not evaluated for this report. The upper banks adjacent to the subject parcel are densely vegetated and provide good cover for CRLF, if present. In general, aquatic conditions are lacking and terrestrial conditions are suitable for CRLF along the surveyed reach of Lighthouse Creek. Pools located upstream of the surveyed reach (not examined for this document) may be capable of supporting CRLF tadpoles, but the hydroperiod of these pools or other wetted reaches of Lighthouse Creek are unknown. CRLF larvae require at least 4 months to metamorphose (Jennings and Hayes, 1994).

California red-legged frogs are known from most of the streams along the south coast of Santa Barbara County between Point Conception and Carpinteria (Hunt, pers. observ), however they have not been found in any watercourses within the Santa Barbara City limits to date (CNDDB, 2005). The urbanized portions of these watersheds have generally been modified to the point that they are incapable of supporting CRLF, but the middle and upper portions of the larger watersheds (e.g., Mission, Arroyo Burro) likely continue to harbor this species (Hunt, 2005). As with the City portions of other creeks, the reach of Lighthouse Creek adjacent to the subject parcel has a low to moderate potential to support CRLF.

Other Special-Status Wildlife Species. Table 2 in the Appendix summarizes the known or potential occurrence of other rare, threatened, or endangered wildlife species that are either known from or potentially occur in the project area. Potential occurrence is based on the known occurrence of a species in the project region (25-mile radius) and the presence of suitable habitat in the project area.

Top of Bank Determination. The top of bank, shown on Figure 2, was determined to be the point that the gentle and then moderately-steep slope intersects with the sheer bank leading down to the creek bed. The top of bank is located about 58 feet from the eastern (cantilevered) edge of the proposed residence.

Monarch Butterfly Roosting Sites. Three known monarch butterfly roosts occur within one mile of the subject parcel: Wilcox (Meade Site 83), La Mesa Park (Meade Site 84), and Honda Valley (Meade Site 85) (Figure 2). Monarch habitat on the Wilcox Property (Douglas Family Preserve) is located in the northeast corner of this park (Meade, 1999) and is classified as an autumnal site. The La Mesa Park site is situated at least 1,000 feet north of the subject parcel along the east side of Lighthouse Creek. The site has substantially changed since many large eucalyptus trees were lost in

1997 and 1998. Meade (1999) recorded a maximum of 103 butterflies at this site in 1998. Butterflies still use the area for autumnal aggregation and transitory clusters. The Honda Valley site, located further east near City College between Shoreline Drive and Cliff Drive, is an autumnal site that supports the largest aggregation of butterflies within the City limits (Meade, 1999).

V. Project Impacts

Short-Term Impacts to Biological Resources: Each of the short-term impacts discussed below are considered potentially significant, but mitigable.

1. Impacts to aquatic-associated sensitive amphibians and reptiles in Lighthouse Creek: There is a low probability that CRLF inhabit Lighthouse Creek downslope of the project area, based on existing aquatic conditions. Consequently, it is unlikely that this project will affect CRLF.

   Aquatic habitat as well as upland habitat on slopes below the proposed building site is suitable for two-striped garter snake (*Thamnophis hammondii*), a California Species of Special Concern. This species could be adversely affected by grading and vegetation removal along the western slope above Lighthouse Creek and by sedimentation of the creek as a result of soil disturbance.

2. Impacts to other wildlife: The slopes below the proposed building site also support at least two species of non-regulated amphibians, including Pacific treefrog (*Hyla regilla*) and black-bellied slender salamander (*Batrachoseps nigriventris*), as well as providing foraging, roosting, and/or breeding habitat for a variety of small mammals and migratory and resident birds. The location of the proposed project on the bluff adjacent to a watercourse is particularly attractive to migratory birds, which use features such as riparian corridors along the coast as stopping points during migration. Resident species with limited dispersal abilities, such as amphibians, reptiles, and small mammals, as well as migratory species could be adversely affected by grading, vegetation removal, and soil erosion of the slopes between the proposed building pad and Lighthouse Creek.

3. Impacts to water quality in Lighthouse Creek could occur if construction debris (including soil erosion) were to be dumped or to wash into the channel.

Long-Term Impacts to Biological Resources: The following impacts are considered adverse, but insignificant.

1. Proposed development at this location will have little effect on the current habitat values of the creek or adjacent slopes, if the proposed mitigation measures are successfully implemented.
2. The creek's short stretch and outlet location high above the beach precludes its use as a fish passage.
3. The area is already heavily developed and vegetation consists entirely of invasive non-natives

on the upper slopes. The addition of one additional residence would not create significant new disturbance into areas that are already heavily urbanized.
4. It is expected that wildlife that use the canopy of the creek-flanking vegetation will continue to do so because the elevational difference between the creek and the residences (proposed and existing) create a barrier to human intrusion.
5. Domestic and feral cats are significant predators of reptiles, birds, and small mammals. The addition of one additional residence with cats to this already urbanized setting would not constitute a significant incremental impact.
6. No significant impacts to monarch butterflies are identified. The site is a minimum of 600 to 1,000 feet from the small autumnal roosting site in Lighthouse Creek adjacent to La Mesa Park. No removal of potential roosting habitat (e.g., eucalyptus trees) is proposed.

VI. Recommended Mitigation Measures

1. Prior to initial site grading, construction fencing of a mesh size small enough to trap soil (such as silt fence) shall be installed along the edge of the grading area on the slopes above Lighthouse Creek. This fencing shall be maintaining in place for the duration of grading and slope stabilization activities.

2. Vegetation removal in graded areas on slopes above Lighthouse Creek shall be removed by hand and dragged upslope to the building pad in order to minimize adverse impacts to wildlife. Vegetation removal shall be limited to the minimum necessary to proceed with construction.

3. A qualified wildlife biologist shall be present during initial site grading and vegetation removal on the slopes in order to salvage and relocate any animals uncovered during these activities.

4. All Best Management Practices (BMPs) shall be employed to prevent soil erosion during construction and to maintain water quality in Lighthouse Creek. Bare soil on slopes shall be covered with erosion control blankets and seeded with a native grass and shrub seed mix to prevent short-term erosion if construction extends into the rainy season. Straw rolls may be used as water bars to interrupt runoff until slopes are vegetated.

5. Iceplant, oleander, yucca, castor bean, English ivy, German ivy, and other invasive, non-native species shall be removed using hand and chemical methods, from all areas disturbed by construction on the slope between the proposed building site and Lighthouse Creek. The removal shall occur under the supervision of a qualified habitat restoration biologist and this material shall be disposed of in a manner that will not result in further spread of these species.

6. Disturbed soils on the slope between the proposed building pad and Lighthouse Creek shall be planted with drought tolerant, native, locally-occurring plants species to improve habitat values for wildlife in this area. The addition of native trees and shrubs along the mid point of the slope would improve the habitat now in place. Native container material can include: coast live oak (*Quercus agrifolia*), western sycamore (*Platanus racemosa*), encelia (*Encelia californica*), California blackberry (*Rubus ursinus*), California fuchsia (*Epilobium canum*), saltbush (*Atriplex*

breweri and *A. californica*), coast goldenbush (*Isocoma vernonioides* ssp. *menziesii*), elderberry (*Sambucus mexicana*) and lemonadeberry (*Rhus integrefolia*)..

VII. References

California Department of Fish and Game (CDFG). 2005. Special Lists: Plants, Animals and Natural Communities. Available at the CDFG web site.
http://www.dfg.ca.gov/whdab/html/lists.html

CNDDB (California Natural Diversity Data Base). 2005. Special-status plant and animal occurrences in the Carpinteria, Santa Barbara, Goleta, and Little Pine Mountain 7.5-minute quadrangles. California Dept. of Fish and Game, Sacramento, CA.

California Native Plant Society. 2001. Inventory of Rare and Endangered Vascular Plants of California. 6th Edition. Available at the CNPS web site.
www.cnps.org/rareplants/inventory/6thEdition.htm

City of Santa Barbara. 1981. Master Environmental Assessment Plan. INTERFACE Planning and Counseling Corporation.

Hickman, J. 1993. The Jepson Manual; Higher Plants of California. University of California Press, Berkeley and Los Angeles. 1,400 pp.

Jennings, M. and M. Hayes. 1994. Amphibians and reptiles of special concern in California. Final report subm. to Calif. Dept. Fish and Game, Inland Fisheries Div., Rancho Cordova, CA. Contr. No. 8023, 255 pp.

Lehman, P. 1994. The birds of Santa Barbara County, California. Vertebrate Museum, Univ. California, Santa Barbara, CA. 337 pp.

Meade, D. 1999. Monarch butterfly overwintering sites in Santa Barbara County, California. Prep. for the County of Santa Barbara Planning and Development Dept., Santa Barbara, CA. 114 pp.

Peikert Group Architects, 2002 Barthels Residence Site Plan 1837½ El Camino de la Luz.

Santa Barbara County (SBCO). 1989. Sensitive Plants of Santa Barbara County, Maps and Catalog. Prepared by Tara Wiskowski for Resource Management Dept.

Smith, C. 1998. A Flora of the Santa Barbara Region, California. Santa Barbara Botanic Garden and Capra Press. 391 pp.

State of California Office of Planning and Research, 1986. California Environmental Quality Act (CEQA): Statutes and Guidelines.

Tierney R. and P. Collins. 1999. Vegetative Fuels Management Plan Biological Assessment. for Honda Valley . Prepared for City of Santa Barbara, Parks and Recreation and Public Works Departments, Santa Barbara, CA.

URS Corporation. 2000. Creek inventory and assessment study: City of Santa Barbara Clean Water and Creek Restoration Program. Prepared for City of Santa Barbara Parks and Recreation Department. September.

USFWS (U.S. Fish and Wildlife Service). 2005. Revised guidance on site assessments and field surveys for the California red-legged frog. Ventura Field Office. 26 pp. August.

USGS, 1988. Santa Barbara, California 7.5-minute topographic quadrangle. Photorevised in 1988.

Williams, D. 1986. Mammalian species of special concern in California. Calif. Dept. Fish and Game, Wildl. Mgmt. Div., Admin. Rept. 86-1. 112 pp.

1837 ½ EL CAMINO DE LA LUZ
BIOLOGICAL RESOURCES

★ Project Site

Lighthouse Creek

Nearby Butterfly Aggregation Sites

- Wilcox
- La Mesa
- Honda Valley

Figure 1

1837 ½ El Camino De La Luz
Biological Resources

1 inch = 3360 feet

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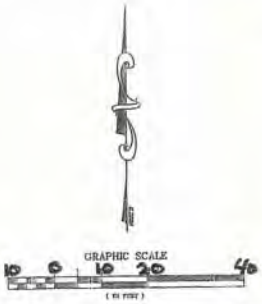

Figure 2

1837 ½ El Camino De La Luz
Site Plan

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APPENDIX A: SPECIAL-STATUS BIOLOGICAL RESOURCES

A "special-status biological resource" refers to any rare, threatened or endangered plant or animal species. Habitats are also considered sensitive if they exhibit a limited distribution, have high wildlife value, contain sensitive species or are particularly susceptible to disturbance. These resources are protected by a variety of federal, state and local policies and programs.

REGULATORY SETTING

Federal and State Policies

The Federal Endangered Species Act of 1973 and the published list of endangered and threatened species provide legal protection for threatened and endangered taxa nationwide. The U.S. Fish and Wildlife Service (USFWS) has jurisdiction over the federal program.

California has a similar mandate embodied in the California Endangered Species Act of 1970 and its corollary laws: the California Species Preservation Act of 1980 and the California Native Plant Protection Act of 1977. The California Department of Fish and Game (CDFG), along with recommendations from the California Native Plant Society (CNPS), has jurisdiction over the California Species Protection Laws. The CDFG has also identified some wildlife species as "of special concern" (CDFG, 2005; Jennings and Hayes 1994; Remsen, 1978; Williams, 1986). These are species that are either biologically rare, very restricted in distribution, or declining throughout their range.

Many species qualify for formal protection under the California Environmental Quality Assurance Act (CEQA, State of California, 1986), even if these plants are not registered under state or federal programs. These include the majority of plants on CNPS Lists 1 and 2 (described below), as well as species that are identified by local authorities as rare, endangered or threatened, regardless of recognition by the USFWS, CDFG or the CNPS.

In addition to the programs described above, the CNPS compiles their own inventory, which includes state- and federally- recognized rare plant species, as well as those plants determined to be rare by this organization. The CNPS maintains several "lists" in an effort to categorize degrees of concern (CNPS 1994). List 1A includes plants assumed extinct in California. List 1B includes species which are rare, threatened or endangered in California and elsewhere. List 2 includes plants rare in California, but more common elsewhere. List 3, a review list, contains species which require more information. List 4 is a watch list, containing species of limited distribution.

Local Programs

In addition to the federal- and/or state-listed species, candidates for listing and species of special concern, there are a number of "local concern" species that have been identified by local authorities

as rare or declining in the Santa Barbara region. Included with these regionally rare species are many plants that are considered to be local "endemics" (occurring within a very limited region). While these species have no formal legislative protection, they may be granted protection in the future if their populations continue to decline. Many of these species are on one or more "watch lists" such as CNPS (1988) for plants and the Audubon Society's "Blue List" for birds, or have been found by local biologists to be rare or declining in the Santa Barbara region. At this time, the City of Santa Barbara does not provide any special protection for these regionally rare or declining taxa. However, because these species are considered by local authorities to be of importance, they are included for planning purposes in the following discussion of sensitive plant and animal resources found at the proposed project sites.

The Santa Barbara City's Master Environmental Assessment (City of Santa Barbara, 1981) provides limited protection for sensitive biological resources that occur within the City. The MEA designates one community found within the park (riparian woodland/creeks) as particularly sensitive and provides specific mitigation measures designed to reduce possible impacts from developments. The MEA also provides a list of mitigation measures designed to protect remaining oak woodland habitats within the City.

Sensitive plants and animals that may be found near the subject property are listed below, along with anticipated impacts resulting from this project.

Table 1: SPECIAL-STATUS PLANTS

There are no listed or proposed species under either the State or Federal Endangered Species Act, or CNPS List 1B plants, expected within the vicinity of the site. The following plant species have been located in nearby, similar habitats. Included in this list are "endemics," or taxa, that are only found within a very limited area. Others are listed with the California Native Plant Society (CNPS) as plants of limited distribution (List 4).

STATUS	DISTRIBUTION AND POSSIBLE IMPACTS
Baccharis plummerae (Plummer's Baccharis) **Status: CNPS List 4.3** LIST 4: Limited distribution (Watch List). 0.3: Not very endangered in California (<20% of occurrences threatened)	Found in shaded sites, typically on slopes above drainages. This woody plant was not seen during site surveys. Impact: Less than significant
Lonicera subspicata ssp. *subspicata* (Santa Barbara Honeysuckle) **Status: CNPS 1B.2** 1B: Rare, threatened, or endangered in California and elsewhere. 0.2: Fairly endangered in California (20-80% occurrences threatened)	Common and found in many plant communities on southern side of the Santa Ynez Mountains from Goleta to Carpinteria. This woody plant was not seen during site surveys. Impact: Less than significant

Table 2: Special-Status Wildlife Species Reviewed For This Document [a]

Common Name	Scientific Name	Regulatory Status [b]	Habitat Associations	Known (bolded text) or Potential Occurrence in Region and Project Site [c]
			INSECTS	
Globose dune beetle	*Coelus globosus*	FSS	Sandy beach	**Known from beach dunes around mouth of Arroyo Burro Creek, approx. 1.5 miles W of project area**; low to no potential for occurring on beach around mouth of in Lighthouse Creek because of lack of suitable dune habitat
Sandy beach tiger beetle	*Cicindela hirticollis gravida*	FSS	Sandy beach	As above
Frost's tiger beetle	*Cicindela senilis frosti*	FSS	Sandy beach; salt marsh	As above
Monarch butterfly	*Danaus plexippus*	CSC	Eucalyptus windrows (roost sites); grassland and scrub (foraging habitat)	**Three known roosts occur within one mile of subject parcel; La Mesa Park autumnal roost is approx. 1,000 feet north and east of subject parcel**; no potential for occurring on subject parcel due to lack of suitable habitat
			FISHES	
Southern steelhead	*Oncorhynchos mykiss*	FE/CSC	Anadromous—adults live in ocean, but return to natal watercourse to spawn	Occurs in other nearby coastal drainages, but no potential for occurring in Lighthouse Creek because terminal end of watercourse contacts beach and ocean via a 15-20-foot high vertical cliff; watercourse is too small to support resident (land-locked) rainbow trout
Tidewater goby	*Eucyclogobius newberry*	FE/CSC	Low salinity terminal lagoons and lower watercourses of coastal drainages	**Occurs in nearby coastal lagoons, such as Arroyo Burro Creek and Mission Creek;** no potential for occurring in Lighthouse Creek because terminal end of watercourse contacts beach and ocean via a 15-20-foot high vertical cliff.

Common Name	Scientific Name	Regulatory Status [b]	Habitat Associations
		AMPHIBIANS	
California red-legged frog	*Rana aurora draytonii*	FT/CSC	Riverine (eggs and larvae); riparian, riparian scrub, grassland, and coastal scrub (overwintering and dispersal)
Coast Range newt	*Taricha torosa torosa*	CSC	Riverine (eggs and larvae); riparian, riparian scrub, grassland, and coastal scrub (overwintering and dispersal)
		REPTILES	
Silvery legless lizard	*Anniella pulchra pulchra*	CSC	Oak woodland, coastal scrub, dune scrub, chaparral on sandy soils
Southwestern pond turtle	*Clemmys marmorata pallida*	CSC	Riverine, freshwater marsh, lakes, reservoirs, riparian scrub
Two-striped garter snake	*Thamnophis hammondii*	CSC	Riverine and adjacent scrub habitats; freshwater marsh, lakes, reservoirs, riparian scrub

Common Name	Scientific Name	Regulatory Status [b]	Habitat Associations	Known (bolded text) or Potential Occurrence in Region and Project Site [c]
			AMPHIBIANS	
California red-legged frog	*Rana aurora draytonii*	FT/CSC	Riverine (eggs and larvae); riparian, riparian scrub, grassland, and coastal scrub (overwintering and dispersal)	Not known from the City reaches of any urban creeks; moderate to high potential in middle and upper reaches of larger City watersheds; Lighthouse Creek adjacent to project site has good-quality upland habitat but poor-quality aquatic habitat; overall, species has a low to moderate potential of occurring in creek because of isolated, urbanized condition of watershed
Coast Range newt	*Taricha torosa torosa*	CSC	Riverine (eggs and larvae); riparian, riparian scrub, grassland, and coastal scrub (overwintering and dispersal)	**Known from upper reaches of Arroyo Burro Creek and Mission Creek**; no potential of occurring in Lighthouse Creek due to unsuitable aquatic habitat and isolation of watershed
			REPTILES	
Silvery legless lizard	*Anniella pulchra pulchra*	CSC	Oak woodland, coastal scrub, dune scrub, chaparral on sandy soils	**Known from Hope Ranch, More Mesa, and La Mesa in association with old beach sand deposits N, NW, and W of project site (Hunt, pers. obser.);** no potential for occurring on subject parcel because of unsuitable soil conditions
Southwestern pond turtle	*Clemmys marmorata pallida*	CSC	Riverine, freshwater marsh, lakes, reservoirs, riparian scrub	**Known from Laguna Creek channel two miles east of subject parcel**; may also occur in Arroyo Burro Creek; no potential to occur in lower Lighthouse Creek because of lack of suitable aquatic habitat; moderate potential upstream where pools occur
Two-striped garter snake	*Thamnophis hammondii*	CSC	Riverine and adjacent scrub habitats; freshwater marsh, lakes, reservoirs, riparian scrub	**Known from lower and middle portions of Mission Creek and Sycamore Canyon Creek watersheds**; moderate to high potential in Lighthouse Creek

Common Name	Scientific Name	Regulatory Status [b]	Habitat Associations	Common Name
			BIRDS	
Allen's hummingbird	*Selasphorus sasin*	MNBMC	Riparian and eucalyptus woodland and riparian scrub (nesting)	**Observed in eucalyptus grove in La Mesa Park (Hunt, pers. observ.);** probably occasionally frequents project site and Lighthouse Creek area while foraging
Bank swallow	*Riparia riparia*	ST	Riparian woodland	**Historically nested in cliffs at mouth of Arroyo Burro Creek and elsewhere along coast; no longer breeds in County (Lehman, 1994);** cliffs adjacent to project site provide suitable nesting and roosting habitat for this species, but species in now a rare spring and fall transient to area
Black swift	*Cypseloides niger*	CSC	Grasslands, riparian corridors, scrub	Rare and irregular spring transient along coast
Burrowing owl	*Athene cunicularia*	CSC	Grasslands, open scrub	**Occasionally found on More Mesa approx. 4 miles W of project site;** no potential for occurring on project site
California brown pelican	*Pelecanus occidentalis californicus*	FE/SE	Beach and nearshore waters	**Commonly observed foraging in nearshore waters and occasionally roosting on beaches adjacent to site.**
Cooper's hawk	*Accipiter cooperi*	CSC	Oak woodland, riparian woodland, riparian scrub	High probability of roosting and possibly nesting in eucalyptus groves around La Mesa Park; may forage along Lighthouse Creek
California horned lark	*Eremophila alpestris actia*	CSC	Grassland, open scrub	**Fall and winter transient to grasslands in Elings Park, approx. one mile NW of project site;** no suitable habitat on project site
California thrasher	*Toxostoma redivivum*	MNBMC	Coastal scrub, chaparral, riparian scrub	**Observed in coastal sage scrub in Elings Park, approx. one mile NW of project site;** no suitable habitat on site
Grasshopper sparrow	*Ammodramus savannarum*	CSC/SLC	Grasslands, open scrub	May occur in grassland habitats at Elings Park, approx. one mile NW of project site; no suitable habitat on site
Lark sparrow	*Chondestes grammacus*	MNBMC	Grasslands, agricultural fields	May occur in grassland habitats at Elings Park, approx. one mile NW of project site; no suitable habitat on site
Least Bell's vireo	*Vireo bellii pusillus*	FE/SE	Riparian woodland	No potential; riparian corridor in Lighthouse Creek is not developed enough to support this species

Common Name	Scientific Name	Regulatory Status [b]	Habitat Associations	Common Name
Loggerhead shrike	*Lanius ludovicianus*	CSC	Coastal scrub, open chaparral, oak savannah	**Known from riparian scrub in lower Arroyo Burro Creek area and Elings Park;** may occasionally forage in lower Lighthouse Creek
Long-billed curlew	*Numenius americanus*	CSC	Grasslands	**Regularly observed on beaches adjacent to project site;** may also forage in grasslands in Elings Park, approx. one mile NW of project site; no suitable foraging habitat on project site
Northern harrier	*Circus cyaneus*	CSC	Grasslands, open coastal scrub, chaparral	**Winter visitor to grasslands at Elings Park, approx. one mile NW of project site;** no suitable foraging or roosting habitat in or around project site
Olive-sided flycatcher	*Contopus cooperi*	MNBMC	Riparian woodlands	Moderate potential of occurring in Lighthouse Creek riparian corridor adjacent to project site
Osprey	*Pandion haliaetus*	CSC	Nearshore waters, lagoons, reservoirs	**Observed foraging along beaches in vicinity of project site (e.g., Arroyo Burro, East Beach)**
Pacific-slope flycatcher	*Empidonax difficilis*	MNBMC	Riparian woodland, riparian scrub	High potential of foraging and possibly nesting in Lighthouse Creek riparian corridor
Purple martin	*Progne subis*	CSC	Riparian woodland, riparian scrub, grasslands	Very rare spring and fall transient to area; low potential of foraging in Lighthouse Creek riparian corridor
Red-breasted sapsucker	*Sphyrapicus ruber*	MNBMC	Riparian woodland, conifers, exotic trees	Uncommon transient and winter visitor to woodlands along coast; moderate potential in ornamental trees around project site
Sharp-shinned hawk	*Accipiter striatus*	CSC	Riparian and oak woodland	Winter visitor to woodlands; moderate potential of roosting and foraging in eucalyptus groves in La Mesa Park and along Lighthouse Creek
Short-eared owl	*Asio flammeus*	CSC	Freshwater marsh, grasslands	**Historical record from lower portions of Arroyo Burro Creek watershed;** no suitable habitat in project site or Lighthouse Creek
Southern California rufous-crowned sparrow	*Aimophila ruficeps canescens*	CSC	Coastal scrub, chaparral, rocky grassland	No suitable habitat in or around project site

Common Name	Scientific Name	Regulatory Status [b]	Habitat Associations	Common Name
Southwestern willow flycatcher	*Empidonax traillii extimus*	FE/SE	Riparian woodland	Uncommon fall transient to riparian woodlands along coast (especially willow woodlands); nearest breeding records are from Santa Ynez River watershed; low potential for occurring in Lighthouse Creek as a fall transient due to lack of habitat
Swainson's thrush	*Catharus ustulatus*	SLC	Riparian woodland	Uncommon spring transient and summer breeder; moderate to high potential of foraging and possibly nesting in Lighthouse Creek woodland habitats
Vaux's swift	*Chaetura vauxi*	FSS/CSC	Riparian woodland, riparian scrub, grassland	Uncommon and irregular transient; high probability of occurring along coast in vicinity of project site
Warbling vireo	*Vireo gilvus*	SLC	Riparian woodland	Low to moderate potential for occurring in Lighthouse Creek due to lack of suitable habitat
Western meadowlark	*Wilsonia pusilla*	SLC	Grassland, agricultural fields	Commonly observed in grasslands in Elings Park, approx. one mile NW of project site; no potential in vicinity of project site due to lack of habitat
Western snowy plover	*Charadrius alexandrinus nivosus*	FT/CSC	Beach, sand dunes	**Occasionally observed foraging on beach near mouth of Arroyo Burro Creek; recent (2005) breeding record at East Beach near mouth of Mission Creek;** beach adjacent to project provides foraging habitat for species
Western yellow-billed cuckoo	*Coccyzus americanus occidentalis*	PE/SE	Riparian woodland	Very rare migrant along coast; recorded at Carpinteria in 1990s in winter; riparian habitat in Lighthouse Creek is not sufficiently developed to support this species
White-tailed kite	*Elanus leucurus*	FP	Grassland, eucalyptus woodland, orchards	**Large communal roosts in oaks on More Mesa 4 miles W of project site; occasionally observed foraging in grasslands in Elings Park, approx. 1 mile NW of project site;** no potential in project site due to lack of suitable foraging and roosting habitat
Wilson's warbler	*Catharus ustulatus*	SLC	Riparian woodland, riparian scrub	**Fairly common transient in riparian woodlands along coast in spring;** moderate to high potential of occurring in Lighthouse Creek habitats in spring

Common Name	Scientific Name	Regulatory Status [b]	Habitat Associations	Common Name
Yellow warbler	*Dendroica petechia brewsteri*	CSC	Riparian woodland	**Common spring and fall transient and breeder in riparian woodlands;** high probability of foraging in Lighthouse Creek in spring, but probably not breeding there
Yellow-breasted chat	*Icteria virens*	CSC	Riparian woodland	**Spring and fall transient and local breeder in riparian woodlands along Arroyo Burro Creek and Mission Creek;** may forage along Lighthouse Creek, but does not breed there
			MAMMALS	
American badger	*Taxidea taxus*	CSC	Grassland, riparian scrub, open chaparral and coastal scrub	Likely formerly occurred in coastal grasslands and open coastal sage scrub throughout Mesa area; no suitable habitat in vicinity of project site
Big free-tailed bat	*Nyctinomops macrotis*	CSC	Riparian woodland	May occasionally forage along Lighthouse Creek, but project site or adjacent areas do not support suitable roosting habitat
Fringed myotis	*Myotis thysanodes*	CSC	Riparian woodland, grasslands	May occasionally forage along Lighthouse Creek, but project site or adjacent areas do not support suitable roosting habitat
Pallid bat	*Antrozous pallidus*	CSC	Grasslands, open scrub, riparian woodland	May forage along Lighthouse Creek, but project site does not support suitable roosting habitat
Red bat	*Lasiurus blossevillii*	CSC	Riparian woodland, oak woodland	May occasionally forage along Lighthouse Creek, but project site does not support suitable roosting habitat
San Diego desert woodrat	*Neotoma lepida intermedia*	CSC	Rocky coastal scrub and chaparral	Known from UPRR right-of-way east and west of Santa Barbara; low probably of occurrence in coastal sage scrub in Elings Park area, NW of project site; project site does not contain suitable habitat for this species
Townsend's big-eared bat	*Corynorhinus townsendii townsendii and C.t. pallescens*	CSC	Riparian woodland, grasslands	**Known from middle and upper portions of Arroyo Burro Creek watershed;** little or no potential of using Lighthouse Creek as foraging habitat

Common Name	Scientific Name	Regulatory Status [b]	Habitat Associations	Common Name
Western mastiff bat	*Eumops perotis*	CSC	Riparian woodland, rocky chaparral	May occur along upper watersheds of larger area drainages; no potential along Lighthouse Creek
Yuma myotis	*Myotis yumanensis*	CSC	Riparian woodland, aquatic habitats, freshwater marsh; roosting habitat north of project area	Relatively common along riparian corridors in area; low to moderate potential of using Lighthouse Creek as foraging habitat, eucalyptus groves in La Mesa Park may provide suitable temporary roosting habitat

(a) Species are arranged alphabetically within broad taxonomic groups

(b) Status Key:

FE = listed as Endangered by the U.S. Fish and Wildlife Service under the Federal Endangered Species Act

PE = proposed for listing as Endangered under the Federal Endangered Species Act

FT = listed as Threatened by the U.S. Fish and Wildlife Service under the Federal Endangered Species Act

SE = listed as Endangered by the California Department of Fish and Game under the California Endangered Species Act

ST = listed as Threatened by the California Department of Fish and Game under the California Endangered Species Act

FSS = Federal Sensitive Species (i.e., on "watch list" maintained by U.S. Fish and Wildlife Service, Bureau of Land Management, and U.S. Forest Service)

MNBMC = Migratory Non-Game Bird Species of Management Concern; species of migratory non-game birds that are considered by the U.S. Fish and Wildlife Service to be of concern because of small population size, specialized habitat requirements, and/or population declines

FP = Listed as Fully Protected by the California Department of Fish and Game; CDFG cannot issue a take permit for this species; project must avoid all impacts to this species

CSC = California Species of Special Concern (CDFG, 2005)

SLC = Species of Local Concern; protected by one or more City and County resource management policies

(c) Potential for particular species occurrence in vicinity of project site is based on known occurrence in region and presence of suitable habitat in and around project site.

Appendix B

California Red-legged Frog Habitat Site Assessment Data Sheet

Site Assessment reviewed by _____
(FWS Field Office) (date) (biologist)

Date of Site Assessment: JAN 11, 2006
(mm/dd/yyyy)

Site Assessment Biologists: HUNT LAWRENCE E.
(Last name) (first name) (Last name) (first name)

(Last name) (first name) (Last name) (first name)

Site Location: CA. SANTA BARBARA CO., SANTA BARBARA, LIGHTHOUSE CREEK BETW. LA MESA PARK & OCEAN.
(County, General location name, UTM Coordinates or Lat./Long. or T-R-S).

****ATTACH A MAP** (include habitat types, important features, and species locations)**

Proposed project name: 1837 1/2 EL CAMINO DE LA LUZ BIOLOGICAL ASSESSMENT
Brief description of proposed action:

CONSTRUCTION OF SINGLE-FAMILY RESIDENCE ON EXISTING PAD WEST OF LIGHTHOUSE CREEK.

1) Is this site within the current or historic range of the CRF (circle one)? (YES) NO

2) Are there known records of CRF within 1.6 km (1 mi) of the site (circle one)? YES (NO)
If yes, attach a list of all known CRF records with a map showing all locations.

GENERAL AQUATIC HABITAT CHARACTERIZATION

(if multiple ponds or streams are within the proposed action area, fill out one data sheet for each)

POND:

Size: N/A Maximum depth: N/A

Vegetation: emergent, overhanging, dominant species: N/A

Substrate: N/A

Perennial or Ephemeral *(circle one)*. If ephemeral, date it goes dry: N/A

(2)

Appendix ~~D~~ B

California Red-legged Frog Habitat Site Assessment Data Sheet

STREAM:

Bank full width: 6-8FT
Depth at bank full: <12 INCHES
Stream gradient: STEEP - 3 TO 7%

Are there pools (circle one)? (YES) NO UPSTREAM OF SURVEY REACH
If yes,
Size of stream pools: 20 FT LONG X ~~3~~ FT WIDE
Maximum depth of stream pools: 14 INCHES

Characterize non-pool habitat in survey reach: (run) (riffle) glide, other: SHALLOW (<12") RUNS; SHORT RIFFLES; RELAT. STEEP STREAM GRADIENT (4-7%)

Vegetation: emergent, (overhanging) dominant species: SALIX LASIOLEPIS, RUBUS URSINUS, TOXICODENDRON DIVERSILOBUM, SENECIO MIKANIOIDES, CARPOBROTUS, ARTEMESIA CALIFORNICA, BACCHARIS PILULARIS, RICINUS COMMUNIS
Substrate: MONTEREY SHALE, SOME FINE SEDIMENTS, MOSTLY EXPOSED BEDROCK

Bank description: NEARLY VERTICAL AT CREEK LEVEL; SOME OVERHANGS; 30°-45° BANK SLOPE UP TO T.O.B.

Perennial (**or Ephemeral**) *(circle one)*. If ephemeral, date it goes dry: EARLY TO MID-SUMMER

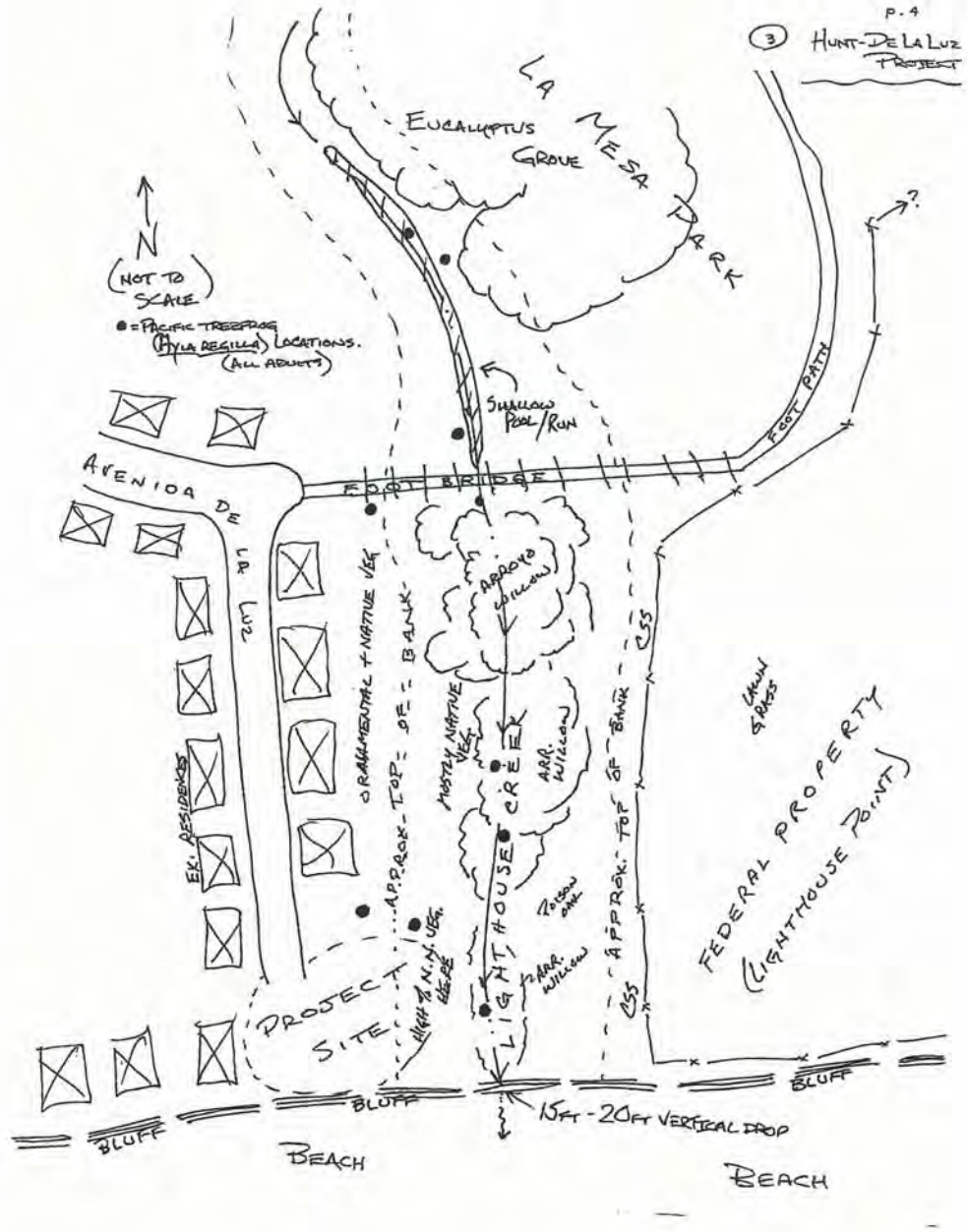
Other aquatic habitat characteristics, species observations, drawings, or comments:

DRAINAGE IS SMALL (<3000 FT TOTAL LENGTH) - STEEP, AND TOTALLY URBANIZED. NO POOLS LG. OR DEEP ENOUGH TO SUPPORT CRLF BREEDING HABITAT. UPLAND HABITAT ON BANKS IS MOD. TO HIGH-QUALITY FOR DISPERSAL, FORAGING, A/O OVERWINTERING.

Necessary Attachments:

1. All field notes and other supporting documents
2. Site photographs — SEE APP. 1 OF BIO. ASSESSMENT REPORT
3. Maps with important habitat features and species location * SEE FIELD SITE MAP ATTACHED

(3) HUNT-DE LA LUZ PROJECT



Appendix ~~E~~. B
California Red-legged Frog Survey Data Sheet

Survey results reviewed by _____ (FWS Field Office) _____ (date) _____ (biologist)

Date of Survey: FEB 6 2006 (mm/dd/yyyy) Survey Biologist: HUNT (Last name) LAWRENCE E. (first name)
Survey Biologist: _____ (Last name) _____ (first name)

Site Location: see previous sheets
(County, General location name, UTM Coordinates or Lat./Long. or T-R-S).

ATTACH A MAP (include habitat types, important features, and species locations)

Proposed project name: AVENIDA DE LA LUZ B.A.
Brief description of proposed action:

Type of Survey (circle one): DAY NIGHT BREEDING NON-BREEDING
Survey number (circle one): 1 2 3 4 5 6 7 8
Begin Time: 2000 hrs. End Time: 2130 hrs.
Cloud cover: clear Precipitation: none
Air Temperature: 55°F Water Temperature: 62°F
Wind Speed: 10 mph Visibility Conditions: excellent
Moon phase: 50% Humidity: ?
Description of weather conditions: _____

Brand name and model of light used to conduct surveys: Wheat Lamp
Were binoculars used for the surveys (circle one)? YES NO
Brand, model, and power of binoculars: Nikon Naturalist 8x40

Appendix ~~E~~. B
California Red-legged Frog Survey Data Sheet

AMPHIBIAN OBSERVATIONS

Species	# of indiv.	Observed (O) Heard (H)	Life Stages	Size Class	Certainty of Identification
Hyla regilla	5	2OB, 3H	adult	adult	100%

Describe potential threats to California red-legged frogs observed, including non-native and native predators such as fish, bullfrogs, and raccoons:
salamander and opossum tracks

Other notes, observations, comments, *etc.*

see 11 Jan 06 sheet

Necessary Attachments:

4. All field notes and other supporting documents
5. Site photographs
6. Maps with important habitat features and species locations

Appendix ~~E~~. B
California Red-legged Frog Survey Data Sheet

Survey results reviewed by _____ (FWS Field Office) _____ (date) _____ (biologist)

Date of Survey: JAN 11, 2006 (mm/dd/yyyy) Survey Biologist: HUNT (Last name) LAWRENCE E. (first name)
Survey Biologist: _____ (Last name) _____ (first name)

Site Location: CA: SANTA BARBARA CO., SANTA BARBARA, LIGHTHOUSE CREEK BETW. LA MESA PARK & OCEAN.
(County, General location name, UTM Coordinates or Lat./Long. or T-R-S).

ATTACH A MAP (include habitat types, important features, and species locations)

Proposed project name: 1837 ½ EL CAMINO DE LA LUZ BIOLOGICAL ASSESSMENT
Brief description of proposed action:

CONSTRUCTION OF SINGLE-FAMILY RESIDENCE ON EXISTING PAD W OF LIGHTHOUSE CREEK

Type of Survey (circle one) (DAY) (NIGHT) (BREEDING) NON-BREEDING

Survey number (circle one): (1) (2) 3 4 5 6 7 8

Begin Time: 1330 HRS; 1830 hrs End Time: 1615 HR; 2030 hrs.

Cloud cover: CLEAR Precipitation: NONE

Air Temperature: 62°F - 53°F Water Temperature: 59°F

Wind Speed: 5-10 MPH Visibility Conditions: EXCELLENT

Moon phase: N/A Humidity: ?

Description of weather conditions: _____

Brand name and model of light used to conduct surveys: WHEAT LAMP

Were binoculars used for the surveys (circle one)? (YES) NO
Brand, model, and power of binoculars: NIKON NATURALIST - 8x40

11 Jan 2006 - L.E. HUNT

Appendix ~~E~~. B
California Red-legged Frog Survey Data Sheet

AMPHIBIAN OBSERVATIONS

	Species	# of indiv.	Observed (O) Heard (H)	Life Stages	Size Class	Certainty of Identification
DAY	HYLA REGILLA	2	O	ADULT	ADULT	100%
DAY	BATRACHOSEPS NIGRIVENTRIS	1	O	ADULT	ADULT	100%
NIGHT	HYLA REGILLA	15+	H	ADULT	ADULT	100%

Describe potential threats to California red-legged frogs observed, including non-native and native predators such as fish, bullfrogs, and raccoons: RACCOON & OPOSSUM TRACKS; CAT TRACKS

Other notes, observations, comments, *etc.*

STREAM IS FLOWING, BUT MAX. DEPTH OF RUNS IS <15", AVG. 8" DEEP WATER CLEAR; AQUATIC HABITAT APPEARS UNSUITABLE FOR CRLF BREEDING; SMALL AMT. OF OVERHANGING BANK; NO DEEP POOLS.

UPLAND HABITAT ON SLOPES IS DENSE VINES+SHRUBS; ARR. WILLOW IN CREEK PROV. ≈ 40-50% CANOPY COVER; SLOPES PROVIDE GOOD UPLAND HABITAT FOR CRLF.

Necessary Attachments:

4. All field notes and other supporting documents
5. Site photographs SEE APP. 1 OF BIO. REPORT
6. Maps with important habitat features and species locations

Appendix ~~E~~. B
California Red-legged Frog Survey Data Sheet

Survey results reviewed by _____
(FWS Field Office) (date) (biologist)

Date of Survey: JAN 25, 2006 (mm/dd/yyyy) Survey Biologist: HUNT (Last name) LAWRENCE E. (first name)
Survey Biologist: _____ (Last name) _____ (first name)

Site Location: SEE 11 JAN 06 SHEET
(County, General location name, UTM Coordinates or Lat./Long. or T-R-S).

ATTACH A MAP (include habitat types, important features, and species locations)

Proposed project name: AVENIDA DE LA LUZ B.A.
Brief description of proposed action:

Type of Survey (circle one): DAY NIGHT BREEDING NON-BREEDING

Survey number (circle one): 1 2 3 4 5 6 7 8

Begin Time: 1915 hrs End Time: 2030 hrs.

Cloud cover: PTLY CLDY Precipitation: none

Air Temperature: 61°F Water Temperature: 62°F

Wind Speed: <5 mph Visibility Conditions: excellent

Moon phase: 30% Humidity: ?

Description of weather conditions: _____

Brand name and model of light used to conduct surveys: Wheat lamp

Were binoculars used for the surveys (circle one)? YES NO
Brand, model, and power of binoculars: Nikon Naturalist 8x40

Appendix ~~E~~. B
California Red-legged Frog Survey Data Sheet

AMPHIBIAN OBSERVATIONS

Species	# of indiv.	Observed (O) Heard (H)	Life Stages	Size Class	Certainty of Identification
Hyla regilla	8	7H, 1O	adult	adult	100%

Describe potential threats to California red-legged frogs observed, including non-native and native predators such as fish, bullfrogs, and raccoons:
none observed

Other notes, observations, comments, *etc.*

See 11 Jan 06 sheet

Necessary Attachments:

4. All field notes and other supporting documents
5. Site photographs
6. Maps with important habitat features and species locations

Appendix E. B
California Red-legged Frog Survey Data Sheet

Survey results reviewed by _____
(FWS Field Office) (date) (biologist)

Date of Survey: JAN 30, 2006 (mm/dd/yyyy) Survey Biologist: HUNT (Last name) LAWRENCE E. (first name)
Survey Biologist: _____ (Last name) _____ (first name)

Site Location: SEE PREVIOUS SHEETS
(County, General location name, UTM Coordinates or Lat./Long. or T-R-S).

ATTACH A MAP (include habitat types, important features, and species locations)

Proposed project name: AVENIDA DE LA LUZ B.A.
Brief description of proposed action:

Type of Survey (circle one): DAY NIGHT BREEDING NON-BREEDING

Survey number (circle one): 1 2 3 4 5 6 7 8

Begin Time: 1415 ; 1830 HRS End Time: 1615 hrs ; 2030 hrs

Cloud cover: partly cloudy Precipitation: none

Air Temperature: 67°F - 55°F Water Temperature: 61°F

Wind Speed: 5-10 mph Visibility Conditions: excellent

Moon phase: none Humidity: ?

Description of weather conditions: _____

Brand name and model of light used to conduct surveys: WHEAT LAMP

Were binoculars used for the surveys (circle one)? YES NO
Brand, model, and power of binoculars: NIKON NATURALIST - 8x40

Appendix E. B
California Red-legged Frog Survey Data Sheet

AMPHIBIAN OBSERVATIONS

	Species	# of indiv.	Observed (O) Heard (H)	Life Stages	Size Class	Certainty of Identification
DAY	HYLA REGILLA	1	O	ADULT	ADULT	100%
NIGHT	HYLA REGILLA	10+	H	"	"	"

Describe potential threats to California red-legged frogs observed, including non-native and native predators such as fish, bullfrogs, and raccoons: RACCOON TRACKS

Other notes, observations, comments, *etc.*

SEE 11 JAN. NOTES

Necessary Attachments:

4. All field notes and other supporting documents
5. Site photographs
6. Maps with important habitat features and species locations

Appendix C. Existing Habitat Conditions on Proposed Building Site and Lighthouse Creek

Photo 1. Dense non-native and ornamental vegetation along upper portions of western slope of Lighthouse Creek invert, looking NE from building site. 8 February 2006.

Photo 2. Lighthouse Creek, looking south from footbridge at end of Camino de la Luz. Subject parcel is beyond deck at right of photograph. Note dense riparian vegetation along creek and extensive invasive, non-native and ornamental vegetation along slopes. 8 February 2006.

Photo 3. Lighthouse Creek, looking upstream (north) from footbridge at end of Camino de la Luz. Note dense riparian and ornamental vegetation along creek. Eucalyptus trees on right side of photo in distance provide an autumnal roost for monarch butterflies (west side of La Mesa Park). 8 February 2006.

Photo 4. Small pool in Lighthouse Creek below footbridge at end of Camino de la Luz. Aquatic habitats such as this, together with dense fringing vegetation are preferred by California red-legged frogs. This type of aquatic habitat is rare in Lighthouse Creek. 8 February 2006.

Exhibit E

WILLIAM ANIKOUCHINE, PH.D
CONSULTANT IN MARINE AND EARTH SCIENCES

16 March, 2005

City of Santa Barbara
Community Development Department
Planning Division
ATTN:
Renee Brooke, AICP
Associate Planner

RE: Peer Review of Geologic Analysis for a Project at 1837 ½ El Camino de la Luz

Dear Ms Brooke,

Herewith is my review of the geologic investigations that have been conducted at the subject parcel (APN 45-100-65). Included as well is a report of my observations at the property and its vicinity based upon two site visits.

I have organized this report to review prior plans and studies chronologically and then present my findings and comments regarding the location of the verge of the bluff and a proper 75-year setback. Geologic impacts under CEQA will also be addressed. A list of the materials reviewed for this report is given in the Appendix.

None of the large format geologic maps included with the reviewed reports were available for inspection. To correct this regrettable lapse, the reviewer has prepared a map (Figure 1) that combines the information gleaned from the text and sketches in the reviewed reports with his own observations and field measurements. The City of Santa Barbara topographic map of 1998 covering the area that includes the subject parcel was used as the base for the map.

Buena Engineers 1971 This report discusses the findings of an engineering geological investigation of the subject parcel. Two borings to 14 ½ feet were drilled on the parking lot atop the bluff. Neither the geologic log from these borings nor the results of analyses of samples from the borings were provided with the report. Limited geological information, the location of the borings and several measurements of the attitude of the Monterey strata on and near the subject parcel, are included on the map in Figure 1. The stratigraphy and attitude data were verified by the writer in the field.

1636 HILLCREST RD. SANTA BARBARA, CA. 93103 805-962-4234

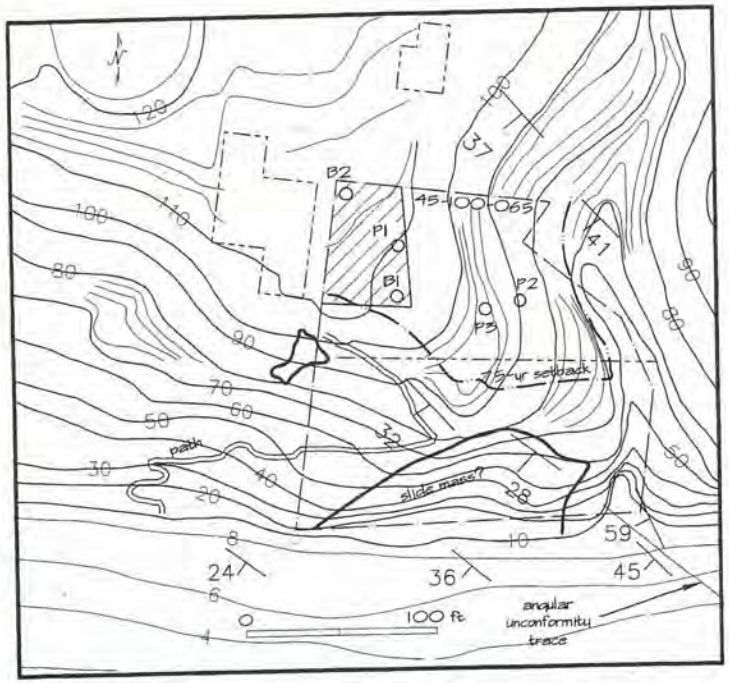


Figure 1. Geologic and topographic map of the subject site and vicinity. Information gleaned from the materials reviewed have been placed on this map. The map includes the reviewer's field observations as well. Buena Engineers soil borings are labeled B1 & B2. Pacific Geoscience borings are P1, P2 & P3.

The Monterey strata are thin-bedded and are fractured into pieces a few inches on a side. These strata are exposed in the coastal bluff face and in the banks of the ravine that extends along the east boundary of the subject parcel. The coastal bluff is reported to have an inclination of as much as 57° in this report. The writer found such slopes in the upper part of the bluff, but inclinations of 77° were measured at the lower section of the bluff.

Three samples of the materials encountered in the two drill holes were analyzed for maximum density – optimum moisture, direct shear, and expansiveness. Based upon some or all of these analyses the soils on the subject parcel were found to be moderately expansive and subject to some settlement. Recommendation for foundation design were provided.

Pacific Materials Laboratory 1978 Following the Camino de la Luz landslide of February 14 1978, this report was commissioned by the City of Santa Barbara. Pacific Materials Laboratory, Inc engaged Dr. Donald Weaver to conduct a geological investigation and prepare this report. The purpose of the investigation was to determine the conditions causing the slide and to identify mitigation of the slide hazard in the vicinity. The location of the slide in relation to the subject parcel is shown by the topographic map in Figure 2.

The stratigraphy, structural geology, physiography and sea cliff retreat were considered. It was determined that the probable cause of the slide was the seaward dip of the Monterey strata and the lack of proper control of surface water that was allowed to permeate the strata. The added mass of the water and the lubrication it provided caused the shear strength of the weakest stratum to be exceeded to the point of failure.

The nature of the slide was thought to be translational along a bedding plane with some rotational movement at the toe (Dr. Donald Weaver, personal communication). The large extent of the slide and the geometry of the slide mass indicates that the upper part of the slide was an active block of strata that failed along a bedding plane and the lower part of the slide was a passive block of strata that was compressed, forced outward and upward (as much as 10 feet). The proximity of the slide requires that the subject parcel be examined to determine if the conditions fostering this kind of slide exist there as well.

The direction of movement of the slide was not directly down dip. Rather, the movement was from 15° to 28° eastward of the dip azimuth. This is significant in that the dips at the subject parcel are parallel to those at the slide. The apparent dip in the direction of slide movement was between 27° and 29°. This is taken into account in examining the stability of the slopes at the subject parcel.

Smith 1980 This geologist reviewed the Buena Engineers 1971 report and decided that the parking lot area is underlain by 6 feet or 8 feet of Older Alluvium which lies unconformably on truncated, inclined Monterey strata. He stated that the previous findings did not apply to the area he considered to be buildable. The use of continuous footings was regarded as inappropriate in the parking lot area.

Smith took issue with the Preliminary Setback Line presented in the Santa Barbara County Seismic Safety Element. A consideration of the actual measured rate of beach erosion at the subject parcel led him to conclude that unrealistic erosion rates were used in placing the line in the vicinity of the subject parcel.

He reviewed the Weaver report and agreed with the findings, adding that shattering of the Monterey strata involved in the slide might have been caused by movement on the La Vigia fault which trends E-W about a half-mile to one mile north of the subject parcel. He stated that the dip of the strata was nearly parallel to the trend of the coastal bluff at the slide site, but that the dip of the strata at the subject site was more nearly perpendicular to the trend of the bluff. He based his choice of a building site on the

unlikeliness of a major slide at the subject parcel upon this premise. This is true of attitudes of strata near the mouth of the ravine along the eastern boundary and east of this point, but west of the ravine mouth the attitudes of the strata are more closely parallel to the shoreline.

The Camino de la Luz slide is reported to extend eastward to the southwest corner of the subject parcel (Figure 2). Smith states that similar sliding is not likely on the subject parcel because of the attitude of the strata and the its resistance to erosion. Dr. Smith explains the minimal influence of the Camino de la Luz slide to the subject parcel by asserting that the slide involved rocks weaker than at the subject parcel and by suggesting that no slides have disturbed the strata at the subject parcel.

Smith's report states that because the soils at the subject parcel are expansive and 8 feet to 10 feet thick, a building should be constructed on a foundation of caissons rather than on continuous footings. Soil creep is also a matter of concern on the steep slopes of the area Smith considers a building envelope. The reviewer observed tension cracks over an inch thick associated with soil creep at the SE corner of the paved area.

The building envelope chosen by Smith is just east of the paved area (cross-hatched on Figure 1). He declared that the paved area was unsuitable as a building site because of an open bedding plane fissure that he observed from the beach and which he projected northward. His buildable envelope lies east of the fissure where the bedrock was found by Dr. Smith to be "extremely competent and of high strength", although data supporting this assertion was not given in his report. He mentions that the rocks in the SE corner of the subject parcel below a flat excavated area just SE of the paved area have been affected by landslides.

Dibblee 1986 This brief report deals with general aspects of the topography and geology of the subject parcel. It considers sea cliff erosion, landslide hazards, and earthquake hazards in general terms. No consideration of building sites or engineering geology of the subject parcel are included. There is nothing with which to take exception.

Pacific Geoscience 1987 This report covers the soils investigation of the building envelope recommended by Dr. Smith. Three borings were made; their locations are shown on Figure 1. The boring on the paved area reached refusal at 13 feet depth. The other two borings drilled on the slope east of the paved area reached refusal at 6 feet depth.

The logs of the borings give only a terse description of the materials encountered. The borings encountered a sandy clay soil overlying weathered Monterey shale that graded downward into fresh shale. Apparently no soils analyses were conducted on samples of these materials. A cast-in-place pile foundation was recommended for any structure built in the tested area. A warning was given regarding soil creep on the sloping part of the building envelope.

K-C Geotechnical 1987 This two page letter amplified the findings of Mr. Dibblee. The rate of cliff retreat was given as 6 inches per year to 8 inches per year. It was stated that conditions that produced the Camino de la Luz slide do not exist at the subject parcel and the likelihood of a slide are "extremely remote". No slumping, adverse erosion or sliding was found on the west slope of the ravine that extends along the east boundary of the subject parcel.

Norris 1988 Dr. Norris estimates a rate of cliff retreat of 4 inches per year based upon a study of three aerial photographs taken in 1943, 1954 and 1986. This low rate is consonant with the assertion Dr. Smith made that the erosion rate in the vicinity of the subject parcel is slower that at areas to the east and west.

Dr. Norris discussed how erosion of the cliff face by ocean waves at high tides causes episodic quantum failure of strata weakened by weathering in the cliff face. The result is the maintenance of the steep cliff face at the subject parcel. Dr. Norris found little chance of the subject parcel being affected by a landslide except at its extreme SE corner of because of the attitude of the Monterey strata.

Dr. Norris did not discuss the relative merits of building envelopes proposed in the past. Rather, he listed suggestions regarding the discharge of surface water and appropriate landscaping vegetation.

Pacific Geoscience 1989 This letter reports observations of the subject parcel to review a plan prepared for a site on the subject parcel. No substantial changes since 1987 were observed. A drilled caisson foundation was stated as being the preferred for construction on the site (assumed to be in the building envelope proposed by Dr. Smith).

Pacific Geoscience 1991 (1) Another site visit to assess changes at the proposed building site is reported. Conditions were as described in the 1989 letter.

Pacific Geoscience 1991 (2) This letter is an addendum to the previous 1991 letter. This letter discusses the placement of a garage on the west side of the open bedding plane fissure reported by Dr. Smith. Heavy vegetation prevented the reviewer from examining the ground surface for evidence of this fissure.

Smith 1991 He discusses the availability of historical aerial photographs of the subject parcel and surrounding area. They are available in the UCSB library.

Earth Systems Consultants 1996 This letter by the successor company of Pacific Geoscience, Inc. recapitulates the correspondence discussed above in this report. Soil slumping at the upper part of the bluff located just seaward of the paved area and erosion at the mouth of the ravine east of the subject parcel were reported following a site visit in January. The choice of drilled caissons for foundations of the house and garage was reiterated.

CFG Consultants 1996 (1) This is an interoffice memo from James Fisher to Richard Cousineau, both of CFG Consultants, presenting a critique of the work of Dr. Smith that is cited above. Not all of this copy of the memo is legible. It deems Smith's work as inaccurate and states that the base topographic map Smith used is inaccurate. In comparing Smith's geologic mapping to work done in 1978, Fisher finds the City Geologic Hazard map (Hoover 1978) to be the accurate one.

Of particular importance is the fact that the attitude of the strata at the southeastern corner of the subject parcel given by Smith is not correct. I made the same observation when I measured the strike and dips of Monterey strata exposed at low tide in the wave cut platform fronting the subject parcel. The beach had been stripped of sand by several intervals of wave attack from the SE so there could be no uncertainty regarding the relationship of the strike of the strata to the trend of the cliff. Along the entire length of the subject parcel's beachfront the strike of the strata was more nearly parallel the shore than perpendicular to it.

Smith's description of the Monterey strata as being siliceous and therefore resistant to erosion is contended by Fisher. I found that the shale is more like a marl and I agree with Fisher's observation that only a few siliceous bed are present and they do not influence the character of the bulk of the strata exposed in the sea cliff.

Fisher takes issue with several other of Smith's findings. He takes exception with the lack of proper identification of earth materials on the subject parcel, the light treatment of slope stability, the misidentification of the "open bedding plane fracture", which is actually a 1 inch thick asphaltum bed, and dismissal of the matter of daylighted strata at the SW part of the subject parcel. I am in agreement with Fisher in these instances.

CFG Consultants 1996 (2) This report is the result of an engineering geology study of the subject parcel with respect to development plans prepared by Martin Northart and Spencer, Inc. and an architect, Detlev Peikert. The study was to evaluate geologic hazards that might affect the structures to be built in the building envelope in the northeastern part of the subject parcel.

The drainage on the subject parcel and surrounding parcels directs runoff across the parcel and thence to the creek on the east boundary of the parcel. A graded pad at the terrace that exists just SW of the paved area is shown in a 1954 aerial photograph. No mention is made of what the topography was before the excavation of the pad there.

The sea cliff at the south side of the subject parcel is described as having a compound slope that is generally convex upward. The base of the cliff slopes 60° to 80°. Above the reach of the waves the slope is 40° and at the top of cliff the slope about 28°.

The geology of the subject parcel is described as a terrace sand lying upon shale bedrock. The sand is said to underlie the paved area and is 5 feet to 6 feet thick. Fill occurs at the graded pad. The shale bedrock dips 25° to 50° to the southwest and is folded to a minor degree in places. Small scale tectonic features such as overriding strata, or small

interformational thrust faults are reported. An angular unconformity at the mouth of the ravine in the SW corner of the subject parcel is reported. This feature separates the steep dipping strata on the east from the more gently dipping strata at the beachfront of the subject parcel on the west. The reviewer verified the existence of these features in the field.

The report describes the seismicity of the subject parcel as likely to cause low level damage to single family dwellings. The closest potentially active fault is the Mesa fault which lies about 1 ½ miles N of the parcel. Active to potentially active faults in the Santa Barbara Channel are mentioned.

The rate of retreat of the sea cliff is chosen to be 4 inches per year. However the erosion at the top of the concave-upward slope is deemed to be negligible over the 65 years (actually 67 years) elapsed between the dates of the aerial photography that CFG examined. Erosion by runoff from the concrete-lined swale and failure of a sections of sea cliff by slumping are indicative of the variability of erosion that can occur.

Landslides involving the cliff are reported to have occurred in the 1970s at the subject site. Soil slumps have occurred near the verge of the cliff. The scarp left by one of these slumps is still visible just below the base of the wooden stairs leading to the concrete-lined swale at the upper part of the sea cliff.

Soil creep and flooding are mentioned in the report; both are considered minor at the subject parcel. The use of caissons set into the shale bedrock and gutters on buildings are recommended to avoid the effects of these processes.

Fisher 2001 This report states that conditions at the subject site are little changed from what was observed in 1996. The California Coastal Commission definition of the "Bluff Edge" is presented and its location noted on an accompanying sketch map. The line demarcating the 75-year setback from the bluff edge is shown on Figure 1.

A study of historical aerial photographs produced estimates of the time of developments on and adjacent to the subject parcel. The neighboring houses and the cabaña on the graded pad appear to have been constructed during the 1940s to 1960s. The cabaña was gone by 1975.

The rate of cliff retreat was stated to be 4 inches per year and a 75-year setback of 25 feet was recommended for the subject parcel.

Fisher 2002 (1) This letter presents responses to comments in letters sent by neighbors of the subject parcel. Little salient material was offered save the mention of a landslide at 1839 Camino de la Luz in November 1995. This slide did not alter the form of the upper edge of the cliff. Slide activity was noted at the SW corner of the subject parcel. The reviewer confirms this occurrence.

Fisher 2002 (2) This letter address comments by the City Review Team, specifically the importance of controlling surface runoff, the definitions of the "bluff edge" used by Fisher and CFG, and the way the 75-year setback was determined.

The Reviewer's Comments The pertinent issues to be considered in assessing a proposed construction at the subject parcel are slope stability and drainage. Given the size and proximity of the Camino de la Luz slide (see Figure 2) and the evidence of sliding on the subject parcel, there is an unfulfilled need for a better evaluation of the stability of the slopes at the parcel. Smith addressed this issue anecdotally and Fisher pointed out a need for further analysis of slope stability. CFG noted the existence of landslides on the parcel but did not mention that this implied further investigation of slope stability. The reviewer has therefore conducted a slope stability analysis which is discussed in detail in a subsequent section of this report.

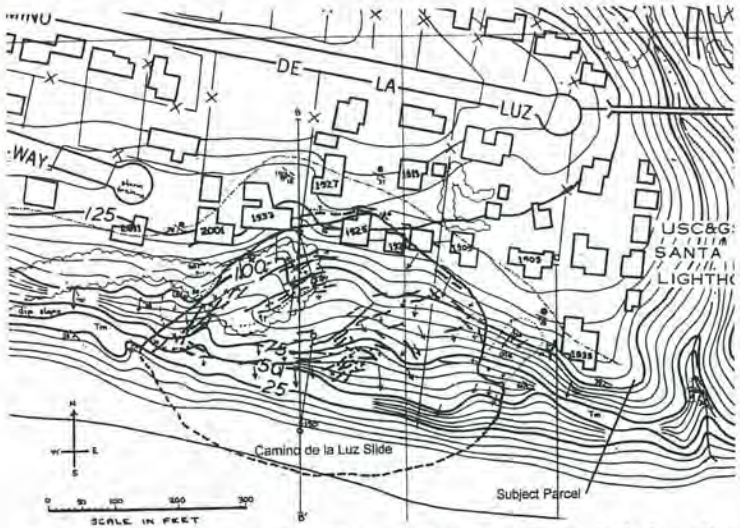


Figure 2. The proximity of the subject parcel to the Camino de la Luz slide. from Weaver 1978.

All the geologists who wrote reports reviewed here declared the need for controlled drainage on this cliff-top parcel. The reviewer agrees and would insist that this be considered thoroughly by engineers, architects and landscape architects involved in planning the development of the subject parcel. Surface water reaching the subject parcel must be intercepted as soon as possible and conducted under controlled conditions to either the ravine east of the parcel or the beach. Under no circumstances should rainwater be allowed to accumulate and flow down the coastal cliff at the south side of the subject parcel.

Other issues, such as the details of the geology and physiography of the subect parcel have been treated adequately by Fisher and CGS. The reviewer found evidence to corroborate their findings in his field investigation of the parcel and its vicinity.

75-year Setback The reviewer finds that the rate of sea cliff retreat is conservatively taken to be 4 inches per year. Beach erosion over the next 75 years would be expected to amount to 25 feet of retreat. This number does not take into account the reduction in retreat rate that must occur as continued retreat lengthens the wave-cut platform fronting the sea cliff. Assuming that the wave climate remains the same, the constant average wave energy flux must be distributed over an increasing length of platform. This would cause an exponential decay in the wave erosion rate.

The retreat of the sea cliff would displace the existing cliff profile landward modified by the increase in the ratio between the degree of terrestrial erosion affecting the part of the coastal cliff above the reach of wave attack and the degree of wave erosion at the toe of the cliff. The net effect should be a reduction in the slope at the upper part of the cliff as terrestrial erosion (mainly by rain runoff) begins to predominate.

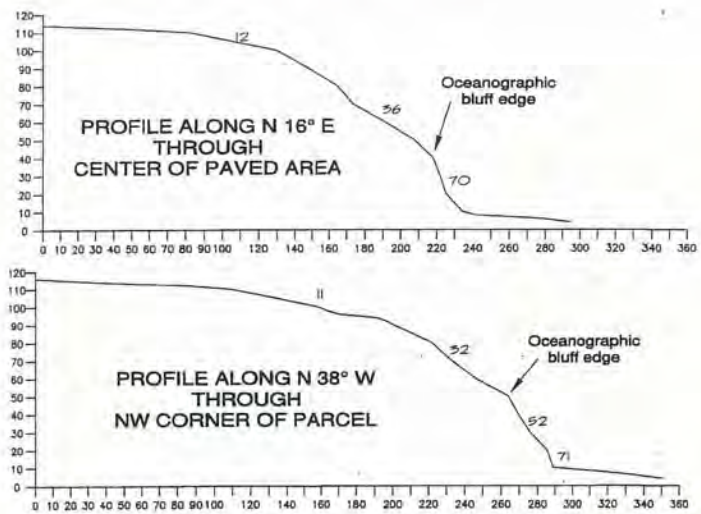


Figure 3. Topographic profiles through the subject parcel. The numbers indicate the local slope in degrees. Note the rounded, convex-upward shape of the the area above the sea cliff in both profiles.

Significant to the consideration of a proper setback, the "bluff edge" which should mark the elevation above which terrestrial erosion prevails would move lower on the cliff face as time progresses. Of course this assumes that no human intervention takes place. But the control of runoff is a condition of mitigation of the impact of rain runoff and this would tend to maintain the status quo or even cause wave erosion to become dominant at the toe of the cliff with an increase in the elevation of the "bluff edge".

However, the California Coastal Commission's somewhat arbitrary definition of the "bluff edge" is based upon a perceived static geometry rather than upon actual coastal processes, so the setback given by Fisher (Figure 1) should serve the purpose of the Planning Division of the Department of Community Development of the City of Santa Barbara. Fisher's setback is 25 feet from the "landward edge of the topmost riser" at the graded pad SE of the paved area (despite the fact that the "riser" is completely artificial), so it complies with the California Coastal Commission's definition and it is based upon 75 years of bluff erosion at 4 inches per year.

Typical cross sections of the subject parcel are shown in Figure 3. This figure shows the configuration of the sea cliff and top area of the parcel. The slope angles at several distinct segments of the profile are shown. A reasonable "bluff edge" is indicated on the profile. The 75-year setback from the "bluff edge" as stipulated by the California Coastal Commission is indicated on Figure 1.

Slope Stability Analysis The field observations made by the reviewer led to a conclusion that the SE corner of the subject parcel had suffered a significant landslide in the past. The topographic expression of this feature reinforced this conclusion. The trace of the failure plane of this and possibly another slide are shown on the map in Figure 1.

It is with misgivings that the reviewer notes that several of the papers reviewed here mentioned that sliding occurred here, but no one seemed concerned that this meant that the Monterey strata failed not down the dip as at the Camino de la Luz slide, but rather nearly normal to the dip. This implies that the shear strength of the strata in its present condition can be exceeded given the appropriate stress conditions and that it might be misleading to focus upon down-dip sliding as the only way slope failure can occur here.

The bedrock mass between the E edge of the Camino de la Luz slide and the ravine on the west of the subject parcel is of concern because it lacks lateral support. Many of the slides the reviewer has examined had declivities on one or both sides of the failed mass. It appears that the stability of a slope depends to some extent upon the shear strength of lateral attachment as well as the attachment below and up-slope.

In an endeavor to examine all possible geological hazards at the subject parcel, it was decided to perform an analysis of the stability of the eastern and southern slopes of the subject parcel. It is anticipated that such analyses would be prudent given that the latest designated buildable envelope lies on the upper part of the slope involved in the aforementioned slide.

Slope stability calculations were performed on the topographic profile shown in Figure 3 using the Modified Bishop method. This method calculates the factor of safety of each of an array of slip circles that is feasible given the geometry of the slope. A psuedostatic (seismic) coefficient of 0.50 was used to ensure obtaining a conservative estimate of the slope stability for each slip circle. The calculations were performed using a unit wet weight of 120 lb/cu ft, cohesion = 0 lb/sq ft, and internal friction angles of 14°. These calculations explored the residual (minimal) strength of the slope.

The strength parameters of the Monterey shale were estimated using the Hoek-Brown (2002) failure criterion. The cohesion and angle of internal friction for clay shale are 0.663 MPa and 14.25°, respectively. These strength parameter values applicable to the Monterey shale. A value of cohesion of 0.0 psf/sq ft is used to estimate the residual strength of the Monterey shale assuming that ancient slides have reduced the strength of the rock mass. The cohesion value obtained by the Hoek-Brown (2002) criterion is more representative of the peak strength of the Monterey shale.

The unit wet weight of the Monterey shale was taken to be 120 lb/cu ft. This is approximately the same value obtained for Rincon shale in the Summerland region (121-122 lb/cu ft). A value of the unit wet weight of 95 lb/cu ft has been measured elsewhere, however the larger value is used for the sake of conservatism

The Mohr-Coulomb strength criterion can be manipulated to show that at failure (factor of safety = 1 and cohesion = 0) the angle of internal friction is equal to the angle of the slope of the slide plane. The angle of the slope near the mouth of the ravine at the E side of the subject parcel is approximately 32° to 52°. Use of this angle with cohesion set to zero allows determination of the residual, or post-failure, strength of the Monterey strata forming the east slope of the subject parcel. An analysis indicated that the residual strength of the Monterey strata at the subject parcel is quite low. The calculated factor of safety is 0.01.

Another calculation was performed using a unit wet weight of 120 lb/cu ft, cohesion = 12590 lb/sq ft (0.663 Mpa) and an internal friction angle of 14°. These Hoek-Brown values were taken to represent the peak (maximal) strength of a slope in undisturbed rock. The factor of safety for peak strength conditions exceeds 6.0 for all the slip circles tested.

The Modified Bishop method calculates the factor of safety of each of an array of slip circles that is feasible given the geometry of the slope. A psuedostatic (seismic) coefficient of 0.50 was used to ensure obtaining a conservative estimate of the slope stability for each slip circle. Residual strength calculation indicates that the brow of the sea cliff at the bluff edge is prone to fail in Monterey shale masses that have failed in the past. Unaffected rock on the brow is stable with a factor of safety exceeding 6.0 or more.

Another stability analysis using the Modified Bishop method with a psuedostatic (seismic) factor of 0.50 was performed to examine the effect of deep slip surfaces. The factor of safety for such a failure is in excess of 1.5. This kind of analysis is representative of the Camino de Luz slide mechanism.

The possibility of a plane failure down dip was investigated using a program by Dr. E. Bane Kroeger of the University of Alaska. Peak strength with a factor of safety of 6.7 indicates that slopes in unfailed Monterey shale are quite stable. The residual strength of failed masses is 0.47. Landslide blocks are such masses; they are not stable and further movement in those masses can be expected.

The results of these analyses are given in the appendix at the end of this report. The results indicate that the entire slope of undisturbed Monterey shale is stable under conditions of a severe earthquake. It is necessary to point out that no residential construction should be considered for the SE corner of the subject parcel because of the likelihood that it is a landslide block of minimal strength.

One must conclude that, on the scale of the immediate area of the subject parcel, the slope is stable. At a small scale, such as at the toe of the sea cliff stability or on a scale the size of the Camino de la Luz slide and at a different (longer) time scale the stability of the strata might be less, but it is beyond the capability of method of analysis to determine this.

I hope that this review is suitable for your purposes. If you have any questions or comments, please contact me.

Sincerely,

William Anikouchine

William Anikouchine PhD
California Certified Engineering Geologist EG 1584

APPENDIX

List of Reports Reviewed in this Document (in chronological order)

Buena Engineers 1971 – "Preliminary Soil Investigation and Engineering Geology Report for a Single-Family Residence on El Camino de la Luz in the La Mesa Area Santa Barbara, California" Buena Engineers 17 May 1971.

Pacific Materials Laboratory 1978 – "Preliminary Landslide Investigation, Sea Cliff Property, El Camino de la Luz, Sant Barbara, California`for City of Santa Barbara" by D. W. Weaver & D. F. Hoffman for Pacific Materials Laboratory 6 March 1978.

Smith 1980 - "Feasibility of Site Development 1837 ½ El Camino de la Luz" by R. J. Smith 29 October 1980.

Dibblee 1986 – "Geologist Report, 1837 El Camino de la Luz, Santa Barbara, California" by Thomas W. Dibblee 24 June 1986.

Pacific Geoscience 1987 – "Soils Engineering Investigation of 1857 el Camino de la Luz, Santa Barbara, California Pacific Geoscience, Inc 9 April 1987.

K-C Geotechnical 1987 – Letter to Mr. Bruce Peterson from Richard Cousineau K-C Geotechnical Associates 3 July 1987.

Norris 1988 – Untitled report by R. M. Norris 8 November 1988.

Pacific Geoscience 1989 – Letter titled "Review of Site Location at 1857 (sic) El camino de la Luz, Santa Barbara, California" by J.M. Sims 18 March 1989.

Pacific Geoscience 1991 (1) – Letter titled "Second Review of Site, 1837 ½ El Camino de la Luz, Santa Barbara, California" by J. M. Sims 21 Januyary 1991.

Pacific Geoscience 1991 (2) – Letter titled "Review of Garage Site, 1837 ½ El Camino de la Luz, Santa Barbara, California" by J. M. Sims 5 February 1991.

Smith 1991 – Untitled letter by R. J. Smith 18 March 1991.

Earth Systems 1996 – Letter titled "1837 ½ el Camino de la Luz, Santa Barbara, California, Third Review of Site" by J. M. Sims, Earth System Consultants 2 February 1996.

Fisher 1996 – Interoffice memo from J. Fisher to R. P. Cousineau titled "Background Review of Dr. Barthel's File: Previous Reports" CFG Consultants 28 May 1996.

CFG 1996 – "Proposed Building Site 1837 ½ El Camino de la Luz, Santa Barbara, California" CFG Consultants 19 June 1996.

Fisher 2001 – Letter titled "Engineering Geologic Update Report, 1837 ½ El Camino de la Luz, Santa Barbara" Fisher Geologic 2 December 2001.

Fisher 2002 (1) – Letter titled "Geologic Review of Supplemental Information, 1837 ½ El Camino de la Luz, Santa Barbara" 15 July 2002.

Fisher 2002 (2) – Letter titled "Geologic Response to City Review Team Comments, 1837 ½ El Camino de la Luz, Santa Barbara" 16 December 2002.

Slope Stability Analyses Results

Plane Failure

Residual Strength:

Slope Height – 100 feet
Slope face angle - 70°
Upper slope angle - 12°
Cohesion – 0 psf
Friction angle - 14°
Dip of discontinuity - 28°
Unit weight of rock – 120 pcf
Unit weight of water – 61.4 pcf
Bluff edge location – 36.4 feet
Length of discontinuity – 327.4 feet

Factor of Safety – 0.469

Peak Strength:

Slope Height – 100 feet
Slope face angle - 70°
Upper slope angle - 12°
Cohesion – 12590 psf
Friction angle - 14°
Dip of discontinuity - 28°
Unit weight of rock – 120 pcf
Unit weight of water – 61.4 pcf
Bluff edge location – 36.4 feet
Length of discontinuity – 327.4 feet

Factor of Safety – 6.7

Stability Analysis using Psuedostatic Assumption for Seismic Effects

Psuedostatic Factor = 0.5

SLOPE STABILITY ANALYSIS USING SIMPLIFIED BISHOP METHOD

1837 1/2 Camino de la Luz

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Layer 1 Cohesion, kips/sqft 12.59
Layer 1 Unit Weight, kips/cuft .12
Layer 1 Friction Angle, deg. 14.25
Layer 2 Cohesion, kips/sqft 9999
Layer 2 Unit Weight, kips/cuft .13
Layer 2 Friction Angle, deg. 0

THIS ANALYSIS WAS MADE USING SLOPING WATER TABLE CONDITIONS WITH SEEPAGE

COORDINATES OF THE CENTER OF THE CIRCLE & THE CIRCLE RADIUS			SAFETY FACTOR	AREA OF FAILURE	COORDINATES OF INTERSECTION OF THE FAILURE CIRCLE WITH GROUND LINE			
X (FT)	Y (FT)	R (FT)	FS	(SQ FT)	X UP	Y UP	X DOWN	Y DOWN
340	160	330	1.65	141.8	14.7	215.2	633.1	8.3
340	160	340	1.96	151.3	4.6	215.8	644.0	7.8
350	160	330	1.66	139.8	24.6	214.7	642.8	7.9
350	160	340	1.98	149.3	14.5	215.2	653.8	7.3
350	160	350	1.94	159.1	4.5	215.8	664.7	6.8
360	160	330	1.68	137.7	34.5	214.1	652.6	7.4
360	160	340	2.00	147.2	24.4	214.7	663.5	6.8
360	160	350	1.96	157.0	14.4	215.2	674.4	6.3
360	160	360	1.92	167.2	4.3	215.8	685.3	5.7
340	150	330	1.71	147.8	16.5	215.1	637.9	8.1
340	150	340	1.68	157.6	6.4	215.7	648.7	7.6
350	150	330	1.73	145.8	26.4	214.6	647.7	7.6
350	150	340	1.70	155.5	16.3	215.1	658.5	7.1
350	150	350	1.67	165.5	6.2	215.7	669.2	6.5
360	150	330	1.75	143.7	36.3	214.0	657.5	7.1
360	150	340	1.71	153.4	26.2	214.6	668.3	6.6
360	150	350	1.68	163.4	16.1	215.1	679.0	6.0
360	150	360	1.65	173.8	6.0	215.7	689.7	5.5
340	140	330	1.81	153.7	18.6	215.0	642.4	7.9
340	140	340	1.80	163.7	8.5	215.5	653.1	7.3
350	140	330	1.84	151.7	28.5	214.5	652.2	7.4
350	140	340	1.82	161.6	18.4	215.0	662.8	6.9
350	140	350	1.81	171.9	8.3	215.6	673.5	6.3
360	140	330	1.86	149.6	38.4	213.9	662.0	6.9
360	140	340	1.85	159.5	28.3	214.5	672.6	6.4
360	140	350	1.83	169.8	18.1	215.0	683.3	5.8
360	140	360	1.81	180.3	8.0	215.6	693.9	5.3
340	130	330	1.53	159.6	21.1	214.9	646.5	7.7
340	130	340	1.52	169.7	10.9	215.4	657.0	7.1
340	130	350	1.51	180.2	0.7	216.0	667.5	6.6
350	130	330	1.54	157.5	31.0	214.3	656.3	7.2
350	130	340	1.53	167.7	20.8	214.9	666.8	6.7
350	130	350	1.52	178.2	10.6	215.4	677.3	6.1
350	130	360	1.51	188.9	0.4	216.0	687.8	5.6
360	130	330	1.56	155.5	40.8	213.8	666.1	6.7
360	130	340	1.55	165.6	30.6	214.4	676.6	6.2
360	130	350	1.54	176.1	20.5	214.9	687.2	5.6
360	130	360	1.53	186.8	10.3	215.4	697.6	5.1

Exhibit F

Discussion: As been on attached plot plan, two private easements enter El Camino de la Luz from the cul-de-sac; a 20 ft. easement which serves three parcels and a possible fourth, and a 15 ft. easement which serves four parcels and a possible fifth parcel, as indicated by small arrows on plot plan. Because of the closeness of the Eaton house and the dwelling opposite it to this easement, it is not possible to widen the subject easement.

A possible solution to this situation would be to join the ends of the two private easements and provide one-way traffic serving all these parcels. This would not meet city street standards, but might be considered as a reasonable solution under the present impossibility of providing full city street standards."

Mrs. Fred Eaton was present and explained that according to actual measurement the easement is 17 feet, and in the past year a number of lots have been split in the neighborhood and they have all been served by an average 15 foot driveway.

The City Planning Director explained that the small map showed the number of parcels to be served by this easement, and reported that because of the location of the Eaton house it is not possible to widen the easement. He suggested that a possible solution might be to tie the two easements together and allow one way traffic on same, but added that this would not meet ordinance requirements, but it would be less hazardous than the proposal as submitted.

Mrs. Eaton explained that tying the two easements together would mean that the driveway would come within five feet of the Wardell front door, which would not comply with any City Ordinance.

The Planning Director pointed out that City standards require a 50 foot right of way.

Mrs. Eaton explained that there are six and seven cars parked in the driveway easement for the lot splits granted to the west of her property.

In response to a question the City Planning Director stated that if this property were located in a multiple family zone, a 15 foot driveway could serve an unlimited number of families.

Acting Mayor Crowell inquired whether the Council used this ordinance to block developments of this kind in other areas. The City Planning Director stated it has been done, except that it is not too frequently used when there is only a possibility for one more lot split. He explained that Ordinance No. 2488 covers not the number of units involved but the number of parcels served by a private driveway.

Councilman Clemens suggested returning this request to the Planning Commission with a request that the provisions of the ordinance be studied.

Acting Mayor Crowell stated that you can't do this except to request a recommendation for the revision of the ordinance.

The City Planning Director stated that several of the neighbors wrote letters to the Planning Commission urging approval of the requested division of property, and the granting of a variance in this case.

Councilman Wilson moved seconded by Councilman Clemens that the Council approve the request of Mrs. Fred D. Eaton, Sr., to divide into two parcels lot 7T and 11H, located at 1837 El Camino de la Luz, as submitted by the applicant.

The Planning Director stated that the Planning Commission feels that its authority does not extend to this particular ordinance.

Mrs. Eaton explained that Mr. and Mrs. Skofield have no objection to granting the request and that in her discussion with other neighbors in the area she has not heard any objections voiced.

Roll Call: Affirmative Council All.

GRANT DEEDS FOR IRPORT PRTY OR CLEAR ZONE ROM. ANTONIO ONTECARLO BY ESO.3464 –

Grant Deed from Antonio and Serafina Montecarlo for lots 18 and 19, Block E of La Goleta Rancho, also known as Fairfield was presented in connection with acquisition of a clear zone for the Municipal Airport.

Councilman DeLoreto moved seconded by Councilman Wilson that the Council accept this grant deed by the adoption of Resolution No. 3464. Roll Call: Affirmative Council All.

ROM JUSTO L. ARTINEZ BY ESO.3465

Grant Deed from Justo L. and Inocencia Martinez for Lot 18, Block F of La Goleta Rancho, also known as Fairfield, was presented in connection with the acquisition of a clear zone for the Municipal Airport.

Councilman DeLoreto moved seconded by Councilman Wilson that the Council accept this grant deed by the adoption of Resolution No. 3465. Roll Call: Affirmative Council All.

EMENS LEAVES

Councilman Clemens was excused from the Council Chambers at this time.

Councilman Callahan moved seconded by Councilman Clemens that the Council find that there is good and sufficient reason connected with the health, safety and welfare of the area to continue this request until the next meeting of the Council and suggest that every Councilman inspect this property to determine what is being requested and report on same. Roll Call: Affirmative Council All.

Councilman Callahan was excused from the Council Chambers at this time. CALLAHAN

Recommendation from the City Planning Commission was presented as follows: RELOCATIO PEDESTRIA MENT IN T VIEW HTS : RESO.3471 ZONING PR EASEMENT 3472 ACCE NEW EASEM

"Subject: Recommendation for relocation of pedestrian easement in Island View Heights Subdivision.

Recommendation: Approval of relocation of pedestrian easement as shown on map attached, to be located along the boundary line dividing new lots 35 and 37.

Discussion: Thomas J. Pleman, developer of Island View Heights Subdivision, appeared before the City Planning Commission on May 20, 1958, with a request that lot 36 thereof be split, dividing the area equally between adjoining lots 35 and 37. This request was brought about by a change in location of the top of the slope behind lots 35, 36 and 37, so that the crest of the slope is 15 ft. closer to Island View Drive than anticipated, making the building pads for these lots 15 ft. narrower. It was stated that this was a result of City Council disapproval of a proposed encroachment of the toe of the slope onto the Meigs Road right-of-way.

Because this voluntary elimination of one lot (lot 36), will permit the creation and development of two improved building sites, for which new building plans must be developed, the Planning Commission voted to approve this request. This was done on the Commission's authority to approve reasonable adjustments of lot lines without going through the procedures outlined in City Zoning Ordinance No. 2585, and on the specific opinion of the City Attorney that this procedure was applicable in this particular instance because of the resulting improvement in lot development, and the fact that no new lot would be created.

However, because of this elimination of lot 36, it is necessary to relocate the existing approved 10 ft. pedestrian easement, formerly located between lots 36 and 37. Accordingly, the Commission hereby recommends to City Council that this easement now be relocated along the new boundary line between lots 35 and 37, as shown on the attached map.

Councilman Clemens inquired how this could be done. The Chief Administrative Officer explained that since the final map of Island View Heights has been filed, he thought it would be necessary to abandon the first easement, and then accept the deed for the relocation of the pedestrian easement.

The City Attorney stated that the subdivider handed to him a deed for the substitute easement, as well as a Resolution abandoning the former easement.

"RESOLUTION NO. 3471

RESOLUTION ABANDONING 10 FOOT PEDESTRIAN EASEMENT LYING BETWEEN LOTS 36 AND 37 OF ISLAND VIEW HEIGHTS NO. 2."

was presented and read in full. Councilman Clemens moved seconded by Councilman DeLoreto that the Council adopt Resolution No. 3471. Roll Call: Affirmative Council All.

Deed for a pedestrian walkway along the revised boundary line dividing lots 35 and 37 in Island View Heights Subdivision and signed by Thomas J. Pleman and Joseph DuBrow, partners in Island View Heights, was presented and ordered accepted by adoption of Resolution No. 3472 on motion of Councilman DeLoreto seconded by Councilman Clemens. Roll Call: Affirmative Council All.

Councilman Callahan returned to the Council Chambers at this time. CALLAHAN

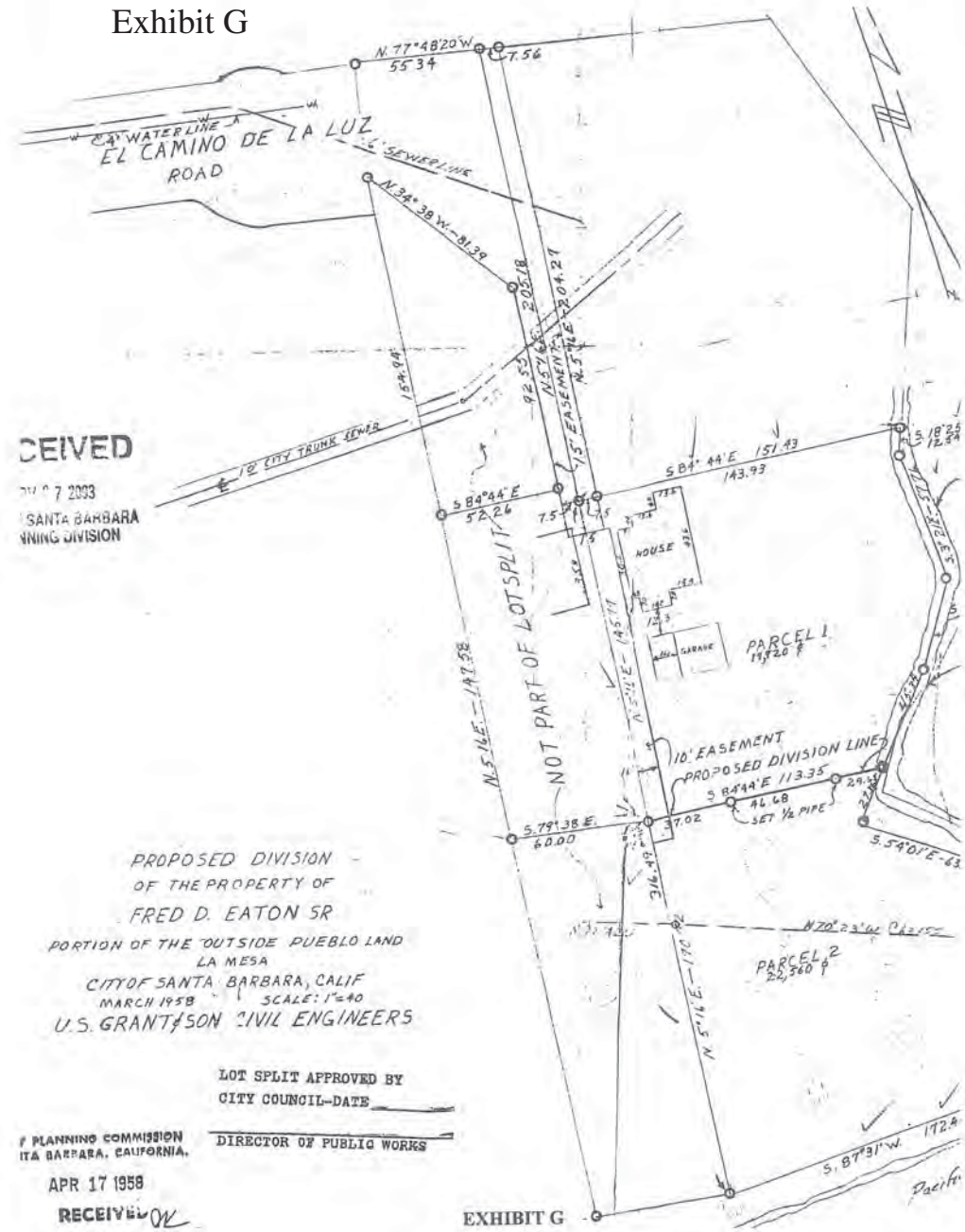
Recommendation from the City Planning Commission was presented as follows: GRANT LOT REQ OF M EATON AT EL CAMIN LUZ

"Subject: Request of Mrs. Fred D. Eaton, Sr., to divide into two parcels lots 7T and 11H, City Engineer Map 10, located at 1837 El Camino de la Luz, in a R-1 zone.

Recommendation: Denial.

Reasons: Creation of an additional parcel would be in violation of City Ordinance No. 2488. The existing 15 ft. driveway easement which now serves this dwelling also provides access to three additional adjoining parcels. See attached plot plan showing dwellings served off El Camino de la Luz cul-de-sac.

Exhibit G



City of Santa Barbara
Planning Division

I CERTIFY THAT THIS NOTICE WAS MAILED ON 08/31/05 TO THE ADDRESSES ON THE ATTACHED MAILING LABELS
Josslyne S.

NOTICE OF EIR PREPARATION/ NOTICE OF ENVIRONMENTAL SCOPING HEARING

Date: August 31, 2005

To: State Clearinghouse
City Clerk
Clerk of the Board
Neighbors and Interested Parties

From: Planning Division
City of Santa Barbara
P.O. Box 1990
Santa Barbara, CA 93102-1990
(805) 564-5470

Project Title: 1837 ½ El Camino de la Luz Residence

Project Location: The project site is located at 1837 ½ El Camino de la Luz, between Oliver Road and Meigs Road, in the West Mesa neighborhood of the City of Santa Barbara, Santa Barbara County.

Project No.: MST2002-00214

APN: 045-100-065

General Plan: Residential, 5 units per acre

Zone: E-3/One-Family Residence and SD-3/Coastal Overlay

Public Scoping Hearing: **Thursday, September 22, 2005**, City Council Chambers, Santa Barbara City Hall, De La Guerra Plaza, 735 Anacapa Street.

Project Description: The project consists of the construction of a 1,499 square foot, 2-story single family residence with an attached 443 square foot garage, on a 23,885 square foot vacant bluff-top lot. Access to the site would be provided by private easements extending south from the terminus of the paved public road (El Camino de la Luz).

The **City of Santa Barbara** will be the Lead Agency and will prepare an environmental impact report (EIR) to evaluate impacts of the proposed 1837 ½ El Camino de la Luz Residence. The purpose of an EIR is to provide decision-makers and the public with information that enables them to consider the environmental consequences of the proposed project. The EIR would identify potentially significant effects, and any feasible means of avoiding or reducing the effects through project redesign, the imposition of mitigation measures, or implementation of alternatives to the project.

Comments on the proposed EIR scope of analysis are invited from public agencies, community interest groups, and individual members of the public. We request the views of public agencies as to the scope and content of environmental information germane to agency statutory responsibilities for the project. Some agencies may need to use the EIR prepared by our agency when considering approvals for the project. Please provide the name of an agency contact persons, if applicable.

EIR Scope of Analysis: The proposed EIR scope of analysis would include evaluation of project environmental effects associated with visual aesthetics impacts. An Initial Study, describing potentially significant visual aesthetic impacts as well as less than significant impacts in other issue areas, is available for review at the City Planning Division located at 630 Garden Street, or online at www.SantaBarbaraCA.gov.

Comments: Written comments on the EIR scope of analysis identified in the Initial Study should be sent at the earliest possible date, but **received not later than, October 3, 2005, at 4:30 p.m.** Please send your written comments to the attention of Renee Brooke, AICP, Project Planner, at the above address.

Public Hearing: An environmental scoping hearing to receive public comments on the proposed EIR scope of analysis will be held before the Planning Commission on **Thursday, September 22, 2005**. The Commission meeting begins at 1:00 p.m. in City Council Chambers, Santa Barbara City Hall, De La Guerra Plaza, 735 Anacapa Street, and this meeting will have several items, including this hearing. An agenda with the order of items to be heard and staff report with an Initial Study for this hearing will be available on Friday, September 16, 2005, from the Planning Division or online at www.SantaBarbaraCa.gov . Under *Quick Selections*, scroll to the heading *City Hall* and click on *Planning Commission*. Please note that online staff reports do not include some exhibits. In accordance with American Disabilities Act requirements, if you need assistance to attend the hearing, please contact the Planning Commission Secretary at 564-5470 several days in advance of the meeting to make arrangements.

Signature: Renee Brooke
Renee Brooke, Project Planner

Telephone: (805) 564-5470

City of Santa Barbara
Planning Division

PLANNING COMMISSION MINUTES

September 22, 2005

CALL TO ORDER:
Vice-Chair John Jostes called the meeting to order at 1:04 p.m.

ROLL CALL:
Present:
Vice-Chair John Jostes
Commissioners, Charmaine Jacobs, Stella Larson, Bill Mahan, George C. Myers and Harwood A. White, Jr.

Absent:
Chair Jonathan Maguire

STAFF PRESENT:
Jan Hubbell, Senior Planner
Renee Brooke, Project Planner
Victoria Greene, Project Planner
N. Scott Vincent, Assistant City Attorney
Deborah J. Bush, Acting Planning Commission Secretary

ENVIRONMENTAL HEARING:

APPROXIMATE TIME: 1:07 P.M.

APPLICATION OF BRENT DANIELS, AGENT FOR HERBERT BARTHELS, TRUSTEE, OWNER, 1837 ½ EL CAMINO DE LA LUZ, 045-100-065 E-3/ONE-FAMILY RESIDENCE AND SD-3/COASTAL OVERLAY, GENERAL PLAN DESIGNATION RESIDENTIAL, 5 UNITS PER ACRE, MST2002-00214

Project Description: The project consists of the construction of a 1,499 square foot, 2-story single family residence with an attached 443 square foot garage, on a 23,885 square foot vacant bluff-top lot. Access to the site would be provided by private easements extending south from the terminus of the paved public road (El Camino de la Luz).

The **City of Santa Barbara** will be the Lead Agency and will prepare an environmental impact report (EIR) to evaluate impacts of the proposed 1837 ½ El Camino de la Luz Residence. The purpose of an EIR is to provide decision-makers and the public with information that enables them to consider the environmental consequences of the proposed project. The EIR would identify potentially significant effects, and any feasible means of avoiding or reducing the effects through

project redesign, the imposition of mitigation measures, or implementation of alternatives to the project.

Comments on the proposed EIR scope of analysis are invited from public agencies, community interest groups, and individual members of the public. We request the views of public agencies as to the scope and content of environmental information germane to agency statutory responsibilities for the project. Some agencies may need to use the EIR prepared by our agency when considering approvals for the project. Please provide the name of an agency contact persons, if applicable.

EIR Scope of Analysis: The proposed EIR scope of analysis would include evaluation of project environmental effects associated with visual aesthetics impacts. An Initial Study, describing potentially significant visual aesthetic impacts as well as less than significant impacts in other issue areas, is available for review at the City Planning Division located at 630 Garden Street, or online at www.SantaBarbaraCA.gov.

Comments: Written comments on the EIR scope of analysis identified in the Initial Study should be sent at the earliest possible date, but **received not later than, October 3, 2005, at 4:30 p.m.** Please send your written comments to the attention of Renee Brooke, AICP, Project Planner, at the above address.

Renee Brooke, Project Planner, provided an overview of the project and stated the purpose of the hearing.

Brent Daniels, Agent for Herbert Barthels, commented briefly on the project and thanked Staff for their continued efforts.

Public comment opened at 1:21p.m.

Commissioner questions:

1. Asked if views from the Coast Guard property should be included in the analysis.
2. When impacts cannot be mitigated, how can the Commission balance issues?

Public comment opened at 1:21p.m.

The following people commented on the scope of the EIR:

Stan Krome, stated that the project since the onset has been plagued by problems. Mr. Krome believes the lot is an illegal lot and would like the Commissioners to view the site.

JoAnna Morgan stated that she concurs with Mr. Krome. Ms. Morgan is concerned that only the issue of view is being considered in the EIR.

Public comment closed at 1:25p.m.

During the discussion, the Commissioners either individually or collectively with regards to the scope of the EIR:

1. Asked how the framing of alternatives would be addressed in the EIR.
2. Asked, if EIR focuses on view corridor, how does the EIR consultant determine what is being taken away and what will remain?
3. Asked when a public view would be considered permanently impacted
4. Stated that the geological review is defensible and is comfortable with the analysis of that issue in the Initial Study.
5. Suggested that the project architect prepare massing studies, starting with the smallest, legally allowable residence on the property.
6. Stated that oftentimes with EIRs, alternatives considered are not feasible. Would like to see the architect and owner propose feasible alternatives which would reduce the visibility of the home. Would like to see how the various scenarios will impact the view corridor, so the EIR should focus more on pictures than words. Suggested that a representative from the Parks and Recreation Department be consulted to help develop potential mitigation measures at La Mesa Park.
7. Stated that it would be helpful to develop feasible alternatives, conduct an analysis of the alternatives.
8. Stated the focus of the EIR should not be narrowed so much that the utility of the document is lost. Alternatives need to include an analysis of impacts to other issue areas.
9. Stated an alternative-based EIR should be considered, where a discussion of alternatives makes up the bulk of the document.

Ms. Hubbell stated that if an impact cannot be mitigated, the Commission must decide if the project results in a public benefit that outweighs the unmitigable impact.

State of California - The Resources Agency
ARNOLD SCHWARZENEGGER, *Governor*

DEPARTMENT OF FISH AND GAME
http://www.dfg.ca.gov
4949 Viewridge Avenue
San Diego, CA 92123
(858) 467-4201

April 27, 2005

Renee Brooke
City of Santa Barbara
P.O. Box 1990
Santa Barbara, CA 93101

Draft Mitigated Negative Declaration for the 1837.5 El Camino de la Luz Project SCH #2005041031, Santa Barbara County

Dear Ms. Brooke,

The Department of Fish and Game (Department), has reviewed the above Draft Mitigated Negative Declaration (DMND) for impacts to biological resources. The project applicant proposes construction of a 1,499 ft.^{2} residence with attached 443 ft.^{2} garage on a ½ acre bluff-top lot overlooking the Pacific Ocean. The proposed project site is located at 1837 ½ El Camino de la Luz in the West Mesa neighborhood in the City of Santa Barbara. The proposed building site is composed vegetatively of non-native grasses and forbs growing on a substrate consisting primarily of asphalt and is of little wildlife value. Lighthouse Creek borders the proposed project site on the east. A proposed site drainage system would include installation of drain pipes and a rip-rapped dissipater in the creek bed. Measures proposed to mitigate potential impacts to Lighthouse Creek include habitat restoration of the creek's west slope and development of an erosion control/water quality plan.

The following statement has been prepared pursuant to the Department's authority as Trustee Agency with jurisdiction over natural resources affected by the project (CEQA Guidelines §15386(a)) and pursuant to our authority as a Responsible Agency (CEQA Guidelines §15381) over those aspects of the proposed project that come under the purview of the Fish and Game Code Section 1600 et seq.:

Streambed Alteration

The construction of the residence and installation of the proposed drainage system into Lighthouse Creek will require issuance of a Streambed Alteration Agreement under Section 1600 et seq., prior to commencing work. You may call our San Diego office at (858) 636-3160 to initiate the 1600 process. You may also obtain an application package online by visiting the Department's website at http://www.dfg.ca.gov/1600/notification_pkg.html. The Department emphasizes that in order to protect sensitive resources, substantial revisions to the proposed project may be required in the SAA.

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MAY 0 3 2005
CITY OF SANTA BARBARA
PLANNING DIVISION

Thank you for this opportunity to provide comment. Questions regarding this letter and further coordination on these issues should be directed to Mr. Martin Potter, Wildlife Biologist, at (805) 640-3677.

Sincerely,

Ms. Morgan Wehtje
Environmental Scientist IV

cc: Mr. Martin Potter
Department of Fish and Game
Ojai, California

Ms. Natasha Lohmus
Department of Fish and Game
Santa Barbara, California

Mr. Scott Morgan
State Clearinghouse
Sacramento, California

RAFAEL & LINDA FRANCO
1835 El Camino de la Luz
Santa Barbara, CA 93109

RECEIVED
APR 13 2005
CITY OF SANTA BARBARA
PLANNING DIVISION

April 11, 2005

Santa Barbara Planning Commission
630 Garden Street
Santa Barbara, CA 93101

Re: Draft Mitigated Negative Declaration –ENV2002-00214

Honorable Commissioners:

This letter is written in response to the subject Draft MND.

First of all, we would like to thank the SB Planning Department for a superior study, better than anything prepared for this project since it was first submitted on Jan 23, 1989. This project has had a long history of incomplete submittals, inadequate review, and wasted inconclusive hearings. It's nice to finally get to the issues.

Undermining all of these efforts, however, is the fundamental flaw, if not fraud, in the original title and subdivision of this parcel. The SB City Council approved the subdivision on May 29, 1958 under the premise that the property owner held title to legal access to the proposed subdivided parcel. This has been contested, litigated, and found title to be deficient. The history and evidence of this issue has been submitted to the Planning Department numerous times, copies of which are submitted herewith.

On November 17, 1995, after litigation against his title insurance company, the applicant executed a quitclaim deed of this access easement. This evidence prompted the SB City Attorney to write a letter to James Lindsey, attorney for the applicant, stating that

> **"it is our conclusion that the required legal access to the parcel is not clearly and definitively established from a legal standpoint. As a result, the City cannot process an application for the development of the parcel with a single family home until you and Dr. Barthels demonstrate that the 15 foot wide easement access originally represented to the City Council as the necessary vehicular access to the parcel does in fact exist and can legally be utilized in perpetuity."**

We are not aware that this proof has ever been produced by the applicant, and therefor we ask one more time, **WHY ARE YOU PROCESSING THIS APPLICATION?** It appears to us, and all of our neighbors that we are putting the cart before the horse.

Nonetheless, we have reviewed the Draft MND and offer the following comments:

AESTHETICS

1. The significant degradation of the public scenic vistas is noted as a significant impact, mitigable. The noted mitigation is to move the house to the west and sink it into the bank so it is not visible from La Mesa Park. The plans submitted do not indicate this suggestion. More significantly, if the house were moved further to the west, it would be in contradiction to the geologic recommendations of all of the geotechnical consultants for the applicant and the reviewer for the City. This area of the site is underlaid by an 8 to 13 feet of alluvium not suited for foundations. Thus the proposed mitigation would exacerbate the geotechnical impact.

2. Page 5 states that the "proposed development is generally compatible with existing single family residential development in the immediate area". We would like to note a subtle but very important planning detail that has been overlooked. The houses along the bluff were all sited with 8 foot receding offsets from each other so as to preserve the views of all of the neighbors as well as blending into the hillside. The location of the proposed house would be contrary to this established pattern and would stick out like a sore thumb.

BIOLOGICAL RESOURCES

1. The report provided by the Planning Department, attached to the Draft MND, had a number of pages missing. It is therefor difficult to comprehensively comment on its adequacy.

2. The consultant states that the site was visited on Sep 14, 2001, and that "the entire site was walked on foot". We note however that no mention is made of the fresh water pools at the bottom of the creek, the numerous frogs, and other fauna living in this area. No investigation was made for possible red legged frogs in this area, a reasonable objective considering their presence in the Arroyo Burro area.

3. No mention is made of the red fox dens that exist across the creek from the property. While red foxes may not be a protected species, we note this to question the adequacy of the report. Red foxes have lived there for years.

GEOPHYSICAL CONDITIONS

Before we comment on specific issues, we would note that the Peer Review of the numerous geotechnical studies was comprehensive, and conclusive, and in fact, the consultant went beyond the normal scope of reviewers in analysing the eastern and southern slopes. This was done by the reviewer because it was omitted in all of the 17 previous report and update letters. There are numerous differences of opinions and contradictions in these reports; the reviewer did a good job in sorting through these to reach his own conclusions.

1. On page 8 of the report, the reviewer notes, "there is still an unfulfilled need for a better evaluation of the stability of the slopes at the parcel".

2. The report and previous reports note the evidence of previous slide in the SE corner of the site. The report concludes that "no residential construction should be considered for the SE corner of the subject parcel because of the likelihood that it is a landslide block of minimal strength"

3. We disagree with the definition of the "bluff edge" to determine the required 75 year setback. The reviewer even comments that the California Coastal Commission's definition of "bluff edge" is "somewhat arbitrary". Looking at the topographic profiles in Figure 3, we would disagree with the definition and location of the "bluff edge" and suggest that the Commission actually visit and walk this bluff and make it's own determination.

4. While the underlying bedrock may be stable, the main problem that we have encountered over the past 23 years of living adjacent top the property is a number of surficial slides of alluvium such as underlies the flat portion of the parcel.

5. The applicant's topographic map is incorrect. A more accurate topo map is included in Fig. 1 of the report. We note this because drainage swales indicated on applicant's site plan would be impractical with the steepness of the actual slope.

6. The mitigation measures state that excavation will be balanced on site. How and where would this be done? This is an unreasonable and impossible mitigation measure considering the size and configuration of the parcel.

7. The applicant is proposing to divert all water flow to the creek below. Considering that this includes flow from large paved areas, motor oils, etc., this may have an adverse impact on the fauna living in the creek pools below. We suggest that a clarifier tank be installed and outflow diverted directly to the ocean.

RECREATION

1. The visual effects on La Mesa Park would be significant. We point out the numerous passive activities at this park including weekly Tai Chi classes, and areas for meditation and quiet enjoyment of some of the best framed vistas of the Channel Islands. We invite you to view "The People's Parks, the Greening of Santa Barbara", a videotape produced by the City's Parks Dept., in which, this specific spot is highlighted. The proposed project would irreverseably destroy these vistas.

BEACH ACCESS

1. This issue is totally omitted from the environmental analysis. **This perhaps the most controversial environmental issue in California and it is missing from the Draft**

MND. Coastal access was the foundation of CEQA. This parcel is the sole access point in this area of the Mesa, and something we have been using for 23 years. This issue must be considered in the environmental analysis of the project.

In conclusion, we repeat our objection to the processing of this application in contradiction to the Santa Barbara City Attorney's position of June 4, 1997 stating that "the City cannot process an application" until the applicant demonstrates that he has legal access to the property. In 16 years, the applicant has never spoken to the neighbors nor made any attempt to secure an easement; in fact he has done the opposite, he has signed a Quitclaim Deed for a portion of the required easement. In view of these facts, we believe that, although the City may legally be required to continue playing this game, it is a waste of everybody's time and money, and in fact, the process could be construed as the City leading the applicant down a very expensive path to denial, to which he can claim hardship at a later date.

Thank you for your consideration.

Rafael Franco

Linda L. Franco

Enclosures

Project Chronology and Chain of Title
Quitclaim Deed Nov. 17, 1995
City Attorney's letter of June 4, 1997
Conditional Certificate of Compliance, Dec 8, 1999
Letter to the Mayor and City Council, June 7, 2002
Letter to the Architectural Board of Review and Site Line Study, June 7, 2002
Letter to Dr Herbert Barthels re. Proof of Access Easement and Trespass, Sep 10,2001
Letter to the Planning Commission, April 1, 1996
Daily Appellate Report for Tuesday, Sep 27, 1994, Barthels v. Santa Barbara Title
Letter to the Planning Commission, Mar 18, 1996
Letter to Margaret Heinrich, Planning Department, Mar 22, 1989

PROJECT CHRONOLOGY 1837.5 El Camino de la Luz

CHAIN OF TITLE

1948 1st National Bank to Kienzle Bk 826 pg 433
1949 Kienzle to Eaton Bk 883 pg 328
1962 Fred Eaton to Gertrude Eaton Bk 1941 pg 1400
1963 Eaton to Brewer #15214
1967 Brewer to Jenkins Bk 2184 pg 923
1976 Jenkins to Barthels Bk 2636 pg 1197

Dec. 1947 Blanco E. Fryer Tract is created. This shows three parcels encompassing the east end of El Camino de la Luz Bk 28 pg 124

Oct. 1948 Blanco Fryer Tract is further subdivided creating eight new parcels, and 15 ft. access easement . Bk. 29 pg 25

May 29, 1958 City Council approves request for lot subdivision. Requires recordation of such within 12 months.

Dec. 2, 1958 Eaton records a lot split creating 1837.5 El Camino de la Luz Bk 43 pg 84. She expands burden on the 15 ft. access easement without consent of other property owners.

April 1963 Eaton grants to Brewer an access easement 15 ft. x 350.95 ft. without consent of other property owners. She had a 15 ft x 205.18 ft. easement to her property. #15214. Across 1937 El Camino de la Luz she limits the easement to 10 ft due to location of the existing house.

1976 Barthels buys the property for $24,500.

Sep. 26, 1988 Barthels was authorized by SB Planning Dept to file an application

Jan 23, 1989 Barthels files a master application for a 2,500 sq. ft. home.

Mar 22, 1989 Affected property owners send letter to the SB Planning Department outlining 10 different issues to be considered in reviewing this project.

April 1989 Jerald Haws, attorney for Joanna Morgan advises Santa Barbara Title Company that Gertrude Eaton did not have any interest in Parcel 46 and the Deed to Barthels is spurious.

Santa Barbara Title Company agreed the title was spurious and issued a check to Barthels for $42,875 representing the purchase price as increased by the title insurance policy inflation endorsement.

Barthels sued Santa Barbara Title for $800,000 plus $280,000 for his time, and attorney's fees. Santa Barbara Superior Court Judge Patrick L. McMahon awarded the $42,875 for the

property, $21,524.40 for his out of pocket expenses, and $10,000 for his time @ $66.66 per hour. At trial, Barthels testified that there was no easement and therefore his property was worthless.

In 1994 Barthels appeals to the Second Appellate District. The appeals court affirms the decision of the lower court. See Daily Appellate Report Tuesday, September 27, 1994.

On 30 Nov. 1995 a quitclaim deed is recorded whereby Barthels quitclaims any interest in Joanna Morgan's property, including her half, 7.5 ft. of the 15 ft. access easement.

On April 1996 Franco writes a letter to the Planning Commission questioning the 15 ft. access easement to the Barthels parcel.

Jun 4, 1997 City Attorney writes letter to James Lindsey, attorney for Barthels, informing him that "it is the City's conclusion that the required legal access to the parcel is not clearly and definitively established from a legal standpoint. As a result, the City cannot process an application for the development of that parcel with a single family home until you and Dr. Barthels demonstrate that the 15 ft. wide easement access originally represented to the City Council as the necessary vehicular access to the parcel does in fact exist and can legally be utilized in perpetuity."

Dec 8, 1999 SB City Engineer issues a Conditional Certificate of Compliance for the lot conditioned with the following specific condition: "Provide evidence, satisfactory to the City Engineer that the owner pf the parcel described herein substantially possesses the required amount of legal access that formed the basis of the originally approved lot split." No notice of this action is sent to neighbors.

September 10, 2001 the Francos, Wrights and Sloans sent a letter via certified mail to Barthels requesting proof of easement or right to access, demanding that Barthels stop trespassing across their properties.

June 2002 Barthels submits revised plans for a smaller residence to ABR.

Jun 7, 2002 Franco writes a letter to the ABR and City Council questioning the process, lack of an Initial Study and CEQA review.

Nov. 7, 2003 Affected property owners submit comments on the proposed project and the history of the parcel, including a copy of the Daily Appellate Report for Sep 27, 1994.

Nov. 2003 ABR reviews the project, makes comments about size and sizing, and refers the project to the Planning Commission to review the environmental issues.

95-066679

Recorded
Official Records
County of
Santa Barbara
Kenneth A Pettit
Recorder
3:26pm 30-Nov-95

Rec Fee	14.00
AU2	2.00
CR Crd	16.00

CARD MM 4

RECORDING REQUESTED BY

HAWS, RECORD, WILLIFORD & MAGNUSSON

AND WHEN RECORDED MAIL THIS DEED ~~XXXXXXXXXXX~~
~~XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX~~ TO

NAME David W. Magnusson
HAWS, RECORD, WILLIFORD & MAGNUSSON

STREET ADDRESS 201 E. Figueroa St.

CITY, STATE & ZIP CODE Santa Barbara, CA 93101

CUMENTARY TRANSFER TAX $ 0
COMPUTED ON FULL VALUE OF PROPERTY CONVEYED, OR
COMPUTED ON FULL VALUE LESS LIENS & ENCUMBRANCES
REMAINING THEREON AT TIME OF SALE.
David Magnusson
nature of declarant or agent determining tax - firm name

QUITCLAIM DEED

For a valuable consideration, receipt of which is hereby acknowledged, Herbert E. Barthels, as the present owner of that certain real property described in that certain document recorded as Document No. 52624 in Book 2636, Page 1197 of Official Records in the County Recorder Office of Santa Barbara County, California, does hereby remise, release and forever quitclaim to JOANNA K. MORGAN, any and all prescriptive easement rights which HERBERT E. BARTHELS heretofore or presently may claim in and to any portion of that certain real property owned by Joanna K. Morgan and particularly described as set forth in Exhibit A attached hereto and made a part thereof.

DATED: November 17, 1995.

Herbert E. Barthels
HERBERT E. BARTHELS

STATE OF CALIFORNIA)
COUNTY OF SANTA BARBARA)

On this 17th day of November, in the year of 1995 before me, the undersigned, a Notary Public in and for said State, personally appeared Herbert E. Barthels, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed it. WITNESS my hand and official seal.

[signature]
Notary Public in and for Said State

EXHIBIT A
Legal Description
(APN 45-100-46)

PARCEL ONE: That portion of the Outside Pueblo Lands of the City of Santa Barbara, in the City of Santa Barbara, County of Santa Barbara, State of California, described as follows:

Beginning at a 3/4" survey pipe set at the northwesterly corner of Parcel One of the tract of land described in the deed to Sara Wardell, an unmarried woman, recorded February 24, 1953, as Instrument No. 2814, in Book 1131, Page 295, of Official Records; thence along the northerly line of said Wardell Tract south 84° 44' east 59.76 feet to the northeast corner thereof; thence along the easterly line of said Wardell tract south 5° 16' west 107.85 feet to a 1/2" survey pipe; thence north 84° 44' west 59.76 feet to a 1/2" survey pipe set on the westerly line of said Wardell tract; thence north 5° 16' east and along the westerly line of said Wardell Tract, 107.85 feet to the point of beginning.

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

No. 5907

State of CALIFORNIA

County of SANTA BARBARA

On November 17, 1995 (DATE) before me, Sybil J. Daly Notary Public (NAME, TITLE OF OFFICER - E.G., "JANE DOE, NOTARY PUBLIC"),

personally appeared HERBERT E. BARTHELS (NAME(S) OF SIGNER(S)),

☐ personally known to me - OR - ☑ proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

SYBIL JULIA DALY
Commission # 1 [illegible]
Notary Public - California
Santa Barbara County
My Comm. Expires Jan 22, 1996

WITNESS my hand and official seal.

Sybil J. Daly
SIGNATURE OF NOTARY

OPTIONAL

Though the data below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent reattachment of this form.

CAPACITY CLAIMED BY SIGNER

☐ INDIVIDUAL
☐ CORPORATE OFFICER
_____ TITLE(S)
☐ PARTNER(S) ☐ LIMITED ☐ GENERAL
☐ ATTORNEY-IN-FACT
☐ TRUSTEE(S)
☐ GUARDIAN/CONSERVATOR
☐ OTHER: _____

SIGNER IS REPRESENTING:
NAME OF PERSON(S) OR ENTITY(IES)
_____

DESCRIPTION OF ATTACHED DOCUMENT

_____ TITLE OR TYPE OF DOCUMENT
_____ NUMBER OF PAGES
_____ DATE OF DOCUMENT
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ILLEGIBLE NOTARY SEAL DECLARATION

GOVERNMENT CODE 27361.7

I certify under penalty of perjury that the Notary Seal on the document to which this statement is attached reads as follows:

NAME OF NOTARY SYBIL JULIA DALY

DATE COMMISSION EXPIRES July 22, 1996

COUNTY OF COMMISSION SANTA BARBARA

PLACE OF EXECUTION OF THIS DECLARATION SANTA BARBARA, CA

TODAY'S DATE 11-22-95

David Mosk

Hahs, Record, Williford & Magnusson

Signature (Firm name, if any)

SYBIL JULIA DALY
Comm. # 969336
NOTARY PUBLIC - CALIFORNIA
Santa Barbara County
My Comm. Expires Jul 22, 1996

PWR1 PWR1

CITY OF SANTA BARBARA

OFFICE OF THE CITY ATTORNEY
DANIEL J. WALLACE,
CITY ATTORNEY

740 STATE STREET, SUITE 201
POST OFFICE BOX 1990
SANTA BARBARA, CA 93102-1990

TELEPHONE.....(805) 564-5326
FAX.....(805) 897-2532

June 4, 1997

RECEIVED

JUN 05 1997

CITY OF SANTA BARBARA
PLANNING DIVISION

James T. Lindsey
Attorney at Law
Granada Building, Suite 402
1216 State Street
Santa Barbara, California 93101-2613

Re: 1837½ El Camino De La Luz (APN 45-100-65)

Dear Mr. Lindsey:

This letter is in response to the packages of materials you submitted to the City during our meeting of May 12, 1997 with your client, Dr. Herbert Barthels, and City Associate Planner, Susie Reardon, concerning the above-referenced parcel and Dr. Barthels's desire to file a development application for the parcel.

After reviewing all the materials submitted as well as all the materials contained within City records, including particularly the minutes of the May 1958 City Council approval of the lot split which created the parcel at 1837 1/2 Camino De La Luz, it is our conclusion that the required legal access to the parcel is not clearly and definitively established from a legal standpoint. As a result, the City cannot process an application for the development of that parcel with a single family home until you and Dr. Barthels demonstrate that the 15 foot wide easement access originally represented to the City Council as the necessary vehicular access to the parcel does in fact exist and can legally be utilized in perpetuity.

During our meeting, I understood you to represent that the agreement between Dr. Barthels and Joanna Morgan dated November 17, 1995 provided that Morgan acknowledged Barthels's right to use the westerly 7½ feet of the 15 foot wide easement which affects the Morgan property. However, in my review of the 1995 agreement, it appears to have very little to do with the 15 foot wide access easement and is mostly about the pedestrian trail beach access easement over the Barthels property which was otherwise in dispute between Morgan and Barthels. As a result, it still appears to us that the status of the 15 foot wide easement is unchanged from the stipulation filed in Morgan v. Barthels, et al. (Santa Barbara Superior Court Case No. 186256) wherein Dr. Barthels stipulated that he would "not now and will at no time in the future claim an easement over or across THE WESTERLY 7 1/2 FEET," which stipulation was signed by the parties to the litigation and executed by Judge Stevens as an order. In fact, we presume that

it was this stipulation/order which brought about Dr. Barthels prevailing in his Superior Court Case No. 182179 wherein he recovered damages from Santa Barbara Title.

Consequently, the question remains whether this parcel has the required legal access and the access which formed the basis of the City approving the original lot split in 1958. Based on my review of the "History" dated November 26, 1996 which you submitted, I am assuming that Dr. Barthels is now claiming either a prescriptive right to the 15 foot wide easement or that he has access rights by legal "necessity." While this may be the case, the City cannot assume it to be the case in the absence of any sort of final legal determination to that effect. This is particularly true where, as here, the record clearly indicates that the existence of the 15 foot easement vis-a-vis the Morgan property has been extensively litigated and, on its face, a claim of prescriptive right would otherwise seem to be barred by the legal doctrine of res judicata.

In conclusion, the City does not believe it is appropriate to process an application to develop a parcel where the parcel does not appear to satisfy a fundamental condition of its original creation, the existence of the 15 foot wide access easement for the full length necessary for vehicular access from the public street to the parcel.

Please do not hesitate to contact me should you or your client have further questions or need further assistance in this matter.

Very truly yours,

Stephen P. Wiley
Assistant City Attorney

cc: Don Olson, Asst. Community Development Director
Susie Reardon, Associate Planner

SWiley\Cor\Lindsey.ltr

RECORDING REQUESTED BY AND WHEN RECORDED, PLEASE RETURN TO:

City Engineer
City of Santa Barbara
P.O. Box 1990
Santa Barbara, CA 93102-1990

APN 045-100-065

Recorders Office
County Of
SANTA BARBARA
KENNETH A. PETTIT
Recorder
LARRY G. HERRERA
Assistant

1999-0095608
REC FEE 13.00

TOTAL 13.00

GOVT CHARGE 13.00-
TOTAL TENDERED 13.00-
CHANGE .00

03:37PM 08-Dec-1999 19991208000359
FNM C5143

CONDITIONAL
CERTIFICATE OF COMPLIANCE

Pursuant to California Government Code Section 66499.35, in response to written application and request by the owner of the real property described herein, or in response to request by a vendee of the owner of the real property pursuant to a written contract of sale, this Conditional Certificate of Compliance is issued by the City Engineer of the City of Santa Barbara, and recorded in the Official Records, in the Office of the County Recorder, County of Santa Barbara, State of California.

This Conditional Certificate of Compliance is issued for that certain real property in the City of Santa Barbara, County of Santa Barbara, State of California, being more particularly described as follows:

THAT PORTION OF THE OUTSIDE PUEBLO LANDS OF THE CITY OF SANTA BARBARA ON THE MESA, SO-CALLED, IN THE CITY OF SANTA BARBARA, COUNTY OF SANTA BARBARA, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

BEGINNING AT A 1/2 INCH IRON SURVEY PIPE SET ON THE NORTHERLY LINE OF EL CAMINO DE LA LUZ AT THE EXTREME EASTERLY END THEREOF, AS SAID EL CAMINO DE LA LUZ IS SHOWN ON A MAP OF SURVEY OF THE BLANCO E. FRYER TRACT FILED IN BOOK 28 AT PAGE 124 OF RECORD OF SURVEYS; THENCE ALONG THE SOUTHERLY PROLONGATION OF THE EASTERLY LINE OF SAID EL CAMINO DE LA LUZ AS SHOWN ON SAID MAP, SOUTH 5°16' WEST 350.95 FEET TO THE TRUE POINT OF BEGINNING; THENCE SOUTH 5°16' WEST 170.72 FEET, TO THE LINE OF MEAN HIGH TIDE OF THE PACIFIC OCEAN; THENCE NORTH 87°31' EAST 172.46 FEET TO A POINT; THENCE NORTH 4°26' EAST 58.70 FEET TO A 1/2 INCH SURVEY PIPE; THENCE NORTH 22°07' WEST 37.85 FEET TO A 1/2 INCH SURVEY PIPE; THENCE

NORTH 54°01' WEST 63.20 FEET TO A 1/2 INCH SURVEY PIPE; THENCE NORTH 38°33' EAST 27.36 FEET TO A 1/2 INCH SURVEY PIPE; THENCE NORTH 87°44' WEST 113.35 FEET TO THE TRUE POINT OF BEGINNING.

EXCEPTING THEREFROM ANY PORTION OF SAID LAND, WHICH AT ANY TIME WAS TIDE LAND, WHICH WAS NOT FORMED BY THE DEPOSIT OF ALLUVION FROM NATURAL CAUSES AND BY IMPERCEPTIBLE DEGREES.

In order to provide compliance with California Government Code §66410 *et seq.*, the Subdivision Map Act, pertaining to the division of real property, and with local ordinances adopted pursuant to the Subdivision Map Act, development of the real property pursuant to this Conditional Certificate of Compliance shall be subject to complete compliance with the condition imposed herein.

Upon compliance with the condition of this certificate the real property described herein shall comprise one (1) legal parcel. This certificate relates only to issues of compliance or noncompliance with the Subdivision Map Act and local ordinances enacted pursuant thereto. Upon compliance the parcel described herein may be sold, leased, or financed without further compliance with the Subdivision Map Act or any local ordinance enacted thereto. Development of the parcel may require issuance of a permit or permits, or other grant or grants of approval.

The real property described herein is required to comply with the following specific condition:

> Provide evidence, satisfactory to the City Engineer that the owner of the parcel described herein substantially possesses the required amount of legal access that formed the basis of the originally approved lot split.

All permits of the City of Santa Barbara needed by the owner of the real property described herein for the development of improvements, including any development of improvements to implement the above condition, and permits and other grants of approval for the development of the real property in the future shall be subject to the condition listed above.

This Conditional Certificate of Compliance shall be recorded in the Official Records of the County of Santa Barbara to run with the land and to serve constructive notice to the property owner, and to any subsequent vendees, grantees, heirs, transferees or assignees of the real property, that the fulfillment and implementation of the condition set forth herein shall be required prior to any subsequent

issuance of City permits or other grants of approval for development of the real property.

Compliance with the foregoing condition by the owner of the real property described herein shall not be required until such time as a permit or other grant of approval for development of the real property is issued by the City of Santa Barbara.

REGISTERED PROFESSIONAL ENGINEER
R. PATRICK KELLY
No. 27,077
Exp. 3/31/01
CIVIL
STATE OF CALIFORNIA

[Seal]

CITY OF SANTA BARBARA

By: R. Patrick Kelly
R. Patrick Kelly, City Engineer

RCE No. 27077 Exp. 3/31/01

Assessed Owner: Herbert E. Barthels, Trustee
Herbert E. Barthels Trust dated December 9, 1985

Mailing Address: 1809 Cliff Drive, Suite C
Santa Barbara, CA 93109

ACKNOWLEDGMENT

STATE OF CALIFORNIA)
COUNTY OF SANTA BARBARA)

On DECEMBER 8, 1999, before me, DONALD G. IRELAN, NOTARY PUBLIC personally appeared R. PATRICK KELLY, personally known to me ~~(or proved to me on the basis of satisfactory evidence)~~ to be the person(~~s~~) whose name(~~s~~) is/~~are~~ subscribed to the within instrument, and acknowledged to me that he/~~she/they~~ executed the same in his/~~her/their~~ authorized capacity(~~ies~~), and that by his/~~her/their~~ signature(~~s~~) on the instrument the person(~~s~~), or the entity on behalf of which the person(~~s~~) acted, executed the instrument.

Witness my hand and official seal.

Signature Donald G. Irelan

DONALD G. IRELAN
Commission # 1181459
Notary Public - California
Santa Barbara County
My Comm. Expires Apr 27, 2002

[Seal]

Rafael Franco & Linda L. Franco
1835 El Camino de la Luz
Santa Barbara, CA 93109

TRANSMITTAL

Date: June 7, 2002

To: **Mayor and Santa Barbara City Council**
Santa Barbara City Hall
De La Guerra Plaza
Santa Barbara, CA93101

Re: **1837.5 El Camino de la Luz**

Attached please find a copy of our letter to the Architectural Board of Review regarding the subject property. As of this date, no one from the Planning Department has answered our question posed in our letter of April 6, 2002. Why is this project being considered for approval by the ABR without a complete application, environmental review, or Initial Study? It does appear as though the process is a bit backwards; let's approve the design and then argue environmental impacts.
Shouldn't we be looking to see if the conditions of approval stipulated in the 1958 lot split and "CONDITIONAL CERTIFICATE OF COMPLIANCE" have been met before we waste a lot of time and aggravation for the neighborhood? **This is not a legal lot until those conditions are met.** I would appreciate an answer in this matter.

Thank you for your assistance.

Sincerely,

Franco

Rafael Franco

Rafael Franco & Linda L. Franco
1835 El Camino de la Luz
Santa Barbara, CA 93109

June 7, 2002

Santa Barbara Architectural Board of Review
City Planning Division
P.O. Box 1990
Santa Barbara, CA 93102-1990

Re: **1837.5 El Camino de la Luz**

Dear Board Members:

You have previously received correspondence questioning why this project was being reviewed by the ABR when the proponent has yet to provide evidence of legal access to this parcel after 44 years of conditional approval of the lot split. I will not belabor this point, but as it seems that you are going to go through this exercise anyway, I wish to address issues that typically fall within you jurisdiction.

Since you are being asked to review and approve this project, I would first question the legality of the process. As of this date, I am not aware of the application for the project being deemed complete, nor any initial study performed as required by CEQA. I am not aware of any environmental review by the Planning Department on this project. There are numerous issues that need to be addressed and determinations made prior to any review and approval procedure. You are not a design review committee, you are the Architectural Review Board for the City of Santa Barbara, and your administrative review and approval is subject to CEQA.

Before you can review the architectural issues for this project, a determination must be made to establish where is the top of the bluff. We contend that the plans submitted erroneously locate the top of the bluff. If you refer to the enclosed photograph from 1972, the top of the bluff is clearly identified. This is critical because it is the basis for determining the required southerly setback for the project. The top of bluff line indicated on the proponent's plan is incorrect. The area indicated as the top of the bluff, where the brick planter is located, is actually artificial fill or a previous slide. To verify this, please walk down the path and look at the exposed rubble below the flat area where the planter is located. See the broken shale intermixed with the clay soil.

What is the required bluff setback, and what is the erosion rate? Enclosed please find an erosion analysis comparing the bluff in May 1995 and May 2001. As you can see, there was a massive slide in 1995 the year of El Nino. The photographs clearly indicate that there has been 30 to 40 feet of erosion of this bluff in just six years. Since 1985 we have had two additional surficial slides immediately below the site for the proposed residence. Without

establishing the top of the bluff, the erosion rate and the required bluff setbacks, any architectural review is moot.

CEQA also requires that the environmental review of visual impacts, including obstruction of views, Quail Botanical Gardens v. Encinitas (Cal. App. 4th Dist. 1994) 35 Cal Rptr. 2d. 470 ("Qail"). We have not seen any submittal by the applicant that addresses this issue. We are including an aerial photograph outlining the view corridor, and comparative photos of views from the park. It is not just the obstruction of views of neighbors; this project would have a significant impact on the views from the public park. Allowing this obstruction would be a tragic mistake.

The applicant has proposed driveway drainage directly into the creek. The plans identify this as a drainage course. Please be very clear, this is not a gutter, it is a natural creek, with significant fauna and life. Where is the environmental analysis? What are the NPDES requirements? What is the mitigation? The proposed drainage spills over to a proposed riprap. The location of this proposed structure is not even on their property, **it is on Federal Land!**

The site plan is incomplete. Not to beat a dead horse, but the architect failed to indicate how this house gets access to the street as required by Code, and the Conditional Certificate of Compliance issued in 1958. How can you approve a site plan if you don't have access to the site?

The site plan indicates an 18-inch pine tree to be preserved. Please note on your site visit that this tree has been dead for five years.

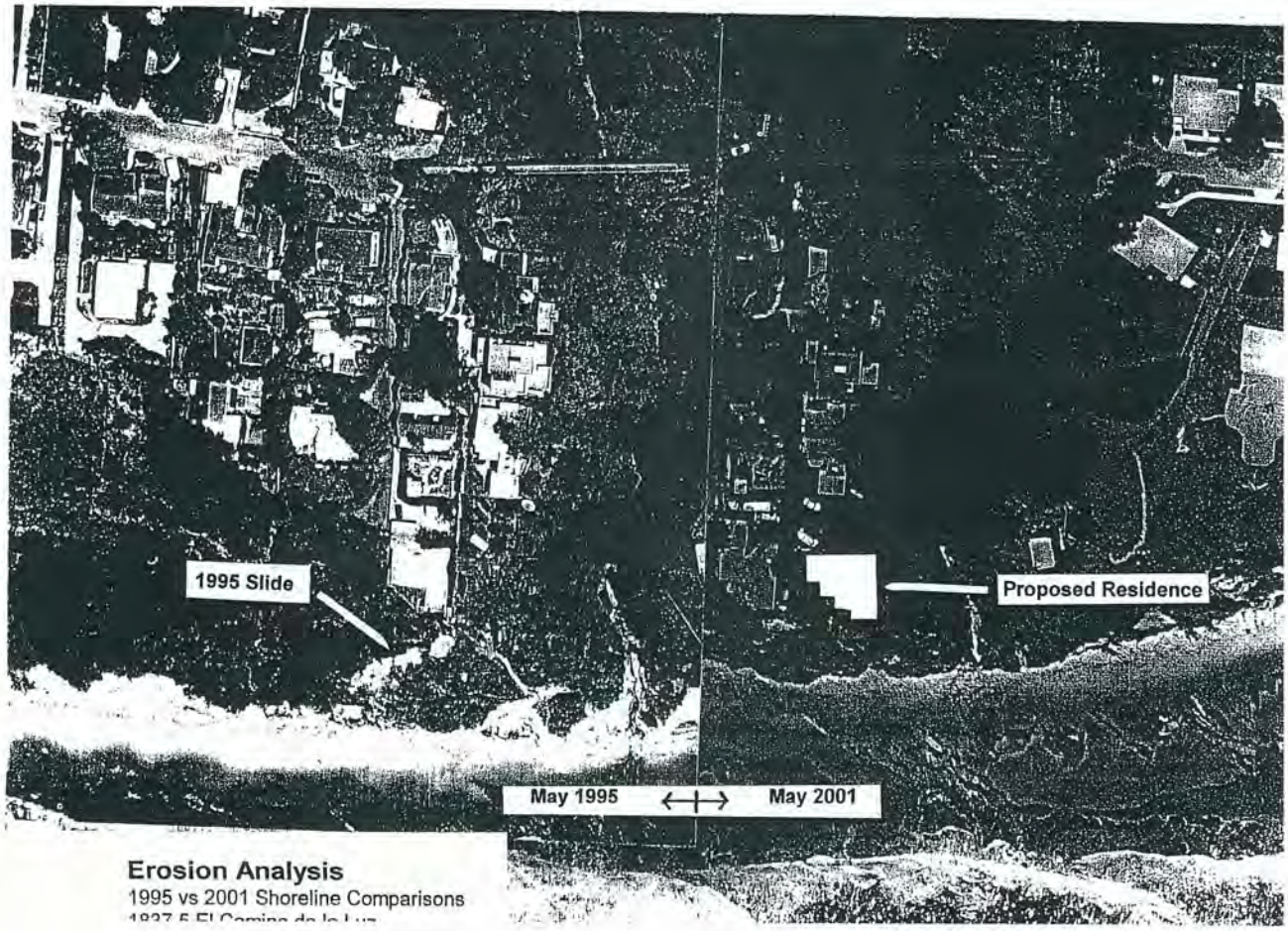
As I indicated in my previous correspondence, we are challenging the process because we believe that you cannot take any action until the environmental review process is complete as required by CEQA.

Thank you for your consideration.

Sincerely,

Rafael Franco

Linda L. Franco



Erosion Analysis

1995 vs 2001 Shoreline Comparisons

1837 & El Camino de la Luz

Appendix B

2009 Geological Trench Inspection Trench Report

WILLIAM ANIKOUCHINE, PH.D
CONSULTANT IN MARINE AND EARTH SCIENCES

25 August 2009

Mr. Daniel Gullett, Associate Planner
Santa Barbara City Community Development Department
630 Garden Street
Santa Barbara
CA 93102-1990

RE: Geological Inspection Trench at 1837½ Camino de la Luz

Dear Mr. Gullett,

A trench inspection was made for the purpose of determining if a reported "bedding plane fissure" is located on the proposed building site at the subject address. This investigation was required to determine if such a fissure affects the location and stability of the building site.

The need for this inspection resulted from my peer review of geologic documents related to the subject parcel. One of these documents, a geologic report by R.J. Smith reported a bedding plane fissure observed near the beach that he projected northward. On the basis of his findings Smith indicated that the area underlying the present paved area at the NW corner of the subject parcel should not be considered for the placement of a house. Conditions in the field were such that Smith's projection of his reported fissure could not be verified by direct visual inspection. Instead, I used the data presented on the geologic map prepared by Smith and calculated the position of the putative fissured bedding plane.

A later geologic study by CGF consultants presented a different geologic map of the subject parcel. I performed the same kind of analysis of the data on the CGF geologic map. A technique wherein the intersection between a dipping stratum and the surface topography can be determined was applied to each map by the writer to verify Dr. Smith's and CFG's results.

Disparate results were obtained from their maps. The cause of this is the location and accuracy of measurements of the attitude of the Monterey strata on the subject parcel made by Smith and by CGF. It is evident that the exact position of the fissure, if it indeed exists needed to be determined by visual inspection of a trench transecting the vicinity of the paved area.

1636 HILLCREST RD. SANTA BARBARA, CA. 93103 805·962·4234

It is important to resolve the issue of this putative fissure. Smith and others have declared that the fissure represents a plane of weakness along which a block slide could occur. They assert that the block slide would involve all the material west of the plane of the fissure. Although the block is buttressed on the west some sort of failure needs to be taken into account in locating the safe building envelope on the subject parcel. Further, if the putative failure plane exists on the subject building site it needs to be ascertained whether it represents a plane of weakness or not. If an inspection reveals that the putative fissure is not present it can be concluded that there is no block slide threat to a building from the fissure mapped by Smith and CGF. In such a case no further such investigations would be necessary.

The location of the inspection trench is indicated on Figure 1. The location was chosen to be in a position to either prove or disprove the existence of the putative fissure. The trench was dug in two segments 19 feet long and 3 feet wide. The trench was excavated to a depth of 8 feet as determined by the depth of the subcrop of the Monterey strata. The trench was excavated using an extendable-boom backhoe. The excavator is 7 ft wide with a bucket 1½ feet wide. Excavated soil was placed adjacent to the trench temporarily.

Inspection was performed by visual examination of the bottom of the trench. The trench was scraped clear of loose material so that the bedrock substrate was exposed. The wall of the trench was photographed and mapped by the writer. After the inspection the trench was backfilled with the original stored soil material which was moistened and compacted to approximately 95% relative compaction. The trench remained open less than a single day. It was revegetated with original, native vegetation at the east and south ends of the trench segments. Elsewhere the trench was repaved with macadam and the curbs reconstituted using concrete.

Three samples of the substrate were obtained during the inspection of the trench, but they were not all undisturbed samples. One sample needed to be reconstituted for shear testing, one was suitable for such analysis, but a third could not be reconstituted.

TRENCHING

The walls of the trench were observed and mapped by the writer. The results of this work are shown in Figures 2 and 3. The circled numbers refer to materials observed on the wall of the trench. The descriptions of the materials are as follows.

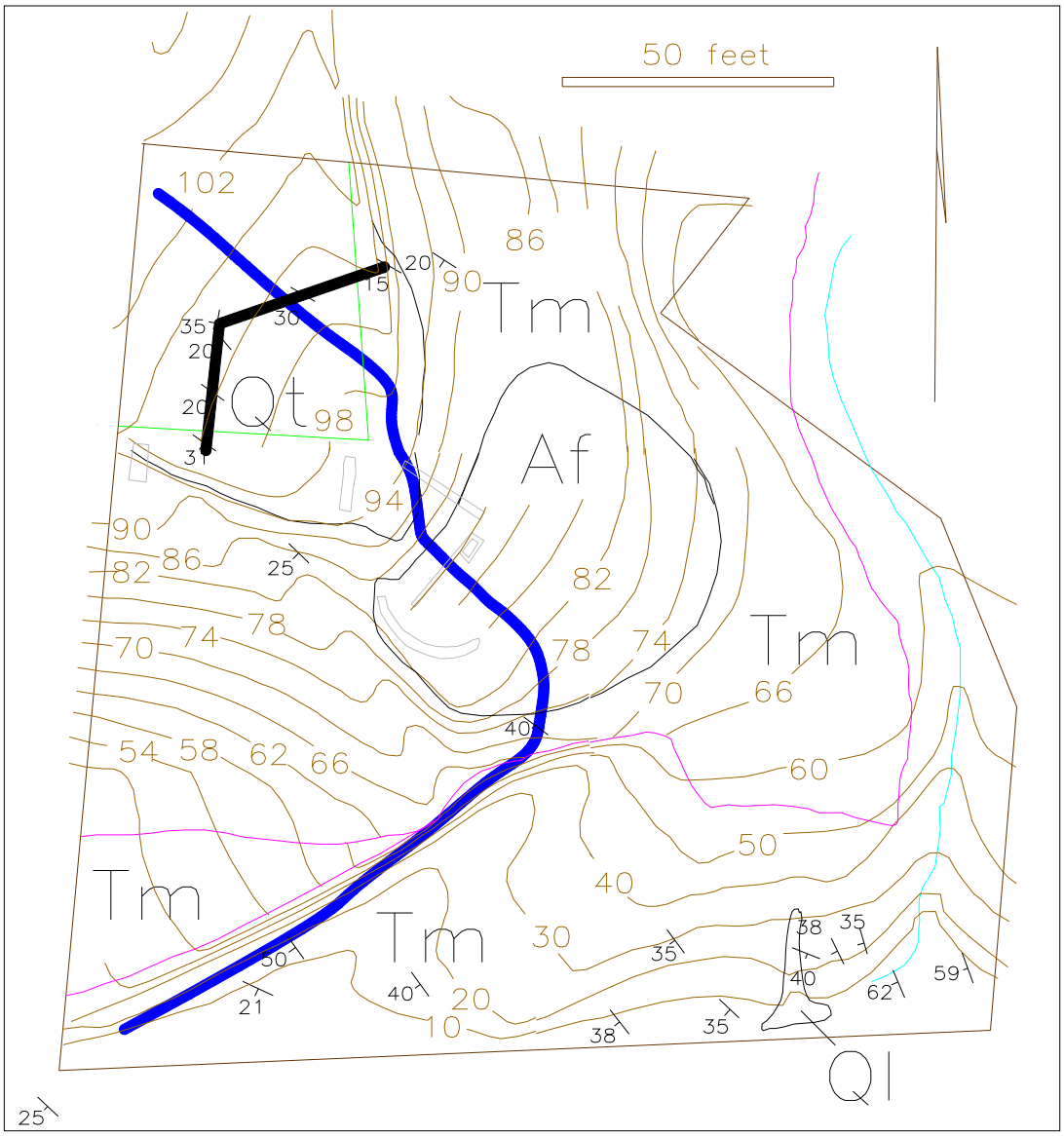


Figure 1. Map of the parcel at 1837½ Camino de la Luz. The position and orientation of the geologic exploratory trench is shown by the heavy black line. The trench is in two segments. The E-W segment is 45 feet long. The N-S segment is 31 ft long. Both segments are approximately 2½ feet wide by 8 feet deep. The heavy blue line marks the expected position of the subcrop of the subject bedding plane.

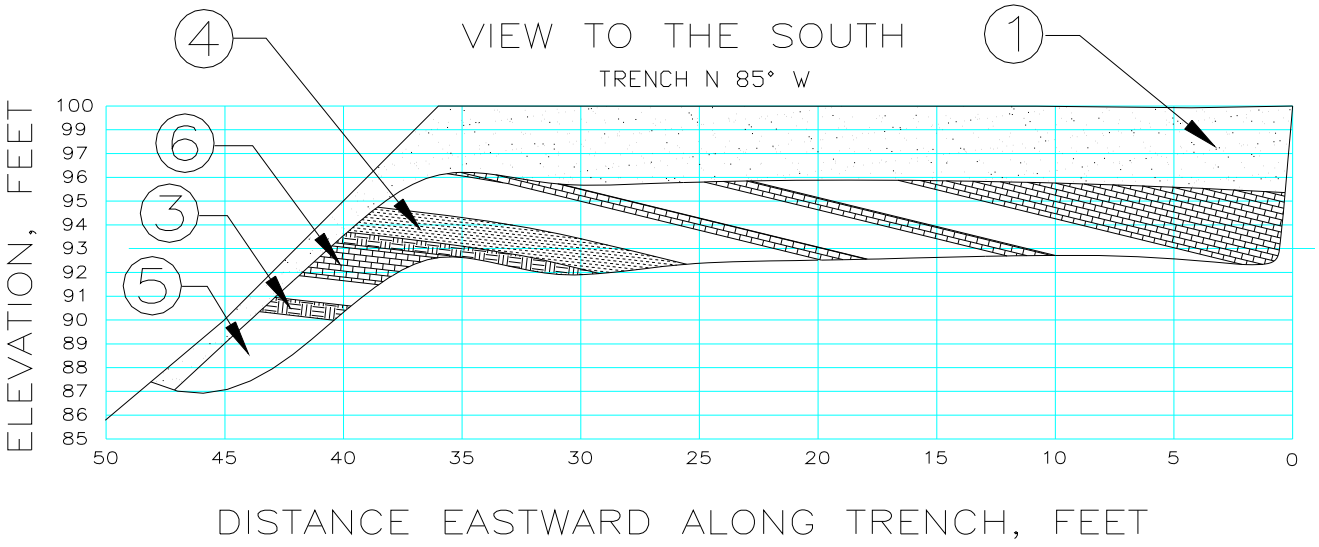


Figure 2. Map of the southern wall of the trench dug at 1837½ Camino de la Luz. The circled numbers and hatching symbols refer to the type of substrate materials which are described in the text.

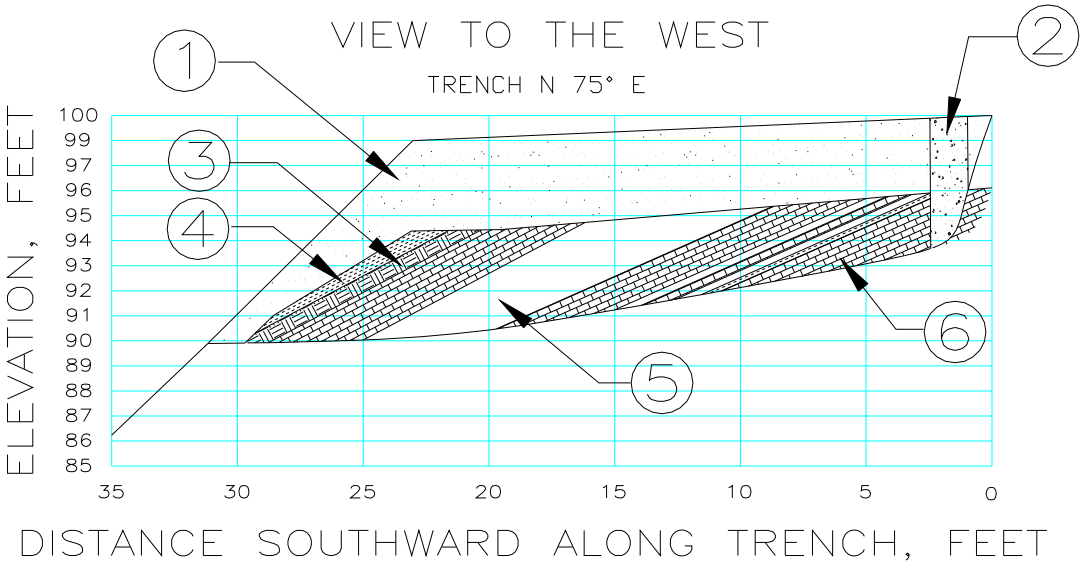


Figure 3. Map of the western wall of the trench dug at 1837½ Camino de la Luz. The circled numbers and hatching symbols refer to the type of substrate materials which are described in the text.

1. Dark gray-brown sandy alluvium and artificial fill.
2. Backfilled trench materials derived from trench excavation.
3. Dark gray dense claystone. Sample B-2

4. Light brown, fissle shale, thin bedded with laminae about 2 mm thick. Often interbedded with Unit 5 below. Sample B-1
5. Tan shale, thin bedded (½" to 1" thick) and interbedded with fissle, white silty clay seams a few mm thick and about 6" apart. Sample B-3
6. Massive light tan siliceous marl with beds 1 to 2 ft thick.

The units exposed in the trench are part of the Mid to Late–Miocene Monterey formation. The formation is overlain unconformably by unconsolidated materials consisting of sandy alluvium or artificial fill.

No evidence of an open bedding plane fissure in the stratification of the Monterey strata was observed in the trench. Instead, massive to thin-bedded marl (calcareous and siliceous shale) strata are interbedded with thin seams of fissle silty shale or dense claystone where the geologic considerations indicate the fissure would occur.

The writer was able to examine the strata at the base of the coastal bluff where the putative fissure was reported to exist by Smith and CGF. The writer observed that a seam of fissle shale about 1½" thick interbedded between strata of thick marl strata had been scoured out to a depth of an inch or so by wave erosion. The scour apparently had been misinterpreted as a pervasive open fissure or petroliferous seam by the previous investigators.

Three samples were taken from the trench at location s shown on Figures 2 and 3. The samples were labeled and placed in sealed containers to preserve their water content. Two of the samples (B-2 and B-3) were subsequently subjected to shear testing by Braun Associates of Buellton, California. The results of the analyses are presented in the Appendix to this report.

The two samples were found to have appreciable apparent cohesion and a low angle of internal friction. Sample B-1 was from a seam of fissile shale. It could not be reconstituted for analysis. Sample B-2 was found to have a residual angle of internal friction of 15º and a residual effective cohesion on 600 psf. Sample B-3 was found to have a residual angle of internal friction of 16º and a residual effective cohesion of 1050 psf. The values of the internal angle of friction are typical of consolidated clay-rich materials. The cohesion values are larger than expected for such materials.

No faults or folds are evident on the subject parcel. No springs or shallow water table was encountered in the trenching on the parcel. The slope of the parcel is about 2.5º toward the southeast corner of the paved area at the site of the trench.

No moisture or free water was encountered in the trench. The substrate materials were quite dry, even at the bottom of the trench. A liquefaction hazard is unlikely to exist because of the lack of a high water table and because the sandy alluvium contains 50% or more of clay and silt.

CONCLUSIONS

The evidence observed in the inspection trench establishes that the putative open bedding plane fissure does not exist on the subject property. Rather, the massive marl beds observable cropping out in the coastal bluff and observed in the trench are interbedded with fissle silty shale and claystone seams a few inches thick. The seams appear in the trench in the position inferred from a geologic analysis of the attitudes of the beds of Monterey formation at the subject parcel.

The fissle beds and claystone seams probably have the minimum shearing strength in the substrate materials at the subject parcel. Subsequent design of the structure to be built on the subject parcel should take this condition into account.

The strata under the subject parcel dip southward at an average angle of about 25°. However the N 60° W strike of these strata is not parallel to the E-W trend of the toe of the coastal bluff so they are buttressed on the west. This condition has caused failures of the coastal bluff elsewhere along the Santa Barbara shoreline to be rotational about an axis normal to the bluff face. The recent slide at Shoreline Park failed in this manner; the slide evident at the SE corner of the subject parcel probably did as well.

The nature of the slide kinematics requires that analysis of slope stability take this rotational effect into account. A simple block sliding model is not adequate as it would exaggerate the slide potential.

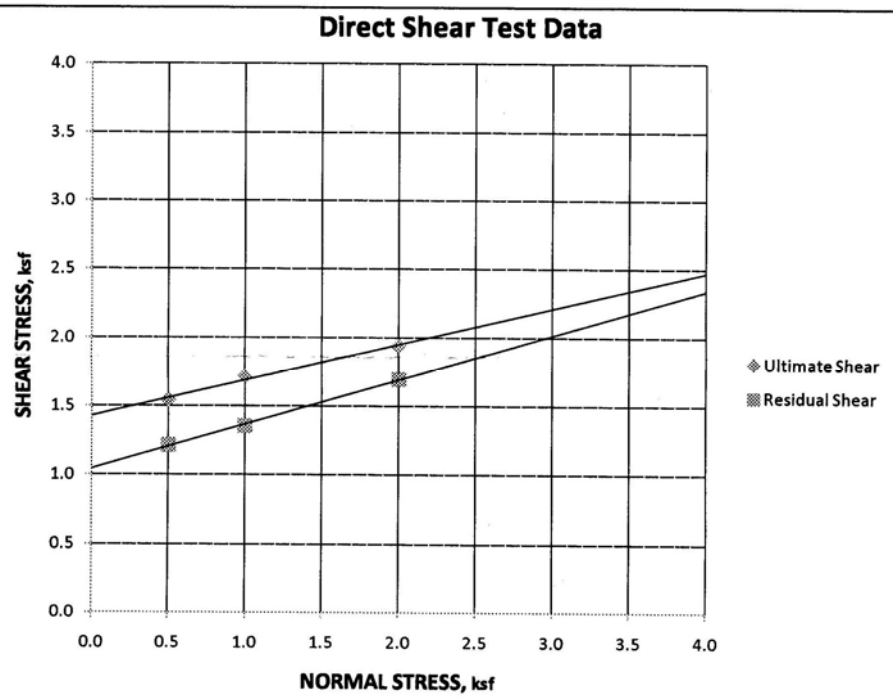
I hope that these findings are suitable for your purposes. Please contact me if you have any questions or comments.

Sincerely,

William Anikouchine PhD
California Certified Engineering Geologist EG 1584

APPENDIX

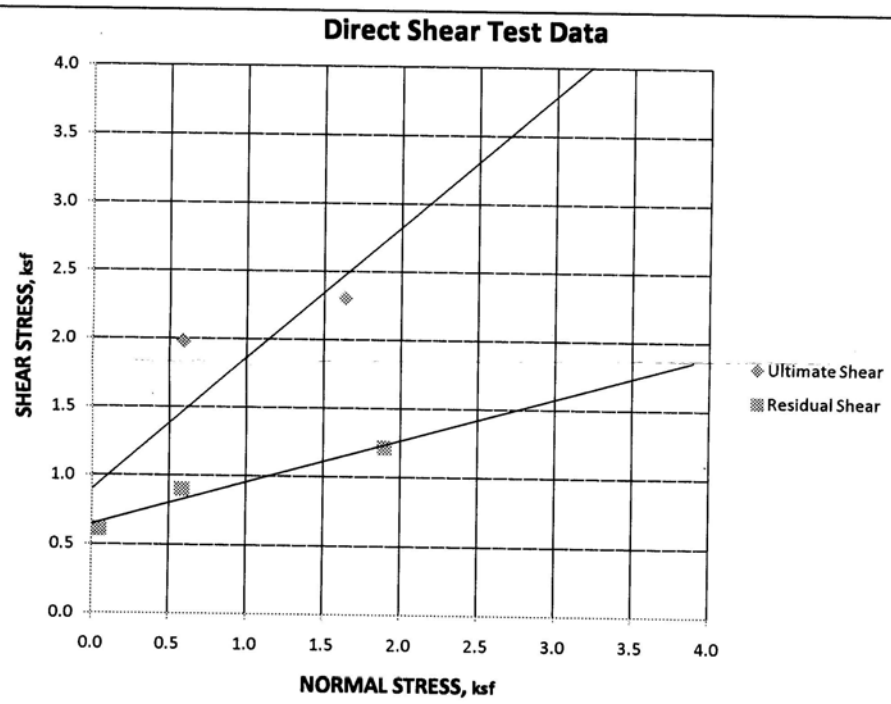
Results Of Analyses of Samples Taken From The Exploration Trench



Ultimate Effective Cohesion	1400 psf
Residual Effective Cohesion	1050 psf
Ulitmate Effective Angle of Internal Friction	14 deg
Residual Effective Angle of Internal Friction	16 deg
Location	Remolded
Depth	Disturbed Sample at 2 ft
Moisture Content	20.9 %
Unit Dry Weight	64.2 pcf
Material Description	
Sample Condition	Remolded

Plate A-7.1

Figure 4. Results of Shear Test of Sample B-3.



Ultimate Effective Cohesion	900 psf
Residual Effective Cohesion	600 psf
Ulitmate Effective Angle of Internal Friction	41 deg
Residual Effective Angle of Internal Friction	15 deg
Location	Grab Sample
Depth	Undisturbed ft
Moisture Content	33.2 %
Unit Dry Weight	58.4 pcf
Material Description	Black plastic CLAY
Sample Condition	Moderatly Disturbed

Plate A-7.2

Figure 5. Results of Shear Test of Sample B-2.

Appendix C

2011 Slope Stability Report

WILLIAM ANIKOUCHINE, PH.D
CONSULTANT IN MARINE AND EARTH SCIENCES

Ms. Kathleen A. Kennedy, Associate Planner 9 November 2011
City of Santa Barbara Planning Division
P.O. Box 1990
Santa Barbara CA 93102

RE: Geological Investigation of Slope Stability at 1837½ Camino de la Luz[1]

Dear Ms. Kennedy,

This report is in response to your division's request for a discussion of the geologic issues involved in evaluating the stability of the coastal bluff at 1837½ Camino de la Luz. A diagram of the subject parcel and adjacent terrain is shown in Figure 1.

Figure 1. Isometric diagram of the topography of the coastal bluff from Lighthouse Creek on the east to about Oliver Street on the west. The scene is viewed toward the NW at an elevation several hundred feet above the top of the parcel (imagine a helicopter view) The diagram was constructed from topographic maps prepared from 1995 aerial photography. The subject parcel is outlined in black. The mesh size is 5 feet.

[1] The proper name of this street is El Camino De La Luz, but the El is omitted in this report for the sake of brevity. Capitalization of the preposition, de and the article, la is also omitted following English standards.

PREVIOUS WORK

The geologic work done so far has consisted of several years of individual examinations and reports which were subjected to a peer review by me. The report of that work dated 16 March 2005 is included here by reference.

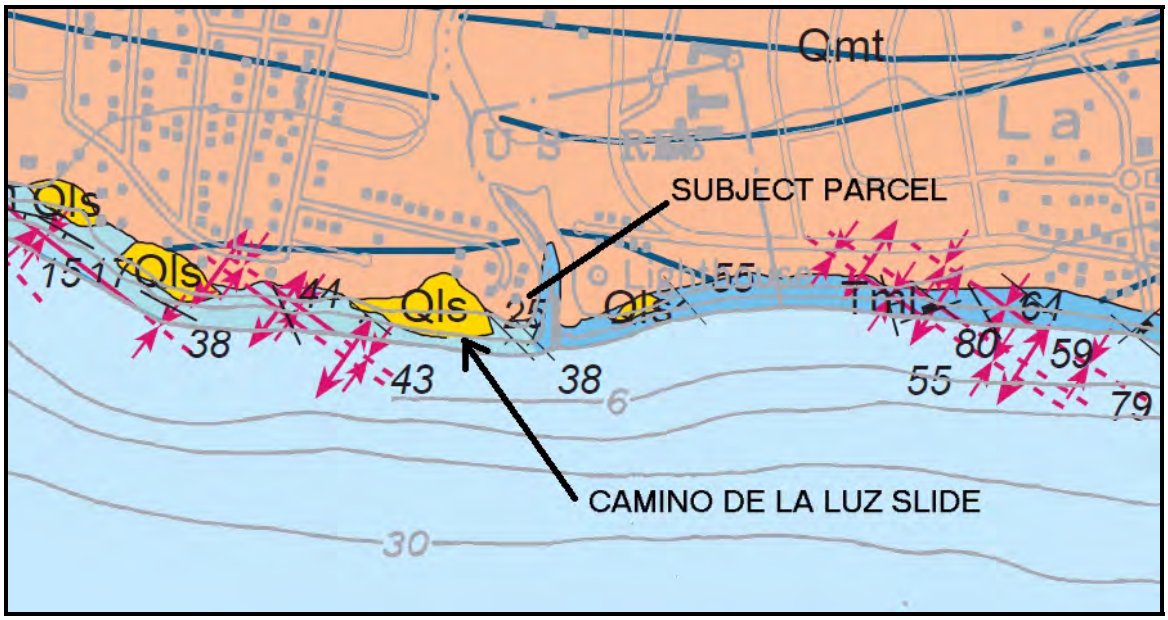


Figure 2. A portion of the geologic map by Minor et al (2006) showing features mapped by the USGS in the vicinity of the subject parcel. Qmt represents marine terrace unconsolidated deposits. Qls represents landslide deposits. Lighthouse Creek trends northward in the center of the figure. Tml represents lower Monterey beds cropping out on the east of the creek. West of the creek beds of the middle Monterey formation crop out in the coastal bluff. The contact between these beds at the mouth of Lighthouse Creek is an unconformity. The magenta lines and paired arrows mark the orientation and type of the fold axes that deform the Monterey beds. Large arrowheads depict anticlinal folds and small arrowheads depict synclinal folds. The attitude of the strata is indicated by the strike and dip symbol; the accompnying number indicates the dip in degrees. Scale is indicated by cultural features.

In the course of the peer review the matter of slope stability arose. No analysis of the stability of the subject parcel had been performed, only anecdotal mention that the slope was stable. In view of the proximity of the Camino de la Luz slide of 14 February 1978 the decision was to perform a stability analysis using existing strength data to determine if previous workers had overlooked a landslide hazard on the parcel.

The exploratory stability analysis using strength data obtained from the literature was included in the writer's 16 March 2005 report. The result of that analysis indicated that the slope appeared to be stable. However an open bedding plane fracture was claimed to be a potential plane of failure that transected the parcel. A geological inspection in an exploratory trench showed that the open fracture does not exist.

The observations in the trench established that the strata of the Monterey formation consist of beds of calcareous marl alternating with 6” to 8” layers of black claystone and thin bedded fissle shale. This alternation of lithology can be seen expressed in Figure 3.

Shear strength values were obtained for samples of black claystone and fissle shale taken from the geologic inspection trench. The data are presented in the appendix of this report. They are from the writer’s report of 25 August 2009 which is included here by reference.

The observations of the attitudes of Monterey strata and measurements of the strength properties of these rocks exposed in the exploratory trench allowed a more accurate and thorough analysis of slope stability at the subject parcel to be made. To accomplish this it was necessary to determine the manner and kinematics of potential slope failure and the evaluation of the likelihood of slope failure at the subject parcel.

Figure 3. View downward and to the SE from the subject parcel at low tide. Monterey strata exposed on the wave-cut beach terrace show varying resistance to erosion by wave action. Note the large angle between the strike of the strata and the trend of the bluff face.

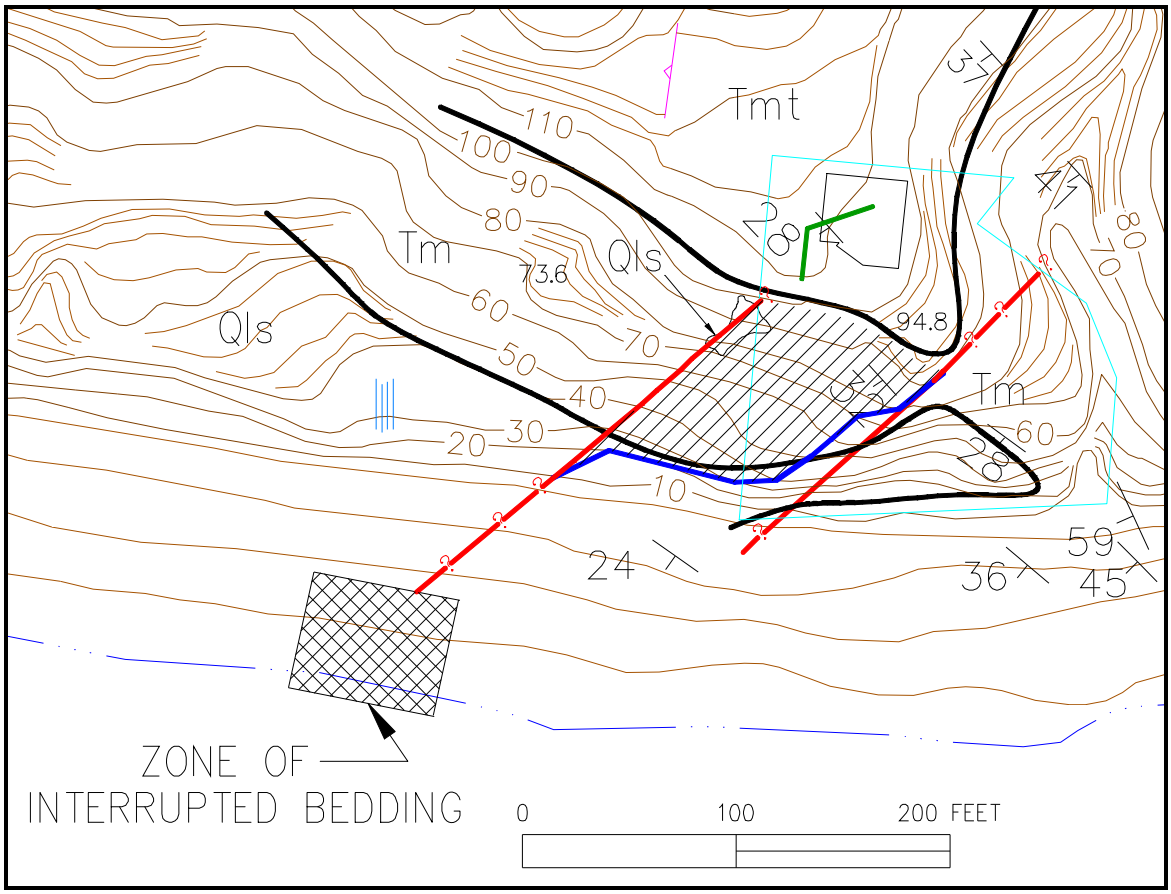


Figure 4. Topographic map showing geological data used in the assessment of the potential for slope failure at 1837½ Camino de la Luz. The parcel boundary is outlined with a thin cyan line. The heavy black lines are contacts between relatively undisturbed Monterey formation beds (Tm), the unconsolidated materials capping the elevated marine terrace (Tmt), and landslide debris (Qls). The heavy red lines mark the location of fractures seen cutting the bluff. They are dashed and queried where uncertain. The heavy blue line shows the outcrop of the lowest bed in the Monterey formation that intersects the fracture in the bluff just west of the subject parcel. A photo of the zone of interrupted bedding is presented in Figure 14. Bedding attitudes are shown by strike and dip symbols and dip values in degrees. The light blue lines are drainage tubes extending to the beach (or nearly so) located by means of a GPS receiver. The proposed building footprint is outlined with a black line. The geologic exploration trench is shown by a heavy green line. Kinematically possible wedge failure is the hatched area between the fracture (heavy red line) and the bedding outcrop (heavy blue line). Hatching is limited to the observable extent of the fracture.

PRESENT GEOLOGICAL WORK

Additional observations were necessary to complete the analysis of slope stability at the subject parcel. The writer conducted a geologic examination necessary for determining the kinematics of potential slope failure. This was followed by an evaluation of the likelihood of slope failure at the subject parcel.

The geologic examination consisted of:

1. Measuring the attitude of the Monterey strata in the bluff face and on the wave-cut platform fronting the bluff at the subject parcel.
2. Examination of the bluff and wave-cut terrace for persistent fractures.

3. Inspection of the bluff for evidence of former slope failure.
4. Examination of bedrock exposures for asperities in the bedding planes and in fracture surfaces.

The findings of this examination are presented in the map on Figure 4. Bedding exposed on the wave-cut terrace permitted the best measurements of the attitude of the Monterey strata. Outcrops in the bluff often gave evidence of involvement in earth movement, particularly at the base of known landslides in this area.

The attitude and orientation of fractures were difficult to measure because of landslide debris cover, colluvium, and the lack of persistence for appreciable distances in the bluff face. Exceptions are the fractures transecting the subject parcel as shown on Figure 4[2].

The attitude of the face of the coastal bluff at the subject parcel trends N 88° E and slopes 70° to the S at the base. The upper part of the face slopes 36° S (see Figure 5).

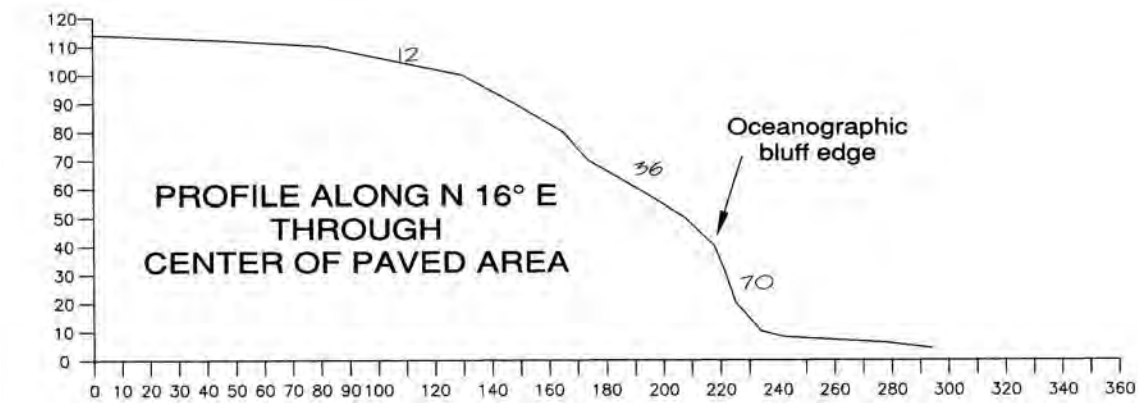


Figure 5. Profile through the subject parcel showing the compound nature of the slope of the coastal bluff at 1837½ Camino de la Luz. The numbers are the local slope in degrees.

The attitudes measured by the writer and other previous workers are shown on Figure 6 in the form of a stereonet plot. The plot shows evidence of bias in measurements by previous workers. Attitudes measured by CFG are biased about 5° clockwise. The Smith measurements are biased about 15° clockwise. It seems likely that a difference in the magnetic declination set on the geologist's compass could account for these biases. In addition, the map base used by Smith had an error in orientation with respect to North; this could explain the greater bias in his measurements.

The frequency distribution of attitudes were contoured and presented in Figure 7. This figure shows that the mean attitude of the bedding in the Monterey strata is a strike of about N 44° W and a dip of about 34° SW. The mean attitude of fractures in the coastal bluff is a strike of N 67 E and a dip of 78° SE. These average values were used in the subsequent analyses of slope stability at the subject parcel.

[2] These fractures can be seen clearly on oblique aerial photographs 200404820 and 200800766 of the California Coastal Records Project (http://www.californiacoastline.org/).

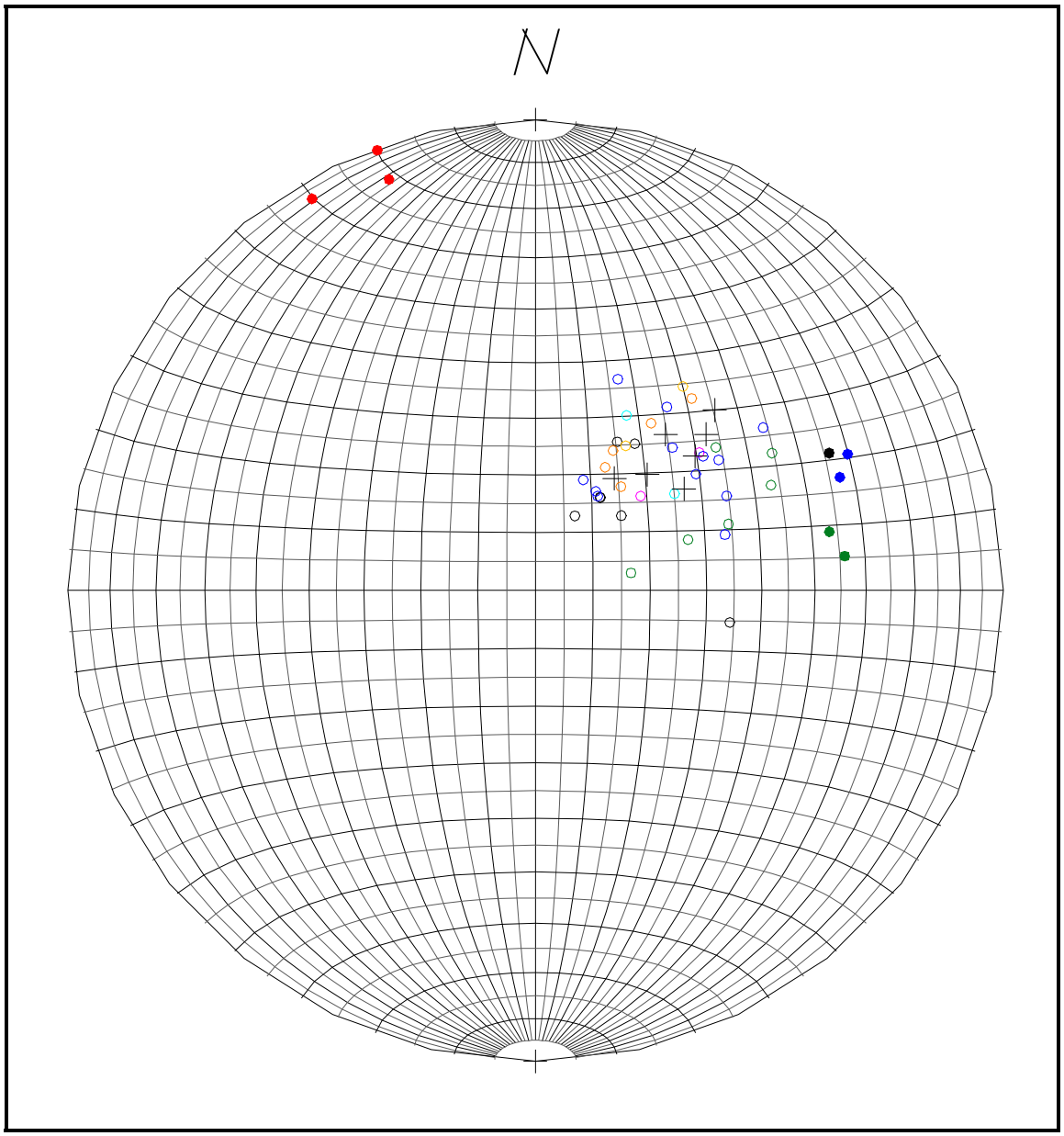


Figure 6. A plot of the structural features observed at 1837 ½ Camino de la Luz. The various symbols are the poles of (normals to) the planar features projected to the lower hemisphere of a Lambert Azimuthal Equal-Area stereonet shown in grey. The magenta circles are bedding attitudes shown on the geologic map in Figure 2. The yellow circles are bedding attitudes from Hoover (1978). The cyan circles are bedding attitudes from Weaver (1978). The red dots represent persistent fractures cutting the Monterey strata. Black circles are bedding attitudes measured by the writer in the geological inspection trench dug on the subject parcel. Orange circles and black crosses are bedding attitudes measured by the writer in the coastal bluff face and the wave-cut terrace at the subject parcel. Green circles are bedding attitudes measured by Smith in the bluff face. The green dots are bedding attitudes measured by Smith east of Lighthouse Creek. Blue circles are bedding attitudes measured by CFG. Blue dots represent bedding attitudes measured by CFG east of Lighthouse Creek. A single black dot represents an attitude measured by the writer east of Lighthouse Creek. The solid dots are attitudes of Monterey strata lying east of an angular unconformity at Lighthouse Creek.

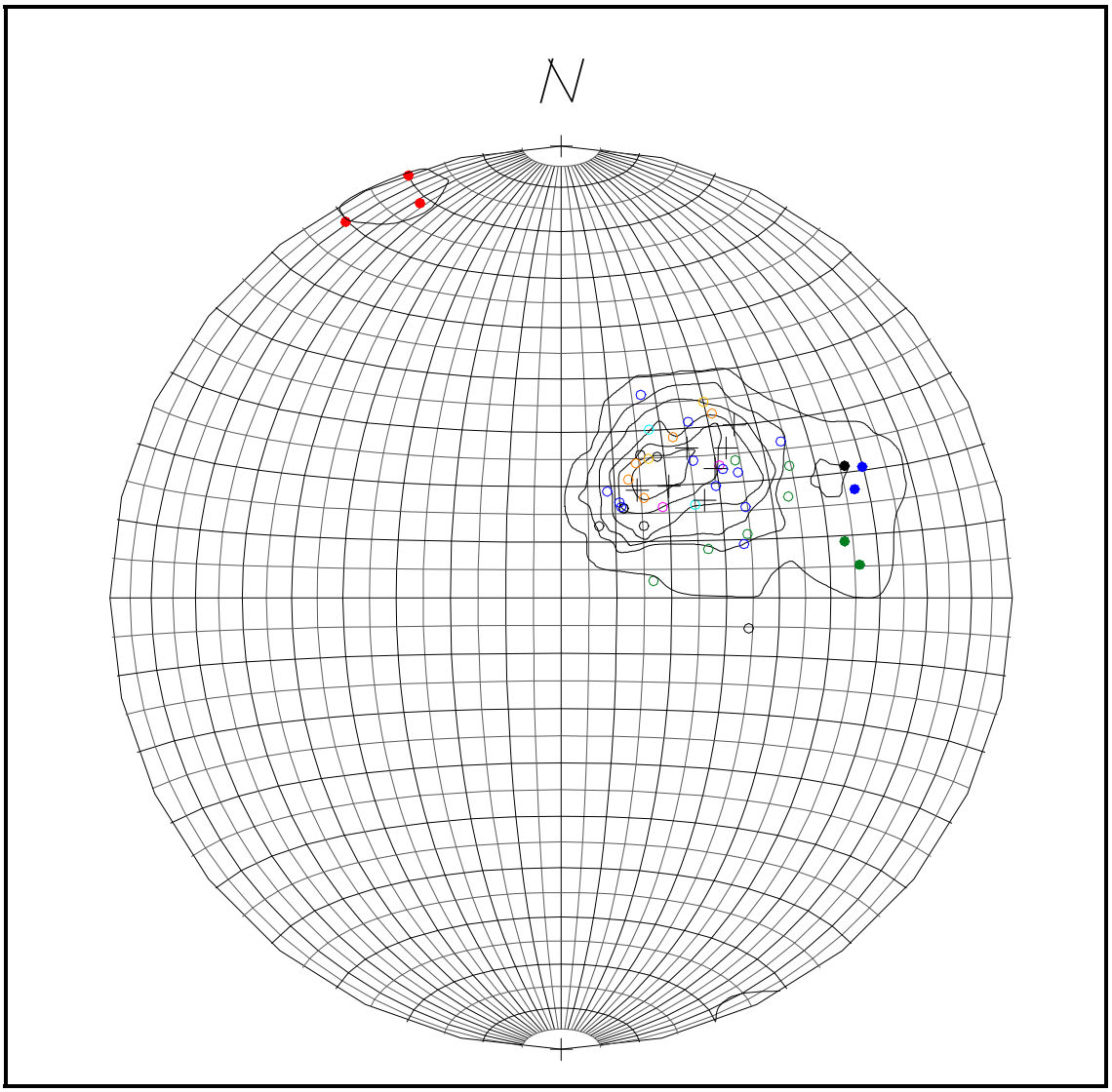


Figure 7. Stereonet plot of the contoured frequency of occurrence of bedding poles and fracture attitude poles in the coastal area of 1837 ½ Camino de la Luz. The plot shows a cluster of fracture attitudes (upper left) and of the attitudes of bedding. The bedding cluster shows two sub-clusters, the larger west of Lighthouse Creek and a smaller one east of the creek. The mean attitude of most of the bedding poles is about 46° azimuth and plunges about 53°. This corresponds to a mean strike of N 44° W and mean dip of 34° SW. The mean attitude of the fractures is about N 67° E strike and 78° SE dip.

The unit weight of the rocks likely to be involved in sliding at the subject parcel was calculated by measuring the widths of individual marl beds over a fixed lateral distance across the outcrop shown in the photo in Figure 3. The marl comprised 36.7% of the width. A weighted average of marl with a unit weight of 120 pcf and claystone with a unit weight of 58 pcf yielded an average weight of 81 pcf for the combined Monterey lithologies.

The kinds of slope failure likely to affect coastal bluffs consist of planar failure down a single bedding plane, a wedge type of failure on two intersecting planes, usually a

bedding plane and a fracture, and toppling failure of nearly vertical beds or jointed slabs of bedrock. Where only unconsolidated sediments or highly fractured rock form a coastal bluff, a circular failure can occur. All of these types occur in the Santa Barbara County coastal bluffs. The representations of these modes of failure are illustrated in Figure 8.

An examination of the top of the bluff at the subject parcel for tension fractures revealed only a few shallow cracks at the SE corner of the paved area. It is likely that these are the result of soil creep in the unconsolidated stratum underlying the paving. Tension fractures were not considered in the slope stability analyses of the coastal bluff inasmuch as no tension cracks appeared to affect the underlying Monterey strata anywhere on the subject parcel.

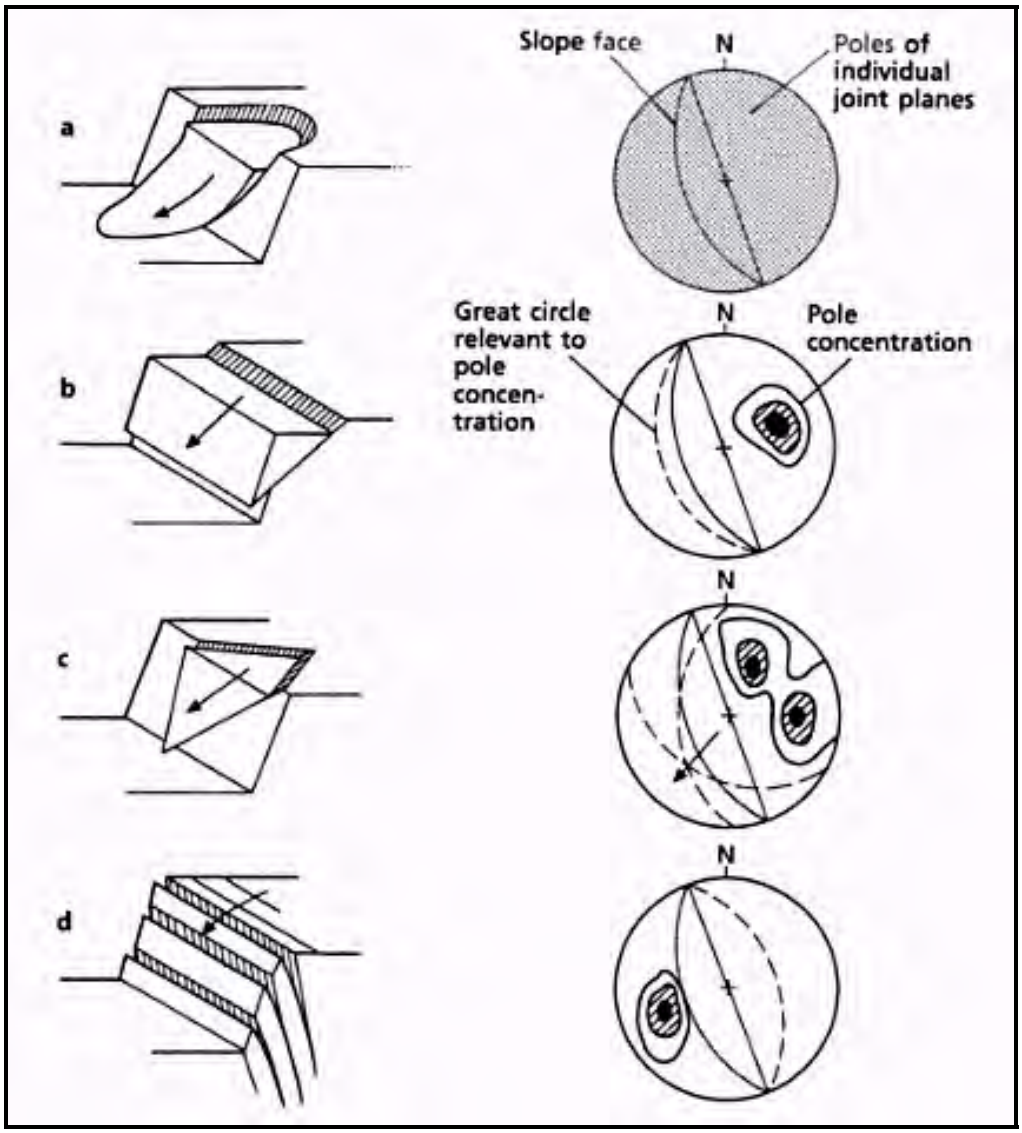


Figure 8. Diagrammatic representation of the modes of failure of a coastal bluff after Hoek & Bray 1981. The stereonet representation for each mode is also shown on the right side of the figure. 8a is a circular failure, 8b is a planar failure, 8c is a wedge failure, and 8d is a toppling failure.

PLANE FAILURE[3]

For sliding to occur on a single plane in a bluff, that plane must strike parallel or nearly parallel to the trend of the bluff. The dip of the failure plane must be smaller than the dip of the bluff face. Further, the dip of the failure plane must be greater than the angle of friction of this plane. Release surfaces which provide negligible resistance to sliding must be present in the rock mass to define the lateral boundaries of the slide. Such surfaces could be faults, fracture zones or declivities such as stream reentrants. Planar failure can occur on a plane passing through the convex promontory of a bluff because no lateral constraints are present there.

Large scale asperities such as small folds and syngenetic slumping features tend to impede planar movement and so are not amenable to conventional stability analysis. Asperities noted in the bluff and wave-cut terrace at the subject parcel were of this type (see Figure 12). They are not considered further inasmuch as they impart considerable stability to the bluff by requiring dilatancy of the entire bluff and shearing of the Monterey marl before movement down the dip of these strata can start. Omitting consideration of such asperities adds conservatism to the analysis of plane failure.

The angle of internal friction of the claystone seam in the Monterey strata examined in the inspection trench was measured to be 15°. A cone with this apical angle was plotted as a black circle on the lower hemisphere of a Lambert Equal area projection in Figure 9. The kinematic envelopes of bedding poles capable of slope failure are plotted on the stereonet in Figure 9 as closed figures. The figure having a green color represents the upper slope of the bluff face and the figure colored red represents the lower, steeper face. The kinematic analysis shows that most of the bedding planes have poles falling within these figures and outside the circle of internal friction angle and so plane failure is not prevented by stereotaxis – all measured strata have dip components down the face of the bluff.

The likelihood of planar failure was evaluated by performing a limit equilibrium analysis of the bedding planes shown to be capable of failure by kinematic analysis. The equation for the factor of safety was modified to apply to a compound sloped bluff (see Figure 5) and then applied to calculate the factor of safety at a 5° graticule of points inside the envelopes shown on the stereonet plot in Figure 9. The input to the limit equilibrium analysis is listed in the following table.

[3] After Hoek & Bray 1981

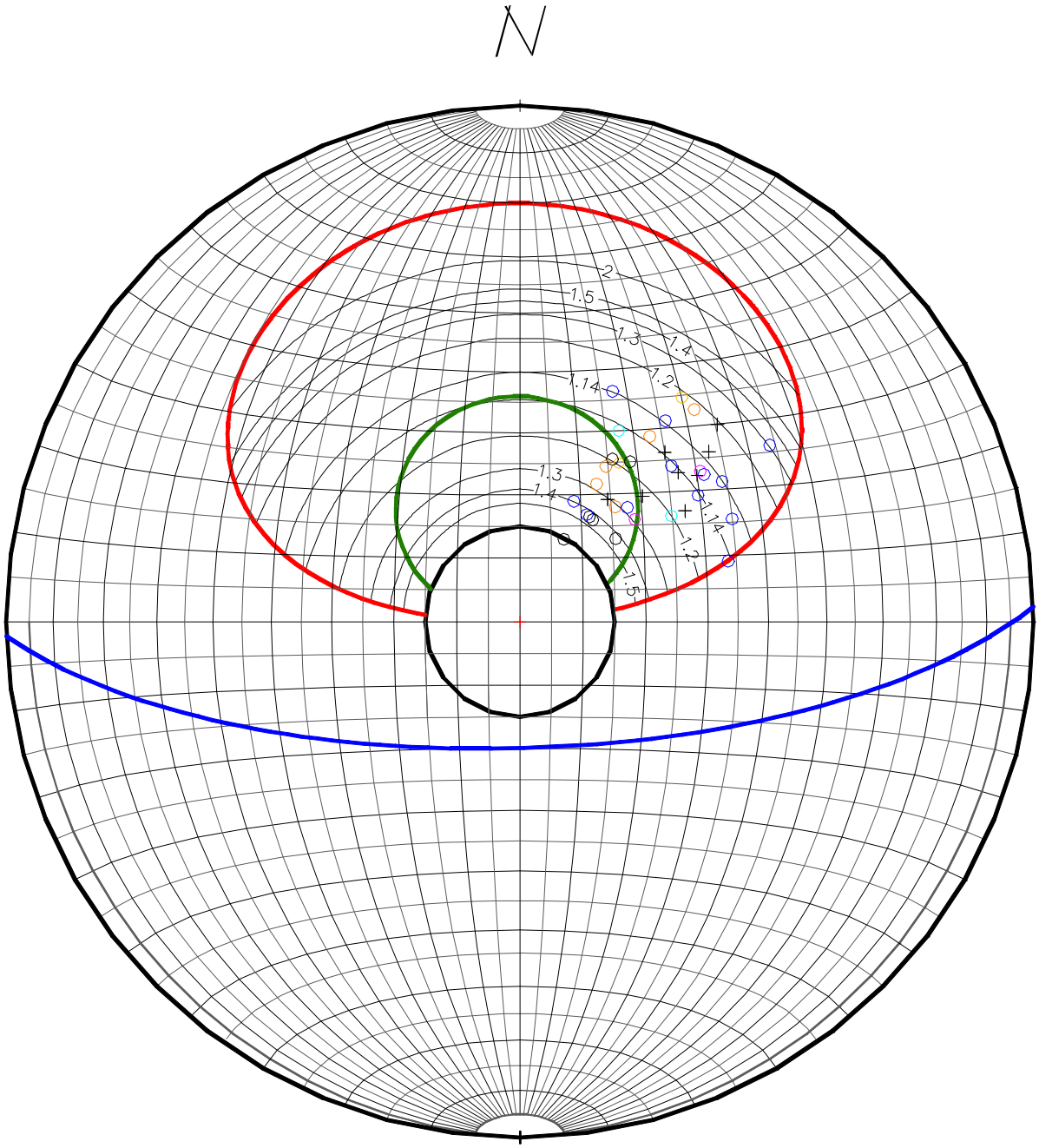


Figure 9. Stereonet plot of bedding plane poles showing the limit of feasibility of planar failure determined by kinematic analysis. The blue arc represents the plane of the face of the coastal bluff at the subject parcel. The central heavy black line is the cone of the angle of internal friction on the claystone seams in the Monterey beds. Poles of beds lying inside this circle cannot fail. The heavy green and red lines demark the envelope of poles that are capable of failure. The red line is for beds cropping out on the lower slope of the bluff; the green line is for beds cropping out on the upper slope. The light black contour lines represent the factor of safety of all attitudes with poles within the feasible failure envelope. The contours represent the safety factors of the slope under building load during a seismic event. The poles of bedding and fractures are as described on Figure 6.

PLANE FAILURE ANALYSIS INPUT

Bedding	Strike	N 44° W
	Dip	34° SW
	Friction Angle	15°
	Cohesion	600 psf
Bluff Face	Upper Slope Strike	N 88° E
	Upper Slope Inclination	36° S
	Lower Slope Strike	N 88° E
	Lower Slope Inclination	70° S
Weights	Average Unit Weight of Rock	81 pcf
	Unit Weight of Water	62.4 pcf
	Building Load Intensity	50 psf
	Seismic Coefficient	0.15

The limit equilibrium equation governing plane failure was modified to allow surcharge loads from a building placed on the top of the coastal bluff at the subject property. A load intensity of 50 psf (20% larger than that recommended by the Uniform Building Code) was applied to a unit width strip having a footprint length of 50 ft, the maximum allowable on the subject parcel's building envelope. The plane failure analysis was performed with the condition of this building surcharge.

In addition, a pseudo-static analysis of the slope of the coastal bluff at the subject parcel was performed to examine the stability of the burdened slope during a seismic event. The analysis consisted of the imposition of a force to the failure mass equal to 15% of the combined weight of the failure mass and building surcharge. The black contours on the stereonet in Figure 9 indicate the factors of safety obtained from this analysis.

All of the attitudes of strata cropping out of the coastal bluff that have poles plotted inside the kinematic envelope on Figure 9 have factors of safety of 1.14 or greater. A factor of safety greater than 1.1 is considered to represent stability under seismic conditions. Most of the strata attitudes measured in the area of study have factors of safety exceeding 1.2 for the existing slope. This indicates that the bluff laden with the largest building conceivable for the site is stable under conditions for planar failure even during a seismic event. The factors of safety for static conditions are not presented in Figure 9 owing to the indicated stability under a severe seismic event.

WEDGE FAILURE

A wedge type failure is feasible where two discontinuities in the substrate intersect in such a way that they form a surface down which sliding can occur. A wedge failure is diagrammed in Figure 10. Actually, a plane failure is a degenerate form of wedge failure where both planes of discontinuity have the same strike, dip, and strength characteristics.

The writer has examined most of the coastal bluffs of Santa Barbara County. Several of the slides noted in these bluffs were of the wedge type. The ancient slide in the SE corner of the subject parcel, the Camino de la Luz slide, the recent Shoreline Park slide and other sites in the Santa Barbara County coastal area appear to be of the wedge type. An example of such a wedge failure in the Shoreline Park area is shown in Figure 11. The ancient slide (Figure 11) seems to be the kind of a wedge slide that is kinematically possible at the subject parcel. Figure 12 shows the fracture that formed the west side of the wedge-type slide at the SE corner of the subject parcel.

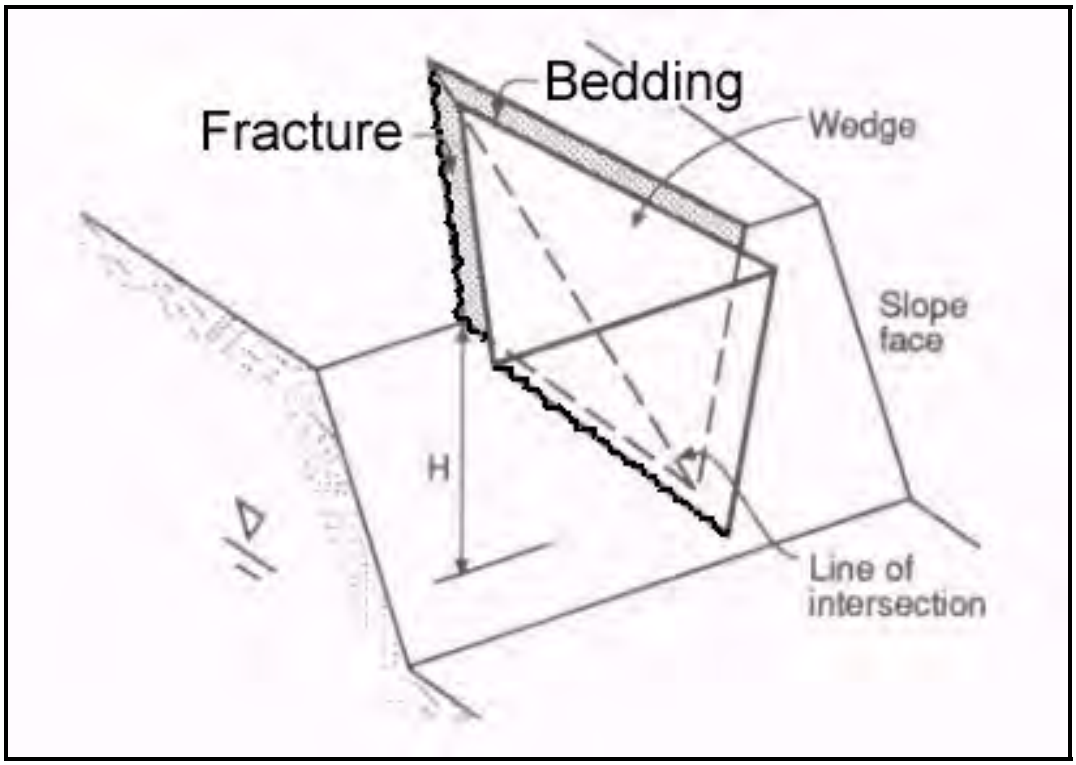


Figure 10. Isometric diagram of a wedge-type failure on a bluff face. H represents the height of the wedge. The water table is shown as being just above sea level. In the case at 1837½ Camino de la Luz the wedge would be formed from the intersection of the bedding plane of a stratum in the Monterey formation with a fracture across the bedding of the Monterey strata. In certain cases a lateral tension fracture parallel to the verge of the bluff occurs near the upper limit of the wedge. The tension fracture acts as a lateral release surface for a wedge failure.

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Figure 11. Photograph of an ancient wedge-type slope failure just west of the steps at Shoreline Park. The plane on the right is a dip face on Monterey strata. The plane on the left is a fracture surface. Most of the failed block has been removed by marine erosion.

Figure 12. Monterey strata exposed in the bluff at the subject parcel. View is toward the NW. The failure plane is delimited in red. The white ledge in the landslide block detached from the layer seen at the left side of the scene. An asperity in the form of a small fold can be seen in the strata exposed by the failure plane. (Photo by the writer, 10 March 2005)

The Camino de la Luz slide is depicted in Figure 13. It appears to have involved several smaller wedge slides. Small ancient slides seem to be involved as well. The ancient slide at the subject parcel is the rightmost one. Steep bluffs (seen as blue lines in Figure 13) are probably caused by fractures on the west side of individual wedges. The fracture just west of the subject parcel provides the potential for a wedge slide involving the subject parcel.

The landslide scar at the left side of the view in Figure 12 attests to the occurrence of a wedge failure there in the past. The field examination of the bluff suggests that a fracture exists to the west of the subject parcel, but that fracture does not appear to extend northward across the subject parcel inasmuch as such a fracture was not observed in the geologic exploration trench. The fracture dips steeply enough to act as a potential western release plane for a plane failure as well as acting as part of a large wedge failure.

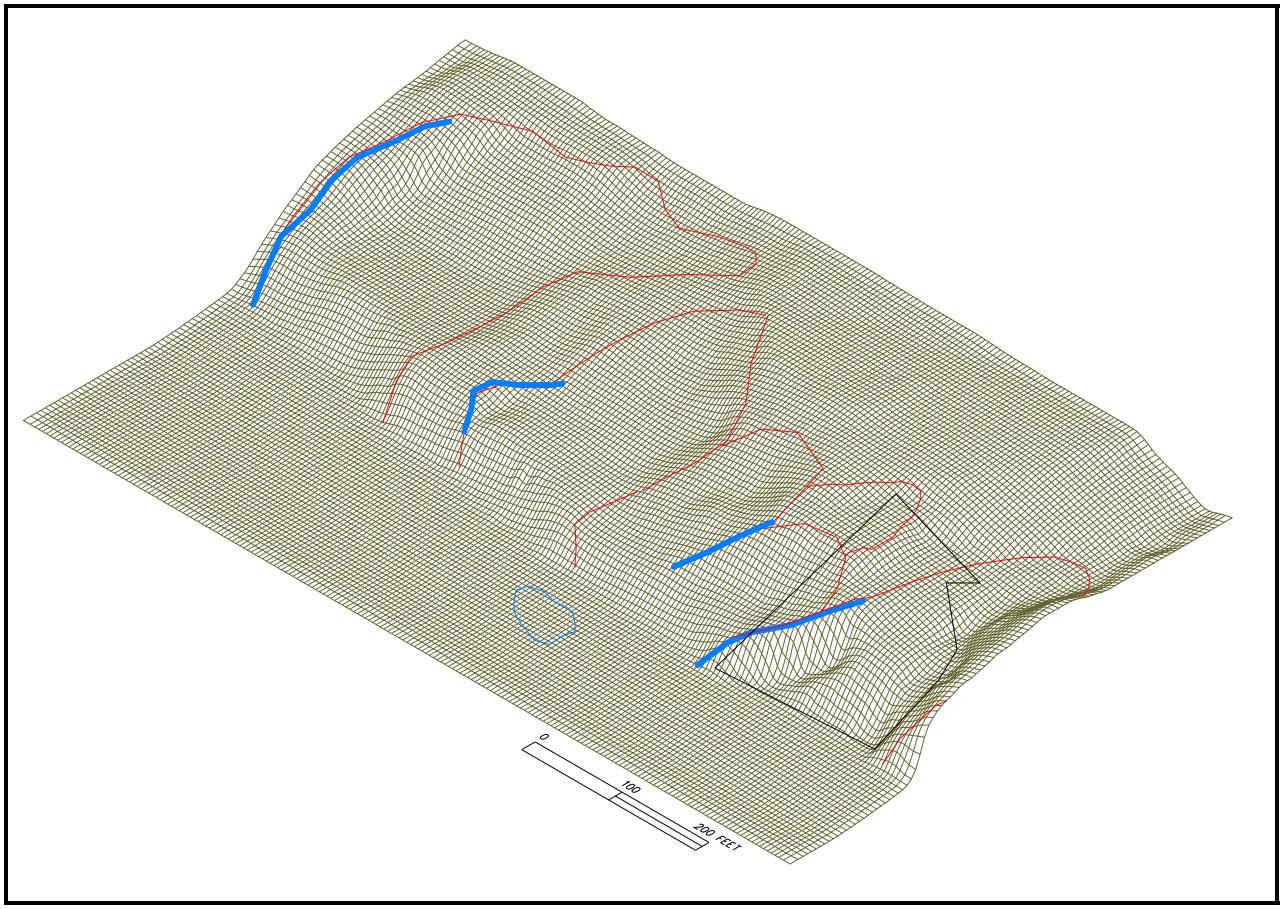


Figure 13. Isometric representation of the coast from Lighthouse Creek to about Oliver Street viewed toward the NW. The subject parcel boundary is shown by the black outline in the lower right corner of the scene. The lowest plane represents sea level. North is parallel to the short axis of the lower plane. The mesh size is 5 feet. The landslide features shown includes those of the Camino de la Luz landslide of 14 February 1978 which lies west of the zone of interrupted bedding is indicated by the closed blue figure on the beach. The red lines outline individual landslide scars. The heavy blue lines represent steep bluffs that might be fracture planes.

The east side of a wedge slide would be formed by a bedding plane having low shear strength. The bedding plane that crops out at the lowest elevation would be under the maximum stress caused by the weight of the overlying wedge block. The orientation of the Monterey formation bedding plane most likely to meet these requirements is shown by the heavy blue line in Figure 4. A potential wedge failure exists between the heavy blue line and the heavy red fracture line west of it. This fracture does not appear to extend across the building envelope; it was not observed in the geologic inspection trench on the subject parcel. Further, there is no surface expression of the fracture on the subject parcel. Slight soil creep was observed at the SE corner of the building envelope, but no tension fracture release surface appears to transect the top of the wedge.

Wedge blocks formed by bedding planes at higher elevations would have decreased weight and would have a decreased tendency for failure. Such wedges would include masses on the lower parts of the subject parcel.

Figure 13 shows the slide scar and a bluff just west of the subject parcel. A zone of interrupted bedding can be seen on the beach at the location indicated by the closed blue line in Figure 13 and indicated on Figure 14. It is quite possible that this zone is a seaward extension of the fracture indicated by the bluff just west of the subject parcel.

Figure 14. Photo looking SW from the subject parcel at low tide. The zone of interrupted Monterey beds indicated on the map in Figure 4 and on Figure 13 is shown. The zone and the beach to the west are strewn with cobbles and boulders washed from the debris of the landslide of February 1978. Photo by the writer on 9 January 2008 at 3:47 PM. Tide stage is approximately -0.9 ft MLLW.

The kinematic analysis for a wedge failure is shown in Figure 15. The average attitudes of the fractures measured in the field and of the bedding measured by several workers are indicated by the red crosses. The pole for the plunge of the line of intersection between average Monterey strata bedding and a fracture having the average attitude is seen to lie within the failure envelope for the lower slope of the coastal bluff and so wedge failure could occur if static conditions permit it.

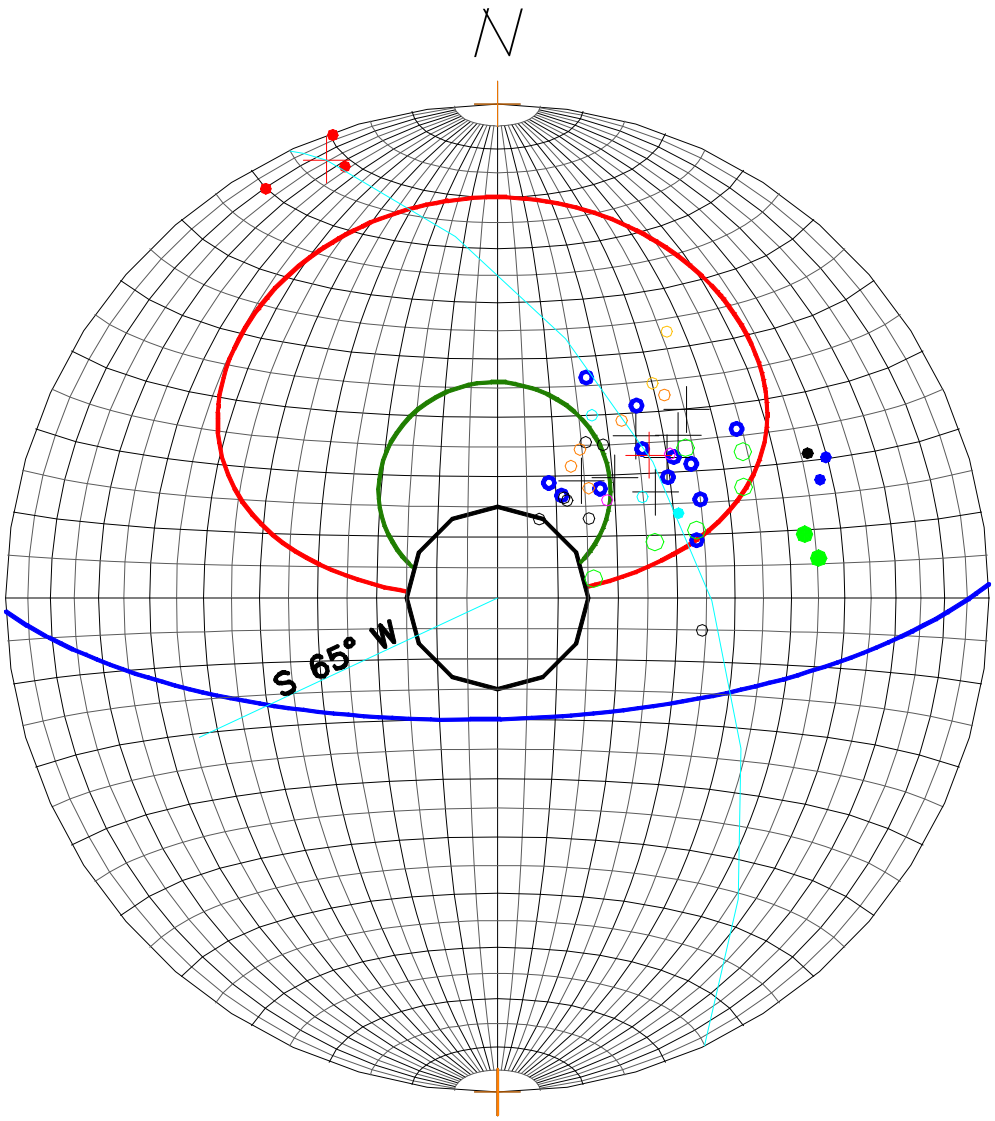


Figure 15. Stereonet plot of the poles of intersection of bedding and fractures for the kinematic analysis of wedge type failure at 1837½ Camino de la Luz. The cyan arc represents a plane containing the average poles for both fractures and bedding which are indicated by the red crosses. That plane also contains the pole to the plunge of the line of intersection of the bedding and fracture. The line of intersection is shown as a cyan line and its pole is indicated by a cyan dot. The azimuth of the line of intersection is 245° and its plunge is 32°.

The azimuth of the line of intersection of the failure wedge determined by kinematic analysis is 245°, the general direction of failure of the slide in the SE corner of the subject parcel (see Figure 4). This suggests that the landslide there was a wedge failure.

A series of safety factor determinations was made using a wedge failure analysis program by Dr. E. Bane Kroeger of the University of Alaska. The measured friction angle and cohesion of the bedding used in the wedge failure analysis was the same as that used in the plane failure analysis. The strength properties of the fracture plane were assumed to be minimal; a friction angle of 15° and no cohesion. These values are probably low, but were used in the interest of providing conservative results.

The program permitted the use of a building surcharge to be added to the weight of the failing wedge. A building surcharge of 100000 lbs (2000 ft² footprint x 50 psf loading rate) was used to include all conceivable building plans for the site. The input values for these determinations are presented in the following table.

WEDGE FAILURE ANALYSIS INPUT

Bedding	Strike	N 44° W
	Dip	34° SW
	Friction Angle	15°
	Cohesion	600 psf
Fracture	Strike	N 67° E
	Dip	78° SE
	Friction Angle	15°
	Cohesion	0 psf
Bluff Face	Upper Slope Strike	N 88° E
	Upper Slope Inclination	36° S
	Lower Slope Strike	N 88° E
	Lower Slope Inclination	70° S
Weights	Average Unit Weight of Rock	81 pcf
	Unit Weight of Water	62.4 pcf
	Building Load	100000 lbs

The analyses were repeated with increased water head acting on a potential failure plane assumed to represent the degree of saturation of the strata by winter rains. The results of the analyses are given in Figure 16 and in the table following:

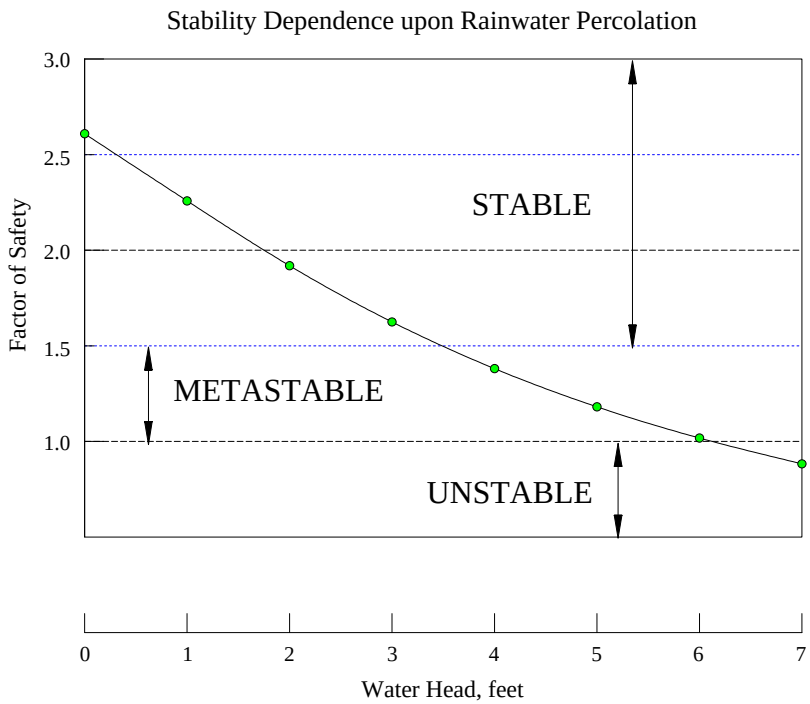


Figure 16. Stability vs groundwater pressure (head).

WATER HEAD, ft.	FACTOR OF SAFETY
0	2.609
1	2.258
2	1.919
3	1.625
4	1.381
5	1.181
6	1.018
7	0.883

It is evident that the stability of the bluff is more sensitive to the amount of water permeating the strata than to the size of the building surcharge load imposed. The possibility of wedge failure is related to the position of the piezometric surface (water table) which is, in turn, determined by the rainfall, evapotranspiration and the hydraulic conductivity of the substrate.

Evapotranspiration varies on an annual basis as shown in Figure 17. It is minimal during the season of winter rains. Rainfall infiltration is related to the rainstorm duration and intensity. Rainwater infiltrates into the substrate at a rate dependent upon the hydraulic conductivity of the substrate, the amount of antecedent moisture in the substrate and the intensity of the rainfall. The hydraulic conductivity is virtually fixed. If rainfall is light,

the infiltration proceeds at the rate of precipitation. The infiltration during a storm is at a maximum initially, followed by a transient decay to a steady rate. The transient behavior decays away after a few hours of moderate to heavy rainfall and the rate of infiltration of rainwater is constant. An excess of the rainfall rate over the infiltration rate is represented by the rate of overland flow.

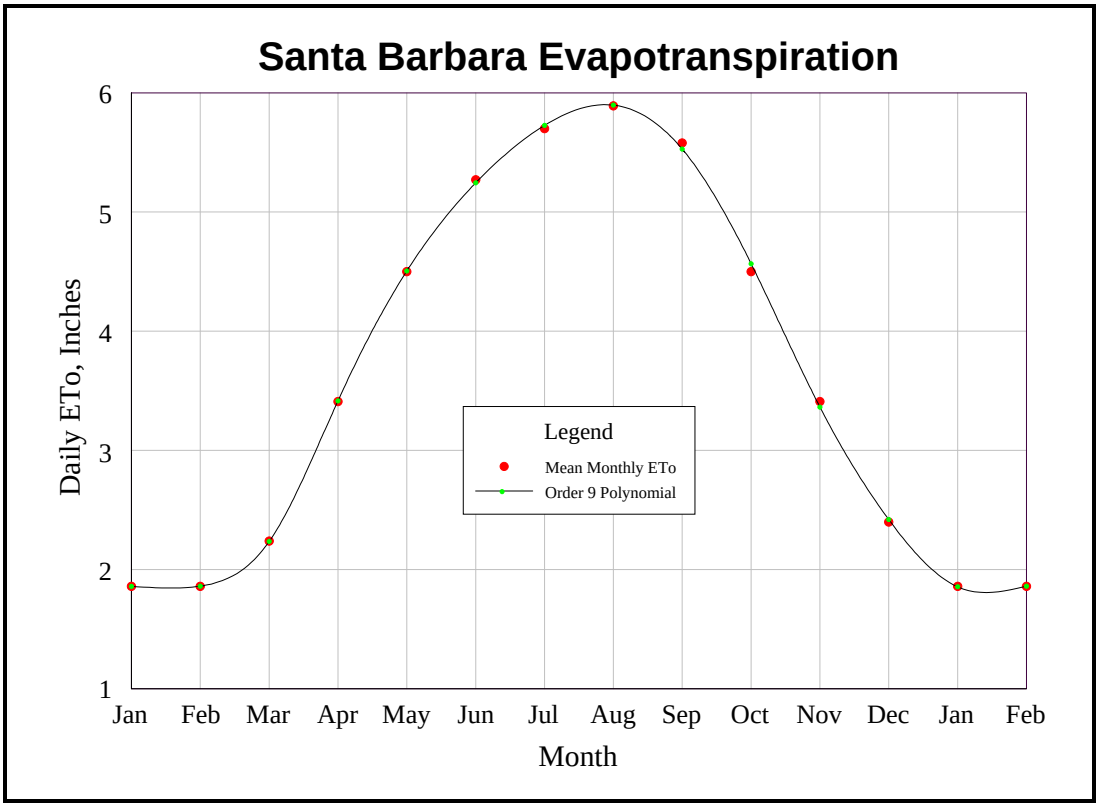


Figure 17. Evapotranspiration signature for average conditions in Santa Barbara.

In effect, the amount of rainwater infiltrating is proportional to the duration of the rainstorm. The probability of incidence of rainfalls of a given duration determines the probability of increase in the position of the piezometric surface. The distribution of storm durations was extracted from a 122-year record of rainfall in Santa Barbara. The durations are taken to represent the magnitude of infiltration; the transient behavior is neglected as being negligible in the case of moderate to severe storms and non-existent in the case of light rains.

The probability of occurrence of duration magnitudes is shown in Figure 18. The population of severe storms is seen to be different from modal rainfalls as indicated by the break in slope on Figures 18 and 19. Daily rainfalls shown in Figure 20 follow the same pattern. Both figures show that the events with recurrence intervals exceeding about 30 years come from a different population than do the more ordinary events. It is apparent that storms of long duration have recurrence intervals in excess of 30 years.

It is assumed that the probability of wedge failure follows the pattern of the recurrence intervals of storm durations. In such a case the risk of wedge failure at the subject parcel is minimal because the recurrence interval of severe rainstorms is on the order of 30 years or more.

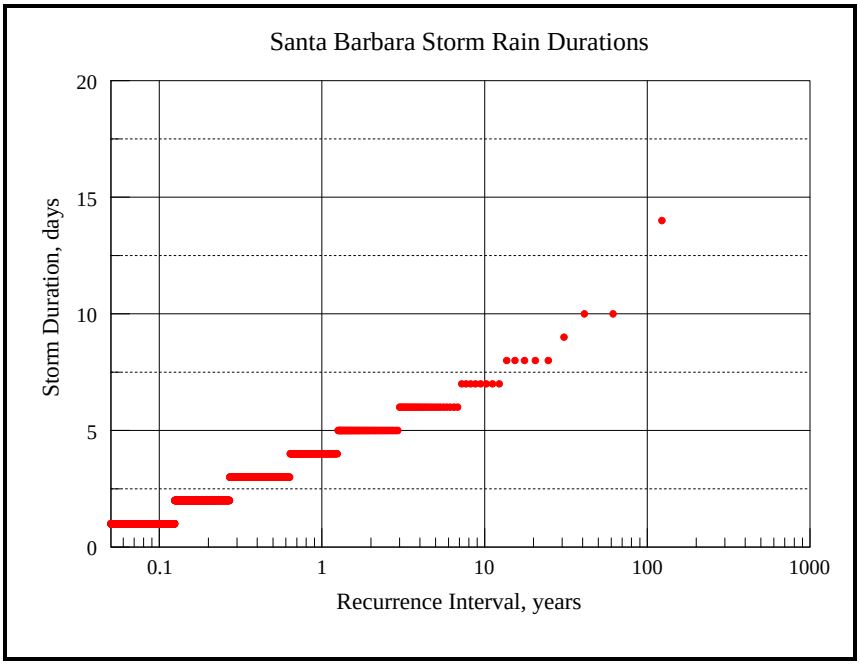


Figure 18. Recurrence intervals of Santa Barbara rainstorm durations. The line segmentation is a result of the evaluation of the durations as integral days. Note the change in slope at 30 years. The 100-year storm duration is 12½ days.

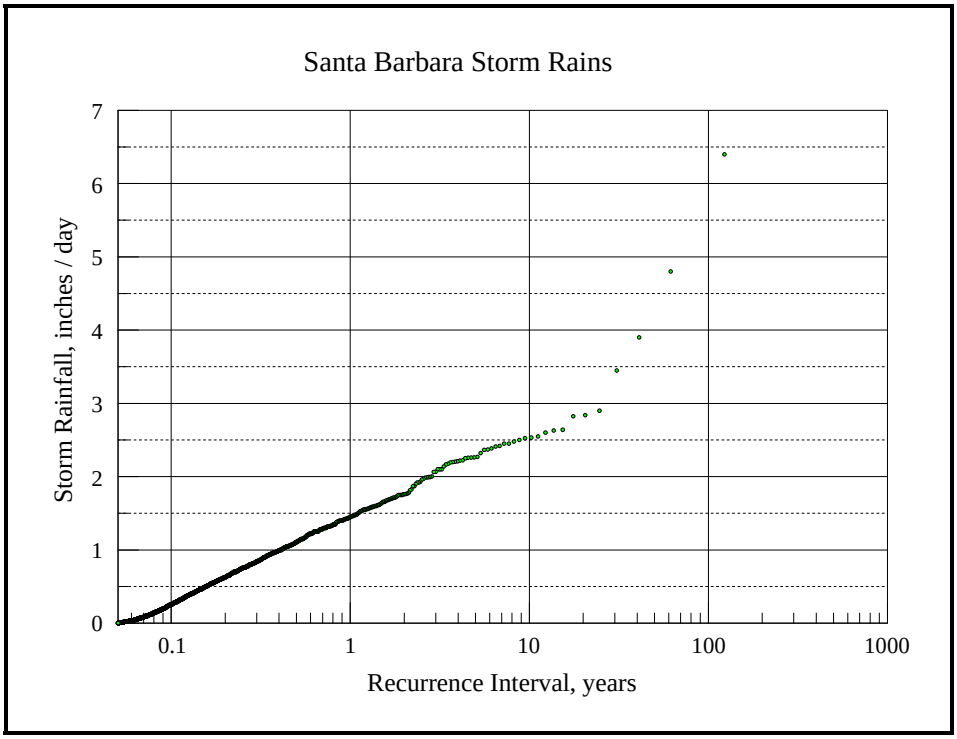


Figure19. Recurrence intervals of Santa Barbara rain intensities. The population of the severe storms starts beyond about 30 years. Note that a 100-year storm produces 6 inches of precipitation.

The amount of rain water that infiltrates and adds to the groundwater and in so doing, raises the water table is small. A rough rule of thumb states that about 25% of rainwater runoff (which is taken to be 19% of precipitation[4]) reaches the water table. This is in agreement with the findings of Crippen (1965)[5]. The 100-year storm event would be expected to deliver only about 4 inches of water to the water table. So it is seen that although the probability of a rainfall of long duration is significant on a 100 year scale, the actual amount of water added by such a storm to that stored below the water table is rather small. An estimate based upon the annual average of precipitation at the subject parcel (about 18 inches) indicates that about 5 in is stored annually on average).

Lighthouse Creek just east of the subject parcel appears to be a historically intermittent stream[6]. It is likely that the stream derives some of its winter base flow from the area under the region of the subject parcel. This base flow represents a discharge from the water stored below the water table and therefore should be subtracted from the estimate of the elevation of the water table by infiltrated rainwater. The lack of seeps in the bluff face suggests that ground water table elevation is close to the elevation of the bluff toe.

The Camino de la Luz landslide of 14 February 1978 was attributed to saturation of the substrate (Weaver 1978). It was thought that excessive uncontrolled runoff with consequent infiltration into a pre-existing slide mass, added to heavy rain infiltration was the primary cause of the failure. The incidence of rain preceding the landslide is shown in Figure 20. The evidence of this landslide supports the conjecture that ground water pressure induced by the excessive infiltration leads to the possibility of the wedge failures which appear to have occurred in this slide. It is important to note that the present analysis indicates that the storm rainfall alone probably was not the sole cause of the landslide.

The conditions at the subject parcel are different from those at the site of the Camino de la Luz landslide of 14 February 1978. A pre-existing slide mass failed at that site. The substrate at the subject parcel is intact marl strata of the Monterey formation. The slope stability analysis for wedge failure indicates that the subject parcel is stable. This is supported by the fact that failure did not occur at the subject parcel during the 14 February 1978 event.

The analysis for wedge stability indicates that the position of the piezometric surface could affect stability. The position is affected by rainfall infiltration. Even though the subject parcel is stable under present conditions and extreme storm events are predicted to raise the piezometric surface only a few inches rather than the 3½ feet required to induce instability, controlling runoff and irrigation at the subject parcel should not be neglected.

---

[4] This follows data reported by Miller & Rapp (1968)
[5] Figure 11 on page E23 for average precipitation of 18 in/yr.
[6] Geologist David Doerner, personal communication. He lived on 8½ ac bordering Lighthouse Creek in the 1930s.

CIRCULAR FAILURE

The potential for circular failure is limited to the unconsolidated material overlying the Monterey strata or landslide debris that lacks the cohesion of intact rock. An example of such a landslide on the coastal bluff in Santa Barbara County is shown in Figure 21. This type of failure is not expected to occur at the subject parcel except in the unconsolidated materials overlying the Monterey strata. The unconsolidated materials are only about 7 feet thick so a failure of this sort would be limited to the "kick-out" such as that existing on the top of the bluff immediately west of the subject parcel (See Figure 4).

TOPPLING OR BUCKLING FAILURE

This kind of failure occurs in rocks having bedding or persistent fractures striking within 10° of the trend of the coastal bluff and dipping nearly vertically (Wyllie & Mah 2004). An example is illustrated in Figure 22. This type of landslide is not expected to occur at the subject parcel. No steeply-dipping discontinuities trending within 10° of the trend of the coastal bluff have been observed at the parcel.

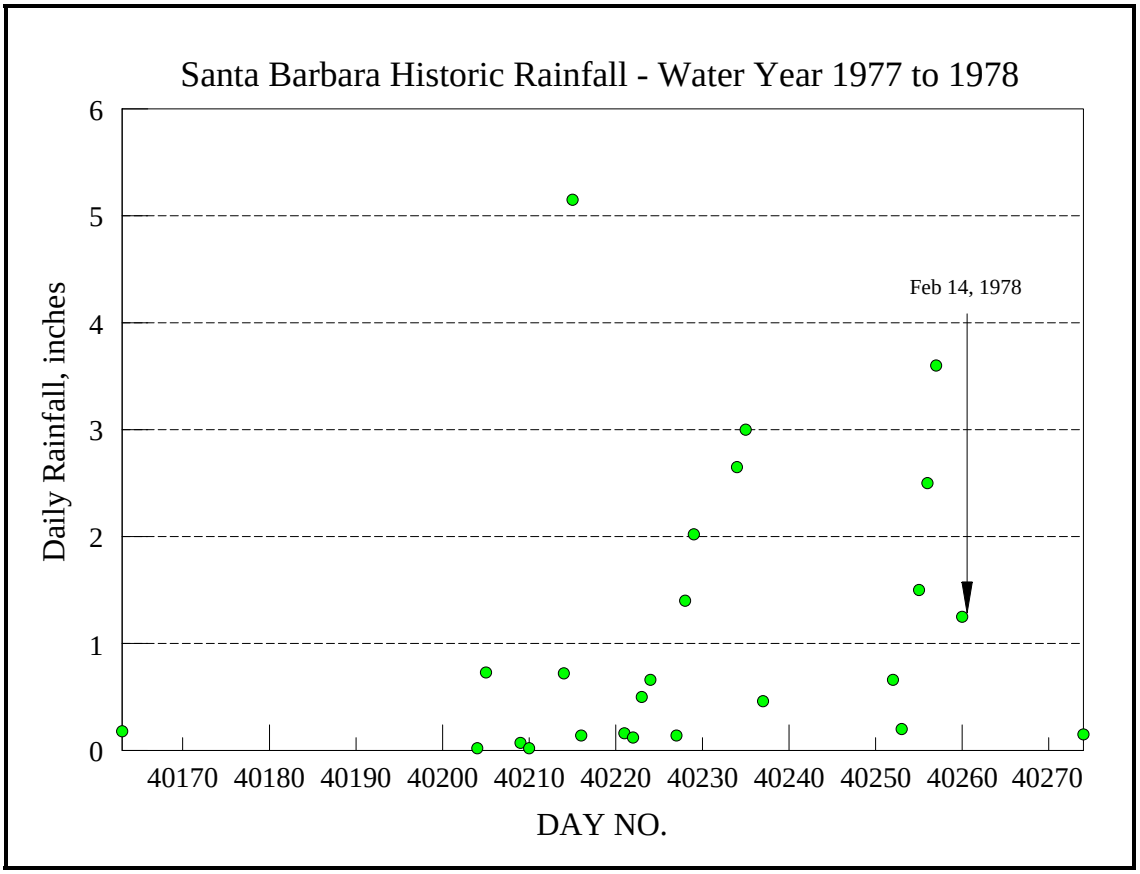


Figure 20. Graph of rainfall preceding the Camino de la Luz landslide. Note the incidence two long-duration sequences of increasingly heavier rainfalls and an extreme single event in the days prior to the landslide.

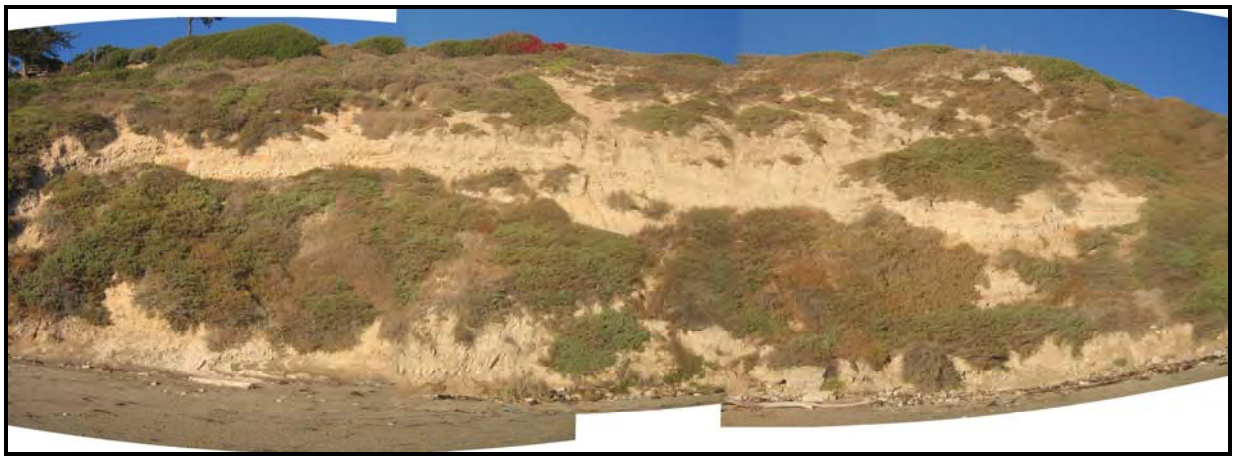


Figure21. Panoramic photo of a circular type landslide on the coastal bluff of Santa Barbara County. The skyline follows the scarp of an ancient landslide. At mid-height up the bluff is the bare scarp of a more recent circular slide of old landslide material. The red Bougainvillea bush and trees suggest the scale of this image.

Figure 22. Toppling Failure viewed from the top of a release surface in the coastal bluff in Santa Barbara County. The mudstone has failed along the steeply dipping planar joint in the center of the photo. Two other joints parallel to the failure joint can be seen in the release surface beyond the failure plane.

MARINE EROSION & LANDSLIDE SETBACK

The method advocated by Johnsson (2003) for calculating a coastal setback considers the rate of marine erosion and the stability of the present coastal bluff. His method of determining the coastal setback consists of deciding upon a project life (75 years in the present case) and applying a rate of bluff retreat to that interval. The stability of the bluff after 75 years of erosion is then estimated by the stability of the present bluff. The setback to the 1.5 factor of safety line is then added to the erosion setback.
The Johnsson (2003) procedure seems to be predicated upon the expectation that all coastal bluff failures occur by circular failure or plane failure. In such cases a line demarking the stable factor of safety line (1.1 in the case of seismic conditions) could be identified and applied to the erosional setback line.

This landslide setback line should be obtained by evaluating the stability of the bluff at the subject parcel with regard to potential wedge failure and not to block sliding or circular failure as implied by Johnsson's method. The direction of wedge failure at the subject parcel is strongly to the southwest (see Figure 15) and not directly seaward. The influence of the wedge failure at the verge of the bluff would be limited to a notch-shaped line rather than a line parallel to the verge such as produced by a tabular failure.

A wedge failure would produce a seaward protuberance in the shoreline. Marine erosion of the wedge would restore the shape and position of the strand to its pre-slide position. However, the height of the wave-caused bluff at the toe would be reduced. This would cause the stability of the failed mass to increase as can be appreciated by examining the diagram in Figure 23. This is the condition that exists in the SE corner of the subject parcel. It would take continued bluff retreat by marine erosion before the failed wedge would become unstable again. That erosion would proceed at the rate determined to have prevailed in the past, 4 inches per year.

It would seem that it would not be necessary to include a landslide setback to the estimate of the 75-yr erosional setback for the subject parcel. Marine erosion will not reach the position of the terrestrial verge of the bluff for about 300 years at the present rate of marine erosion. The factor of safety of the bluff will drop below 1.5 when marine erosion has proceeded 60 ft shoreward and formed a bluff 60 ft high. This would be expected to occur in about 180 years.

These epistemic estimates of landslide occurrence in the bluff at the subject parcel indicate that there is little need for concern in this regard. The aleatory effects are such that a 26% (= 1 - (1 - 1/100) exp 30) chance exists that a 100-year rainfall could occur in the next 30 years. Note that this does not mean that a 100-year storm will occur in the next 30 years - one has not occurred for the past 97 or so years. Further, it does not mean that there is a 26% chance of failure of the bluff at the subject parcel. The 100-year event is about 6 inches of rainfall per day. The minimal infiltration from such an event reduces the aleatory effect to negligible.

SEA LEVEL RISE AND COASTAL EROSION

Some concern exists regarding the effect of sea level rise in the future. Estimates of sea level rise have been made using postulated future warming of the ocean and atmosphere. Values presented by the California State Lands Commission as predicted by the California Ocean Protection Council based upon work by Vermeer and Rahmstorf (2009) are used here with the reservation that only tenuous results can be expected from an analysis involving the combined uncertainties of the many causative variables.

The rate of sea level rise is estimated from the expected rate of melting of land-bound glaciers and the ice sheets of Antarctica and Greenland. A small contribution is included as thermal expansion of sea water in response to warming. It appears that no account was made of thermal expansion of the coastal land mass under such warming. Neither was tectonic elevation of this coastal region, renowned for its high rate of tectonic uplift. The remnants of a coastal terrace at about one meter above the present wave-cut terrace existed along the Santa Barbara cliffed shoreline in the 1980s. That one-meter terrace was evidence of relatively recent uplift of this region. There is no reason to suppose that uplift will not continue.

The rate of coastal retreat is assumed to increase by 20% because of sea level rise (Adams & Inman 2009). This means that the effective rate of erosion will be about 5 in /yr rather than the present rate of 4 in/yr. At the future rate the coastal bluff at the subject parcel would become unstable in about 140 years. It is evident that sea level rise would have no deleterious effects upon the stability of the bluff within the next 75 years.

CONCLUSIONS

An analysis of the stability of the coastal bluff at the subject parcel indicates that under conservative estimation of geological and physical conditions, the bluff face is stable. Neglecting the stabilizing effects of asperities in the bedding and fractures, neglecting the effects of lateral release surfaces, ignoring stereotaxis, and utilizing conservative values for the physical parameters of stability while imposing a maximum building surcharge and seismic load failed to produce a result indicating instability.

Both plane failure and wedge failure are kinematically allowed for the subject parcel but the factors of safety indicate stability of the mass involved in such slides. The mass involved in both kinds of failure lies below (S of) the proposed building envelope so slope failure should not be a threat to a structure built there.

The probability of failure is affected by the degree of saturation of the substrate in the masses but the infiltration of rainwater from severe storms (4 in for a 100-yr storm) is not sufficient to create instability. Even so, surface runoff and irrigation must be controlled at the subject parcel.

Marine erosion at the subject parcel is not expected to induce landslides until the bluff reaches a height of 60 ft. Bluff retreat under conditions of future sea level rise would

induce instability in about 140 years, a span of time many times the life of any project at the site. The 75-year setback proposed by Fisher (2001) appears to be appropriate for the subject parcel.

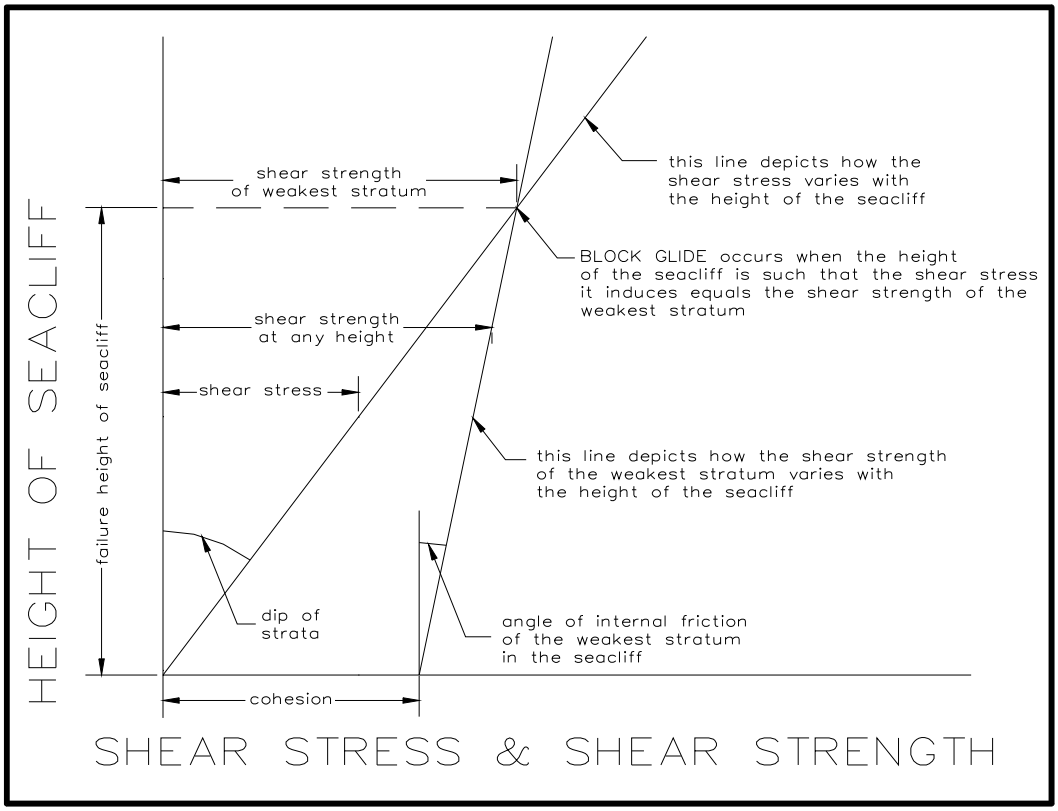
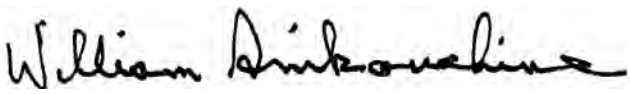


Figure 23. Diagram illustrating the dependence of bluff stability upon the height of the bluff.

I trust that this response is suitable for your purposes. Please contact me if you have any questions or comments.



William Anikouchine PhD
Consultant in Earth & Marine Sciences
Santa Barbara CA

REFERENCES

Adams & Inman (2009) - "Climate Change and Potential Hotspots of Coastal Erosion Along the Southern California Coast." Adams, Peter N. and Douglas L. Inman 2009, PIER Research Report, CEC-500-2009-022-D, Sacramento, CA: California Energy Commission.

CFG (1996) – "Proposed Building Site 1837½ El Camino de la Luz, Santa Barbara, California" CFG Consultants 19 June 1996.

Crippen (1965) – "Natural Water Loss and Recoverable water in Mountain Basins of Southern California" John R. Crippen, USGS Professional Paper 417 E. 1965.

Fisher (2001) – Letter titled "Engineering Geologic Update Report, 1837 ½ El Camino de la Luz, Santa Barbara" Fisher Geologic 2 December 2001.

Hoek & Bray (1981) - "Rock Slope Engineering," 3rd edition, E. Hoek and J. Bray Chapman & Hall, London 1981.

Hoover (1978) – "Geologic Hazards Evaluation of the City of Santa Barbara" M. F. Hoover 27 October 1978

Johnsson, M. (2003) - "Memorandum to Coastal Commission and Interested Parties, Establishing Development Setbacks from Coastal Bluffs" 16 January 2003.

Knur (2007) – "Geotechnical Engineering Commentary, Proposed Single-Family Residence, 1837 ½ El Camino De La Luz, Santa Barbara, California" R. T. Knur, Geotechnologies, Inc. 5 September, 2007.

Miller and Rapp (1968) – "Reconnaissance of the Ground-Water Resources of the Ellwood – Gaviota Area, Santa Barbara County, California" U.S. Geological Survey Water Resources Division, Open File Report 68-182. 10 April 1968. 50 p.

Minor et al (2006) - "Preliminary Geologic Map of the Santa Barbara Coastal Plain Area, Santa Barbara County, California" U.S. Geologic Survey Open File Report 02-136 (version 1.2).

Smith 1980 - "Feasibility of Site Development 1837 ½ El Camino de la Luz" by R. J. Smith 29 October 1980.

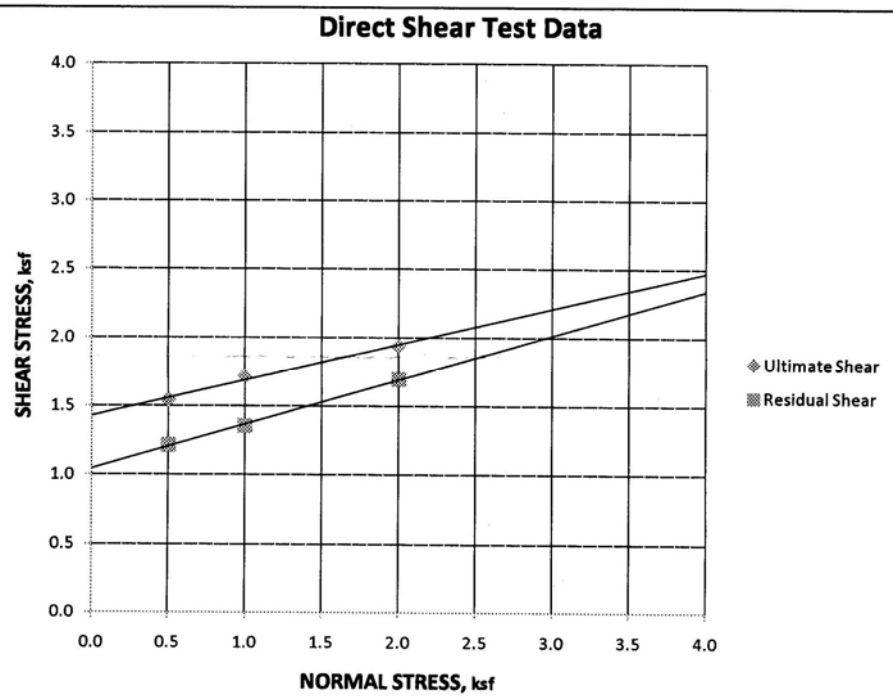
Vermeer and Rahmstorf 2009 - "Global sea level linked to global temperature", *Proceedings of the National Academy of Sciences*, Martin Vermeer and Stefan Rahmstorf, 2009

Weaver (1978) – "Preliminary Landslide Investigation, Sea Cliff Property, El Camino de la Luz, Santa Barbara, California for City of Santa Barbara" by D. W. Weaver & D. F. Hoffman for Pacific Materials Laboratory 6 March 1978.

Wyllie & Mah (2004) – "Rock Slope Engineering, Civil and Mining" 4th edition. Duncan C. Wyllie and Christopher W. Mah. 2004 Taylor & Francis /Spon Press New York. 431 pp.

APPENDIX

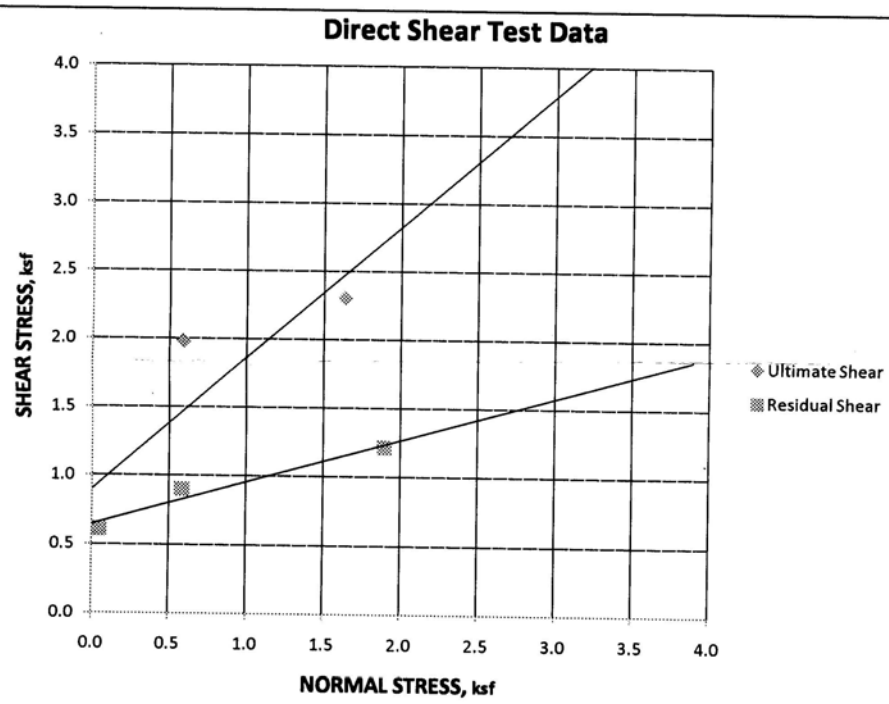
Results of Analyses of Samples Taken From the Exploration Trench



Ultimate Effective Cohesion	1400 psf
Residual Effective Cohesion	1050 psf
Ulitmate Effective Angle of Internal Friction	14 deg
Residual Effective Angle of Internal Friction	16 deg
Location	Remolded
Depth	Disturbed Sample at 2 ft
Moisture Content	20.9 %
Unit Dry Weight	64.2 pcf
Material Description	
Sample Condition	Remolded

Plate A-7.1

Figure A-1. Results of Shear Test of Sample B-3.



Ultimate Effective Cohesion	900 psf
Residual Effective Cohesion	600 psf
Ulitmate Effective Angle of Internal Friction	41 deg
Residual Effective Angle of Internal Friction	15 deg
Location	Grab Sample
Depth	Undisturbed ft
Moisture Content	33.2 %
Unit Dry Weight	58.4 pcf
Material Description	Black plastic CLAY
Sample Condition	Moderatly Disturbed

Plate A-7.2

Figure A-2. Results of Shear Test of Sample B-2.

Appendix D

2013 Ocean Bluff Erosion Retreat Study

OCEAN BLUFF EROSION RETREAT STUDY
BARTHELS RESIDENCE
1837-1/2 EL CAMINO DE LA LUZ
SANTA BARBARA, CALIFORNIA

November 15, 2012
(Revised March 21, 2013)

Prepared by:

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November 15, 2012
(Revised March 21, 2013)

FILE NO.: SL-16766-GA

Mr. Herbert Barthels
c/o Mr. Richard Monk
Hollister & Brace
P.O. Box 630; 1126 Santa Barbara Street
Santa Barbara, Ca 93102

PROJECT: BARTHELS RESIDENCE
1837-1/2 EL CAMINO DE LA LUZ
SANTA BARBARA, CALIFORNIA

SUBJECT: Ocean Bluff Erosion Retreat Study

Dear Mr. Barthels:

In accordance with your request, this report presents our findings regarding the location of the bluff top and estimated bluff retreat rates for your property at 1837-1/2 El Camino de la Luz, Santa Barbara, California. Our conclusions and recommendations regarding an appropriate setback for your proposed project are based upon a field reconnaissance, bluff retreat and topographic analysis utilizing current digital technology and aerial photographs, and review of past geologic studies.

Thank you for this opportunity to have been of service. If you have any questions, please feel free to contact this office at your convenience.

Sincerely,

Earth Systems Pacific

PROFESSIONAL GEOLOGIST
RICHARD T. GORMAN
No. CEG 1325
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA

Richard T. Gorman
Certified Engineering Geologist

Copy to: Land P Consultants, Attn.: Brent Daniels
City of Santa Barbara, Attn.: Danny Kato
Herb Barthels
Patti Gutshall

Doc. No.: 1211-010.GEO.REV1/jr

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Figure 1: 1953 Air Photograph and Site Topography

Figure 2: Site Coastal Photograph

Figure 3: Bluff Top and Bluff Erosion Retreat Map

Figure 4: Anikouchine Geological Inspection Trench

1.0 INTRODUCTION

Proposed Project and Background

The development of the property at 1837-1/2 El Camino De La Luz, Santa Barbara, California with a single family residence is proposed. The property is a 23,885 (0.5 acres) square foot lot that is located at the top of an ocean bluff in the West Mesa neighborhood in southern Santa Barbara. The proposed project is a new split-level, approximately 1,500 square foot residence with a detached garage. Access to the site would be along private easements extending south from the terminus of El Camino de la Luz.

Numerous geologic and soils investigations of the site have been performed over the past 25 years. A Draft Environmental Impact Report prepared for the project in February, 2012 by Rodriguez Consulting, Inc. cited three reports prepared by Dr. William Anikouchine, one of which cited 17 previous geologic reports. In those reports, potential geologic hazards were evaluated, including issues associated with landsliding, slope instability, and seismicity. As the general geologic issues affecting the site have been adequately addressed by others, this report is limited to assessment of bluff erosion and the anticipated bluff retreat.

As part of our assessment of bluff conditions and erosion, the following reports and letters were reviewed:

- "Proposed Building Site Feasibility, 1837 1/2 El Camino De La Luz, Santa Barbara, California" by CFG Consultants, dated June 19, 1996
- "Engineering Geologic Update Report, 1837 1/2 El Camino De La Luz, Santa Barbara, California" by Fisher Geologic, dated December 2, 2001
- "Geotechnical Engineering Commentary, Proposed Single Family Residence, 1837 1/2 El Camino De La Luz, Santa Barbara, California" by Geotechnologies, Inc., dated September 5, 2007
- "Geological Inspection Trench at 1837 1/2 El Camino De La Luz, Santa Barbara, California" by William Anikouchine, PhD, dated August 25, 2009
- "Geological Investigation of Slope Stability at 1837 1/2 El Camino De La Luz, Santa Barbara, California" by William Anikouchine, PhD, dated November 9, 2011

Purpose and Scope of Work

The purpose of this study was to determine an ocean bluff erosion retreat rate and appropriate building setback, based upon a review of data compiled from previous geologic reports, analysis of historical and current aerial photographs using digital technology, and observations of the current bluff conditions. This study encompassed the following tasks:

1. Review of geologic maps, survey maps, and published and unpublished geologic reports pertinent to the project area.
2. Geologic reconnaissance and mapping of features observable at the ground surface across the subject site and bluff face.
3. Analysis of the bluff erosion retreat rate.
4. Preparation of this report.

Site Setting

The subject property consists of an approximately 23,885 (0.5 acres) square foot lot (APN 045-100-065) located on an ocean bluff immediately west of the Coast Guard Lighthouse Property and south of La Mesa Park. The height of the bluff is approximately 100 feet. The nearly square-shaped lot is accessed from a driveway that branches off of the cul-de-sac at the end of El Camino de la Luz. The property is vacant, but has been graded in the past and is paved with a thin veneer of asphalt concrete (AC). Review of aerial photographs dating to 1938 indicates that the property has remained vacant over the years. The paved area and graded pad below the southeast side of the paved area were apparently graded during the 1950's, (see Figure 1, 1953 Aerial Photograph and Site Topography).

South of the paved lot, the bluff descends to the south toward the beach and to the east toward a south trending drainage, which flows over the top of the ocean bluff (see Figure 2, Site Coastal Photograph). Santa Barbara City Public Works Department referenced and titled this drainage as the Barranca drainage. This drainage is now referred to as the Lighthouse Creek. Surface drainage from adjacent parcels to the site and runoff from the city street Elise Way, less than 1/3 mile north of the site, flows into Lighthouse Creek.

The majority of the ocean bluff face is covered with dense vegetation consisting of small-leafed ice plant and native brush. A narrow footpath switches back across the south exposure of the bluff face, terminating at the beach below the adjacent property to the west. The upper half of the seaward-facing bluff face, below the paved area, has an approximate slope angle of 35 degrees. Below the lower leg of the footpath, the bluff steepens to about 65 to 75 degrees. This area is described by William Anikouchine as the "oceanographic bluff edge" (Anikouchine, 2005, 2009), i.e. the most landward point where sea waves have a direct effect on bluff erosion.

2.0 BLUFF CONDITIONS

Geologic units observed within the site and immediate area consists of fill and sandy alluvium beneath the paved area, underlain by claystone and shale bedrock of the Monterey Formation.

The paved area was constructed approximately at native grade. The total thickness of the fill and sandy alluvium underlying the paved area is approximately 5 to 6 feet. These layers are exposed along the top of the ocean bluff and consist mostly of sand. A backhoe trench was excavated by William Anikouchine, PhD (Anikouchine, 2009) to expose the geologic units in this area. The approximate location of the trench is shown on Figure 3, Bluff Top and Bluff Erosion Retreat Map. According to Anikouchine, the trench exposed bedrock of the Monterey Formation underlying the fill and sandy alluvium. The bedrock consisted of interbedded layers of claystone and shale. The profile of the bedrock closely reflects the topography of the bluff face, as depicted in Figure 4, Geological Inspection Trench (extracted from Anikouchine, 2009).

A site reconnaissance was performed by the undersigned to observe the current condition of the bluff face. Bedrock is exposed in the lower bluff face; it consisted of interbedded layers of claystone and shale. The layers of bedrock are well-bedded and dip 25 to 50 degrees to the southwest. The bedding trends sub-parallel along the bluff face. No sea caves are present and only minor undercutting was observed along the bottom of the bluff.

3.0 RETREAT ANALYSIS

To estimate the rate of ocean bluff retreat, analysis of historical aerial photographs was conducted. Stereoscopic vertical aerial photographs of the site dated 1953 were analyzed in combination with a topographic site map, dated April 5, 2012 (provided by Peikert Group Architects, LLP) and a 2010 digital La Mesa ortho aerial photograph. The 2010 ortho aerial photograph was used as a basis to plot data from the site map and the 1953 aerial photographs.

Stereographic interpretation of the 1953 aerial photographs was performed using manual and digital/computer stereo-scope techniques to determine the bluff top conditions and to identify the edge of the bluff top. Once the alignment of the bluff top was determined and plotted on the 1953 air photograph, it was imported and geo-registered into the program Global Mapper (ver. 14). The bluff top as it existed in 1953 and in 2012 were then plotted on the 2010 digital La Mesa ortho photograph. The determination of the location of the 2012 bluff top was based on site observations, site mapping, the conditions exposed in the previously discussed Geological Inspection Trench (Anikouchine, 2009), and the 2012 topographic site map.

The 2012 bluff top was defined and plotted near the existing AC curb edge along the western and central part of the paved area of the site. At the southeastern corner of the paved area, the bluff top follows a moderately broad ridgeline that trends down to the mouth, or bluff top edge, of Lighthouse Creek (see Figure 2).

The alignment of the 1953 bluff top was then compared with the alignment of the present 2012 bluff top to estimate the maximum distance that the bluff has retreated. Areas of maximum bluff erosion were identified and bluff retreat losses were measured. Annual maximum bluff retreat loss was calculated for the approximate 59-year period between 1953 and 2012. These results were then used to project the maximum bluff retreat (loss) for the 75-year design life span anticipated for the proposed residence.

The maximum bluff erosion retreat that occurred during the last 59 years was 5 feet. The maximum erosion occurred at the southwestern corner of the paved area, as shown in Figure 3. This maximum bluff erosion retreat of 5 feet equates to an erosion rate of 1.02 inches per year.

4.0 SUMMARY OF PREVIOUS STUDIES

Predicted rates of bluff retreat at the site, as presented in the numerous geologic studies prepared for the project site, have varied widely. Some of the rates reported were based upon original research of aerial photographs and field measurements, while some were based upon review of earlier reports. K-C Geotechnical (1987) gave a rate of 6 to 8 inches per year, based upon a report by Thomas W. Dibblee, Jr. (1986), which was prepared for the adjacent parcel at 1837 El Camino de la Luz. Norris (1988) estimated a rate of 4 inches per year, based upon review of three aerial photographs dated 1943, 1954, and 1986, noting that the erosion rate in the vicinity of the subject site was less than in nearby areas to the east and west. This report was also not available to this firm for review, but was cited in several later reports.

CFG Consultants (1996) reviewed aerial photographs dated 1928, 1938, 1947, 1954, 1959, 1969, 1972, and 1995. Based upon measurements of the distance between Cliff Drive and the bluff top (both on photos and in the field), they concluded that the top of the bluff at the paved parking area had not changed in over 65 years, and estimated the buff retreat rate to be "less than 4 inches per year."

Fisher Geologic (2001) prepared an update of the 1996 CFG Consultants report, confirming that the "less than 4 inches per year" rate established by that study was appropriate. Fisher noted that documented retreat rates were available for Station MOSS, located 1.2 miles to the east, and for

station WHEELER, located 0.56 miles to the west. Retreat rates at MOSS were determined to be 7.7 inches per year, while WHEELER had zero inches of retreat since 1927. Fisher concluded that the conditions at El Camino de la Luz most closely matched conditions at WHEELER, as "rocks comprising the seacliff at El Camino de la Luz are hard, highly siliceous and more resistant to erosion than at most locations along the Santa Barbara Coastline."

Geotechnologies, Inc. (2007) estimated a retreat rate of 4 to 8 inches per year, based upon the previously discussed reports (Norris, 1988, CFG Consultants, 1996, and Fisher, 2001).

Anikouchine (2005) states that the rate of bluff retreat is "conservatively taken to be 4 inches per year." He bases this rate upon review of earlier studies, indicating that this is the rate of retreat that would occur as a result of beach erosion. He states that bluff retreat related to coastal processes would occur only below the "oceanographic bluff edge," i.e. the elevation above which terrestrial erosion prevails.

The 2012 EIR states that the average annual rate of bluff retreat at the project site is estimated to be less than 4 inches per year, citing Anikouchine (2005).

5.0 CONCLUSIONS

Based upon the results of our field reconnaissance, bluff retreat and topographic analysis utilizing current digital technology and aerial photographs, along with review of past geologic studies, it is our opinion that the maximum rate of bluff retreat at the subject site is 1.02 inches per year.

In reviewing past geologic studies, it appears that only Norris (1988) and CFG Consultants (1996) established retreat rates based upon original research of historical aerial photographs and topographic measurements. Other reports cited these earlier studies, and Fisher Geologic (2001) and Anikouchine (2005) concurred with the findings of Norris and CFG Consultants based upon review of the reports combined with field observations. CFG Consultants and Fisher concluded that the rate of retreat was something "less than 4 inches per year," but did not specify where within this 4-inch range the actual retreat rate fell. CFG Consultants noted that the top of the bluff had not changed in over 65 years, and that no measurable retreat of the seacliff had occurred since 1980. Fisher concluded that the geologic conditions at the subject site closely match conditions at station WHEELER, located 0.56 miles to the west, where the documented retreat rate has been zero inches since 1927. Anikouchine (2005) states that the rate of seacliff retreat is "*conservatively* [emphasis added] taken to be 4 inches per year."

Our evaluation of bluff retreat at the site was based upon a comparison of the conditions shown in 1953 aerial photograph and a current topographic map, with stereographic interpretation of the 1953 photograph performed using manual and digital/computer stereo-scope techniques. The results were then geo-registered and plotted onto a 2010 digital La Mesa ortho photograph using program Global Mapper (ver. 14). This methodology results in a digitally-aided plot that is considerably more accurate than those based upon strictly manual methods as used for previous studies. The maximum bluff erosion retreat over the 59-year time span from 1953 to 2012 was determined to be 5 feet, or an average of 1.02 inches of bluff retreat per year.

This rate of retreat is considerably less than the 3 to 10 inches per year that is generally considered to be characteristic of the Santa Barbara area (City of Santa Barbara, 1979). There are a number of reasons why this is so. First, the bluff in the area of the subject site is underlain by Monterey Formation bedrock. The overall bedrock of the Monterey Formation has a variable resistance to wave attack and erosion, due to the different interbedded bedrock units within the formation. At this site, the rock comprises interbedded layers of claystone and shale. The shale is highly siliceous and resistant to erosion. The bedding trends sub-parallel along the bluff face which also increases resistance to sea wave erosion. No sea caves were observed in the bluff face and only minor undercutting along the bottom of the bluff was observed, further illustrating that the bedrock exposed in the bluff face is resistant to sea wave erosion.

The 1.02 inches per year bluff retreat rate for the subject site is consistent with this firm's findings for bluff retreat of the Monterey Formation along the San Luis Obispo County coastline. The results of numerous studies have indicated retreat rates ranging from 1.5 to 2.5 inches per year in San Luis Obispo County. The shoreline of San Luis Obispo County has a generally west-facing configuration, which renders it vulnerable to high-energy sea waves produced by the prevailing northwest-trending storms. In contrast, south of Point Conception, the Santa Barbara shoreline generally faces to the southwest, which reduces the impact of northwest-trending storm wave energy. The presence of the offshore Santa Barbara Channel Islands provides additional protection. Consequently, sea wave energy along the Santa Barbara coast is considerably less than that along the San Luis Obispo coastline, and erosion rates would be expected to be less.

75-Year Proposed Building Bluff Top Setback

An increase of 20 percent to the retreat rate was assumed by Anikouchine (2011) based upon a paper by Adams and Inman (2009) that calculated the effects of sea level rise on sea cliff retreat. This 20 percent increase, added to the determined rate of 1.02 inches per year, would result in a total bluff erosion retreat rate of 1.22 inches per year. It should be noted however, that the bluff top as determined in this report, is actually over 70 feet upslope of where the actual bluff erosion will occur. We concur with Anikouchine's conclusion that sea wave-related erosion will be

confined to the lower, steep part of the bluff referred to by Anikouchine as the "oceanographic bluff edge" (Anikouchine 2005, 2011). This is consistent with the findings of CFG Consultants, Inc. and Fisher, who found that virtually no retreat at the top of the bluff has occurred for over the last 65 years. Therefore, it is reasonable to infer that it will likely be well over 100 years before retreat of the oceanographic bluff edge would impact the bluff top as designated herein and used for planning purposes.

Assuming, however, that the retreat would occur *at the bluff top* at a rate of 1.22 inches per year, which includes the sea level rise factor, it is estimated that the bluff would retreat approximately 7.6 feet over a 75-year design life period (see Plate 1).

No additional bluff top setback to accommodate any potential slope instability is considered necessary due to the high factor of safety obtained from stability analysis by Anikouchine (Anikouchine, 2011).

6.0 CLOSURE

This report is valid for conditions as they exist at this time for the type of development described in the Introduction section of this report. The study was intended to be performed in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing in the locality of this project under similar conditions. No other representation, warranty, or guarantee, is either expressed or implied.

If changes with respect to the project type or location become necessary, or if items not addressed in this report are incorporated into plans, this firm shall be notified for modifications to this report.

If future property owners wish to use this report, such use will be allowed to the extent the report is applicable, only if the user agrees to be bound by the same contractual conditions as the original client, or by contractual conditions that may be applicable at the time of the report's use.

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End of Text

REFERENCES

Addams, P.N & Inman, D.E. 2009, Climate Change and Potential Hotspots of Coastal Erosion along the southern California Coast, CEC-500-2009-002-F

Anikouchine, William, 2005, Geologic Review, 1837-1/2 El Camino De La Luz, EIR.

Anikouchine, William, 2009, Geological Inspection Trench at 18371/2 El Camino De La Luz, Santa Barbara, California.

Anikouchine, William, 2011 Geological Investigation of Slope Stability at 1837-1/2 El Camino De La Luz, Santa Barbara, California.

CFG Consultants, 1996, Proposed Building Site, 1837-1/2 El Camino De La Luz, Santa Barbara, California.

Dibblee, T.W., Geologist Report, 1837 El Camino De La Luz, Santa Barbara, California, dated June 24, 1986.

Geotechologies, Inc., 2007, Geotechnical Engineering Commentary, Proposed Single Family Residence, 1837-1/2 El Camino De La Luz, Santa Barbara, California.

Fisher, 2001, Engineering Geologic Update Report, 1837-1/2 El Camino De La Luz, Santa Barbara, California.

Revised Draft Environmental Impact Report, 1837-1/2 El Camino De La Luz Residence, SCH No. 2005041031, February 2012, by Rodriguez Consulting, Inc.

Air Photographs

Date	Scale	Source	Flight No.
1953	1" = 4800'	UCSB	CC-1-44 & 45
1938	1" = 2400	UCSB	C-4950-F- 72 & 73

APPENDIX

Plate 1: Site Map

Figure 1: 1953 Air Photograph and Site Topography

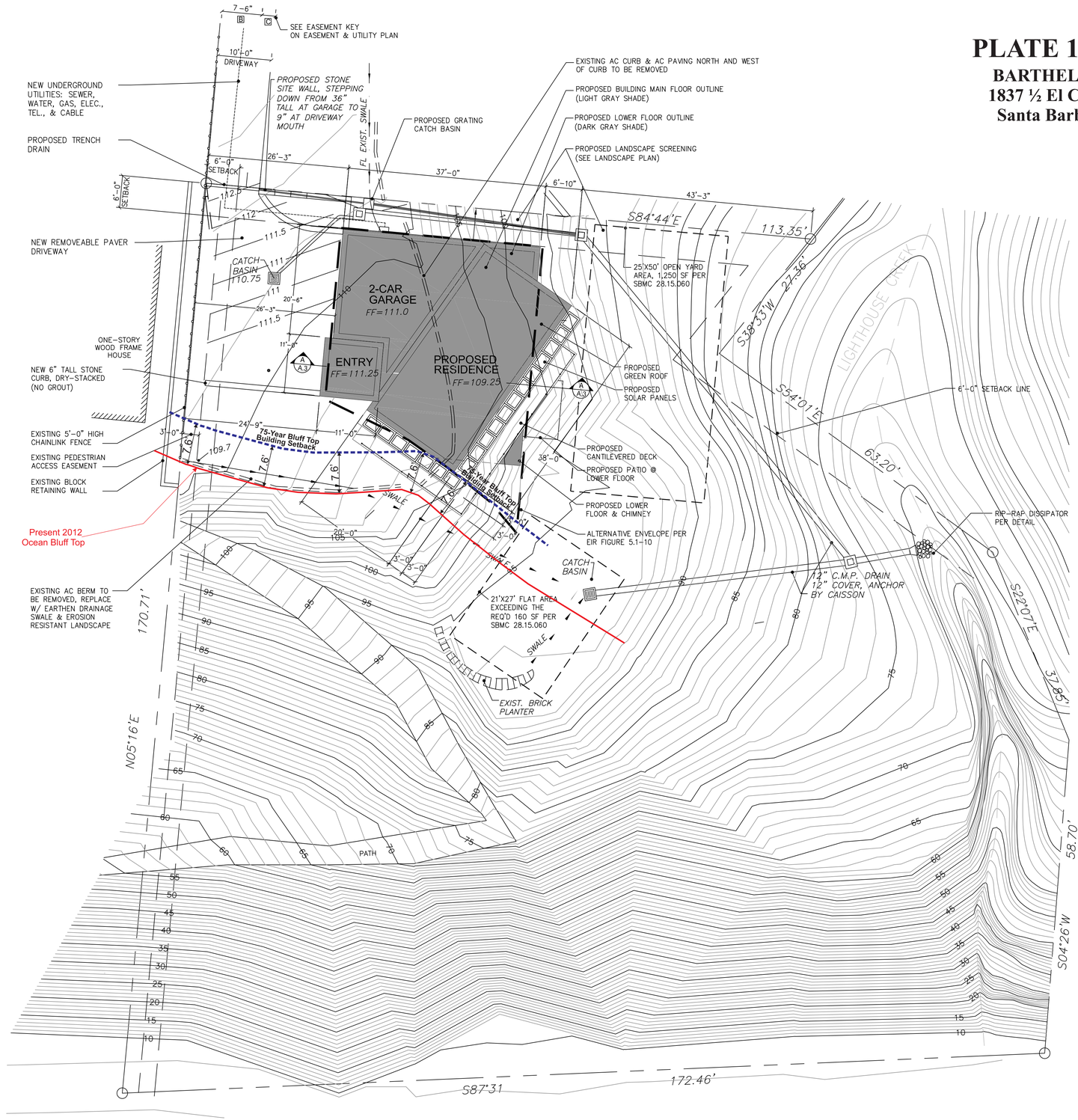
Figure 2: Site Coastal Photograph

Figure 3: Bluff Top and Bluff Erosion Retreat Map

Figure 4: Anikouchine Geological Inspection Trench

PLATE 1: SITE MAP

BARTHELS RESIDENCE
1837 ½ El Camino de la Luz
Santa Barbara, California



N

SCALE:1" = 10'-0"

REF.: Topo prepared by Peikert Group Architects, LLP

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FIGURE 1: 1953 AIR PHOTOGRAPH AND SITE TOPOGRAPHY

BARTHELS RESIDENCE
1837 ½ El Camino de la Luz
Santa Barbara, California

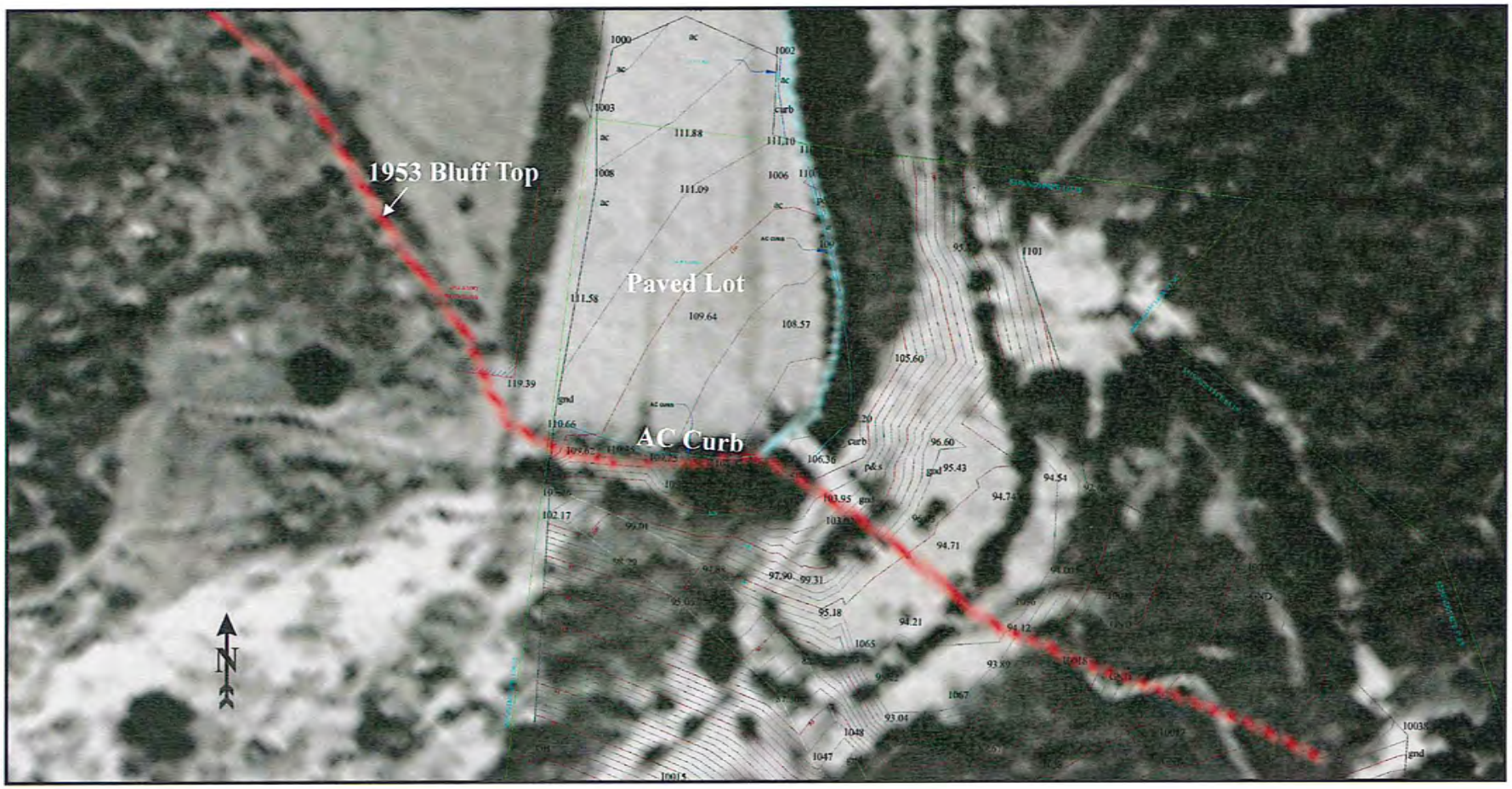

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FIGURE 2: SITE COASTAL PHOTOGRAPH

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FIGURE 3: BLUFF TOP AND BLUFF EROSION RETREAT MAP
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FIGURE 4: ANIKOUCHINE GEOLOGICAL INSPECTION TRENCH

BARTHELS RESIDENCE
1837 ½ El Camino de la Luz
Santa Barbara, California

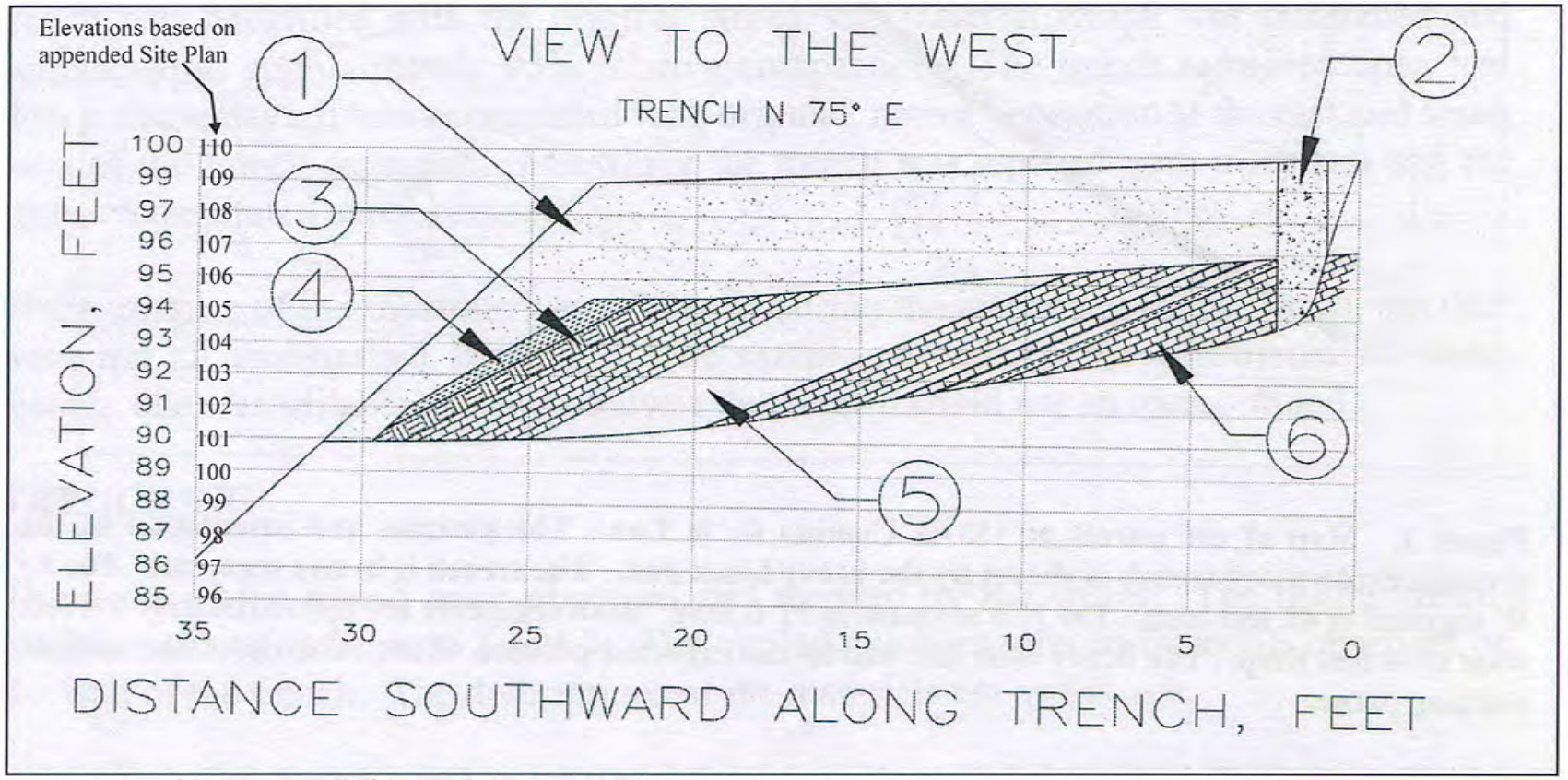

Figure 3. Map of the western wall of the trench dug at 1837V2 Camino de la Luz. The circled numbers and hatching symbols refer to the type of substrate materials which are described in the text.

1. Dark gray-brown sandy alluvium and artificial fill.
2. Backfilled trench materials derived from trench excavation.
3. Dark gray dense claystone. Sample B-2
4. Light brown, fissle shale, thin bedded with laminae about 2 mm thick. Often interbedded with Unit 5 below. Sample B-l
5. Tan shale, thin bedded (½ to 1" thick) and interbedded with fissle, white silty clay seams a few mm thick and about 6" apart. Sample B-3
6. Massive light tan siliceous marl with beds 1 to 2 ft thick.

REF.: Extract from Anikouchine Geological Inspection Trench, 2009

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Appendix E

2013 Canyon Slope Stability Analysis and Erosion Study

CANYON SLOPE STABILITY ANALYSIS AND EROSION STUDY BARTHELS RESIDENCE 1837-1/2 EL CAMINO DE LA LUZ SANTA BARBARA, CALIFORNIA

March 21, 2013
(Revised July 9, 2013)

Prepared for

Mr. Herbert Barthels

Prepared by

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March 21, 2013
(Revised July 9, 2013)

FILE NO.: SL-16766-GA

Mr. Herbert Barthels
c/o Mr. Richard Monk
Hollister & Brace
P.O. Box 630
1126 Santa Barbara Street
Santa Barbara, CA 93102

PROJECT: BARTHELS RESIDENCE
1837-1/2 EL CAMINO DE LA LUZ
SANTA BARBARA, CALIFORNIA

SUBJECT: Canyon Slope Stability Analysis and Erosion Study

Dear Mr. Barthels:

In accordance with your request, this report presents our findings regarding the stability and erosion potential of the canyon slope along the eastern side of the proposed building area at 1837-1/2 El Camino de la Luz, Santa Barbara, California. Our conclusions and recommendations regarding an appropriate setback for your proposed development are based on a field reconnaissance, subsurface exploration, laboratory testing of soil samples and review of aerial photographs. Evaluation of the ocean bluff is beyond the scope of this report.

CANYON SLOPE STABILITY

Subsurface Exploration

To assess the geologic units, a subsurface exploration was performed within the canyon slope area on February 13, 2013. Two borings were drilled at the site utilizing hand auger equipment. The approximate locations of the borings are indicated on the Site Map (Appendix A). Soils encountered in the borings were categorized and logged in general accordance with the Unified Soil Classification System and ASTM D 2488-09a. Logs of the borings and a Boring Log Legend are provided (Appendix B). As the borings were drilled, soil samples were obtained using a ring-lined barrel sampler (ASTM D 3550-01/07 with shoe similar to D 2937-04).

Laboratory Testing

Two ring samples were tested for unit weight and moisture (ASTM D 2937-10, as modified for ring liners). One ring sample was tested for unconfined compressive strength (ASTM D 2166-06). Results of the laboratory tests are provided (Appendix C).

Geologic Profile

In Boring 1, in the canyon slope, four feet of clayey sand with gravel fill soil was encountered. Along the top of the canyon slope, on the outside edge of the existing curb, approximately 5 feet of sandy clay with gravel fill soil was encountered in Boring 2. The gravel within the fill soils was composed of shale and claystone rock fragments. The fill soils in both borings were underlain by moderately hard, and fractured, weathered, interbedded shale and claystone bedrock of the Monterey Formation.

Slope Conditions

The canyon slope is approximately 35 feet tall, with a gradient of 1.75:1 (horizontal: vertical) in the upper half. The slope flattens to a 3.5:1 angle in the lower half. The slope is covered with a dense growth of vegetation. We understand that in the early 1950s, a graded path was constructed along the western side of the creek on the eastern flank of the canyon slope to provide access to the site. This grading was also addressed in the Engineering Geologic Update Report by Fisher Geologic (2001). The construction apparently consisted of placing fill along the front or southeastern side of the ocean bluff, and along the upper half of the canyon slope. Due to the dense vegetation present on the canyon slope, the limits of the fill could only be approximated based on a review of the 1953 air photograph and site observations. The approximate limits of the fill are shown on the Canyon Slope Looking West Photograph (Appendix A). Based on field observations along Lighthouse Creek, the lower half of the slope and creek area appears to be overlain with 1 to 2 feet of alluvium. A thin layer of alluvium was observed overlying bedrock along the thread of the creek in the vicinity of the creek mouth.

Slope Stability

Shale Bedrock

During the site reconnaissance, no evidence of gross slope instability was observed in the canyon slope within the site area. In our opinion, the Monterey Formation bedrock at the site is grossly stable, due to its favorable cross bedding strength characteristics and its bedding orientations of 28 to 34 degrees dipping into the slope face, see Cross Section A-A' (Appendix D). Due to the presence of these favorable bedding orientations, block and cross bedding rotational failures within the shale and claystone bedrock have a very slight potential of occurring.

Colluvial Soils

The colluvial soils observed along the lower half of the canyon slope and in the bottom of the creek were not included in the slope stability analysis due to the soils being on the lower flatter part of the slope and having a thickness of only 1 to 2 feet. Due to these soil and slope conditions, it is our opinion that they would not have an impact on the gross stability of the canyon slope.

Fill Soils

The fill soils appear to be grossly stable, due to their apparent age and the lack of evidence of slope instability on the canyon slope. To determine the factor of safety (FS) for potential failure surfaces under saturated conditions, a slope stability analysis was performed using the computer program PCSTABL5. The analysis was conducted using the Modified Bishop method of slices. Cross Section A-A', per the Site Map (Appendix A), was used as the basis for the slope stability analyses; it was based on information obtained from the subsurface exploration and our field reconnaissance.

The common standard for stability in geotechnical analysis is a factor of safety of 1.5 for static conditions and 1.1 for seismic conditions. To simulate the accelerations produced by an earthquake, a horizontal seismic acceleration of 0.15g was used in the pseudostatic stability analysis. This acceleration is recommended by the California Division of Mines and Geology (CDMG) in "Special Publication 117" (1997) and "Recommended Procedures for Implementation of Division of Mines and Geology (DMG), Special Publication 117: Guidelines for Analyzing and Mitigating Landslide Hazards in California" (Blake, et al, 2002).

The fill soil shear strengths used in the slope stability analysis were determined from an unconfined compression test, and Mohr's Circle analysis. The unconfined compression test measures a soil's ability to resist a compressive load. The ability to resist the load is referred to as the soil's "strength." Strength is in turn made up of two components; friction and cohesion. By utilizing the unconfined compression test results, we constructed a graphical representation of the friction and cohesion acting on the various planes within the soil, at the point of compressive failure. This analysis is called a Mohr's Circle Analysis and is one of the basic tenants of materials engineering. It is simply a semicircle drawn to scale on a plot of cohesion on the vertical axis and compressive strength on the horizontal axis, see Mohr's Circle Plot (Appendix D). The center of the circle is plotted at the unconfined compressive strength derived from the test. The radius of the circle is such that the arc of the circle goes through the ordinate. According to Mohr's theory, which is now accepted as fact in the engineering community, each point on the circle represents the cohesion and friction stresses acting on various planes in the soil at the point of failure.

The angle of friction and the cohesion, in combination, determine the "shear" strength of the soil at failure. The Mohr's Circle allows us to draw a line tangent to the circle at any angle that we choose, and by extending the line to the vertical axis derive the cohesion of the soil corresponding to that friction angle. In this case, the friction angle of 25 degrees was used and was based on the coarse grained consistency of the fill soil and upon our geotechnical experience in this area. As one can see from the plot, the corresponding cohesion was 209 psf. The slope stability analysis was then based upon the cohesion and friction angle determined from the Mohr's Circle Plot (Appendix D). (Note: the Mohr's Circle Analysis works not only for soil, but for any solid material. Using the analysis,

one can find strength parameters of concrete, plaster, rock, or a baked potato if desired.) Bedrock shear strengths for the underlying bedrock were taken from the direct shear test data presented in the "Geological Inspection Trench" report by Anikouchine (August 2009). These data indicated that the bedrock has an ultimate effective angle of internal friction of 41 degrees and an ultimate effective cohesion of 900 psf.

The slope stability analysis resulted in a factor of safety of 1.53 under static conditions, and 1.16 when seismic (earthquake) forces are considered; see Slope Stability Plot (Appendix D). In analyzing the stability of slopes there are literally an infinite number of surfaces or planes along which the slope could fail. For each plane, the weight of the soil above the plane is the downward driving force trying to cause a failure and the strength of the soil (i.e. the friction and cohesion) acting along the plane provides the resistance to failure. The factor of safety is simply the resisting force divided by the driving force. Typically, the industry norm is that a failure plane which has at least 50 percent more resisting force than driving force (i.e. a factor of safety of 1.5) under static conditions is considered to be stable. Given the very low chance of a strong earthquake occurring during the life of the building *and* at a critical time when the water table is high and soils are wetter than normal, etc., a factor of safety of 1.1 is typically considered stable when earthquake forces are included with the driving forces in the analysis.

All slope stability analyses look at these countermanding forces (driving vs. resisting) acting along potential failure planes and calculate the factor of safety of each plane. No computer program can analyze an infinite number of potential failure planes, but they can analyze thousands of planes. Like all programs, the program used in this analysis starts with a single plane and calculates the factor of safety. It then analyzes another potential plane (higher, lower or at a different orientation than the first) and calculates that factor of safety. It then compares the two factors of safety. If the second factor of safety were to be lower than the first, it is more critical than the first. The program will then analyze another plane that is farther in the direction of the second plane. It will continue to analyze potential planes, moving in the direction of lower factors of safety, until the trend of the factors of safety reverses and factors of safety begin to increase.

At this point the program has approximated the plane with the lowest factor of safety, or in other words, the plane that has the greatest chance of failure. The program then analyzes several more planes in close proximity to the plane which has the lowest factor of safety thus far, but at different orientations. As it does this, it is continuously seeking lower factors of safety. After many more iterations, it homes in on the plane with the lowest factor of safety, referred to as the "critical failure plane." It is the potential failure plane that has the greatest chance of failure, were a failure of the slope to occur. It is considered to be a "worst case scenario."

Looking at it another way, a very heavy structure placed at the top of the bluff would add to the downward driving force trying to cause failure. For instance, if a tall, very heavy water tank were to be placed at the top of the bluff and water (i.e. weight) added to the tank until the bluff failed, the failure would be expected to occur along the critical failure plane.

The next step is not done by computer, but the geologist or engineer performing the analysis. That step is to compare the calculated factors of safety for the critical failure plane to the industry norms. In this case, the critical factor of safety under static conditions was 1.53, and the critical factor of safety under seismic conditions was 1.16. Both of these values are above industry norms so the slope is considered stable.

There is one last step in the process, however, and that is to recommend a setback. In our analyses, the top of the critical failure plane was approximately 5 feet back from the top of the canyon slope. While we don't expect any slope failure at all, it would be imprudent to build a structure right at (or within) the critical failure plane; some setback from it is appropriate. Consequently, we recommended a 10-foot setback from the top of the slope for conventional foundations founded into fill soil. This setback should be viewed as an additional factor of safety over and above the factor of safety calculated for the critical failure plane.

LIGHTHOUSE CREEK EROSION

Lighthouse Creek is an ephemeral creek that generally only flows during and immediately after precipitation. The creek area adjacent to the proposed building area consists of a densely vegetated "U" shaped canyon. No evidence of eroded creek bank features was observed along the bottom of the creek. In the vicinity of the mouth of the creek the thread of the creek is incised to a depth of approximately 10 feet. The incised erosion in this area may have been caused by drainage flowing from a 24-inch culvert that discharges surface drainage from the existing Coastguard Lighthouse development, located on the east side of the creek, see the Incised Creek Erosion Looking West Photograph (Appendix A). The general location of this photograph is shown on the Site Map (Appendix A). Erosion up creek of the incised erosion feature appears to be minor and confined to the thread of the creek.

A review of historical photographs indicated that very minor erosion has occurred along the top edge of canyon slope during the last 60 years.

CONCLUSIONS AND RECOMMENDATIONS

Canyon Slope Stability and Building Setback

During our reconnaissance, we found no evidence of instability of the slope adjacent to the proposed building area. The upper half of the canyon slope is covered with 4 to 5 feet of fill soil that was apparently placed in the early 1950s. Our analysis of the fill indicates that this soil is stable under static and seismic conditions. However, if it were to become unstable and fail, the critical point of failure would be approximately 5 feet back (west) from the top of the canyon slope, see Slope Stability Plot (Appendix D).

We are unaware of any records that document the placement or compaction of the fill and it is unknown whether the fill was placed, compacted, or tested in a controlled earthwork program. Given the age of the fill, it is unlikely that it was placed as a properly engineered fill, and there are variations in consistency, density, and moisture content throughout it. These variations could lead to

differences in the soil's ability to support the planned structure. Such a situation could stress and possibly damage foundations (and the structure itself), often resulting in severe cracks and displacement. Consequently, the fill, in its current conditions, should not be relied upon for support of the proposed structure.

Ordinarily, remediation of undocumented fill involves a program of overexcavation, moisture conditioning, and recompaction of the soil to create sufficiently uniform support for the structure. In this case, the entire depth of undocumented fill would need to be removed and recompacted. It would also involve keying the fill into the bedrock and benching the bedrock as the fill is placed. Excavations would be on the order of 4 to 6 feet in depth and would need to extend at least 5 feet beyond the building footprint. At these depths and extents, the overexcavation would encroach upon the slope to the canyon. If it is desired to mitigate the undocumented fill and use a conventional footing foundation, the fill should be removed and replaced in a controlled, engineered program and a setback of 10 feet between the footings and the top of the slope should be established, see Cross Section A-A' (Appendix D) and the Site Map (Appendix A).

As an alternative to a program of overexcavation and recompaction of the undocumented fill, a drilled caisson foundation system could be used. A caisson involves drilling a vertical hole a prescribed depth into the bedrock. Once the hole is drilled, reinforcing (rebar cage) is lowered into the hole and concrete is placed. Grade beams are then constructed to span between the caissons so that the foundation acts as an integral unit to support the structure. The caissons should be founded in the stable bedrock underlying the site, see Cross Section B-B' and Lower Floor Level Plan (Appendix D). A caisson foundation system would require less disturbance of the site than would an overexcavation and recompaction program, and the area disturbed would typically be confined to the building footprint.

A caisson foundation would bear in the underlying rock and would essentially span across the fill (as opposed to bearing in the fill). As a result, the potential for instability of the fill, even though remote, becomes a moot point since once the foundation is cast, the fill provides no support to the foundation. Consequently, a setback of a caisson foundation from the top of the canyon slope is not necessary.

Lighthouse Creek Erosion

Erosion along the creek appears to be confined within the thread of the creek. No defined eroded banks were observed within the bottom of the creek adjacent to the proposed building area. In addition, no significant erosion has occurred along the top edge of the canyon slope during the last 60 years. Therefore, no erosion setback is required.

Thank you for this opportunity to have been of service. If you have any questions, please feel free to contact this office at your convenience.

Sincerely,

Earth Systems Pacific

Richard T. Gorman
Certified Engineering Geologist

PROFESSIONAL GEOLOGIST
RICHARD T. GORMAN
No. CEG 1325
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA

Attachment: References

Appendices:

Appendix A
Site Map
Canyon Slope Looking West Photograph
Incised Creek Erosion Looking West Photograph

Appendix B
Borings Logs (2 Pages)
Boring Log Legend

Appendix C
Laboratory Test Results (4 Pages)

Appendix D
Slope Stability Plot
Cross Section A-A'
Cross Section B-B'
Mohr's Circle Plot
Lower Floor Level Plan

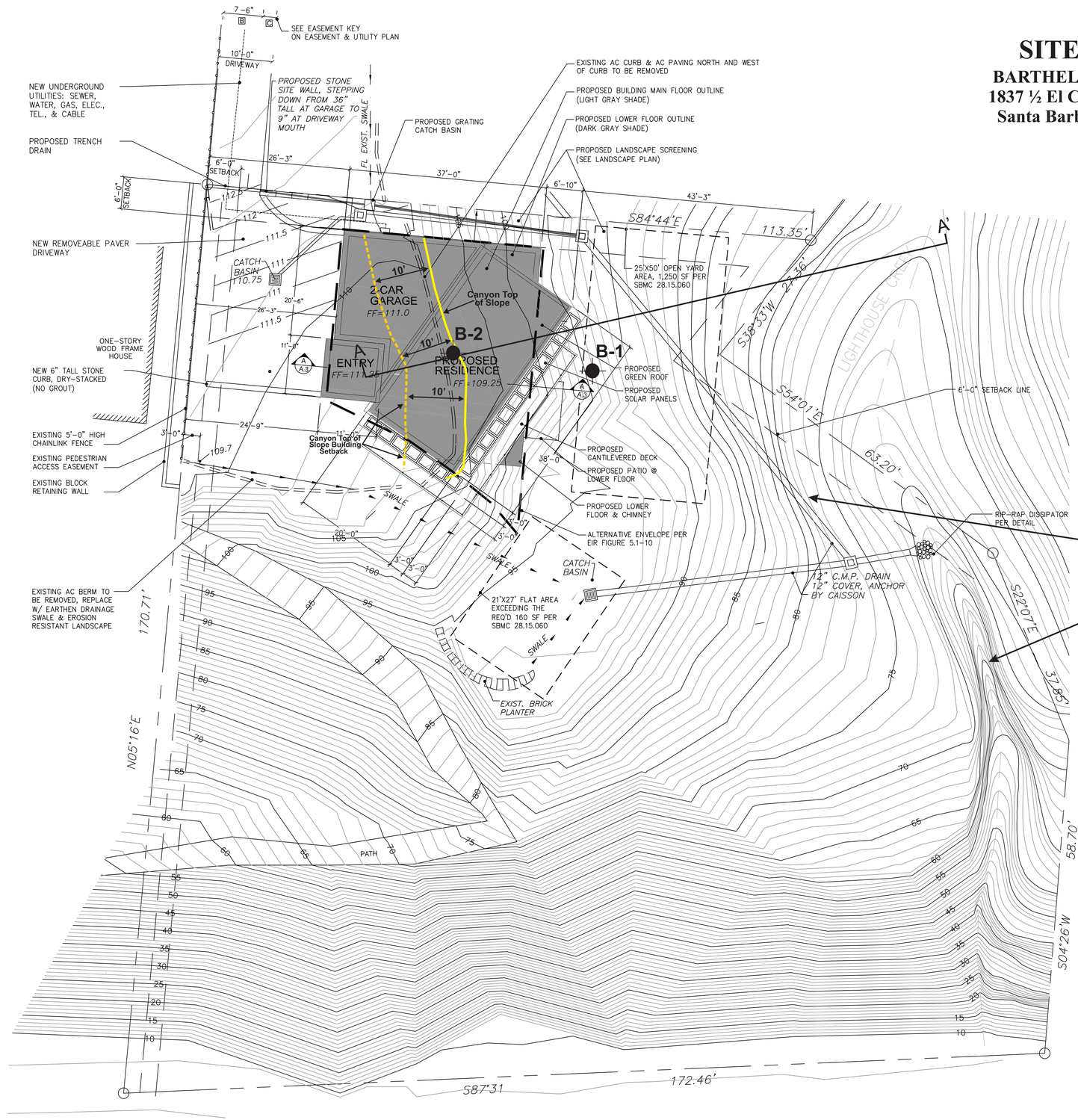
Copies to:
Land P Consultants, Attn.: Brent Daniels
Patti Gutshall
Herb Barthels
Peikert Group Architects, LLP, Attn.: Detlev Peikert
City of Santa Barbara, Attn.: Kathleen Kennedy (2 copies)

APPENDIX A

Site Map
Canyon Slope Looking West Photograph
Incised Creek Erosion Looking West Photograph

SITE MAP

BARTHELS RESIDENCE
1837 ½ El Camino de la Luz
Santa Barbara, California



Approximate location of canyon slope looking west photograph

Approximate location of incised creek photograph

LEGEND

B-2 — Approximate location of hand auger boring

A — A' — Cross Section

Canyon top of slope

Canyon top of slope 10 foot building setback for shallow foundations founded into fill soil (Setback not required for caisson foundations founded into bedrock)

N

SCALE:1" = 10'-0"

REF.: Topo prepared by Peikert Group Architects, LLP

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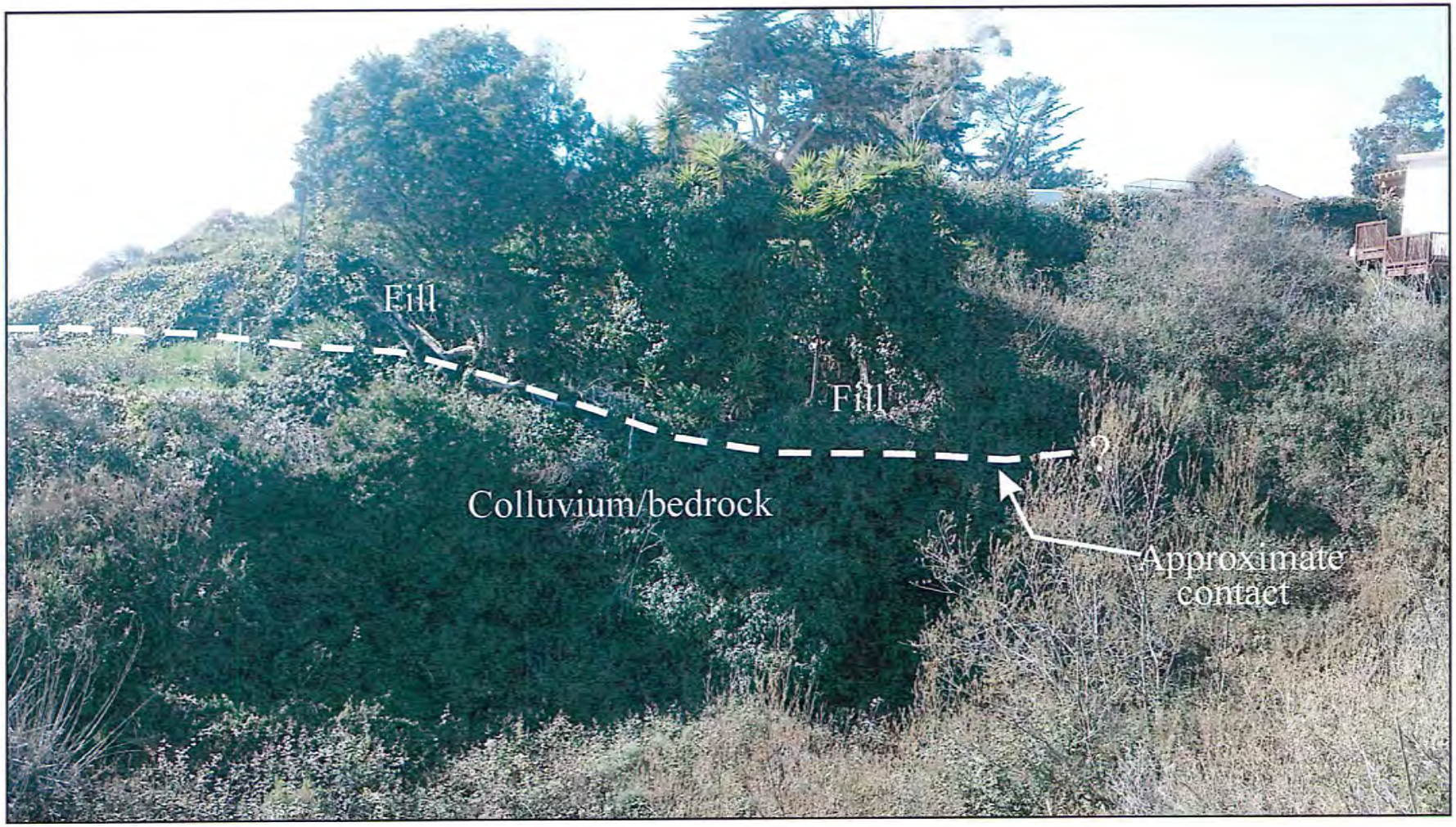
CANYON SLOPE LOOKING WEST

BARTHELS RESIDENCE
1837 ½ El Camino de la Luz
Santa Barbara, California



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INCISED CREEK EROSION LOOKING WEST

BARTHELS RESIDENCE
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Santa Barbara, California

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SL-16766-GA

APPENDIX B

Logs of Borings
Boring Log Legend

Earth Systems Pacific

Boring No.1
PAGE 1 OF 1

LOGGED BY: R. Gorman
DRILL RIG: Hand Auger
AUGER TYPE: 4" Solid Stem Auger

JOB NO.: SL-16766-GA
DATE: 2/13/13

BARTHELS RESIDENCE
1837-1/2 El Camino de la Luz
Santa Barbara, California

DEPTH (feet)	USCS CLASS	SYMBOL	SOIL DESCRIPTION	SAMPLE DATA: INTERVAL (feet)	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN.
0	SC		FILL: CLAYEY SAND WITH GRAVEL: brown, moist, loose, roots, gravel consists of shale and claystone rock fragments	1.5–2.5	■	53.2	28.7	
4			MONTEREY FORMATION: BEDROCK: Interbedded shale and claystone, moderately hard, fractured and weathered	4.0–5.0	■			
6			End of Boring @ 6.0' No subsurface water encountered					

LEGEND: ■ Ring Sample ○ Grab Sample ▭ Shelby Tube Sample ● SPT

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of drilling. Subsurface conditions may differ at other locations and times.

Earth Systems Pacific

Boring No.2
PAGE 1 OF 1

LOGGED BY: R. Gorman
DRILL RIG: Hand Auger
AUGER TYPE: 4" Solid Stem Auger

JOB NO.: SL-16766-GA
DATE: 2/13/13

BARTHELS RESIDENCE
1837-1/2 El Camino de la Luz
Santa Barbara, California

DEPTH (feet)	USCS CLASS	SYMBOL	SOIL DESCRIPTION	SAMPLE DATA: INTERVAL (feet)	SAMPLE TYPE	DRY DENSITY (pcf)	MOISTURE (%)	BLOWS PER 6 IN.
0	SC		FILL: SANDY CLAY WITH GRAVEL: brown, very moist, soft, gravel consists of shale and claystone rock fragments	2.0–3.0	Ring Sample	81.7	25.3	
				4.5–5.5	Ring Sample			
5			MONTEREY FORMATION BEDROCK: interbedded shale and claystone, moderately hard, fractured and weathered					
7			End of Boring @ 6.5' No subsurface water encountered					

LEGEND: Ring Sample ◯ Grab Sample ▭ Shelby Tube Sample ● SPT

NOTE: This log of subsurface conditions is a simplification of actual conditions encountered. It applies at the location and time of drilling. Subsurface conditions may differ at other locations and times.

Earth Systems Pacific

BORING LOG LEGEND

SAMPLE / SUBSURFACE WATER SYMBOLS	GRAPH. SYMBOL
CALIFORNIA MODIFIED	
STANDARD PENETRATION TEST (SPT)	
SHELBY TUBE	
BULK	
SUBSURFACE WATER DURING DRILLING	
SUBSURFACE WATER AFTER DRILLING	

SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS	GROUP SYMBOL	TYPICAL DESCRIPTIONS	GRAPH. SYMBOL
COARSE GRAINED SOILS (MORE THAN HALF OF MATERIAL IS TESTED OR JUDGED TO BE LARGER THAN #200 SIEVE SIZE)	GW	WELL GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES	
	GP	POORLY GRADED GRAVELS, GRAVEL-SAND MIXTURES, LITTLE OR NO FINES	
	GM	SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES, NON-PLASTIC FINES	
	GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES, PLASTIC FINES	
	SW	WELL GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES	
	SP	POORLY GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES	
	SM	SILTY SANDS, SAND-SILT MIXTURES, NON-PLASTIC FINES	
	SC	CLAYEY SANDS, SAND-CLAY MIXTURES, PLASTIC FINES	
FINE GRAINED SOILS (HALF OR MORE OF MATERIAL IS TESTED OR JUDGED TO BE SMALLER THAN #200 SIEVE SIZE)	ML	INORGANIC SILTS AND VERY FINE SANDS, SILTY, CLAYEY FINE SANDS, CLAYEY SILTS WITH SLIGHT PLASTICITY	
	CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS	
	OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY	
	MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SANDY, SILTY SOILS, ELASTIC SILTS	
	CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS	
	OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS	
	PT	PEAT AND OTHER HIGHLY ORGANIC SOILS	

OBSERVED MOISTURE CONDITION

DRY	SLIGHTLY MOIST	MOIST	VERY MOIST	WET
LITTLE/NO MOISTURE	JUDGED BELOW OPTIMUM	JUDGED ABOUT OPTIMUM	JUDGED OVER OPTIMUM	SATURATED

TYPICAL CONSISTENCY

COARSE GRAINED SOILS			FINE GRAINED SOILS		
BLOWS/FOOT		DESCRIPTIVE TERM	BLOWS/FOOT		DESCRIPTIVE TERM
SPT	CA SAMPLER		SPT	CA SAMPLER	
0-10	0-16	LOOSE	0-2	0-3	VERY SOFT
11-30	17-50	MEDIUM DENSE	3-4	4-7	SOFT
31-50	51-83	DENSE	5-8	8-13	MEDIUM STIFF
OVER 50	OVER 83	VERY DENSE	9-15	14-25	STIFF
			16-30	26-50	VERY STIFF
			OVER 30	OVER 50	HARD

GRAIN SIZES

U.S. STANDARD SERIES SIEVE				CLEAR SQUARE SIEVE OPENING		
# 200	# 40	# 10	# 4	3/4"	3"	12"

SILT & CLAY	SAND			GRAVEL		COBBLES	BOULDERS
	FINE	MEDIUM	COARSE	FINE	COARSE		

TYPICAL ROCK HARDNESS

MAJOR DIVISIONS	TYPICAL DESCRIPTIONS
EXTREMELY HARD	CORE, FRAGMENT, OR EXPOSURE CANNOT BE SCRATCHED WITH KNIFE OR SHARP PICK; CAN ONLY BE CHIPPED WITH REPEATED HEAVY HAMMER BLOWS
VERY HARD	CANNOT BE SCRATCHED WITH KNIFE OR SHARP PICK; CORE OR FRAGMENT BREAKS WITH REPEATED HEAVY HAMMER BLOWS
HARD	CAN BE SCRATCHED WITH KNIFE OR SHARP PICK WITH DIFFICULTY (HEAVY PRESSURE); HEAVY HAMMER BLOW REQUIRED TO BREAK SPECIMEN
MODERATELY HARD	CAN BE GROOVED 1/16 INCH DEEP BY KNIFE OR SHARP PICK WITH MODERATE OR HEAVY PRESSURE; CORE OR FRAGMENT BREAKS WITH LIGHT HAMMER BLOW OR HEAVY MANUAL PRESSURE
SOFT	CAN BE GROOVED OR GOUGED EASILY BY KNIFE OR SHARP PICK WITH LIGHT PRESSURE, CAN BE SCRATCHED WITH FINGERNAIL; BREAKS WITH LIGHT TO MODERATE MANUAL PRESSURE
VERY SOFT	CAN BE READILY INDENTED, GROOVED OR GOUGED WITH FINGERNAIL, OR CARVED WITH KNIFE; BREAKS WITH LIGHT MANUAL PRESSURE

TYPICAL ROCK WEATHERING

MAJOR DIVISIONS	TYPICAL DESCRIPTIONS
FRESH	NO DISCOLORATION, NOT OXIDIZED
SLIGHTLY WEATHERED	DISCOLORATION OR OXIDATION IS LIMITED TO SURFACE OF, OR SHORT DISTANCE FROM; SOME FRACTURES PRESENT; FELDSPAR CRYSTALS ARE DULL
MODERATELY WEATHERED	DISCOLORATION OR OXIDATION EXTENDS FROM FRACTURES, USUALLY THROUGHOUT; Fe-Mg MINERALS ARE "RUSTY"; FELDSPAR CRYSTALS ARE "CLOUDY"
INTENSELY WEATHERED	DISCOLORATION OR OXIDATION THROUGHOUT; FELDSPAR AND Fe-Mg MINERALS ARE ALTERED TO CLAY TO SOME EXTENT OR CHEMICAL ALTERATION PRODUCES IN SITU DISAGGREGATION
DECOMPOSED	DISCOLORATION OR OXIDATION THROUGHOUT, BUT RESISTANT MINERALS SUCH AS QUARTZ MAY BE UNALTERED; FELDSPAR AND Fe-Mg MINERALS ARE COMPLETELY ALTERED TO CLAY

drafting/masters/Boring Log Legend091608.dwg

APPENDIX C

Laboratory Test Results

Barthel Residence

SL-16766-GA

BULK DENSITY TEST RESULTS

ASTM D 2937-10 (modified for ring liners)

February 20, 2013

BORING NO.	DEPTH feet	MOISTURE CONTENT, %	WET DENSITY, pcf	DRY DENSITY, pcf
1	1.5 - 2.0	28.7	68.4	53.2
2	2.0 - 2.5	25.3	102.3	81.7

Barthel Residence

SL-16766-GA

PARTICLE SIZE ANALYSIS

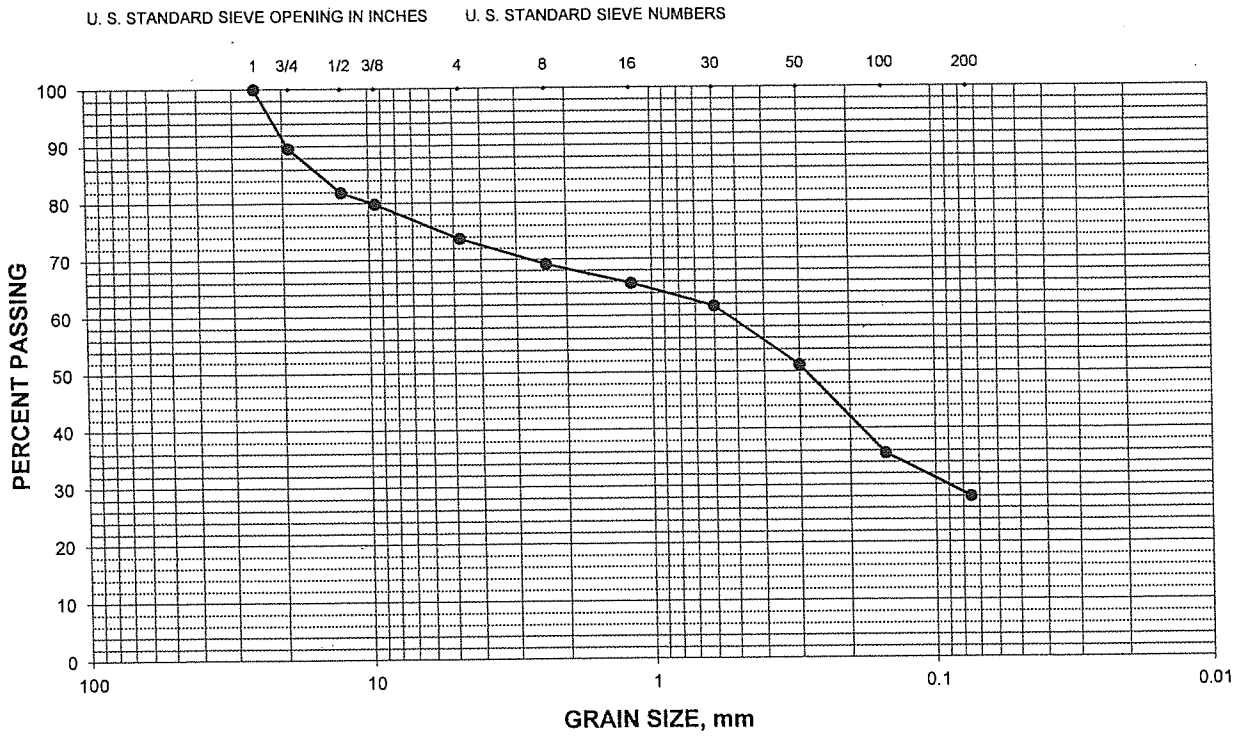
ASTM D 422-63/07; D 1140-00/06

Boring #1 @ 1.5 - 2.0'

February 20, 2013

Brown Clayey Sand with Gravel (SC)

Sieve size	% Retained	% Passing
1" (25-mm)	0	100
3/4" (19-mm)	10	90
1/2" (12.5-mm)	18	82
3/8" (9.5-mm)	20	80
#4 (4.75-mm)	26	74
#8 (2.36-mm)	31	69
#16 (1.18-mm)	34	66
#30 (600-µm)	38	62
#50 (300-µm)	49	51
#100 (150-µm)	64	36
#200 (75-µm)	72	28



Barthel Residence SL-16766-GA

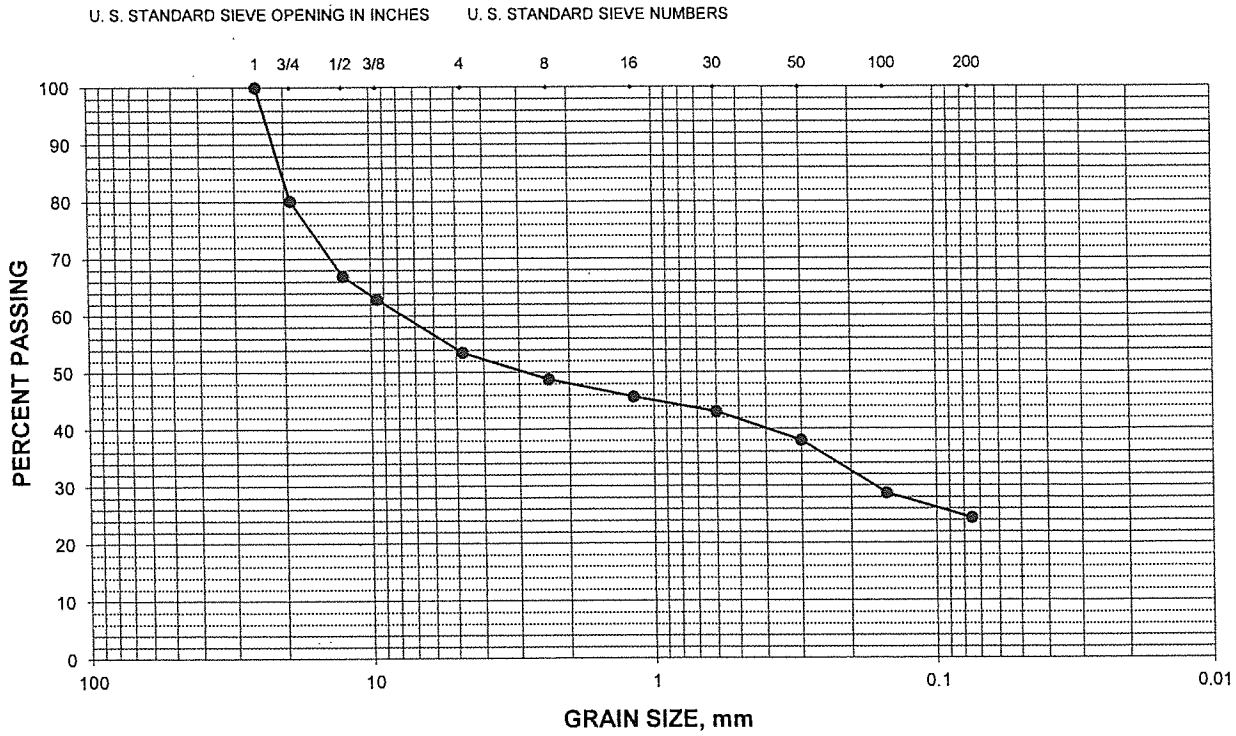
PARTICLE SIZE ANALYSIS

ASTM D 422-63/07; D 1140-00/06

Boring #2 @ 2.0 - 2.5' February 20, 2013

Brown Clayey Sand with Gravel (SC)

Sieve size	% Retained	% Passing
1" (25-mm)	0	100
3/4" (19-mm)	20	80
1/2" (12.5-mm)	33	67
3/8" (9.5-mm)	37	63
#4 (4.75-mm)	47	53
#8 (2.36-mm)	51	49
#16 (1.18-mm)	54	46
#30 (600-µm)	57	43
#50 (300-µm)	62	38
#100 (150-µm)	71	29
#200 (75-µm)	76	24



Barthel Residence

SL-16766-GA

UNCONFINED COMPRESSION ON COHESIVE SOIL

ASTM D 2166-06

February 20, 2013

Boring #2 @ 2.0 - 2.5'
Brown Clayey Sand with Gravel (SC)
Ring Sample
COMPRESSIVE STRENGTH: 5 psi (650 psf)

Dry Density: 81.7 pcf
Moisture Content: 25.3%
Degree Saturation: 65.3%
Specific Gravity: 2.65 (assumed)
H/D Ratio: 1.50

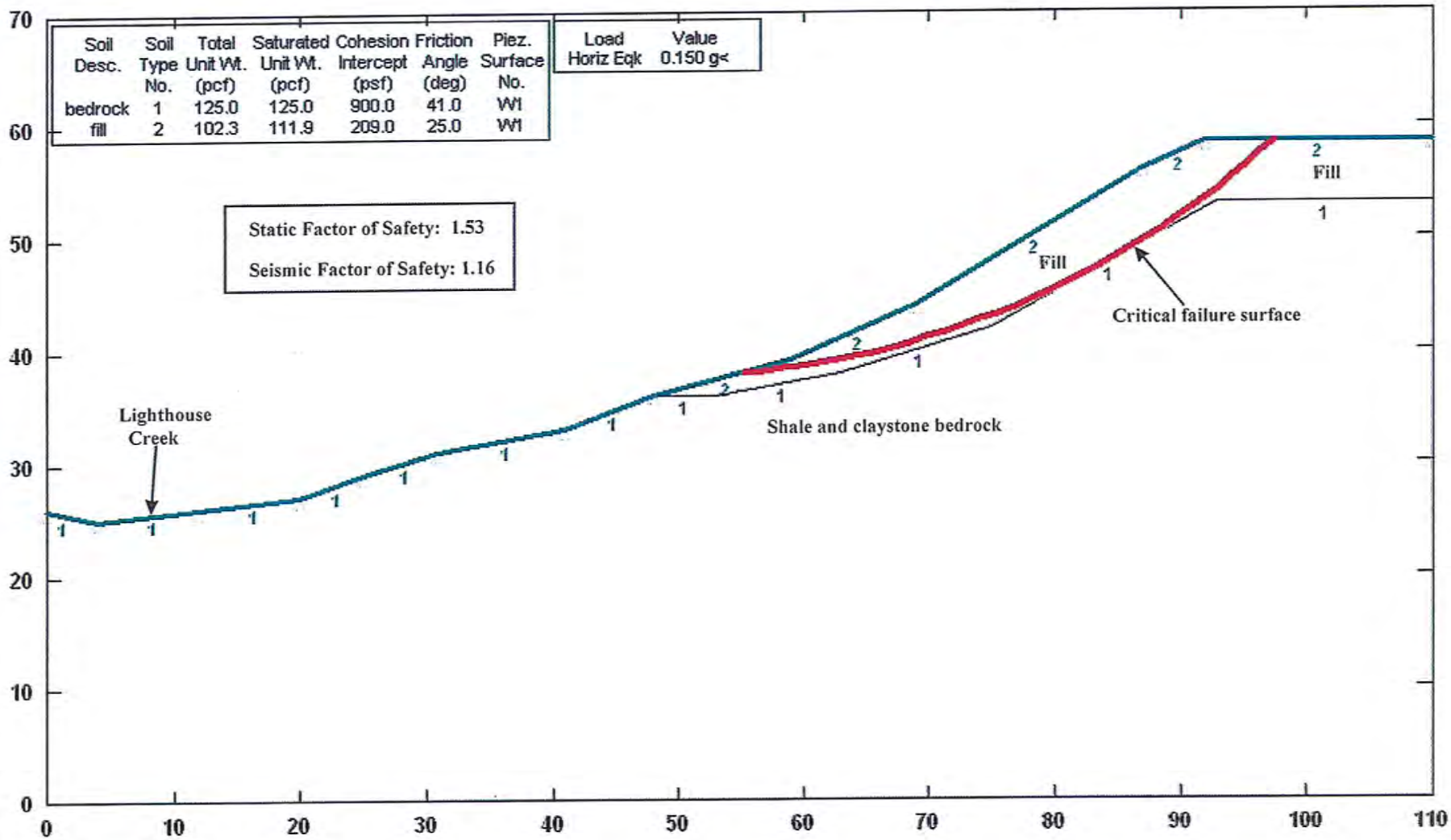
TIME (MINUTES)	DEFORM, in (X 1000)	AXIAL STRAIN	AREA (SQ. IN.)	APPLIED LOAD (LBS)	STRENGTH (PSI)	STRENGTH (PSF)
0.5	32	0.0090	4.47	11	2	354
1.0	60	0.0168	4.51	15	3	479
1.5	88	0.0246	4.54	18	4	571
2.0	116	0.0325	4.58	18	4	566
2.5	143	0.0401	4.62	20	4	624
3.0	171	0.0479	4.65	21	5	650
3.5	201	0.0563	4.69	20	4	613
4.0	227	0.0636	4.73	20	4	609
4.5	255	0.0714	4.77	18	4	543
5.0	282	0.0790	4.81	18	4	539
5.5	311	0.0871	4.85	18	4	534
6.0	338	0.0947	4.89	18	4	530
6.5	366	0.1025	4.94	15	3	438
7.0	393	0.1101	4.98	13	3	376
7.5	422	0.1182	5.02	11	2	315
8.0	452	0.1266	5.07	10	2	284
8.5	478	0.1339	5.12	10	2	282
9.0	509	0.1426	5.17	10	2	279
9.5	538	0.1507	5.22	10	2	276
10.0	563	0.1577	5.26	8	2	219

APPENDIX D

Slope Stability Plot
Cross Sections A-A' and B-B'
Mohr's Circle Plot
Lower Floor Level Plan

SLOPE STABILITY PLOT

BARTHELS RESIDENCE
1837 ½ El Camino de la Luz
Santa Barbara, California

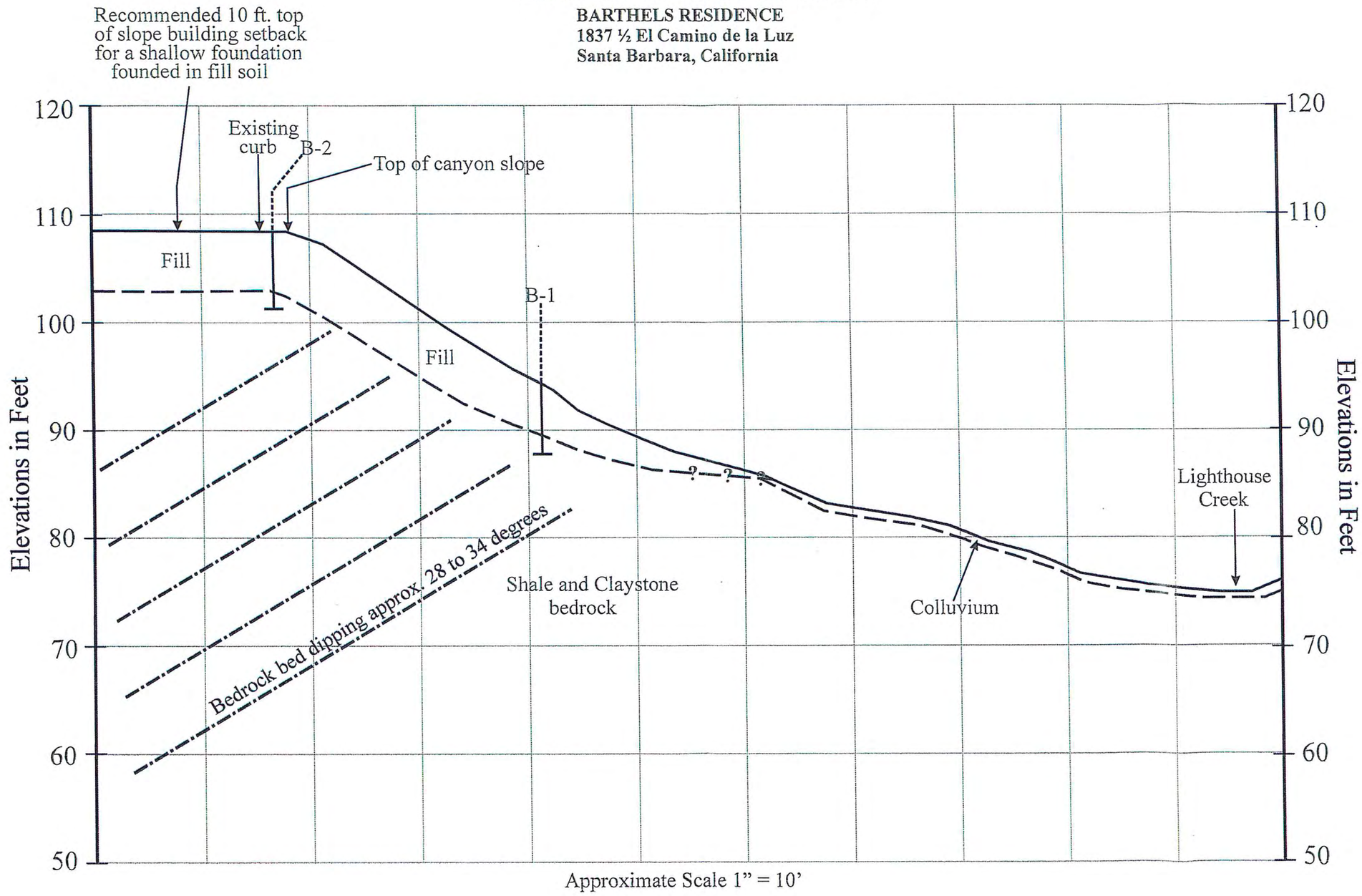


EARTH SYSTEMS PACIFIC
4378 Old Santa Fe Road, San Luis Obispo, CA 93401
July 2013

(805) 544-3276 - (805) 544-1786
www.earthsys.com - email: esp@earthsys.com
SL-16766-GA

CROSS SECTION A-A'

BARTHELS RESIDENCE
1837 ½ El Camino de la Luz
Santa Barbara, California



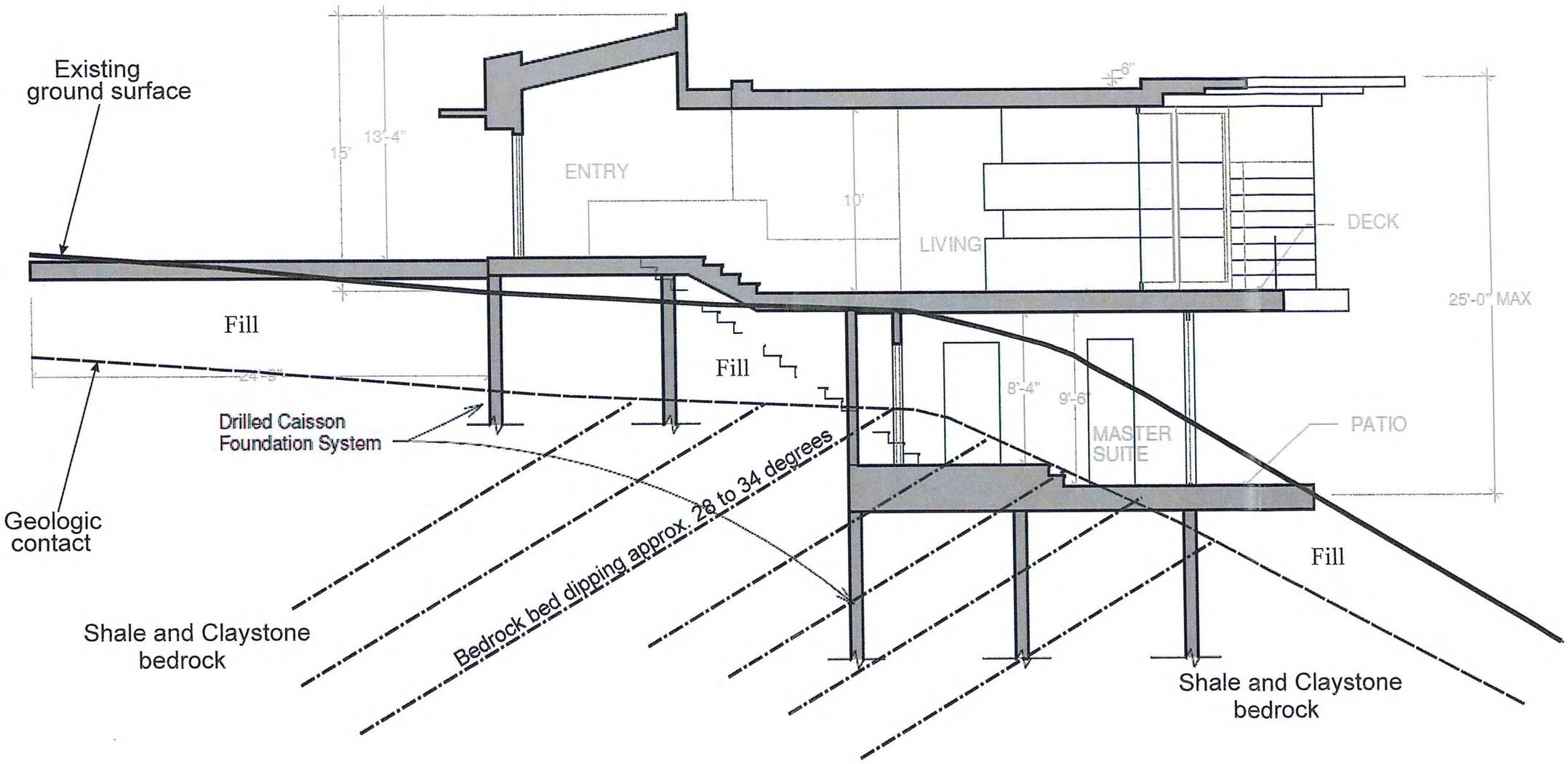
Earth Systems Pacific
4378 Old Santa Fe Road, San Luis Obispo, CA 93401
June 2013

(805) 544-3276 - (805) 544-1786 Fax
www.earthsys.com - e-mail: esp@earthsystems.com

SL - 16766-GA

CROSS SECTION B-B'

BARTHELS RESIDENCE
1837 ½ El Camino de la Luz
Santa Barbara, California



Approximate Scale 1" = 6'

REF.: Topography and cross section was prepared by Peikert Group Architects, LLP, dated June 2013

Earth Systems Pacific
4378 Old Santa Fe Road, San Luis Obispo, CA 93401
June 2013

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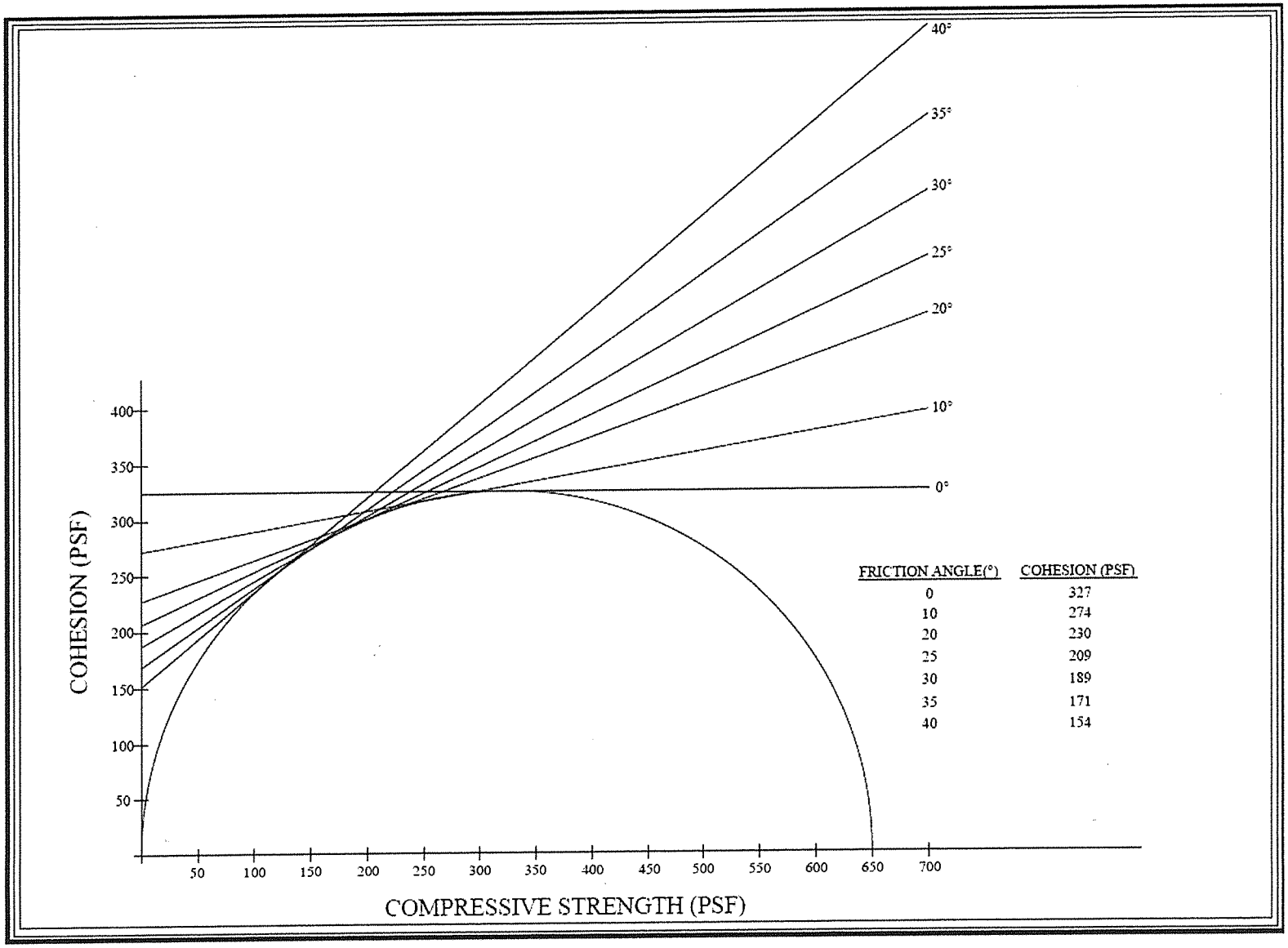
SL - 16766-GA

MOHR'S CIRCLE PLOT
BARTHELS RESIDENCE
1837 ½ El Camino de la Luz
Santa Barbara, California



FRICTION ANGLE(°)	COHESION (PSF)
0	327
10	274
20	230
25	209
30	189
35	171
40	154

Earth Systems Pacific

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4378 Old Santa Fe Road, San Luis Obispo, CA 93401

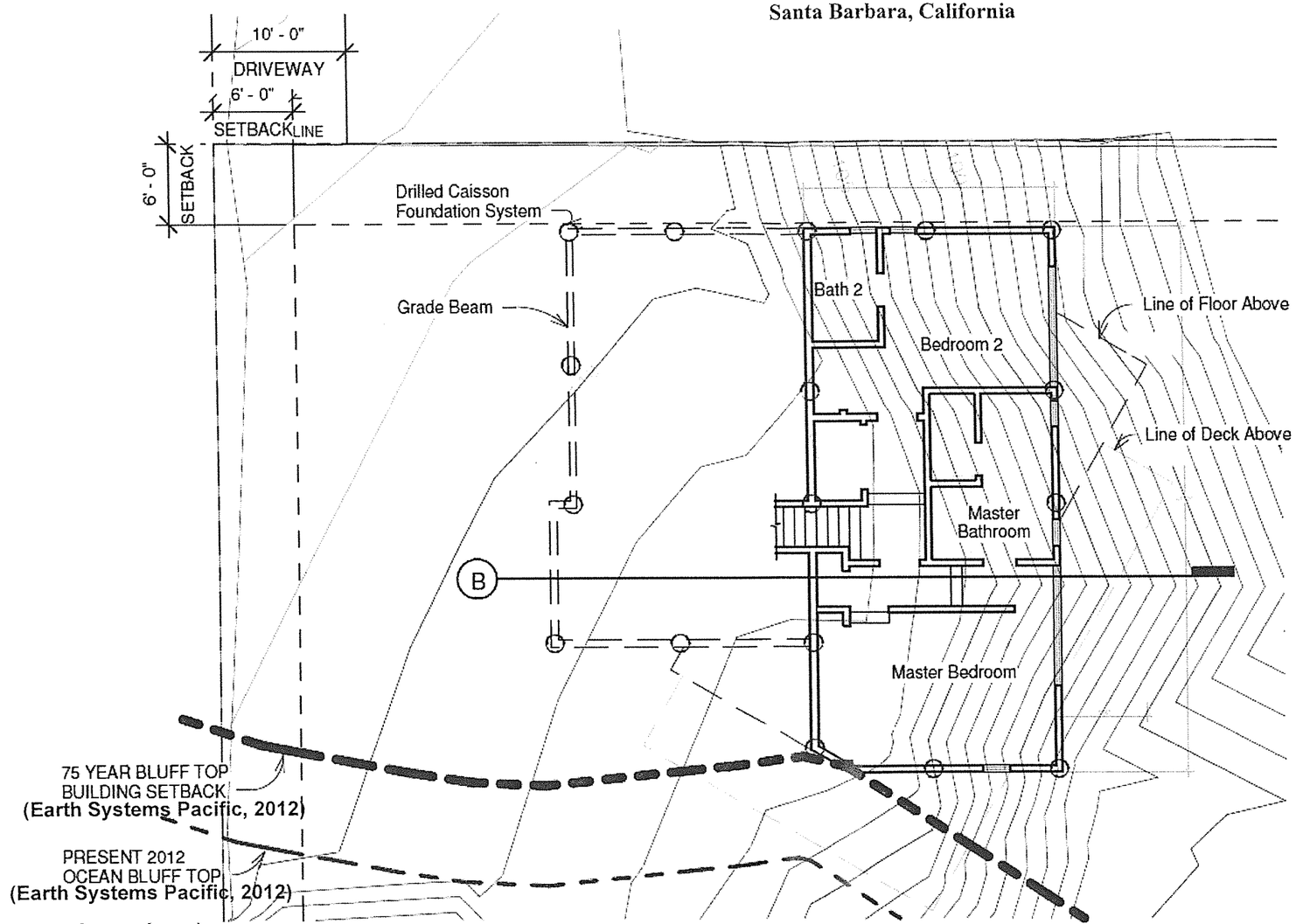
www.earthsys.com - e-mail: esp@earthsystems.com

June 2013

SL - 16766-GA

LOWER FLOOR LEVEL

BARTHELS RESIDENCE
1837 ½ El Camino de la Luz
Santa Barbara, California



2 Lower Level
1" = 10'-0"

Approximate Scale 1" = 10'

REFERENCES

1. Topography and building design by Peikert Group Architects, LLP, dated June 2013
2. Ocean Bluff Erosion Study, Barthels Residence, 1837- ½ El Camino De La Luz, Santa Barbara, California, by Earth Systems Pacific, November 15, 2012

Earth Systems Pacific
4378 Old Santa Fe Road, San Luis Obispo, CA 93401
June 2013

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SL - 16766-GA

Appendix F

2008 Proposed Final EIR Comments and Responses

10.0 FINAL EIR RESPONSES TO COMMENTS

As part of the Final EIR for the 1837½ El Camino de la Luz Residence project, written responses to public comments received during the Draft EIR public review period are provided in this section. In accordance with the requirements of CEQA Guidelines section 15088, responses to review comments are provided only for comments that address the adequacy of the environmental review provided by the Draft EIR.

The review period for the Draft EIR prepared for the 1837½ El Camino de la Luz Residence project extended from November 27, 2006 to January 12, 2007. A list of the agencies and persons that submitted comments on the Draft EIR is provided below. A copy of each comment letter is provided in this section, along with responses to comments that pertain to the environmental review of the proposed project. Responses to comments provided at the January 11, 2007 public hearing on the Draft EIR are also provided.

WRITTEN COMMENTS **Page**

State Agencies

1. Governor's Office of Planning and Research 10-3

Public

2. Bruce Peterson 10-7
3. Rafael Franco 10-11
4. Rafael Franco et. al. 10-19

JANUARY 11, 2007 PUBLIC HEARING COMMENTS

Rafael Franco 10-29
Joanna Morgan 10-29
Peter Miller 10-30
Janice Taylor 10-30
Brett Daniels 10-30

PLANNING COMMISSIONER SEPTEMBER 8, 2005 HEARING COMMENTS 10-31

STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse and Planning Unit

Arnold Schwarzenegger
Governor

Cynthia Bryant
Director

January 11, 2007

RECEIVED

JAN 22 2007

CITY OF SANTA BARBARA
PLANNING DIVISION

Victoria Greene
City of Santa Barbara
P.O. Box 1990
Santa Barbara, CA 93102-1990

Subject: 1837 1/2 El Camino de la Luz Residence
SCH#: 2005041031

Dear Victoria Greene:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. The review period closed on January 10, 2007, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Terry Roberts

Terry Roberts
Director, State Clearinghouse

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

IV-5

Document Details Report
State Clearinghouse Data Base

SCH# 2005041031
Project Title 1837 1/2 El Camino de la Luz Residence
Lead Agency Santa Barbara, City of

Type EIR Draft EIR

Description The project consists of the construction of a 1,499 sf 2-story single family residence with an attached 443 sf garage, on a 23,885 sf vacant bluff-top lot. Access to the site would be provided by private easements extending south from the end of the paved public road (El Camino de la Luz).

Lead Agency Contact

Name Victoria Greene
Agency City of Santa Barbara
Phone (805) 564-5470 **Fax**
email
Address P.O. Box 1990
City Santa Barbara **State** CA **Zip** 93102-1990

Project Location

County Santa Barbara
City Santa Barbara
Region
Cross Streets Oliver Road / Cliff Drive / Meigs Road
Parcel No. 045-100-065
Township **Range** **Section** **Base**

Proximity to:

Highways 225, 101
Airports Santa Barbara
Railways UPRR
Waterways Lighthouse Creek, Pacific Ocean
Schools Washington ES, Monroe ES, SB City College
Land Use Vacant lot / E-3 Zone (Single Family Residential) and SD-3 (Coastal Overlay Zone) / Residential, 5 units per acre

Project Issues Aesthetic/Visual; Air Quality; Archaeologic-Historic; Coastal Zone; Cumulative Effects; Drainage/Absorption; Forest Land/Fire Hazard; Geologic/Seismic; Landuse; Noise; Public Services; Recreation/Parks; Schools/Universities; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Wildlife

Reviewing Agencies Resources Agency; Regional Water Quality Control Board, Region 3; Department of Parks and Recreation; Native American Heritage Commission; Department of Fish and Game, Region 5; Department of Water Resources; California Coastal Commission; California Highway Patrol; Caltrans, District 5; Caltrans, Division of Aeronautics; Department of Toxic Substances Control

Date Received 11/27/2006 **Start of Review** 11/27/2006 **End of Review** 01/10/2007

Note: Blanks in data fields result from insufficient information provided by lead agency.

IV-6

10.1 WRITTEN COMMENTS

Comment Letter No. 1
California Office of Planning and Research
Date: January 11, 2007

Response

1-1. No response is required regarding the distribution of the Draft EIR to various State agencies. No comments regarding the Draft EIR were received from the Office of Planning and Research or other State agencies.

PLANNING COMMISSION (7)
SR. PLANNER, ASST. CITY ATTY.
CASE PLANNER APPLICANT('S)
AGENT PC SEC, ENTERED AS INT
PARTY ON DATE:
BY:

Bruce Peterson
1837 El Camino De La Luz
Santa Barbara, Ca.
93109

LETTER No. 2

Planning Commission
City of Santa Barbara
Community Development Department
Planning Division
630 Garden Street
Santa Barbara, CA 93102

RECEIVED
JAN 03 2007
CITY OF SANTA BARBARA
PLANNING DIVISION

Honorable Commissioners:

I am writing a short note in response to the focused EIR that was required by the planning commission for the lot known as 1837.5 El Camino De La Luz. Although I have signed our neighborhood letter penned by Ray Fraco. I wish to point out several other issues.

1. The visual impacts from public areas specifically Lower La Mesa Park and the east end of Light House Creek foot bridge are significantly impacted by the original proposal and alternatives 1 and 2 in the aesthetic EIR analysis. The only possible building site on this lot to protect public views would be at the extreme west edge of the property. 2-1

2. Since the passage of measure 'B' creek protection in Santa Barbara has become a major concern. The city council in December of 2006 set a new environmental standard for building next to creeks when they required a 100 foot set back from Arroyo Burro creek on homes to be built on an 87 acre parcel. This land mark decision sets a precedent for all future buildings near Santa Barbara creeks. 2-2

3. The geology of this lot is a work in progress. The work done 2-3

Bruce Peterson
1837 El Camino De La Luz
Santa Barbara, Ca.
93109

by Dr. Anikouchine was a summarization of past work, but provided no laboratory geologic findings, supposition rather than scientific investigation. A younger more energetic geologist would be able to provide scientific information. 2-3 CON'T.

4. Legal access does not exist from El Camino De La Luz. When the property split was approved by the city council in the 1950's, the owner of 1837 was required to provide 15 foot easements from El Camino De La Luz to the lower half of the property, which they wanted to create a second lot. The lot split was contingent upon recording this fifteen foot easement; it never occurred. Dr. Barthels, the second owner of this lot received compensation in 1994 from his title company after he testified in superior court that this lot, 1837.5, was unbuildable. In 1997, the city attorney requested Dr. Barthels to provide documentation showing his legal access to the parcel. This also has not occurred. Over half the distance from El Camino De La Luz to the vacant lot there is no legal easement. Less than half the distance there is a 9 foot easement. Until this issue is resolved, there is no logical reason to continue public and private time on this matter. Dr. Barthels was financially compensated for his purchase of this imperfect and unbuildable lot. 2-4

Please consider these points when making any decisions regarding 1837.5 El Camino De La Luz.

Bruce Peterson
1837 El Camino De La Luz
Santa Barbara, Ca.
93109

Bruce F. Peterson
Grace Peterson
Vanessa Peterson
1837 El Camino De La Luz
Santa Barbara, CA
93109

Bruce F. Peterson
Grace Peterson
Vanessa Peterson

Comment Letter No. 2
Bruce Peterson
Date: January 3, 2007

2-1. The analysis provided by the Draft EIR concluded that the development of the proposed residence, as well as the development of the alternative project design concepts, would have the potential to result in significant visual impacts to important public views. Mitigation measures to reduce the identified impacts to a less than significant level were also provided by the EIR.

Moving the proposed structure to the "extreme west edge" of the project site was not considered to be a feasible mitigation measure or project alternative because of the resulting inability to provide adequate ingress and egress to a covered parking area on the project site. The Alternatives section of the Final EIR has been amended to include a discussion of why this alternative was not considered to be feasible.

2-2. Setback requirements to separate new development from the top of a creek bank are established based on project-specific conditions, such as the sensitivity of biologic resources provided by the creek, potential flooding impacts, and the type and size of the proposed project. Due to the moderately high habitat value of Lighthouse Creek adjacent to the project site, and the small size of the proposed project, it was determined that the 50-foot building setback that would be provided from the top of the creek bank would be adequate to reduce potential biologic, hydrologic, geologic and water quality impacts of the proposed project to a less than significant level. The building setback from the creek provided by the proposed project would also be similar to or greater than the setbacks provided by other houses in the project vicinity that are also adjacent to the creek.

2-3. The purpose of Dr. Anikouchine's review was to evaluate and summarize the extensive amount of information that has been produced by 17 previous geologic investigations of the project site. No additional "scientific investigation" beyond what was provided by Dr. Anikouchine was required to evaluate potential geologic hazard impacts of the proposed project and alternatives.

2-4. The establishment of legal access to the project sitewas not an environmental issue evaluated by the project EIR. Prior to the development of the proposed project, the applicant must demonstrate to the satisfaction of the City that adequate access can be legally provided.

Rafael Franco
1835 El Camino de la Luz
Santa Barbara, CA 93109

RECEIVED
JAN 12 2007
CITY OF SANTA BARBARA
PLANNING DIVISION

LETTER No. 3

January 12, 2007

Planning Commission
City of Santa Barbara
Community Development Department
630 Garden Street
Santa Barbara, CA 93102

Re: **Draft Environmental Impact Report**
1837.5 El Camino de la Luz
SCH No. 2005041031
November, 2006

Honorable Commissioners:

One of the objectives of the California Environmental Quality Act is to provide a system for extracting necessary objective data on proposed projects so that individuals, commissions, or judges could make informed decisions for the public welfare. You are often requested to unnecessarily exercise the wisdom of Solomon when in fact there is a process in law to develop data to serve your informed decision. In this case, that process is the Environmental Impact Report. We submit that Solomon's wisdom would not have been required had they had DNA data.

The subject report deals primarily with two issues, visual impacts and geotechnical stability. Our comments on these and other issues were noted in our letter of Dec. 27, 2006 and at your hearing on Jan 11, 2007. At the hearing, it was evident that the geotechnical data presented was incomplete and insufficient for you to make an objective decision. The neighbors and persons affected by this project have not concluded that the slope is or is not stable; we do however conclude that the geotechnical study in this report is insufficient for the EIR. Please consider the following:

1. The report bases its conclusions on a peer review by Dr. Anikouchine in which he admits that he did not have the technical data that accompanied the reports he was evaluating. He called this a "regrettable lapse". Dr. Anaikouchine was hired by the City of Santa Barbara. Would the City adopt any report, including budgetary reports, without specific data? We agree with Dr. Anikouchine that this is "regrettable", but we could not find this excuse anywhere in the California Environmental Quality Act. The data is available and should be included in this report. 3-1

2. There are two issues governed by the Coastal Act and Code, the effects of erosion on the bluff and the underlying stability of the soil or bedrock. Provisions and regulations are made in law for consideration of erosion and an analysis of the stability of the slope.

   a. The effects of erosion are considered by estimating historical precedent and analysis, and the location of the top of the coastal bluff as defined by law (California Code of Regulations, Title 14, Sec. 13577(h)(2). We do not have an objection with the rate of erosion defined in the EIR, 4 to 8 in. per year, but we disagree with the defined "top of bluff" drawn on the project plans and used as a basis for all subsequent analysis and conclusions. 3-2a

   First, we would like the record to be corrected that the top of bluff drawn on the architect's plans are not drawn or certified by a geologist, soils engineer or surveyor, but rather by the architect. This plan is used by Dr. Anikouchine who then mislabels this line as the"75-yr setback" in his report (Figure 1, page 2). Dr. Anikouchine further stated that the definition of top of bluff stipulated in law is "arbitrary". With all due respect, many of our laws are arbitrary, but we live under a system of laws not opinions. 3-2b We have submitted a topographic map signed by a California Registered surveyor indicating the correct topography for the site, and the top of bluff as defined by law. This plan also indicates the different rates of erosion and the architect's stipulated top of bluff. 3-2c Nowhere in the law is the top of bluff defined as a line starting at the highest point and dropping forty feet to the creek as drawn by the architect.

   b. The report states that slope stability calculations were performed using the Modified Bishop method. This method is appropriate for circular-shaped failures only and is used for homogenous, isotropic geologic materials. The subject slope is comprised of well bedded siltstone bedrock of the Monterey Formation that is non-homogeneous and anisotropic. Individual beds vary greatly in strength, and in the orientation that the strength is defined (along bedding or across bedding). The Janbu method of analysis employing a block-shaped failure should be used to find the lowest factor of safety. The factor of safety should be directed along the lowest day-lighted bedding plane. As I demonstrated at the hearing we need to determine the load, the orientation and inclination of the bedding planes, and the coefficient of friction at he lowest or must vulnerable of the bedding planes. This cannot be done without laboratory testing and data. 3-3

   c. The stability calculations are not based on a site specific cross-section drawn through the bluff face. The cross section shown on Figure 3 is very generalized. The cross section should be based on an adequately-scaled topographic map with geologic information superimposed. The cross 3-4

sections should be drawn in the direction of most probable failure. More than one cross section may be necessary.

d. The geologic material strength was "estimated using the Hoek-Brown (2002) Failure Criterion". The use of material strengths for slope stability analysis are not generally accepted by reviewing agencies in California. Site-specific geologic material samples should be obtained and tested by acceptable methods. The material strengths used in the analysis should also include testing that is consistent with the strength of the rock along bedding, which is generally the weakest strength direction for rock. 3-5

e. As a separate item in the report, sea cliff erosion, is estimated to be 4 inches per year. A finding should be made as to the effect of a future sea cliff profile and its effect on slope stability. 3-6

As stated earlier, we have not drawn a conclusion on the stability of the slope. We have studied the previous reports, many of which are simply letters of opinion without data. We have studied the typology of the Monterey Formation shale that forms the cliff. The day-lighted and decomposed bedding planes are easily visible. We have watched the bluff on a weekly basis for 25 years. We have experienced the surficial slides and are familiar with the 1976 massive slide just 400 ft. to the west. From this experience we can conclude that the data presented to you for this project is erroneous and incomplete. On this particular issue, accurate data can be obtained, analyzed and presented to you to make an objective decision. 3-7

Thank you for your consideration

Sincerely,

Ray Franco

Attachements:

1. List of methods for slope stability analysis.
2. Slope Stability Calculator for the Modified Bishop's Method
3. Non-circular Failure Surface: Jambu's Method
4. A Brief History of Hoek-Brown failure criterion
5. Factors of Safety Definition
6. Project Description: USGS Coastal and Marine Slope Stability and Landslides

3-8

Comment Letter No. 3
Rafael Franco
Date: January 12, 2007

3-1. All of the information available to the City from the 17 previous geologic investigations of the project site was provided to Dr. Anikouchine for his review of potential project-related geological hazard impacts. Although some of the reports were missing large format maps, a sufficient amount of information regarding the project site was available for Dr. Anikouchine to conduct his review, and to adequately evaluate the potential for the proposed project and alternatives to result in significant impacts. CEQA Guidelines section 15151 establishes standards for determining the adequacy of the environmental impact analysis provided by the EIR. This section indicates that "*An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible.*" If the large format maps from some of the previous studies of the project site are no longer available to the City, it would not reasonable, or required by CEQA, to require that the maps be included in the analysis provided by the EIR. Based on the peer review of the 17 previous geologic investigation reports that have been prepared for the project site, Dr. Anikouchine concluded that potential geologic hazard impacts could be reduced to a less than significant level with the implementation of proposed mitigation measures.

3-2a. As part of the peer review of the previous geologic investigations prepared for the project site, Dr. Anikouchine noted that the top of the seacliff (bluff), as defined by the California Coastal Commission, was mapped by Fisher in 2001. Fisher is a geologist qualified to interpret the Coastal Commission's definition of bluff edge and to make a determination regarding the location of the bluff edge on the project site. The line depicted on Figure 1 of Dr. Anikouchine's report does not depict the top of bluff, which is roughly 25 feet southward of the building pad area that is highlighted on the figure. The setback line depicted in Dr. Anikouchine's report provides an accurate representation of the location of the proposed setback line from the top of the bluff given the size and scale of the figure.

As described on page 5.2-2 of the EIR, 75 years is a common value used to estimate the useful design life of new structures, and a bluff edge setback that would generally allow a new structure to exist safely for 75 years is commonly used. Based on a calculated average rate of seacliff retreat in the project vicinity of four inches per year, the proposed 25-foot setback from the edge of the bluff would provide an adequate setback distance for the proposed residence.

3-2b As part of his review, Dr. Anikouchine determined that the top of bluff line identified by Fisher is depicted on the project plans, and that the top of bluff line accurately interprets the definition of "top of bluff" used by the California Coastal

Commission. Dr. Anikouchine describes the Coastal Commission's definition of the bluff edge as being "somewhat arbitrary" because it is based on a perceived static geometry of the bluff configuration, rather than upon actual coastal processes. Such process were described in Dr. Anikouchine's report as including changes to the bluff configuration resulting from the on-going landward retreat of the bluff, and terrestrial erosion (rainfall runoff). Based on the Coastal Commission's definition of bluff edge, future changes to the configuration of bluff may result in the relocation of the bluff edge. Dr. Anikouchine's description of the Coastal Commission's definition of bluff edge does not indicate or imply that the definition should in any way be disregarded. Furthermore, a Coastal Commission memo dated January 16, 2003 (www.coastal.ca.gov/w-11,5-2mm3), notes that the definition of bluff edge is *"largely qualitative, and the interpretation of the topographic profile to yield a bluff edge determination at any given coastal bluff may be subject to various interpretations."* Given the acknowledgement that the identification of the bluff edge based on the Coastal Commission's definition may move over time or result in different determinations, the description of the criteria as being "somewhat arbitrary" was not inappropriate.

3-2c. A comparison of the project site topographic contours depicted on the map prepared by Penfield & Smith (June, 2006/revised December 2006, see attached) and the topographic contours depicted on the proposed project plans indicates that the both surveys have depicted project site contours that are generally similar in configuration and length. Therefore, the two maps generally depict similar topographic conditions within the proposed building area. The only major difference between the two surveys is that the Penfield and Smith elevation contours are labeled as being approximately nine to ten feet higher in elevation than the contours on the project site maps. For example, the Penfield and Smith maps indicate that the proposed building pad has an elevation above sea level that ranges from approximately 111 feet in the northwest corner to 99 feet in the southeast corner. The project plans depict similarly shaped project site contours, but indicates that the existing building pad elevations range from approximately 101 to 90 feet. This discrepancy between the two maps does not affect the impact analysis of the proposed project, and does not require alterations to the design of the alternative design concepts that were evaluated by the EIR.

The project site contours depicted by the Penfield & Smith map are not complete and do not include the entire project parcel. Furthermore, the "top of bluff" designation included on the Penfield & Smith map does not comply with the top of bluff definition adopted by the Coastal Commission. The top of slope as defined by the Coastal Commission occurs "at that point nearest the cliff beyond which the downward gradient of the surface increases more or less continuously until it reaches the general gradient of the cliff." Cross sections of the seacliff at the project site are provided as Figure 3 in Dr. Anikouchine's March 15, 2005 peer review report of previous geologic studies of the project site (EIR Appendix

A). The cross sections identify the major break in cliff slope gradient that comply with the Coastal Commission's definition of the top of bluff. The top of bluff line depicted on the project plans corresponds to the location identified by Dr. Anikouchine. Therefore, the top of bluff determination made by Fisher, confirmed by Dr. Anikouchine, and depicted on the proposed project plans is considered to be accurate.

3-3. The Modified Bishop method of slope stability analysis is but one of several methods based upon the method of slices. The method of slices is not restricted to circular slip surfaces. The commonly-used STABL series of methods are capable of applying the method of slices to any kind of slip surface. The method used by Dr. Anikouchine is a modification of the Bishop method integrated in the STABL program. Its application is to perform the analysis repeatedly to determine which surface (of any shape) is the critical surface. The Bishop method is used because it ignores lateral shear effects on the slices and thus gives the most conservative result. The Janbu, Spencer, Morgenstern-Price and other methods all treat the lateral shear effects as contributing to the shear strength of the slices in a potential slide mass and so tend to overestimate the factor of safety of a critical surface.

The evidence of landslide failure at the SE corner of the subject parcel indicates that the mode of sliding was not a block slide down a weak dip surface, but instead followed a failure plane that transected the rock mass across the bedding. The use of a rotational slide surface in the slope stability analysis is quite justified.

3-4. Figure 3 in Dr. Anikouchine's report shows the two profiles along which stability analyses were performed. These profiles were drawn from the city's topographic map.

3-5. Laboratory tests of samples of rock materials to derive material properties are notoriously inaccurate and tend to overestimate the strength of rock masses in situ. The Hoek-Brown method estimates the bulk strength of a rock mass and is therefore to be preferred. The commenter's assertion that a rock mass is weakest along bedding is incorrect. Ubiquitous jointing almost always causes minimal strength in a rock mass and can be a significant factor even when block sliding is involved.

3-6. Predicting future seacliff profiles for the purpose of conducting additional slope stability analysis would be speculative and not required by CEQA. A general description of possible changes to the seacliff profile were provided on pages 9 and 10 of Dr. Anikouchine's report under the heading of "75-year Setback." This description indicates that slope of the cliff face could be reduced should the cliff retreat landward, thereby increasing the width of the beach and decreasing the erosive effects of ocean waves. Under these conditions, terrestrial erosion would

become the dominant erosive force, which would decrease the overall slope of the bluff. The marine erosion rate at the base of the coastal bluff should not be applied as the rate of erosion at the upper break in slope defining the top of the seaward slope. The marine erosion rate will typically be greater than the erosion rate of the seaward slope. It is also noted that the seacliff could become steeper because of proposed mitigation to reduce runoff over the cliff face. Should this occur, wave action would remain the dominant erosive force affecting the seacliff.

3-7. The slope stability analysis provided by Dr. Anikouchine has been prepared in conformance with standard engineering practice. The visual seacliff conditions cited by this comment do not provide substantial evidence for concluding that the slope stability analysis is inadequate for the purpose of conducting a CEQA review of potential geologic hazard impacts.

3-8. Attachments provided as part of this comment letter have been provided in EIR Appendix D.

SLOPE STABILITY ANALYSIS:-

To Be Considered in Assessment of Stability

- Ground Investigation
- Most Critical Slip Surface
- Tension Cracks
- Submerged Slopes
- Factor of Safety
- Long and Short-Term Stability
- Effective or Total Stress Parameters?
- Progressive Failure
- Pre-Existing Failure Surfaces
- Assumptions in Limit Equilibrium

Methods of Analysis

Granular Soils:

- The C'=0 Method

Cohesive Soils:

Circular Failure Surface

- The Basic Idea
- Method of Slices
- Fellenius' Method
- Bishop's Method

Non-Circular Failure Surface

- Janbu's Method *
- Infinite Slope Method
- Stability Charts

Slope Stability Calculator - HELP (Draft)

(last updated 9 July 2006)

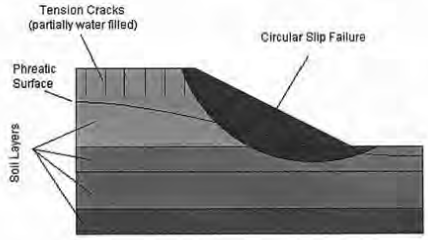
Contents:

- Introduction · Input Data · Calculation Details · Bibliography

Introduction

This calculator determines the factor of safety for a soil slope. It uses the Bishop Modified and/or Ordinary Method of Slices for a 2-dimensional setting. It is a slightly modified JavaScript clone of the slope stability software STABR Ver. 2.84 (MS-DOS).

The calculator searches the circular slip surface for which the factor of safety is minimal. Then, it calculates for this slip circle the corresponding critical seismic coefficient for which the factor of safety is 1.



The properties of the slope are defined in the **Input Data** table.

The **Result** field shows the calculation results.
The contents of the Result field can be highlighted and copied for further use.

The computation may take several minutes on old machines.

See special instructions for offline use of this calculator.

For background information, see also Properties of Tailings Dams and Safety of Tailings Dams.

Factor of Safety

The Factor of Safety is defined as the ratio of the available shear strength of the soil to that required to keep the slope stable. It is common practice to use the following empirical guidelines for slope stability assessments:

Factor of Safety	Guidelines for limit equilibrium of a slope
< 1.0	Unsafe
1.0 - 1.25	Questionable safety
1.25 - 1.4	Satisfactory for routine cuts and fills, Questionable for dams, or where failure would be catastrophic
> 1.4	Satisfactory for dams

The **Units** can be selected for the whole calculator as Imperial or Metric. This selection must be made before any other entry, since it resets the complete calculator.

	Imperial		Metric	
Length	ft.	feet	m	meters
Line Load	lbs/ft.	pounds per foot	kN/m	kilo Newton per meter
Pressure, Cohesion	p.s.f.	pounds per square foot	kPa	kilo Pascal
Unit Weight	p.c.f.	pounds per cubic foot	kN/m^3	kilo Newton per cubic meter
Unit Weight of Water	62.4 p.c.f.		9.81 kN/m^3	

(all pounds are pounds force)

1 ft. = 0.3048 m	1 m = 3.281 ft.
1 lb = 4.448 N	1 kN = 224.8 lb
1 lb/ft. = 14.59 N/m	1 kN/m = 68.52 lb/ft.
1 p.s.f. = 47.88 Pa	1 kPa = 20.89 p.s.f.
1 p.c.f. = 157.1 N/m^3	1 kN/m^3 = 6.366 p.c.f.

(all pounds are pounds force)
See also Unit Converter.

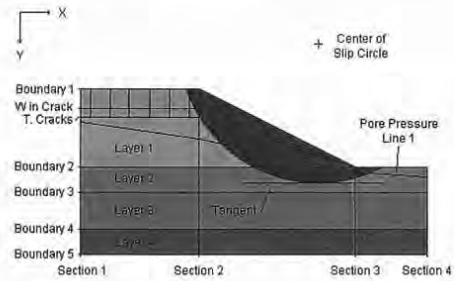
Input Data

Some **Sample Data Sets** can be selected from a pick list. These sets include the three examples supplied with STABR, and several tailings dams of various heights and slopes.
The "Crescent Junction, UT" sample data sets are the original sets used for the proposed alternate disposal site for the Atlas Moab tailings, as given in: Attachment 1 of Remedial Action Plan, Moab Uranium Mill Tailings Remedial Action Project - Disposal Cell Design and Engineering Specifications - June 2006, Calculation MOA-02-05-2006-03-17-00 Through End (ADAMS Accession No. ML061700032).
The layers for these data sets are defined as follows:

1. Radon Barrier
2. Tailings
3. Clean-Fill Dike
4. Alluvial/Eolian Soil
5. Weathered Mancos Shale
6. Competent Mancos Shale

For the entry of user defined problems, it is highly recommended to draw the problem to scale on gridded paper first. The ground surface should extend beyond any slip surface at each end of the slope. Once the input data has been entered, the **Draw Input** button draws a schematic of the situation, including geometry data, pore pressure lines and slip circle tangents (only when Java is enabled).

Note: Y-coordinate values increase downward!



Geometry

Sections [ft.] · [m]
X-coordinates (in increasing order) of the vertical soil sections
If not all of the sections are required, leave excess trailing sections empty.

Boundary *n* [ft.] · [m]
Y-coordinates of the boundaries between different horizontal soil layers, for each vertical section.

Boundary 1 describes the exposed surface of the slope.
If not all of the boundaries are required, leave excess trailing boundaries empty.

W in Crack [ft.] · [m]
Y-coordinates of depth of water in tension cracks for each vertical section.

T. Cracks [ft.] · [m]
Y-coordinates of depth of tension cracks for each vertical section.

Pore Pressure Data (optional)

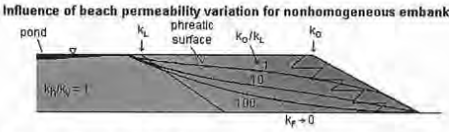
Enter *either* Pore Pressure and Coordinates, *or* R_u Factor

Pore Pressure [p.s.f.] · [kPa]
Pore-water pressure (in increasing order), for each of the Equi-Pressure Lines.
If only one line is entered (with Pore Pressure = 0), then this is used as the **phreatic surface**.
If not all of the available lines are required, leave trailing fields open.

Coordinates of Equi-Pressure Lines [ft.] · [m]
Y-coordinates of lines of equal pore pressure in the soil, for each vertical section.

Phreatic Surface in Upstream Tailings Dams

Influence of beach permeability variation for nonhomogeneous embankments



Influence of beach width for homogeneous, anisotropic embankments

(impermeable foundation) after: Vick 1983

k_L = permeability at the edge of the ponded water at the slimes zone
k_O = permeability at the spigot point (dam crest)
k_F = permeability of foundation
k_h / k_v = anisotropy ratio (horizontal vs. vertical)

R_u Factor (unitless)
Average pore pressure ratio. This factor allows for an alternate pore pressure specification in terms of a fraction of the pressure caused from the overlying soil column.

Caution: If this value is entered, any above defined pore-water pressure data is disregarded.

Soil Properties

Layer Properties

The soil properties are specified for the soil layers as defined by the above boundaries. Layer No.1 is the top layer and is situated between Boundary 1 and Boundary 2; layer No.2 is situated between Boundary 2 and Boundary 3, and so forth.

Cohesion [p.s.f.] · [kPa]
Soil cohesion, for each soil layer
Leave field open (or enter negative number), if a cohesion profile is to be used instead (see below).
Enter 0 for tailings layers.

Friction Angle [°]
for each soil layer
Enter 0 for water layers

Density [p.c.f.] · [kN/m^3]
unit weight of the soil, for each soil layer
For layers of water, enter the exact value of 62.4 p.c.f., or 9.81 kN/m^3, respectively.

Cohesion Profile

The cohesion profile is only used for those soil layers, for which the Cohesion field in the Soil Properties table is left open (or contains a negative number). The cohesion profile is defined independently of the soil layer boundaries.

Elevation [ft] · [m]
Y-coordinates (in increasing order) for which a soil cohesion vs. depth is to be specified
If not all of the available elevations are required, leave trailing fields open.

Cohesion [p.s.f.] · [kPa]
soil cohesion for each depth defined

Slip Circle

Slip Circles are specified by their center and by points or lines their circumference has to pass.

Centers

Enter *either* Specified Centers, *or* Search Start Center and Final Search Grid.

Specified Centers [ft.] · [m]
X- and Y-coordinates of centers of slip circles to be used.
If not all of the available centers are required, leave trailing fields open.
Caution: If this parameter is entered, any Search Start Center or Grid specifications are disregarded.

Search Start Center [ft.] · [m]
X- and Y-coordinates of the center of the first slip circle to be analyzed

Final Search Grid [ft.] · [m]
finest grid width to be used for the centers of the slip circles to be analyzed

Circumference

Enter *either* Tangent Depths *or* Toe Point.

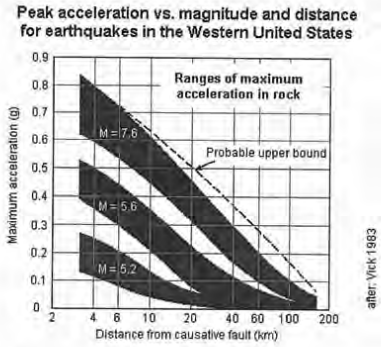
Tangent Depths [ft.] · [m]
Y-coordinates of the horizontal tangents which the slip circles to be analyzed must touch.
If not all of the available tangents are required, leave trailing fields open.

Toe Point [ft.] · [m]
X- and Y-coordinates of the toe point of the slope which the slip circles have to pass.
Caution: If this parameter is entered, any defined tangent coordinates are disregarded.

General

Method
Select Bishop Modified or Ordinary Method of Slices

Seismic Coefficient (unitless)
multiplier on the weight of the potential sliding mass; also fraction of peak horizontal ground acceleration vs. gravity
If no value is entered, 0 is assumed.



Seismic Option

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Calculation Details

The two Limit Equilibrium Methods implemented in this calculator differ in regard of how they deal with interslice forces:

- Ordinary Method of Slices: Interslice forces are neglected.
- Bishop's Simplified Method: Resultant interslice forces are horizontal (i.e., there are no interslice shear forces).

Other, more sophisticated methods, such as Spencer, Morgenstern-Price etc., also consider interslice shear forces, however, the factors of safety obtained often do not differ very much.
For details on the Limit Equilibrium Methods, see, for example, the Theoretical Background chapter in the TSLOPE Software documentation by TAGAsoft, or the Help File distributed with the free Slope/W Student Edition by Geo-Slope International Ltd.

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Bibliography

PROGRAM STABR VERSION 2.84 (MS-DOS)

(ii) Non-Circular Failure Surface:

JANBU'S METHOD:

The difficulty in analysing a non-circular failure surface is that it is difficult to find a single point through which many of the force components act. So, the moment equilibrium method used for circular surfaces is no longer the most appropriate.

Janbu chose instead to use the force equilibrium method in the analysis which follows.

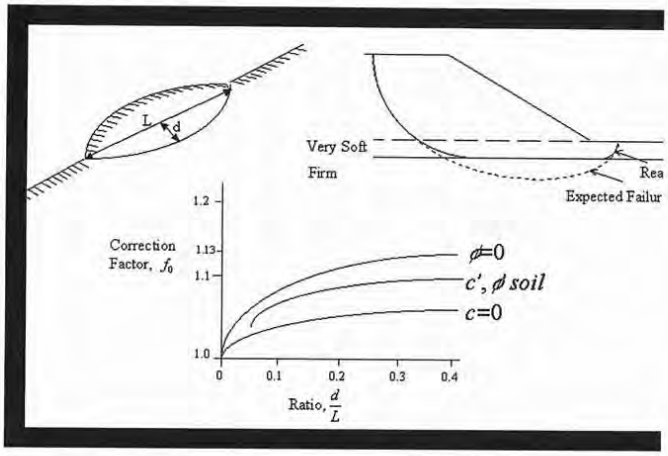
Following on further from Bishop's Method, we get:-

$$F = \frac{\sum\left[c'b + (W + \Delta X - ub)\tan\phi\right]\left(\dfrac{\sec^2\alpha}{1 + \tan\alpha\tan\phi/F}\right)}{\sum W\tan\alpha}$$

(1) This equation is again solved iteratively, using the same method as for Bishop's Method.
(2) Janbu, after discovering a certain amount of innacuracy in this formula, decided on a correction factor, f_0. which should be applied *after* iteration has taken place:-
SO:- $F_{corrected} = f_0 \times F_{iterative}$

(3) The value of f_0 is found from the limited graph below:-

(4) It is necessary to use narrow slices for this method.



Discussion paper # 7

A brief history of the development of the Hoek-Brown failure criterion

The original Hoek-Brown failure criterion was developed during the preparation of the book *Underground Excavations in Rock*, published in 1980. The criterion was required in order provide input information for the design of underground excavations. Since no suitable methods for estimating rock mass strength appeared to be available at that time, the efforts were focussed on developing a dimensionless equation that could be scaled in relation to geological information. The original Hoek-Brown equation was neither new nor unique – an identical equation had been used for describing the failure of concrete as early as 1936. The significant contribution that Hoek and Brown made was to link the equation to geological observations, initially in the form of Bieniawski's Rock Mass Rating and later to the Geological Strength Index GSI. The subsequent development of the criterion and the associated GSI system is described in these notes.

Evert Hoek

April 2004

A brief history of the development of the Hoek-Brown failure criterion

1980 Hoek E. and Brown E.T. 1980. *Underground Excavations in Rock* . London: Institution of Mining and Metallurgy 527 pages

Hoek, E. and Brown, E.T. 1980. Empirical strength criterion for rock masses. *J. Geotech. Engng Div., ASCE* **106**(GT9), 1013-1035.

The original failure criterion was developed during the preparation of the book *Underground Excavations in Rock*. The criterion was required in order provide input information for the design of underground excavations. Since no suitable methods for estimating rock mass strength appeared to be available at that time, the efforts were focussed on developing a dimensionless equation that could be scaled in relation to geological information. The original Hoek-Brown equation was neither new nor unique – an identical equation had been used for describing the failure of concrete as early as 1936. The significant contribution that Hoek and Brown made was to link the equation to geological observations in the form of Bieniawski's Rock Mass Rating and later to the Geological Strength Index.

It was recognised very early in the development of the criterion that it would have no practical value unless the parameters could be estimated by simple geological observations in the field. The idea of developing a 'classification' for this specific purpose was discussed but, since Bieniawski's RMR had been published in 1974 and had gained popularity with the rock mechanics community, it was decided to use this as the basic vehicle for geological input.

The original criterion was conceived for use under the confined conditions surrounding underground excavations. The data upon which some of the original relationships had been based came from tests on rock mass samples from the Bougainville mine in Papua New Guinea. The rock mass here is very strong andesite (uniaxial compressive strength about 270 MPa) with numerous clean, rough, unfilled joints. One of the most important sets of data was from a series of triaxial tests carried out by Professor John Jaeger at the Australian National University in Canberra. These tests were on 150 mm diameter samples of heavily jointed andesite recovered by triple-tube diamond drilling from one of the exploration adits at Bougainville.

The original criterion, with its bias towards hard rock, was based upon the assumption that rock mass failure is controlled by translation and rotation of individual rock pieces, separated by numerous joint surfaces. Failure of the intact rock was assumed to play no significant role in the overall failure process and it was assumed that the joint pattern was 'chaotic' so that there are no preferred failure directions and the rock mass can be treated as isotropic.

1983 Hoek, E. 1983. Strength of jointed rock masses, 23rd. Rankine Lecture. *Géotechnique* **33**(3), 187-223.

One of the issues that had been troublesome throughout the development of the criterion has been the relationship between Hoek-Brown criterion, with the non-linear parameters m and s, and the Mohr-Coulomb criterion, with the parameters c and ϕ. Practically all software for soil and rock mechanics is written in terms of the Morh-Coulomb criterion and it was necessary to define the relationship between m and s and c and ϕ in order to allow the criterion to be used for to provide input for this software.

An exact theoretical solution to this problem (for the original Hoek-Brown criterion) was developed by Dr John. W. Bray at the Imperial College of Science and Technology and this solution was first published in the 1983 Rankine lecture. This publication also expanded on some of the concepts published by Hoek and Brown in 1980 and it represents the most comprehensive discussion on the original Hoek Brown criterion.

1988 Hoek E and Brown E.T. 1988. The Hoek-Brown failure criterion - a 1988 update. *Proc. 15th Canadian Rock Mech. Symp.* (ed. J.H. Curran), pp. 31-38. Toronto: Civil Engineering Dept., University of Toronto

By 1988 the criterion was being widely used for a variety of rock engineering problems, including slope stability analyses. As pointed out earlier, the criterion was originally developed for the confined conditions surrounding underground excavations and it was recognised that it gave optimistic results near surfaces in slopes. Consequently, in 1998, the idea of *undisturbed* and *disturbed* masses was introduced to provide a method for downgrading the properties for near surface rock masses.

This paper also defined a method of using Bieniawski's 1974 RMR classification for estimating the input parameters. In order to avoid double counting the effects of groundwater (an effective stress parameter in numerical analysis) and joint orientation (specific input for structural analysis), it was suggested that the rating for groundwater should always be set at 10 (completely dry) and the rating for joint orientation should always be set to zero (very favourable). Note that these ratings need to be adjusted in later versions of Bieniawski's RMR.

1990 Hoek, E. 1990. Estimating Mohr-Coulomb friction and cohesion values from the Hoek-Brown failure criterion. *Intnl. J. Rock Mech. & Mining Sci. & Geomechanics Abstracts.* **12**(3), 227-229.

This technical note addressed the on-going debate on the relationship between the Hoek-Brown and the Mohr-Coulomb criterion. Three different practical situations were described and it was demonstrated how Bray's solution could be applied in each case.

1992 Hoek, E., Wood, D. and Shah, S. 1992. A modified Hoek-Brown criterion for jointed rock masses. *Proc. rock characterization, symp. Int. Soc. Rock Mech.: Eurock '92*, (J. Hudson ed.). 209-213.

The use of the Hoek Brown criterion had now become widespread and, because of the lack of suitable alternatives, it was now being used on very poor quality rock masses. These rock masses differed significantly from the tightly interlocked hard rock mass model used in the development of the original criterion. In particular it was felt that the finite tensile strength predicted by the original Hoek Brown criterion was too optimistic and that it needed to be revised. Based upon work carried out br Dr Sandip Shah for his Ph.D thesis at the University of Toronto, a modified criterion was proposed. This criterion contained a new parameter a that provided the means for changing the curvature of the failure envelope, particularly in the very low normal stress range. Basically, the modified Hoek Brown criterion forces the failure envelope to produce zero tensile strength.

1994 Hoek, E. 1994. Strength of rock and rock masses, *ISRM News Journal*, **2**(2), 4-16.

1995 Hoek, E., Kaiser, P.K. and Bawden, W.F. 1995. *Support of underground excavations in hard rock.* Rotterdam: Balkema

It soon became evident that the modified criterion was too conservative when used for better quality rock masses and a 'generalised' failure criterion was proposed in these two publications. This generalised criterion incorporated both the original and the modified criteria with a 'switch' at an RMR value of approximately 25. Hence, for excellent to fair quality rock masses, the original Hoek Brown criterion is used while, for poor and extremely poor rock masses, the modified criterion (published in 1992) with zero tensile strength is used.

These papers (which are practically identical) also introduced the concept of the Geological Strength Index (GSI) as a replacement for Bieniawski's RMR. It had become increasingly obvious that Bieniawski's RMR is difficult to apply to very poor quality rock masses and also that the relationship between RMR and m and s is no longer linear in these very low ranges. It was also felt that a system based more heavily on fundamental geological observations and less on 'numbers' was needed.

The idea of *undisturbed* and *disturbed* rock masses was dropped and it was left to the user to decide which GSI value best described the various rock types exposed on a site. The original *disturbed* parameters were derived by simply reducing the strength by one row in the classification table. It was felt that this was too arbitrary and it was decided that it would be preferable to allow the user to decide what sort of disturbance is involved and to allow this user to make their own judgement on how much to reduce the GSI value to account for the strength loss.

1997 Hoek, E. and Brown, E.T. 1997. Practical estimates or rock mass strength. *Intnl. J. Rock Mech. & Mining Sci. & Geomechanics Abstracts.* **34**(8), 1165-1186.

This was the most comprehensive paper published to date and it incorporated all of the refinements described above. In addition, a method for estimating the equivalent Mohr Coulomb cohesion and friction angle was introduced. In this method the Hoek Brown criterion is used to generate a series of values relating axial strength to confining pressure (or shear strength to normal stress) and these are treated as the results of a hypothetical large scale in situ triaxial or shear test. A linear regression method is used to find the average slope and intercept and these are then transformed into a cohesive strength c and a friction angle ϕ.

The most important aspect of this curve fitting process is to decide upon the stress range over which the hypothetical in situ 'tests' should be carried out. This was determined experimentally by carrying out a large number of comparative theoretical studies in which the results of both surface and underground excavation stability analyses, using both the Hoek Brown and Mohr Coulomb parameters, were compared.

1998 Hoek, E., Marinos, P. and Benissi, M. (1998) Applicability of the Geological Strength Index (GSI) classification for very weak and sheared rock masses. The case of the Athens Schist Formation. *Bull. Engg. Geol. Env.* 57(2), 151-160.

This paper extends the range of the Geological Strength Index (GSI) down to 5 to include extremely poor quality schistose rock masses such as the 'schist' encountered in the excavations for the Athens Metro and the graphitic phyllites encountered in some of the tunnels in Venezuela. This extension to GSI is based largely on the work of Maria Benissi on the Athens Metro. Note that there were now 2 GSI charts. The first of these, for better quality rock masses published in 1994 and the new chart for very poor quality rock masses published in this paper.

2000 Hoek, E. and Marinos, P. (2000) Predicting Tunnel Squeezing. *Tunnels and Tunnelling International.* Part 1 – November 2000, Part 2 – December, 2000.

This paper introduced an important application of the Hoek-Brown criterion in the prediction of conditions for tunnel squeezing, utilising a critical strain concept proposed by Sakurai in 1983.

2000 Marinos, P and Hoek, E. (2000) GSI – A geologically friendly tool for rock mass strength estimation. *Proc. GeoEng2000 Conference, Melbourne.*

2000 Marinos, P. & Hoek, E. 2000. From The Geological to the Rock Mass Model: Driving the Egnatia Highway through difficult geological conditions,

Northern Greece, *Proc. 10th International Conference of Italian National Councilof Geologists, Rome*

These papers put more geology into the Hoek-Brown failure criterion than that which has been available previously. In particular, the properties of very weak rocks are addressed in detail for the first time. There is no change in the mathematical interpretation of the criterion in these papers.

2000 Hoek, E. and Karzulovic, A. (2000) Rock-Mass properties for surface mines. In *Slope Stability in Surface Mining* (Edited by W. A. Hustralid, M.K. McCarter and D.J.A. van Zyl), Littleton, CO: Society for Mining, Metallurgical and Exploration (SME), pages 59-70.

This paper repeats most of the material contained in Hoek and Brown, 1997, but adds a discussion on blast damage.

2000 Marinos, P and Hoek, E. (2000). GSI: a geologically friendly tool for rock mass strength estimation. *Proc. GeoEng2000*, Melbourne.

2001 Marinos. P, and Hoek, E. (2001) – Estimating the geotechnical properties of heterogeneous rock masses such as flysch. *Bulletin of the Engineering Geology & the Environment (IAEG),* 60, 85-92

These papers does not add anything significant to the fundamental concepts of the Hoek-Brown criterion but they demonstrates how to choose appropriate ranges of GSI for different rock mass types. In particular, the 2001 paper on flysch discussed difficult materials such as flysch on the basis of the authors' experience in dealing with these rocks in major projects in northern Greece.

2002 Hoek, E., Carranza-Torres, C. and Corkum, B. (2002) Hoek-Brown criterion – 2002 edition. *Proc. NARMS-TAC Conference*, Toronto, 2002, **1**, 267-273.

This paper represents a major re-examination of the entire Hoek-Brown criterion and includes new derivations of the relationships between *m, s, a* and *GSI.* A new parameter D is introduced to deal with blast damage. The relationships between the Mohr Coulomb and the Hoek Brown criteria are examined for slopes and for underground excavations and a set of equations linking the two are presented. The final relationships were derived by comparing hundreds of tunnel and slope stability analyses in which both the Hoek-Brown and the Mohr Coulomb criteria were used and the best match was found by iteration. A Windows based program called *RocLab* was developed to include all of these new derivations and this program can be downloaded (free) from www.rocscience.com. A copy of the paper is included with the download.

2004 Chandler R. J., De Freitas M. H. and P. G. Marinos. Geotechnical Characterisation of Soils and Rocks: a Geological Perspective. Keynote paper in: *Advances in geotechnical engineering, The Skempton Conference*, v1, p. 67-102, Thomas Telford, ICE, London (2004)

A brief contribution on the Geological Strength Index within a more general paper on engineering geology of soils and rock.

2004 V. Marinos, P. Marinos and E. Hoek. Discussion on rock mass characterisation with special emphasis in the geological strength index and in tunnelling, *Proc. 32nd International Geological Congress, Florence*, 2004. (in press)

A discussion on some of the geological aspects of the Geological Strength Index applied to tunnelling.

Hoek, E., Marinos P, and Marinos V. 2004. Rock mass characterisation for molasses. Paper submitted to the International Journal of Rock Mechanics and Mining Science.

A significant paper in which a new GSI chart for molassic rock masses is introduced, Molasse consists of a series of tectonically undisturbed sediments of sandstones, conglomerates, siltstones and marls, produced by the erosion of mountain ranges after the final phase of an orogeny. They behave as continuous rock masses when they are confined at depth and, even if lithologically heterogeneous, the bedding planes do not appear as clearly defined discontinuity surfaces. The paper discusses the difference between these rock masses and the flysch type rocks which have been severely disturbed by orogenic processes.

Summary of equations

Publication	*Coverage*	*Equations*
Hoek & Brown 1980	Original criterion for heavily jointed rock masses with no fines. Mohr envelope was obtained by statistical curve fitting to a number of (σ'_n, τ) pairs calculated by the method published by Balmer [28]. σ'_1, σ'_3 are major and minor effective principal stresses at failure, respectively σ_t is the tensile strength of the rock mass m and s are material constants σ'_n, τ are effective normal and shear stresses, respectively.	$\sigma'_1 = \sigma'_3 + \sigma_{ci}\sqrt{m\sigma'_3/\sigma_{ci} + s}$ $\sigma_t = \frac{\sigma_{ci}}{2}\left(m - \sqrt{m^2 + 4s}\right)$ $\tau = A\sigma_{ci}\left((\sigma'_n - \sigma_t)/\sigma_{ci}\right)^B$ $\sigma'_n = \sigma'_3 + \left((\sigma'_1 - \sigma'_3)/(1 + \partial\sigma'_1/\partial\sigma'_3)\right)$ $\tau = (\sigma'_n - \sigma'_3)\sqrt{\partial\sigma'_1/\partial\sigma'_3}$ $\partial\sigma'_1/\partial\sigma'_3 = m\sigma_{ci}/2(\sigma'_1 - \sigma'_3)$
Hoek 1983	Original criterion for heavily jointed rock masses with no fines with a discussion on anisotropic failure and an exact solution for the Mohr envelope by Dr J.W. Bray.	$\sigma'_1 = \sigma'_3 + \sigma_{ci}\sqrt{m\sigma'_3/\sigma_{ci} + s}$ $\tau = \left(Cot\phi'_i - Cos\phi'_i\right)m\sigma_{ci}/8$ $\phi'_i = \arctan\left(1/\sqrt{4h\cos^2\theta - 1}\right)$ $\theta = \left(90 + \arctan(1/\sqrt{h^3 - 1})\right)/3$ $h = 1 + \left(16(m\sigma'_n + s\sigma_{ci})/(3m^2\sigma_{ci})\right)$
Hoek & Brown 1988	As for Hoek 1983 but with the addition of relationships between constants m and s and a modified form of *RMR* (Bieniawski [15]) in which the Groundwater rating was assigned a fixed value of 10 and the Adjustment for Joint Orientation was set at 0. Also a distinction between *disturbed* and *undisturbed* rock masses was introduced together with means of estimating deformation modulus E (after Serafim and Pereira [18]).	*Disturbed rock masses:* $m_b/m_i = \exp((RMR - 100)/14)$ $s = \exp((RMR - 100)/6)$ *Undisturbed or interlocking rock masses* $m_b/m_i = \exp((RMR - 100)/28)$ $s = \exp((RMR - 100)/9)$ $E = 10^{((RMR-10)/40)}$ m_b, m_i are for broken and intact rock, respectively.
Hoek, Wood & Shah 1992	Modified criterion to account for the fact the heavily jointed rock masses have zero tensile strength. Balmer's technique for calculating shear and normal stress pairs was utilised	$\sigma'_1 = \sigma'_3 + \sigma_{ci}\left(m_b\sigma'_3/\sigma_{ci}\right)^a$ $\sigma'_n = \sigma'_3 + \left((\sigma'_1 - \sigma'_3)/(1 + \partial\sigma'_1/\partial\sigma'_3)\right)$ $\tau = (\sigma'_n - \sigma'_3)\sqrt{\partial\sigma'_1/\partial\sigma'_3}$ $\partial\sigma'_1/\partial\sigma'_3 = 1 + a m_b^a\left(\sigma'_3/\sigma_{ci}\right)^{(a-1)}$
Hoek 1994 Hoek, Kaiser & Bawden 1995	Introduction of the Generalised Hoek-Brown criterion, incorporating both the original criterion for fair to very poor quality rock masses and the modified criterion for very poor quality rock masses with increasing fines content. The Geological Strength Index *GSI* was introduced to overcome the deficiencies in Bieniawski's *RMR* for very poor quality rock masses. The distinction between disturbed and undisturbed rock masses was dropped on the basis that disturbance is generally induced by engineering activities and should be allowed for by downgrading the value of *GSI*.	$\sigma'_1 = \sigma'_3 + \sigma_c\left(m\sigma'_3/\sigma_{ci} + s\right)^a$ for $GSI > 25$ $m_b/m_i = \exp((GSI - 100)/28)$ $s = \exp((GSI - 100)/9)$ $a = 0.5$ for $GSI < 25$ $s = 0$ $a = 0.65 - GSI/200$

Hoek, Carranza-Torres and Corkum, 2002	A new set of relationships between GSI, m_b, s and a is introduced to give a smoother transition between very poor quality rock masses (GSI < 25) and stronger rocks. A disturbance factor D to account for stress relaxation and blast damage is also introduced. Equations for the calculation of Mohr Coulomb parameters c and ϕ are introduced for specific ranges of the confining stress σ'_{3max} for tunnels and slopes. All of these equations are incorporated into the Windows program RocLab that can be downloaded from the Internet site www.rocscience.com. A copy of the full paper is included with the download.	$\sigma'_1 = \sigma'_3 + \sigma_{ci}\left(m_b \sigma'_3 / \sigma_{ci} + s\right)^a$ $m_b = m_i \exp(GSI - 100/28 - 14D)$ $s = \exp(GSI - 100/9 - 3D)$ $a = \frac{1}{2} + \frac{1}{6}\left(e^{-GSI/15} - e^{-20/3}\right)$ $E_m(GPa) = \left(1 - \frac{D}{2}\right)\sqrt{\frac{\sigma_{ci}}{100}} \cdot 10^{((GSI-10)/40)}$ $\phi' = \sin^{-1}\left[\frac{6am_b(s + m_b\sigma'_{3n})^{a-1}}{2(1+a)(2+a) + 6am_b(s + m_b\sigma'_{3n})^{a-1}}\right]$ $c' = \frac{\sigma_{ci}\left[(1+2a)s + (1-a)m_b\sigma'_{3n}\right](s + m_b\sigma'_{3n})^{a-1}}{(1+a)(2+a)\sqrt{1 + \left(6am_b(s + m_b\sigma'_{3n})^{a-1}\right)/((1+a)(2+a))}}$ where, for tunnels $\frac{\sigma'_{3max}}{\sigma'_{cm}} = 0.47\left(\frac{\sigma'_{cm}}{\gamma H}\right)^{-0.94}$ - H is the depth below surface for slopes $\frac{\sigma'_{3max}}{\sigma'_{cm}} = 0.72\left(\frac{\sigma'_{cm}}{\gamma H}\right)^{-0.91}$ - H is the slope height γ is the unit weight of the rock mass

FACTOR OF SAFETY:

In slope design, and in fact generally in the area of geotechnical engineering, the factor which is very often in doubt is the shearstrength of the soil. The loading is known more accurately because usually it merely consists of the self-weight of the slope.

The FoS is therefore chosen as a ratio of the available shear strength to that required to keep the slope stable.

Guidelines for limit equilibrium of a slope:-

FACTOR OF SAFETY	DETAILS OF SLOPE
<1.0	Unsafe
1.0-1.25	Questionable safety
1.25-1.4	Satisfactory for routine cuts and fills, Questionable for dams, or where failure would be catastrophic
>1.4	Satisfactory for dams

For highly unlikely loading conditions, factors of safety can be as low as 1.2-1.25, even for dams. eg.situations based on seismic effects, or where there is rapid drawdown of the water level in a reservoir.

Western Coastal and Marine Geology

WCMG > Research Projects > by title

Overview
Start/End Dates
Location
Investigators
Objectives
Approach
Tasks and SubTasks
Products, Results, Pub
Cooperators

Coastal and Marine Slope Stability and Landslides

Overview

The coastal urban regions of the Pacific margin of the United States are growing rapidly, putting increasing demands on coastal infrastructure and lifelines, such as highways, utilities and community services. These structures and services, as well as the general population that are located in the coastal zone, are at risk from coastal landslides, which are triggered by a variety of phenomena including long-term and seasonal changes in the water table as a result of changing land use, coastal erosion caused by natural response to changes in sea level and changes in sediment transport patterns caused by construction of dams, breakwaters and other coastal structures, and episodic disastrous earthquakes and storms. Coastal landslides can be significant contributors to longshore sediment load; hence, increase in the frequency of landslides can in some cases also contribute to environmental degradation through local amplification of sedimentation in nearshore habitats. This project focuses on characterizing the geologic environment, properties, form, and historic incidence of coastal landsliding on the Pacific Ocean coast of California, which was chosen because of its diversity of geology and landslides that is representative of many western U.S. coastal landslide-prone regions. This information will then be used to extract more specific information about the triggering mechanisms for the different types of landslides and/or geologic setting; specific parameters that lead to increased landslide susceptibility of the different formations. Coastal and fjord landslides into water have been associated with catstrophic tsunami innundation in historic time. This project will develop the linkage between landslide volume and mechanics; bathymetry; and tsunami runup height.

Start/End Dates

10/1/2002 - 9/30/2008

Location

Coastal urban regions of the Pacific margin of the United States

Investigators

- Rob Kayen, Project Chief
- Homa Lee
- Eric Geist
- Brad Carkin
- Cheryl Hapke
- Mark Reid
- K.M. Schmidt

Map of southern Big Sur Coast area showing sediment yield from coastal landslides and active slope distribution. *Excerpt from from Hapke and others, 2004, Maps Showing Estimated Sediment Yield From Coastal Landslides and Active Slope Distribution Along the Big Sur Coast, Monterey and San Luis Obispo Counties, California, USGS Scientific Investigations Map 2852.*

Objectives

The focus of this project is to develop a regional understanding of coastal landslide extent, location, timing, and impact. The objective is to develop an understanding of the context under which coastal landslides occur. The elements of that context are parent geologic substrate; weathering, alteration and soil formation; topography, groundwater and drainage; and transient environmental loads in the form of earthquakes, rainfall, storm-wave attack, and land development. We have decided to focus our attention on California's and Alaska's coast initially, the site of many large landslides that often disrupt the major transportation route along the coast. These slides consume large sums of taxpayer dollars for maintenance and remediation, in addition to the inconvenience and danger they cause. The first year of the project was focused on developing a regional and spatial framework of understanding of the Big Sur coast and identifying particular sites and slides to study in detail.

Approach

In FY2005 our highest prioity is the funding support of Homa Lee's

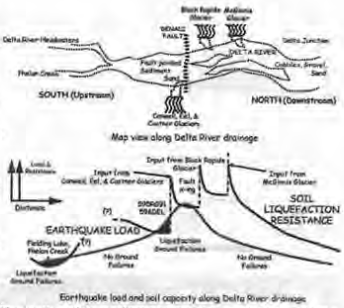
tsunami landslide research effort (task 6) in the fjords of Seward and Valdez AK. This research task was delayed one year to assist the program in cost containment. Also, the delay of this task and excellent progress and productivity on the other tasks are sufficient to request that the final year of this project be changed to FY08, so that the latter years can be used to write up findings from the FY05-FY06 field seasons. This project is an example of multi-team collaboration on a broad interdisciplinary topic. This project has developed a suite of new technologies for coastal land loss research. We encourage the program to modify the final year, accordingly. Our strategy for investigating these elements is to:

1. measure historic landslide activity and the consequent amounts of sediment input into the littoral system,
2. discern if the amounts of sediment input correlate with land use (e.g., the presence of the highway near the coast and within the landslide zone),
3. determine the influence of variables such as topography, sediment/rock properties, groundwater, earthquakes, and wave impact on landslide occurrence and type.

Emphasis is directed to stressors that result in region-wide coastal land-loss or clustered triggering of slides, as opposed to isolated landslide events. We have opened communication with coastal agencies and academic experts to get a broader understanding of the information needs regarding coastal landslides. One of the project goals is to assess the current state of models that are used to predict coastal landslide occurrence under these varied environmental loads. For example, recent work by Hampton suggests that water table locally perched by lower permeability layers may be a very important factor in controlling slope stability even in areas that have been traditionally interpreted as wave erosion induced. Another aspect is the influence of seismic loading. While the methodology for the analysis of compacted embankments is advanced, natural seismically induced landslides have not been subjected to the same rigorous evaluation. Thus, we are building on recent work at the USGS and UC Berkeley to develop more rigorous methods of seismic deformation analysis for natural slopes. Finally, the project will conduct a synthesis of the historical and spatial distribution data with the predictive modeling capabilities to identify vulnerable coastline and levels of transient loads required to trigger future landslides. In the broad sense, this third phase is directed toward establishing simplified guidelines for assessing landslide hazard risk that can be used by coastal agencies for land use planning.

Tasks and SubTasks

- Digital Photogrammetric Analysis of Coastal Landslide Processes (Hapke)
- Ultra High Resolution of Failure Mechanics of Young Coastal Terrace Deposits (Collins & Sitar COOP partners)
- 3-D slope stability of large coastal landslides (Reid)
- Topographic, tectonic, and geologic controls on planar, translational landslides along the Pacific Coast (Schmidt)
- Modeling of Dynamic Displacements of Coastal Ground (Kayen)
- Coastal and Near Shoreline Submarine Landslides (Lee)



Tectonic uplift, sediment ponding, and their effects on liquefaction potential: Conceptual diagram of the intersection of earthquake load and soil liquefaction resistance capacity.

Products

see web site: "Coastal and Marine Ground Deformation Hazards", http://walrus.wr.usgs.gov/geotech/

Barnhardt, W.A. and Kayen, R.E. (1999) Internal Structure of Earthquake-Induced Landslides in Anchorage, Alaska. Seismological Research Letters, V. 70 (2), p. 231-2

Barnhardt, W.A. and Kayen, R.E., 2000, Radar Structure and Hazard Assessment of Coastal Landslides in Anchorage, Alaska, Amer. Assoc. Pet. Geol. Special journal issue on coastal hazards. (WPG M00-0186).

Barnhardt, W.A., Jaffe, B., and Kayen, R.E., 1999, Evaluation of landslide hazards with ground penetrating radar, Lake Michigan Coast, Proc. Coast Sediments Conference '99, New York.

Barnhardt, W.A., Jaffe, B.E., and Kayen R.E., 1999, Mitigation of landslide hazards at Sleeping Bear Dunes National Lakeshore, Michigan: Geol. Soc. Amer. Abs. with Prog, v. 31, no. 7, p. A384.

Collins, B. and Sitar, N., Geotechnical Observations of Recent Coastal Bluff Failures, Pacifica, California, GSA.

Conference proceedings paper and presentation: Highway Geology Symposium, San Luis Obispo, CA, August 2002.

Desgagnes, P., Locat, J., Lee, H.J., and Heroux, M.C., 2001, The geotechnical characterization of mass movements along the New Jersey margin: a tool for hazard assessment: Abstracts, Chapman Conference on the Formation of Sedimentary Strata on Continental Margins, Ponce, Puerto Rico.

Gardner, J.V., Lee, H., Field, M.E., and Prior, D.B., 1996, Are the Humboldt slide blocks slide blocks or antidunes?: EOS, Transactions, American Geophysical Union, v. 77, no. 46, p. F330.

Gardner, J.V., van den Ameele, E.J., Gelfenbaum, G., Barnhardt, W., Lee, H., and Palmer, S., 2001. Mapping Puget Sound Delta Fronts after 2001 Earthquake, EOS, 82, 485-488.

Goff, J.A., Wheatcroft, R.A., Lee, H., Drake, D.E., Swift, D.J.P., and Fan, S., 2002. Spatial variability of shelf sediments in the STRATAFORM natural laboratory, Continental Shelf Research, 22, 1199-1223.

Hampton, M.A., Lee, H.J., and Locat, J., 1996, Submarine landslides: Reviews of Geophysics, v. 34, p. 33-59.

Hapke, Cheryl, 2002, Sediment yield from coastal landslides based on historical digital terrain modeling: Big Sur, California, Geological Society of America Annual Meeting Abstracts with Programs, v.34, n. 6, p. 48.

Hapke, Cheryl, 2001, Historical Assessment of Landslide Volume Contribution to the MBNMS Along the Big Sur Coast, CA: CA Dept. of Transportation Big Sur Coastal Highway Management Plan, p.1-14.

Hapke, C.J. and Green, K.R., 2004, Map Showing Coastal Cliff Retreat Rates Along the Big Sur Coast, Monterey and San Luis Obispo Counties, California, USGS Scientific Investigations Map 2853. (http://pubs.usgs.gov/sim/2004/2853/)

Hapke, C.J., Green, K. and Dallas, K., 2003, Estimated Sediment Yield From Coastal Landslides and Active Slope Distribution Along the Big Sur Coast, Report to the Coast Highway Management Plan, California Dept. of Transportation District 5, 47 p. (http://www.dot.ca.gov/dist05/projects/bigsur/news.htm)

Hapke, C.J., Green, K.R., and Dallas, K., 2004, Maps Showing Estimated Sediment Yield From Coastal Landslides and Active Slope Distribution Along the Big Sur Coast, Monterey and San Luis Obispo Counties, California, USGS Scientific Investigations Map 2852. (http://pubs.usgs.gov/sim/2004/2852/)

Harp, E.L. Jibson, R.W., Kayen, R.E., Keefer, D.K., Sherrod, B.S., Carver, G.A., Collins, B.D., Moss, R.E.S., and Sitar, N. (2003) Landslides and Liquefaction Triggered by the M7.9 Denali Fault Earthquake of 3 November 2002, GSA Today 13(8) p. 4-10.

Hughes-Clarke, J.E., Mayer, L.A., Goff, J.A., Lee, H.J., and Wakefield, W., 1996, Regional seabed characterization through analysis of angular response of seabed backscatter strength: application to STRATAFORM east

and west coast surveys: EOS, Transactions, American Geophysical Union, v. 77, no. 46, p. F329.

Kayen, Robert, Nicholas Sitar, Gary Carver, Brian Collins, Robb Moss (2002) Geotechnical Reconnaissance of the 3 November 2002, Mw 7.9, Denali - Earthquake, Alaska, abs. S72F-1330, Amer. Geophys. Union. Dec. 2000, San Francisco, CA.

High-resolution crosshole radar tomography; application to liquefaction-induced changes in soil on Treasure Island, by R. E. Kayen, W. A. Barnhardt, U.S. Geological Survey; Scott Ashford, University of California at San Diego; Kyle Rollins, Brigham Young University; D. L. Minasian, and B. A. Carkin, U.S. Geological Survey. Professional Paper 1630. p. 3-10.

Kayen, R. E., Barnhardt, W. A., Ashford, S. and Rollins, K. (2001) Crosshole Radar Tomography for Characterization of Liquefaction-Induced Changes in Soil Density at Treasure Island, San Francisco Bay, California, USA, Proceedings of the Annual Conference, Japanese Geotechnical Society, Tokushima City, Shikoku, Japan, June 12-14, 2001.

Kayen, R.E. and Mitchell, J.K. (1999) Liquefaction potential during earthquakes by Arias Intensity: Closure Journal of Geotechnical and Geoenvironmental Engineering, Amer. Soc. Civil Eng. Vol. 125(7), p. 626-629.

Kayen, R.E., Barnhardt, WA, and Palmer, SP (1999) Geomorphological and Geotechnical Issues Affecting the Seismic Slope Stability of the Duwamish River Delta, Port of Seattle, Washington, in, W.M. Elliott and P. McDonough, eds. Optimizing Post-Earthquake Lifeline System Reliability, American Society of Civil Engineers, Lifeline Earthquake Engineering Monograph No. 16, p.482-492.

Kayen, R.E., Edwards, B. D., Lee, H. J., (1999) "Nondestructive Laboratory Measurement of Geotechnical and Geoacoustic Properties through Intact Core-liner," Nondestructive and Automated Testing for Soil and Rock Properties, ASTM Special Technical Publication-1350, W. A. Marr and C.E. Fairhurst eds., American Society for Testing and Materials, p. 83-94.

Kayen, R.E., Ozaki, R, Tanaka, Y., and Takada, S. (2001) Multi-directional Displacement of Compliant Soil, Proceedings of the 26th Japanese Society of Civil Engineers Earthquake Engineering Symposium, August 1-3, 2001, Sapporo, Hokkaido Japan, p. 693-696.

Lee, H.J., 1996, Evidence of rapid gravitational mass movement on the submerged floans of the Hawaiian Islands: Proceedings of the "Pierre Beghin" international workshop on rapid gravitational mass movements, Grenoble, France.

Lee, H.J., Dartnell, P., Israel, K., and Locat, J., 1996, Evaluating submarine slope stability regionally: EOS, Transactions, American Geophysical Union, v. 77, p. 5317.

Lee, H.J., Dartnell, P., Minasian, D., Israel, K., Wong, F., and Locat, J., 1998, Evaluating shallow-seated submarine slope stability regionally:

comparison between the Eel margin and the Los Angeles margin, California: SEPM-IAS Research Conference, Strata and Sequences on Shelves and Slopes, Program and Abstract Volume, Catania, Sicily.

Lee, H.J., Dartnell, P., Minasian, D., Wong, F., Israel, K., and Locat, J., 1998, Shallow-seated slope stability contrasts: Eureka, California vs. Santa Monica Bay, California: EOS, Transactions, American Geophysical Union.

Lee, H.J., Kayen, R.E., Gardner, J.V., and Locat, J., 2003. Characteristics of several tsunamitenic submarine landslides, In Submarine Mass Movements and their Consequences, Locat and Meinert (eds), p. 357-366.

Lee, H.J., Locat, J., Dartnell, P., Minasian, D., and Wong, F., 2001, Regional variability of factors that influence offshore slope stability, synthesis within a GIS: Proceedings of the 11th Meeting of the European Union of Geosciences, Strasbourg, France.

Lee, H.J., Locat, J., Dartnell, P., and Wong, F., 1999, Regional variability of slope stability: application to the Eel margin, California: Marine Geology, v. 154, p. 305-321.

Lee, H.J., Syvitski, J.P.M., Parker, G., Orange, D., Locat, J., Hutton, J.W.H., and Imran, J., 2002. Distinguishing sediment waves from slope failure deposits: field examples, including the 'Humboldt Slide' and modelling results, Marine Geology, 192, 79-104.

Lee, H.J., and Locat, J., 2001, Submarine mass movements and strata formation: a geotechnical perspective: Abstracts, Chapman Conference on the Formation of Sedimentary Strata on Continental Margins, Ponce, Puerto Rico.

Lee. H.J., Locat, J., Dartnell, P., Minasian, D., and Wong, F., 2000, A GIS-based regional analysis of the potential for shallow-seated submarine slope failure: Proceedings of the Eighth International Symposium on Landslides, Cardiff, Wales.

Leroueil, S., Vaunat, J., Picarelli, L., Locat, J., Lee, H.J., and Faure, R., 1996, Geotechnical characterization of slope movements: Proceedings of the International Symposium on Landslides, Trondheim, Norway.

Locat, J, Lee, H., Kayen, R., Israel, K., Savoie, M.-C., and Boulanger, E., 2002. Shear strength development with burial in Eel River margin slope sediments, Marine Geotechnology, 20, 111-136..

Locat, J., Gardner, J.V., Lee, H.J., Mayer, L., Hughes-Clarke, J.E., and Kammerer, I., 1999, Using multibeam sonar surveys for submarine landslide investigations: Proceedings of the International Symposium on Slope Stability Engineering, Shikoku, Japan, p. 127-134.

Locat, J., Lee, H.J., Schwab, W., Twichell, D.C., and Nelson, C.H., 1996, Analysis of the mobility of far-reaching debris flows on the Mississippi Fan, Gulf of Mexico: Proceedings of the International Symposium on Landslides, Trondheim, Norway.

Locat, J., Savoie, M.-C., Lee, H.J., Kayen, R.E., and Israel, K., 1996, Structuration and mobilization of Eel River margin sediment: factors and behavior: EOS, Transactions, American Geophysical Union, v. 77, no. 46, p. F317.

Locat, J., and Lee, H.J., 2002, Submarine landslides: advances and challenges: Canadian Geotechnical Journal, vol. 39, p. 193-212.

Miyata, T., Y. Tanaka, R. Kayen, S. Takada, and B. J. Shih Ground-Penetrationg Radar Image of the 1999 Rupture in Chi-Chi Earthquake, Taiwan, International Workshop on Physics of Active Fault, February 26-27, 2002 at NIED, Tsukuba, Japan

Orange, D.L., McAdoo, B.G., Moore, J.C., Tobin, H., Screaton, E., Chezar, H., Lee, H.J., Reid, M., and Vail, R., 1997, Headless submarine canyons and fluid flow on the toe of the Cascadia accretionary complex: Basin Research, v. 9, p. 303-312.

Ozaki, R, Takada, S. and Kayen, R.E. (2001) Multi-directional Newmark Sliding Analysis with Compliant Materials, Japanese Journal of Structural Engineering, Vol. 47(3) 571-578.

Pratson, L.F., Lee, H.J., Parker, G., Garcia, M.H., Coakley, B.J., Mohrig, D., Locat, J., Mello, U., Parsons, J.D., Choi, S.-U., and Israel, K., 1996, Studies of mass-movement processes on continental slopes: Oceanography, v. 9, no. 3, p. 168-172.

Proceedings, IX International Symposium on Landslides, Rio de Janeiro, Brazil, 2004.

Schmidt, K.M. and Reid, M.E., 2002, Deep-seated landsliding and rock mass strength along the Big Sur coast, CA: EOS, Transactions of the American Geophysical Union, v. 83, n. 47, p. F551.

Schwab, W.C., Lee, H.J., Twichell, D.C., Locat, J., Nelson, C.H., McArthur, W.G., and Kenyon, N.H., 1996, Sediment mass-flow processes on a depositional lobe, outer Mississippi Fan: Journal of Sedimentary Research, v. 66, no. 5, p. 916-927.

Surface Wave Investigation and Analysis of Earthquake-Induced Liquefaction Sites in Asia, Amer. Geophys. Union. Dec. 2000, San Francisco, CA.

Troost, K.G., Booth, D.B., Shimel, S.A., Haugerud, R.A., Kramer, S.L., Kayen, R.E., and Barnhardt, W.A., 2002, Geologic controls on ground failures in Seattle and vicinity during the 2001 Nisqually earthquake, Seismological Research Letters, v. 72, p. 396.

Urgeles, R., Locat, J., Lee, H.J., Martin, F., and Konrad, J., 2001, The Saguenay Fjord: integrating marine geoophysical and geotechnical data for spatial slope stability analysis: Proceedings of the 11th Meeting of the European Union of Geosciences, Strasbourg, France.

December 27, 2006

Planning Commission
City of Santa Barbara
Community Development Department
Planning Division
630 Garden Street
Santa Barbara, CA 93102

LETTER No. 4

Re: **Draft Environmental Impact Report**
1837.5 El Camino de la Luz
SCH No. 2005041031
November, 2006

Honorable Commissioners:

Please consider the following comments on the subject report.

This Planning Commission has required the preparation of a focused EIR to study the aesthetic impacts of the proposed project. Specifically, the report was to study the visual impacts on the public views of the ocean and the Channel Islands from La Mesa Park and other public areas. This draft report concludes:

> **As presently designed, the proposed residence would have the potential to substantially obstruct existing ocean views provided from important public view points, including views provided from the "benches" area of La Mesa Park and the eastern edge of Lighthouse Creek footbridge.**

This conclusion, and the need to study three project alternatives, required the expansion of the EIR to study additional impacts including biological impacts, geotechnical hazards, fire hazards, transportation, water resources, air quality, cultural resources, noise, and public services. Issues of legal compliance of the original subdivision of the property and access are not included in this EIR, but are referenced with the inclusion of our previous correspondence. 4-1

AESTHETICS

We agree with the conclusions of the EIR regarding the impacts of the proposed project. **The project has a significant impact on public views of the ocean and Channel Islands.** The design violates the policies and requirements of the City of Santa Barbara Local Coastal Plan. We appreciate the two alternatives produced in this report; they are incremental design variables that attempt to reduce the impact. We disagree with the conclusion that Alternative 2 would reduce the impact to less than significant, nor is Alternative 2 the only alternative that would accomplish this. 4-2

Aesthetics is a subjective issue, but this is not an aesthetic issue of color, bulk or compatibility with the neighboring houses. This Planning Commission concluded that the proposed project could have an impact on public views and therefor required this focused EIR. The question then becomes, how much of the public view can be given up and allow a house to be built? This is why alternatives 1 and 2 were developed.

This may be subjective, so let's do some comparisons. If a structure were proposed adjacent to the Brown Pelican on Arroyo Burro Beach, would it be considered less than significant? Would a house on the west end of Shoreline Park be considered less than significant? Both of these hypothetical structures could be designed to be compatible with the existing adjacent structures, color, scale and so forth, but we would all agree that the impacts would still be significant. Both of these proposals would incrementally reduce the public views protected by the Local Coastal Plan. Both would be classified as Class I impacts under CEQA.

In both of these cases, the views are broader than those from La Mesa Park. The proportional impact on the narrower views from La Mesa Park are much greater than the hypothetical impacts on Arroyo Burro or Shoreline Park and therefor exponentially more significant. If you are to make a subjective judgement on the impact of a project and various reductions of public views, then it should be made in the context of other similar proposals. We submit that the proposed residence or alternatives 1 and 2 should be Class I Significant and Unavoidable Impacts under CEQA. 4-3

Santa Barbara has a unique history of coastal preservation. Access to our beaches and views of the ocean and Channel Islands are our greatest natural resource. We believe that any violation of the LCP policies protecting these public views is a significant impact and should be so listed in this EIR.

GEOTECHNICAL HAZARDS

The EIR references Dr. Anikouchine's review of 17 previous reports or letters for this project, and correctly concludes that

> **"An on-site feature identified by previous evaluations may have the potential to result in a significant slope stability impact".**

4-4a

We agree with this conclusion, but disagree with the proposed mitigation measure calling for inspection of a building pad prior to the issuance of a grading permit. CEQA requires this analysis prior to adoption of the EIR. Considering the conflicting conclusions of the 17 reports based on hypotheses rather than conclusive laboratory test results, it is imperative that this exploration and testing be included as part of this report. The following issues leave the EIR inconclusive:

1. In all the reports dating back to 1971, only two are based on actual borings on site, Buena Engineers 1971 and Pacific Geoscience 1987. 4-4b

2. Dr. Anikouchine did not have geologic maps included in these reports nor did he have log borings or laboratory test results. He notes this as a **"regrettable lapse".** 4-4c

3. Dr. Anikouchine did not do any borings, extract any samples or conduct laboratory tests. 4-4d

4. The Smith 1980 report reviewed the Buena report and concluded that the area under the flat paved pad was unsuitable for construction based on his discovery of a bedding plane fracture and the overlaying of expansive alluvium layer 6 to 8 ft in depth. CFG 1996 takes exception to Smith's fracture and identifies this as a 1 inch asphaltum bed. Dr. Anikouchine agrees with Smith, thus the unresolved issue of the stability of the upper pad considered for Alternatives 1 and 2. 4-4e

5. The EIR classifies the soils under the paved area as "terrace sand"; we do not know where this conclusion comes from. Smith 1980 classifies this as "moderately expansive alluvium". 4-4f

6. Pacific Geoscience 1987 drilled 3 exploratory borings but did no soils analysis on sample materials. 4-4g

7. Fig. 1 in Dr. Anikouchine's report draws the line "75 ft.-yr setback" incorrectly. The line reflects the "top of bluff" as drawn by the architect, not the actual setback. 4-4h

8. The rate of cliff retreat varies in the reports from 4 inches to 8 inches. 4-4i

9. None of the 17 reports did a slope stability analysis required by code. Dr. Anikouchine, the reviewer, took it upon himself to complete these calculations, without field borings or laboratory test data. This is a highly unusual practice for a reviewer of geotechnical reports. His conclusions place the liability on the City of Santa Barbara. 4-4j

TOP OF BLUFF and 75 YEAR SETBACK

The top of bluff is incorrectly plotted on all the site plans and Dr. Anikouchine's Figure 1. The EIR correctly references the Coastal Commission's definition of "bluff edge" as follows:

> In cases where the top edge of the cliff is rounded away from the face of the cliff as a result of erosional processes related to the presence of the steep cliff face, the bluff line or edge shall be defined as that point nearest the cliff beyond which the downward gradient of the surface increases more or less continuously until it reaches the general gradient of the cliff. In a case where there is a step like feature at the top of the cliff face, the landward edge of the topmost riser shall be taken as the cliff edge..." **(California Code of Regulations, Title 14, Section 13577(h)(2).** 4-5a

The definition could not be any clearer. The conditions of this parcel are exactly as defined in the law. Every report agrees that the lower southeast terrace is an excavated terrace; therefor the lower terrace should not to be considered in drafting the edge of bluff, yet all of the plans follow the plan drawn by the architect. This plan draws a cross-gradient line that drops 40 ft down the cliff before it returns paralleling the creek. The enclosed survey by Penfield & Smith correctly plots the edge of bluff as defined by law as well as the one drawn by the architect. This survey also indicates the various 75 year setbacks, 4 and 8 inches per year. 4-5b

In this regard, we take exception to Dr. Anikouchine's comment that the Coastal Commission's definition of "edge of bluff" is "arbitrary"; **it is the law**. It is not the reviewer's prerogative to discount definitions in law, and make alternative suggestions as to what "should serve the purpose...of the City of Santa Barbara". Clearly, none of the proposed designs comply with code requirements, even the minimal assumed 4 inches per year regression of the bluff. 4-5c

TRANSPORTATION and IMPACTS OF CONSTRUCTION

The EIR refers to construction impacts, i.e. parking and storage of building materials, in the transportation section. However, the report does not address the actual physical process of construction. The report considers the excavation of 500 cubic yards of soil as less than significant and in most cases, we might agree. However, in this location, there is no access for trucks to load and haul away materials. The required 75 year setback leaves a pad area approximately 27 ft x 40 ft. for the house, trucks, and building materials. This area is also the area noted as unbuildable in Smith 1980 and the uncertain fracture in the bedrock agreed to by Dr. Anikouchine from which the EIR concludes that there is a potentially significant slope stability impact. We recognize the impacts of construction are temporary, but in this case they are impossible and significant. 4-6

BEACH ACCESS

The EIR notes that there is beach access via an existing trail, a trail that has been in place for over 50 years. The report assumes that this trail would remain in place. We would request that this issue be clarified in the EIR. 4-7

CREEKS

The report omits creek set back requirements of the City of Santa Barbara. 4-8

FIRE HAZARDS

The report addresses this issue by requiring that the house have a fire sprinkler system. We believe this misses the concerns of the LCP with regards to houses on the edge of creeks and the high fire hazard, **not to this house**, but to all of the other structures within this environment. The proposed structure would foreclose access to emergency or service vehicles. The existing pad has served these emergency vehicles on a number of occasions. 4-9

APPENDIX B

The EIR includes our previous correspondence re. Draft Mitigated Negative Declaration, dated April 11, 2005. We note the omission of our June 6, 2005 correspondence and its attachments; we enclose a copy of the letter and attachments and request that these be included for the record in the EIR. 4-10

We also enclose a copy of the Penfield and Smith survey plotting the edge of bluff and required setbacks, dated Dec. 11, 2006 and request that this be added to the record. —

Finally, the first consideration of the proposed project is the legal status of the subject parcel. This question has been raised numerous times in correspondence with this Commission. The City attorney in his letter of June 4, 1997 wrote to the applicant's attorney:

> **"it is our conclusion that the required legal access to the parcel is not clearly and definitively established from a legal standpoint. As a result, the City cannot process an application for the development of that parcel with a single family home until you and Dr. Barthels demonstrate that the 15 foot wide easement access originally represented to the City Council as a necessary vehicular access to the parcel does in fact exist and can legally be utilized in perpetuity".** 4-11

The applicant has testified in court that the parcel is unbuildable. In a lawsuit against the title company the defendant agreed that title, i.e. the access easement, was spurious. Dr. Barthels has prevailed and been compensated for his loss. Once again we ask, why is the City of Santa Barbara processing this application, wasting everybody's time and money?

Thank you for your consideration.

Rafael Franco
1835 El Camino de la Luz

Linda L. Franco

Joanna Morgan
1843 El Camino de la Luz

Stan Krome

Horace Wright
1833 El Camino de la Luz

Jerry Lu Wright

Bruce Peterson
1837 El Camino de la Luz

Maggie Peterson

Peter Miller
1839 El Camino de la Luz

Jennifer Miller

Tom Sloan
1841 El Camino de la Luz

Tine Sloan

Comment Letter No. 4
Rafael and Linda Franco
Joanna Morgan
Stan Krome
Horace and Jerry Lu Wright
Bruce and Maggie Peterson
Peter and Jennifer Miller
Tome and Tine Sloan

Date: December 27, 2007

4-1. The conclusion by the EIR that the proposed project would have the potential to result in significant visual impacts to important public views does not require that the EIR provide additional evaluations of other potential environmental impacts that were previously determined by the Initial Study to be less than significant or that could be reduced to a less than significant level with the implementation of identified mitigation measures. The alternatives to the proposed project evaluated by the EIR would result in additional excavations on the top of the bluff, which could have the potential to result in geologic/slope stability impacts not previously considered by the Initial Study. Therefore, an evaluation of potential geologic impacts was included in the project EIR. Other environmental impacts identified by the Initial Study as having the potential to result from the development of the proposed residence, such as impacts to biological and cultural resources, noise, traffic, hazards, etc., would not be substantially affected by variations in the size and configuration of a residence constructed on the project site.

Section 2.5 of the EIR indicates that access to the project site an issue that remains to be resolved. The site access mitigation measure identified by the Initial Study prepared for the project and included in the EIR summary section indicates that the project applicant must provide the City with adequate evidence of legal access to the project site. Therefore, issues related to the establishment of legal access to the project site were adequately disclosed by the EIR.

4-2. The EIR indicates that with the implementation of proposed mitigation measures, the proposed project and alternative design concepts may be found consistent with the applicable policies of the City's General Plan, Local Coastal Plan, Residential Design Guidelines and the Coastal Act. The EIR also concluded that potential visual impacts of the proposed project and the alternative design concepts could be reduced to a less than significant level with the implementation of proposed mitigation measures.

4-3. The EIR has provided detailed (photosimulations) evaluations of the potential visual impacts of the proposed project and alternative design concepts. This evaluation was conducted by comparing existing visual conditions to post-project

development conditions, and evaluating the changes in existing environmental conditions to a set of pre-determined significance criteria. A similar analysis was provided for two alternative project design scenarios. The analysis of potential visual impacts associated with the proposed project and alternative design concepts provided an objective basis for evaluating significant impacts and identifying feasible mitigation measures. This comment indicates that the proposed project and alternatives should be considered to result in significant and unavoidable impacts to existing visual conditions, however, no basis or justification to support the suggested conclusion has been provided.

4-4a. As indicated by this comment, there have been 17 prior evaluations of the geologic conditions of the project site, plus the peer review of the previous reports and the slope stability analysis conducted by Dr. Anikouchine. The evaluation of potential geologic impacts provided by the EIR has been prepared consistent with CEQA Guidelines section 15151, which indicates that "*disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.*"

The evaluation of potential geologic hazard impacts provided by the EIR has summarized the findings of each of the 17 previous investigations conducted at the project site, provided a site-specific slope stability analysis based on information provided by the previous reports, and is also based on Dr. Anikouchine's site reconnaissance and knowledge of engineering properties associated with the Monterey formation. The analysis has provided reasonable conclusions regarding the potential slope stability impacts of the proposed project and proposed alternative design concepts, and provided feasible mitigation measures to reduce potentially significant impacts to a less than significant level. Therefore, the EIR's evaluation of potential project-related geological impacts has been conducted consistent with the requirements of CEQA.

4-4b. This comment indicates that only two of the previous geologic investigations of the project site included soil boring data. No response is required.

4-4c. Please refer to response 3-1.

4-4d. A substantial amount of information about the geological conditions that exist at the project site is provided by the 17 previous investigations that have been prepared for the site. In addition, general knowledge of the engineering properties of the Monterey formation has provided a sufficient basis for preparing the slope stability analysis provided by the EIR. The purpose of Dr. Anikouchine's slope stability analysis was to evaluate the assertion by previous evaluators, including Smith, that the bluff at the project site was stable. It was not

the intent of the evaluation to exempt the property owner from preparing a complete geotechnical evaluation of the project site and the proposed project.

4-4e. Dr. Anikouchine's report does not indicate that he agrees with Smith's assessment of the presence of an "open bedding plane fracture" on the project site. Page 6, paragraph four of Dr. Anikouchine's report states: "*Fisher takes issue with several other of Smith's findings. He takes exception with the lack of proper identification of earth materials on the subject parcel, the light treatment of slope stability, the misidentification of the "open bedding plane fracture", which is actually a 1 inch thick asphaltum bed, and dismissal of the matter of daylighted strata at the SW part of the subject parcel. I am in agreement with Fisher in these instances*"

4-4f. The description of the project site containing terrace sand soils is from the assessment of project site conditions provided by CFG Consultants (1996).

4-4g. This comment indicates that in 1987 three borings were conducted on the project site but no soils analysis was conducted. No response is required.

4-4h. Please refer to response 3-2a.

4-4i. This comment indicates that the rate of seacliff retreat varies from four to eight inches per year. Previous investigations of the project site, including aerial photo interpretation, have concluded that the average rate of seacliff retreat at the proposed project site is on the order of four inches per year.

4-4j. Please refer to response 4-4a.

4-5. Please refer to response 3-2a. The top of the bluff at the project site was delineated by a geologist (Fisher, 2001), not the project architect.

Please refer to response 3-2b and the reference to the Coastal Commission memo dated January 16, 2003. This memo indicates that the position of a bluff edge may be modified by factors such as the landward retreat of the bluff or anthropogenic modifications resulting from grading or the construction of structures. It is not disputed that previous grading of the project site modified the configuration of the slope, affecting the location of the bluff edge as defined by the Coastal Commission. As indicated by this comment, the bluff edge has been defined as required by state law and has been determined based on existing condition even though those condition have been modified due to previous grading operations.

Please refer to response 3-2c regarding the topographic contours and bluff edge depicted on the map recently prepared by Penfield & Smith.

5a. Please refer to response 4-5 regarding man-made changes to the configuration of the bluff on the project site.

5b. Please refer to response 3-2c, which indicates that the top of bluff on the project site was determined by a geologist, not the project architect. Also, the top of bluff depicted on the Penfield & Smith map does not comply with the Coastal Commission's definition of "top of bluff."

5c. Please refer to response 3-2b regarding the description of the Coastal Commission definition of the top of bluff as "arbitrary."

6. The proposed project would not require the exportation of soil from the project site. Project site grading and the removal of approximately 500 cubic yards of soil would only result from the implementation of the alternative design concepts evaluated by the EIR. The EIR acknowledged that construction-related access constraints could affect the export of excavated material. However the analysis provided in sections 8.2.3 and 8.3.3 under Threshold C indicates that: "*the narrow driveway leading to the project site would constrain the ability to remove excess soil excavated from the project site, but it is anticipated that soil could be removed using trucks that can transport approximately five cubic yards of soil per load.*"

The setback area from the top of the project site bluff would apply to the development of a new structure. The setback area could be temporarily used as a staging area for the construction of a residence. The temporary use of the setback area would not result in changes to the project site that would have the potential to result in significant slope stability impacts.

7. The proposed project plans do not indicate that there would be any modifications to the existing bluff trail.

8. Please refer to response 2-2 regarding the establishment of appropriate creek setbacks.

9. The provision of fire sprinklers within a structure substantially reduces potential fire safety and suppression impacts, even in a high fire hazard zone. Development of a residence on bluff top property would not result in a significant impact to emergency vehicle access.

10. The additional attachments provided by this comment letter have been included in EIR Appendix D.

11. The City has determined that the project site is a legal parcel. Please refer to response 4-1 regarding the provision of legal access to the project site.

10.2 JANUARY 11, 2007 PUBLIC HEARING COMMENTS (see attached minutes)

Rafael Franco

Mr. Franco provided testimony that was similar to comments provided in letters dated December 27, 2006 (letter No. 2) and January 12, 2007 (letter No. 3). A summary of Mr. Franco's comments and references to responses to similar written comments are provided below.

Mr. Franco indicated that the visual impacts of the proposed project and alternatives could not be reduced to a less than significant level.

Please refer to response 4-3.

Mr. Franco stated that the topography and top of bluff designation provided on the project plans is incorrect.

Please refer to responses 3-2a and 3-2c.

Mr. Franco indicated that a method of evaluating the stability of the project site ocean bluff, other than the method used by Dr. Anikouchine, should have been used in preparing the project site slope stability analysis.

Please refer to response 3-3.

Mr. Franco requested that his letter dated May 19, 2005 be included in the EIR.

Mr. Franco's letter is actually dated June 6, 2005, and has been included in the Final EIR as part of Appendix D.

Mr. Franco requested that minutes from the May 19, 2005 Planning Commission contain errors.

This comment does not address the adequacy of the impact analysis provided by the EIR and no response is required. However, Mr. Franco has been invited to provide clarifying or responsive comments in writing.

Joanna Morgan

Ms. Morgan indicated that Penfield and Smith produced a topographic map of the project site that depicts topographic contours that are different than the contours depicted on the project plans. She also indicated that three other geologists interviewed by area residents did not agree with Dr. Anikouchine regarding potential slope stability issues. She also indicated that the proposed project was too close to Lighthouse Creek.

Please refer to comment response 3-2c regarding the mapping of topographic contours on the project site. In summary, the topography depicted on the project plans and the Penfield & Smith map are generally similar, however, the Penfield & Smith map did not map the entire project site. The top of bluff indicated on the Penfield & Smith map does not comply with the Coastal Commission's definition of the bluff edge.

This comment did not provide specific information regarding the areas of disagreement between three unnamed geologists and the results of the peer review and slope stability analysis prepared by Dr. Anikouchine. As indicated by response to comment 4-4a, CEQA Guidelines section 15151 indicates that disagreement among experts does make the EIR inadequate. Without more specific information regarding the area(s) of disagreement, a more detailed evaluation and response cannot be provided.

Please refer to response 2-2 regarding the setback of the proposed residence from Lighthouse Creek. In summary, the 50-foot setback from the top of creek bank is considered adequate due to the inaccessibility of the creek and the low potential for flooding-related impacts. The proposed setback would also be similar to or greater than other development adjacent to Lighthouse Creek in the project area.

Peter Miller

Mr. Miller expressed concerns regarding slope stability, and water that may seep into drill holes developed on the project site would have the potential to result in slope stability impacts.

The analysis provided by the EIR indicates that based on the project-specific slope stability analysis conducted by Dr. Anikouchine, the proposed project would not result in a significant slope stability impact provided that adequate surface water drainage is maintained. Proposed mitigation measures were also provided that address potential slope stability impacts that may result should excavations on the project site confirm the presence of a potential slip plane created by a "bedding plane fracture" or other similar feature. Should it be determined that drilled caissons should be provided to construct an adequate foundation for the proposed project, or if drill holes are developed on the project site for some other reason, the holes would not be left open for an extended period of time before they were filled with concrete caissons or other material. Due to the short period of time the drill holes would be exposed, they would not be a significant source of water collection/percolation, and would not result in a potentially significant slope stability impact.

Janice Taylor

Ms. Taylor indicated that La Mesa Park provides significant public views that should be preserved.

The EIR's evaluation of potential visual impacts specifically addressed potential impacts to views provided from La Mesa Park. The analysis indicated that the proposed project and the alternative project design scenarios would have the potential to result in significant visual impacts to important public views provided from the park. However, those impacts could be reduced to a less than significant level with the implementation of proposed mitigation measures.

Brett Daniels

Mr. Daniels indicated that the proposed mitigation measure that requires the residence developed on the project site to provide a flat roof is not appropriate.

Proposed mitigation measure 1a.1, which required that the proposed residence provide a flat roof to minimize impacts to ocean views from important public view points, has been deleted. Proposed mitigation measures 1a.2 and 1a.3, which limit the maximum height of the proposed structure to 25 and 15 feet respectively, have been modified to include a reference to Figure 5.1-10. This new figure outlines a building envelope footprint on the project site in which a new residence may be located, and depicts the maximum building height elevations above existing grade at each corner of the building envelope. These building height elevations form an imaginary plane above the building envelope which the proposed residential structure may not exceed.

10.3 JANUARY 11, 2007 PLANNING COMMISSIONER COMMENTS

The following comments regarding the Draft EIR for the 1837½ El Camino de la Luz Residence project were provided by the Planning Commission.

1. **Asked Staff to reconcile differences between the different surveys of the project site that depict different elevation contours, and to resolve questions regarding the location of the bluff edge.**

   A comparison of the project site topographic contours depicted on the map prepared by Penfield & Smith (June, 2006/revised December, 2006) and the topographic contours depicted on the proposed project plans indicates that both surveys have depicted project site contours that are generally similar in configuration and length. Therefore, the two maps generally depict similar topographic conditions within the proposed building area. The only major difference between the two surveys is that the Penfield and Smith elevation contours are labeled as being approximately nine to ten feet higher in elevation than the contours on the project site maps. This discrepancy does not affect the impact analysis of the proposed project, and does not required alterations to the design of the alternative design concepts that were evaluated by the EIR.

2. **Indicated that proposed mitigation measures should only require building height requirements and should not require the use of a flat roof.**

   Proposed mitigation measure 1a.1, which required that the proposed residence provide a flat roof to minimize impacts to ocean views from important public view points, has been deleted. Proposed mitigation measures 1a.2 and 1a.3, which limit the maximum height of the proposed structure to 25 and 15 feet respectively, have been modified to include a reference to Figure 5.1-10. This new figure outlines a building envelope footprint on the project site in which a new residence may be located, and depicts the maximum building height elevations above existing grade at each corner of the building envelope. These building height elevations form an imaginary plane above the building envelope which the proposed residential structure may not exceed.

3. **Expressed concerns about the project site drainage being discharged directly into Lighthouse Creek.**

   A single residence would not be a substantial source of runoff water pollutants and would not have a significant project-specific impact on the water quality of Lighthouse Creek. To minimize the project's cumulative contribution to storm water quality impacts, proposed mitigation measure W-2 (Drainage System Maintenance) requires that the proposed storm water drainage system be adequately maintained, and that a maintenance plan be implemented that includes "*periodic clean-out of inlets and filters and filter replacement as necessary.*" The implementation of this mitigation measure would reduce the proposed project's potential cumulative water quality impacts to a less than significant level.

   The proposed project would also require construction activities within the Lighthouse Creek streambed to develop the proposed drainage system. Mitigation measure BIO-5 (Streambed Alteration Agreement) requires that the applicant obtain a Streambed Alteration Agreement from the Department of Fish and Game prior to the submittal of a grading permit for grading and installation of drainage devices within the banks of Lighthouse Creek. The implementation of conditions required by the Agreement would reduce the potential for impacts to habitat or other natural resources provided by the creek to a less than significant level.

4. **Expressed concern about the ability to make required findings required for consistency with California Coastal Act Section 30251.**

   In summary, this Coastal Act section requires that visual qualities of coastal areas be "considered and protected," and that new development be visually compatible with the character of surrounding areas. This section of the Coastal Act does not require that new development not change existing visual conditions.

The EIR determined that with the implementation of proposed mitigation measures, project-related impacts to existing public views of coastal resources would be reduced to a less than significant level. This determination is based on analysis conclusions that a very small portion of existing view corridors would be impaired by the project after proposed mitigation measures are implemented to reduce the size of the structure. Along with requirements to minimize the size of the residence, mitigation measures for the proposed project and both alternative design concepts require ABR approval of proposed building colors and on-site landscaping. Ultimately, the Planning Commission must determine whether these measures adequately protect the visual qualities of this coastal area, consistent with the requirements of this section of the Coastal Act.

5. **Provide a visual depiction of mitigation measure requirements, rather than a requirement to provide a flat roof.**

Proposed mitigation measures 1a.2 and 1a.3, which limit the maximum height of the proposed structure to 25 and 15 feet respectively, have been modified to include a reference to Figure 5.1-10. This new figure outlines a building envelope footprint on the project site in which a new residence may be located, and depicts the maximum building height elevations above existing grade at each corner of the building envelope. The four elevation points depicted on the figure form an imaginary plane above the building envelope which the proposed residential structure may not exceed.

6. **Provide additional information regarding why an alternative was evaluated that provides more floor area than the proposed project.**

The analysis of alternatives to the proposed project has complied with the requirements of CEQA, which requires that the EIR describe a range of reasonable alternatives that would feasibly attain most of the basic objectives of the project, but would avoid or substantially reduce the significant effects of the project. One of the analysis objectives for Alternative No. 1 was to demonstrate that it would be feasible to develop a residence on the project site that provides a similar amount of liveable square footage as the proposed project, while also minimizing visual impacts from important public viewing locations. The intent of this analysis was to find the "upper end" of the feasible development range on the project site that would still minimize visual impacts.

The design concept for Alternative 1 accomplished this analysis objective by placing much of the structure's lower level livable area below existing grade. This facilitated a project design that provided more liveable floor area than the proposed project, while also providing a small reduction in the impacts to important public scenic views. Further modifications to the alternative design would still be required, however, to reduce the structure's visual impacts to a less than significant level. These modifications would require the removal of the

structure's third level to reduce the maximum height of the western building elevation to 15 feet. Even with the implementation of this mitigation measure, Alternative No. 1 would provide approximately 738 more square feet of livable floor area than the proposed project.

7. **Requested additional information regarding why a house that is substantially smaller than the proposed project was not evaluated.**

The analysis objective of Alternative No. 2 was to evaluate a project design that would minimize visual impacts to identified important public views by placing a minimal amount of development on the project site. Similar to Alternative No. 1, this objective was partially achieved by placing much of the structure's livable floor area below existing grade. The most substantial portion of the alternative design structure that would extend above existing grade would be the required covered parking area.

The analysis of Alternative No. 2 determined that the visual impacts of the structure could be reduced to a less than significant level with the implementation of a mitigation measure to reduce the building's eastern elevation to a maximum height of 25 feet above existing grade. Implementation of this measure would only require that the roof over the covered parking area be lowered approximately three feet. This mitigation measure would not result in the removal of any livable area square footage. Therefore, the design concept evaluated by Alternative No. 2 is consistent with the request by the Planning Commission to provide an evaluation of the minimum sized house that would be capable of reducing project-related visual impacts to a less than significant level.

8. **Expressed concern about the stability of slopes on the east side of the project site adjacent to Lighthouse Creek.**

The proposed structure would be located approximately 50 feet west of the top of bank identified for Lighthouse Creek. Between the proposed location of the house and the top of the creek bank, the project site elevation drops approximately 20 feet. Therefore, the slope between the proposed development site and the top of bank is approximately 2.5(h) to 1(v), which generally does not result in significant slope stability impacts. Also, the proposed project would not result in new development that would result in cutting or other alternations to the creek slope that would have the potential to result in a significant slope stability impact.

9. **Expressed concern regarding the establishment of exact building height requirements because it will look different from various viewing locations.**

Maximum building heights have been recommended as a method to minimize the size of the proposed project and to reduce impacts to important public views to a

less than significant level. The proposed building height requirements also provide some development flexibility given the sloping topography of the project site. To implement the maximum height requirements, a new figure has been added to the EIR (Figure 5.1-10), which outlines a building envelope footprint on the project site, and depicts the maximum building height elevations above existing grade at each corner of the building envelope. The four maximum building height points depicted on the figure form an imaginary plane above the building envelope which the proposed residential structure may not exceed.

10. **Suggestions were provided to consider additional design alternatives that explores options for the placement of the required parking on the project site.**

CEQA Guidelines section 15126.6 provides guidance regarding the selection of alternatives for evaluation in an EIR when it states that "*an EIR need not considered every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternative that will foster informed decision making and public participation.*" The alternatives analysis provided by the Draft EIR has evaluated a reasonable range of potential design alternative concepts, ranging from a structure that is somewhat larger than the proposed project yet provides an incremental reduction in visual impacts, to a residence that is smaller than the proposed project that would be capable of reducing visual impacts to a less than significant level with only a minor design alteration.

The alternative designs evaluated by the EIR are intended to be conceptual studies of potential site development options, and are not meant to impose specific design requirements or architectural styles. Rather, the alternative designs are intended to evaluate a range of potential building configurations and massing options that have the potential to reduce aesthetic impacts when compared to the impacts of the proposed project. This analysis approach is intended to identify a design concept (general building elevations, massing, heights, appearance, etc) with less than significant aesthetic impacts, rather than a specific project design. Submittal of a final project design that conforms to the alternative designs would be the applicant's responsibility.

11. **Expressed a desire to see a public benefit provided by the project, such as improvements to the bridge across Lighthouse Creek.**

CEQA requires that there be a nexus, or direct connection, between the impacts of a project and the mitigation required. Since the proposed project would not result in significant direct or indirect impacts to the bridge across Lighthouse Creek, there would not be a sufficient nexus to implement a mitigation measure under CEQA to require improvements to the appearance of the bridge.

2. The Architecture 2030 presentation that was scheduled before City Council on January 23, 2007, has been moved to January 30, 2007.
3. The 3408-3412 State Street appeal to City Council has been moved to February 27, 2007. Commissioner Jostes will represent the Planning Commission.
4. Tully Clifford, Supervising Transportation Engineer, has accepted the position of Public Works Director for the City of Solvang.

C. Comments from members of the public pertaining to items not on this agenda.

Chair Jacobs opened the public hearing at 1:04 P.M. and, with no one wishing to speak, closed the public hearing at 1:04 P.M.

II. **ENVIRONMENTAL HEARING:**

ACTUAL TIME: 1:04 P.M.

APPLICATION OF BRENT DANIELS, L&P CONSULTANTS, AGENT FOR HERB BARTHELS, 1837 ½ EL CAMINO DE LA LUZ, APN 045-100-065, E-3/SINGLE-FAMILY RESIDENTIAL AND SD-3/COASTAL OVERLAY ZONES, GENERAL PLAN DESIGNATION: RESIDENTIAL, 5 UNITS PER ACRE (MST2002-00214) (CDP2002-00008).

The purpose of this hearing is to receive public comments on the Draft Environmental Impact Report prepared for this project. The proposal consists of the construction of a 1,499 square foot, 2-story single family residence with an attached 443 square foot garage, on a 23,885 square foot vacant bluff-top lot. Access to the site would be provided by private easements extending south from the end of the paved public road (El Camino de la Luz).

Case Planner: Victoria Greene, Project Planner
Email: vgreene@SantaBarbaraCA.gov

Victoria Greene, Project Planner, gave the Staff Report and introduced Debra Andaloro, Environmental Analyst, and Steve Rodriguez, Environmental Consultant.

Brent Daniels, L & P Consultants, asked to defer the applicant presentation until after the conclusion of public comment.

Commissioner's comments and questions:

1. Asked if the lot's legal status and access issues have been resolved.
2. Asked for clarification of the "top of bluff".
3. Asked about the annual erosion and how bluff stability is determined.
4. Referenced the Environmental Impact Report (EIR) and the mitigation measures proposed for the alternative house designs that require a slope stability analysis, but

noted that the mitigation measures did not call for a slope stability analysis for the originally proposed residence. Asked why a slope stability analysis was not required.

5. Asked if any construction would put more potential weight on the slope than is being excavated.
6. Suggested a side-on driveway in alternative designs, and asked why no analysis was done on siting a house as far to the West as the property line allows.
7. Asked Staff if the alternatives analysis provided sufficient environmental detail to allow the Planning Commission to approve an alternative project.
8. Asked counsel if the Commission is able to choose an alternative, even if the applicant has not proposed one. Recalled that City Council has previously directed an applicant to conform to an option not chosen by the applicant.
9. Asked if an alternative has similar impacts to a proposed project and the alternative reduces impacts further than the proposed project, then is the Commission required to choose the alternative with the lesser impact.
10. Asked if the Planning Commission had the ability to request a third alternative and gave an example.
11. Asked if adding an alternative would require recirculation of the DEIR.

Scott Vincent, Assistant City Attorney, stated that the responsibility of demonstrating adequate access rests with the applicant. The city is not the arbiter of the claims, nor in a position to tell the applicant that it must settle its interest. The applicant goes through the process and takes the risk. If the applicant's project is approved, and the applicant moves forward, the neighbors can choose to block the applicant's efforts to gain permits. Ms. Hubbell added that the lot is legal, the specific concern was with the legal access to the project. If the project is approved, a condition would be placed that adequate legal access is provided to allow for fire access.

Debra Andaloro, Environmental Analyst, responded that numerous geologic surveys have been done over the years that led to determining the top of the bluff. Many of the studies looked at where the setback line should be drawn, based on defining the top of the bluff. This is not a perfect science, but the bluff top should be stable for approximately 75 years. Ms. Hubbell added that most geologists look at a site with a particular type of geology that is there, looking at soil types, etc. to determine the specific geological erosion rate for an individual site.

Steve Rodriguez, Environmental Consultant, addressed the two slope stability analyses referenced in the EIR; only one applies only to the alternatives. Both alternative designs require excavation to lower the project height of the residence. The slope stability analysis addressed whether you are putting more weight on the slope than you are taking off with the excavation. Mr. Rodriguez affirmed that, based on a slope stability analysis done by Dr. William Anikouchine, Certified Engineering Geologist, any construction would put more weight on the slope than would be removed. The other component applying to the proposed project and the two alternatives is the question of whether there is a bedding plane weakness feature on the site. Geologists have varied opinions on whether this feature exists. The

bedding plane feature is a different issue than overall slopes. Dr. Anikouchine's slope stability report was for the project. Mr. Rodriguez replied that the house could not be moved all the way to the West on the lot because it would not allow for access to the garage.

Ms. Greene responded that the EIR does provide sufficient detail to allow decision-makers to approve a project alternative.

Mr. Vincent explained the purpose of evaluating alternatives. If the Commission cannot approve the originally proposed design, the applicant can be given the option of choosing another alternative. The applicant can be given an option approved by the Commission and is free to disagree with the Commission decision and appeal to City Council.

Mr. Vincent responded that the Commission is not obligated to choose the least impacting alternative. Ms. Hubbell added that, in this project, both alternatives have Class 2 impacts. This is a discretionary decision and the Commission can continue to push to reduce the impacts so that the project chosen is the best and most consistent with policies.

Ms. Hubbell stated that, if a third alternative were added, it could mean potential recirculation of the draft EIR.

Mr. Vincent clarified that the purpose of today's hearing is for evaluating the sufficiency of the environmental document, considering whether it has looked at enough alternatives, and reconciling the difference in opinions. If the findings cannot be made for policy reasons, the applicant can be asked to present another option with suggestions on resolving the policy issues. Ms. Hubbell stated that the reasoning why other alternatives were considered, but not chosen, could be included in the EIR.

Chair Jacobs opened the public hearing at 1:35 P.M.

The following people expressed concerns with the report:

Ray Franco, speaking for a group of El Camino de la Luz neighbors, expressed concern that visual impacts are not mitigatable even with the alternatives proposed. Mr. Franco added that the topography submitted by the applicant was incorrect for defining top of bluff and shows the wrong contours; discrepancy between the top of bluff shown and top of bluff as defined in the Public Records Code. Challenged methodology and content of Dr. Anikouchine's report; slide analysis not included. Also, would like to see their letter, dated May 19, 2005, included in the EIR. Mr. Franco referenced statements recorded in the Planning Commission Minutes of May 19, 2005, as being incorrect and asked they be corrected: 1) Mr. Franco alleges he did not make the statement on Page 4 discussing a 10' easement, and 2) that the property to the north of Dr. Barthels property is his and is not the location of the portion of an access easement quitclaimed by Dr. Barthels.

Joanna Morgan identified herself as being the recipient of Dr. Barthel's quitclaim deed that narrowed his access to 9' with access to the beach by easement. Ms. Morgan contracted with Penfield and Smith for a topographic survey of her property. The survey shows different topography and bluff top than the applicant's plans. Three geologists interviewed by the neighbors did not agree with Dr. Anikouchine and felt that he was taking the liability of a potential slide. Ms. Morgan also felt the proposed project is too close to the creek.

Peter Miller spoke about the instability of the cliff. Concerned with drilling that could further alter bluff stability and City liability if the project caused instability and loss of homes.

Janice Taylor noted the importance of ocean views from La Mesa Park and the footbridge. The park is used year round. It provides a window to the sea that needs to be preserved.

With no one else wishing to speak, the public hearing was closed at 1:54 P.M.

Mr. Daniels gave the applicant presentation and clarified the draft EIR and that the applicant would review the survey data with their architect.

Mr. Daniels noted applicant disagreement with the mitigation measure requiring a flat roof..

Commissioner's comments and questions:

1. Asked Staff about the process for rectifying the difference in surveys now that another survey has been presented.
2. Asked Staff what kind of choices the Planning Commission will have in certifying the final EIR.
3. Asked how Staff will address Mr. Franco's request for corrections of the minutes of May 19, 2005. Requested that Staff review and resolve the request.
4. Noted that the EIR adequately covers the issues.
5. Two Commissioners felt that it is not appropriate to dictate architectural style in the EIR, only a height restriction is appropriate.
6. Concerned with the drainage system requirements that allow surface drainage from the property to flow into the creek.
7. Findings would have to be made to support California Coastal Act Section 30251. Noted that homes have been built in the area that do not comply with this policy. Cannot say that there is no significant impact on view when all options list some view impact.
8. Would like to see a graphic that includes the mitigations.
9. Many Commissioners expressed concern over the conflict in geology and topography information and would like to see a resolution to each, especially defining the top of the bluff.
10. Asked why alternative #1 is 25-30% larger than the proposed project.

11. Asked why a smaller house was not evaluated as part of alternative #2. Would also like to see the reasoning behind alternatives presented.
12. Two Commissioners were concerned with slopes and adequacy of setbacks on the east side of the property and with drainage to the Creek; slope stability issues need to be addressed in the EIR. Setting exact heights for this project does not work, given that it looks different depending on where viewed; three-dimensional envelope needs to be defined. Suggested an alternative #3 that explores other options for the automobile and access onto the property.
13. Some Commissioners expressed a desire to see a public benefit to mitigate the loss of a public view, such as fixing the footbridge at the park over the creek, or stairs to the beach.
14. While the document does address size, bulk, and scale, it does not necessarily provide alternatives
15. Several commissioners felt that there was insufficient information presented in the EIR to make the findings for the CDP and modification.

Ms. Greene stated that the difference in topography numbers can be resolved. The top of bluff definition can be revisited.

Ms. Hubbell stated that a review can be done of the minutes. However, the Commissioners present at the meetings in question are no longer on the Commission. Mr. Vincent suggested that a review be done and any discrepancies can be documented in the EIR response to comments. Also, Mr. Franco can submit a letter about the discrepancies.

III. NEW ITEM:

ACTUAL TIME: 2:34 P.M.

APPLICATION OF JUSTIN VAN MULLEM, ON DESIGN, LLC, AGENT FOR JAMES AND PAMELA HALDEMAN, 1533 W. VALERIO STREET, APN: 041-071-031, A-2/R-1 ZONES, GENERAL PLAN DESIGNATION: MAJOR HILLSIDE (MST2003-00338)

The proposed project consists of the subdivision of an existing 3.45 acre site into two lots of approximately 1.725 acres each. The lots would take access from West Valerio Street via a shared private driveway that also serves two existing single-family residences. Proposed Parcel 1 would be 75,140 square feet with an average slope of 29%. A new residence is proposed on this parcel and would be approximately 5,843 square feet, including basement and garages. Proposed Parcel 2 would be 75,142 square feet with an average slope of 31%. This parcel contains the existing residence, which is approximately 5,948 square feet.

The discretionary applications required for this project are:

1 Modifications to allow the two newly created lots to have less than the required 100 feet of frontage on a public street (SBMC §28.15.080);

Appendix G

2013 Updated Biological Evaluation

Lawrence E. Hunt
Consulting Biologist

Brent Daniels
L&P Consultants, Inc.
3 West Carrillo Street, Suite 205
Santa Barbara, California 93101 23 August 2013

Subject: Updated Biological Evaluation of Proposed Residential Development on APN 045-100-065, 1837 ½ El Camino de la Luz, Santa Barbara, California.

Background. This letter report compares existing conditions on the subject property at 1837 ½ El Camino de la Luz to conditions described in a previous Biological Evaluation of the property (Tierney and Hunt, 2006), and evaluates potential impacts to biological resources from the currently proposed development project. The applicant proposes to construct a two-story, 1,505 sq. ft. single-family residence, a 429 sq. ft. garage, a 1,250 sq. ft. City-required open space area, and a 567 sq. ft. play area on the 23,885 sq. ft. (0.55 acre) property (Figure 1).

Methods. All accessible portions of the subject property were surveyed on foot on 17 August 2013 between 1500 and 1700 hrs. These areas included the flatter portion of the property along the blufftop, the east-facing above Lighthouse Creek, and two small flat areas graded below the blufftop into the east- and southeast-facing slopes. The invert of Lighthouse Creek within the property limits is difficult to access. Instead, an upstream reach of the creek between a footbridge that connects El Camino de la Luz to La Mesa Park and northern limits of the subject property was surveyed on foot.

Existing Conditions. The subject property consists of a relatively small flat area along the blufftop and east- and south-facing slopes that drain to Lighthouse Creek and the Pacific Ocean, respectively. The subject property is mostly undeveloped, but remnants of previous development are evident, including asphalt paving along the blufftop where the residence is proposed to be constructed and two flat areas below the blufftop that were graded into the southeast- and east-facing slopes decades ago and may have been used as patios (Figure 1). In general, site conditions on the subject property have not changed appreciably from those described and evaluated in Tierney and Hunt (2006).

Vegetation. Vegetation on the subject property is mapped in Figure 1. A complete list of plant species observed in these various areas is provided at the end of this report. The proposed building site along the blufftop was paved decades ago. This pavement is deteriorating and now supports sparse ruderal vegetation. Ruderal vegetation consists of a mixture of mostly non-native grasses, weeds, and forbs and a few native species that

share the ability to rapidly colonize disturbed soils. Non-native ruderal species dominate the paved areas include rip-gut brome (*Bromus diandrus*), flax-leaved fleabane (*Conyza bonariensis*), and sweet fennel (*Foeniculum vulgare*). The upper portions of the surrounding east- and south-facing slopes and large portions of the blufftop are dominated by a dense cover of highly invasive, ornamental species that were planted as landscaping. This infestation is dominated by Algerian ivy (*Hedera helix*), oleander (*Nerium oleander*), Hottentot fig (*Carpobrotus edulis*), dragon tree (*Dracaena draco*), and ice plant (*Mesembryanthemum crystallinum*). Imbedded in masses of Algerian ivy and ice plant in this area are sparse stands of native forbs and shrubs, including California blackberry (*Rubus ursinus*), toyon (*Heteromeles arbutifolia*), lemonadeberry (*Rhus integrifolia*), poison oak (*Toxicodendron diversilobum*), and wild rye (*Leymus condensatus*), representing either colonists or remnants of formerly more extensive native scrub.

In contrast to the upper slopes and flat areas along the blufftop, the middle and lower portions of the east- and south-facing slopes supports native, woody scrub vegetation. Dominant species in this native scrub include (in approximately order of dominance): coastal sunflower (*Encelia californica*), saltbush (probably Brewer's saltbush (*Atriplex lentiformis* ssp. *breweri*), but could be California saltbush (*A. californica*), coastal sagebrush (*Artemisia californica*), toyon, poison oak, lemonadeberry, coast goldenbush (*Hazardia squarrosa*), California blackberry, giant wild rye, and coyote brush (*Baccharis pilularis*).

Wildlife and Wildlife Habitats. See the description provided in Tierney and Hunt (2006). Habitat conditions have not changed appreciably from that characterization.

Special-Status Biological Resources.

Vegetation. Native vegetation is restricted to the middle and lower portions of the steep east- and south-facing slopes above the beach and Lighthouse Creek. This plant community is labeled as Coastal Bluff Scrub (CBS) in Figure 1. Vegetation here contains elements belonging to two plant communities: Southern coastal bluff scrub and Venturan coastal sage scrub (Holland, 1986, aka *Encelia californica* Shrubland Alliance of Sawyer et al., 2008). Southern coastal bluff scrub has been eradicated or severely fragmented by coastal development throughout its range and is a conservation priority in the State of California (CDFG, 2002).

Vegetation in the footprint of the proposed residence, garage, the City-required open space area, and the play area consists almost entirely of highly invasive, non-native species (Figure 1). Removing these non-native species, implementing a habitat restoration plan for the undeveloped portions of the parcel, and creating a landscaping plan that emphasizes native, locally-occurring plants, will benefit native vegetation and wildlife on and around the subject property.

Plants. The only special-status plant species determined by Tierney and Hunt (2006) to potentially occur on the subject property were Plummer's baccharis (*Baccharis plummerae*) and Santa Barbara honeysuckle (*Lonicera subspicata* ssp. *subspicata*). These perennial shrubs were not observed on-site during field surveys for the Tierney and Hunt report conducted in 2002, 2006, or during surveys for the present document. Cliff-aster (*Malacothrix saxatilis* var. *saxatilis*) should be added to this list because it is an element of coastal bluff scrub in the project region. For example, the type locality of this species when it was discovered in 1836, was coastal bluffs in the Santa Barbara area (Smith, 1998). This perennial rhizomatous herb was surveyed for during the site visit for this report, but was not found in coastal bluff scrub vegetation on-site.

Wildlife. A number of special-status wildlife species were evaluated by Tierney and Hunt (2006). Most of these species do not occur on the subject property or in surrounding areas because of the lack of suitable habitat. Their report evaluated the potential occurrence of two special-status species: monarch butterfly (*Danaus plexippus*) and California red-legged frog (*Rana draytonii*).

Monarch butterflies are commonly observed in the Santa Barbara region at certain times of the year and several autumnal (fall) roosts are known within a one-mile radius of the subject property (Meade, 1999): Douglas Family Preserve (Meade Site 83) approximately one air mile west of the subject property, La Mesa Park (Meade Site 84) approximately 600 feet north of the property, and Honda Valley (Meade Site 85) approximately one air mile ENE of the property. The La Mesa Park site is considered to be a minor autumnal site by both Calvert (1991) and Meade (1999). The Honda Valley site supports the largest aggregation of monarchs within the City limits (Calvert, 1991; Meade, 1999). Tierney and Hunt (2006) concluded that although monarch butterflies may occasionally forage on the subject property, the proposed project would not disturb monarch roosts in the area. The conclusion of the present evaluation remains the same.

Protocol surveys for California red-legged frogs were conducted by Lawrence E. Hunt in 2006 in and around Lighthouse Creek for the Tierney and Hunt (2006) report. No CRLF were found in Lighthouse Creek at that time and habitat conditions were determined to be marginal for this species along the surveyed reach of this drainage (Cliff Drive to the beach). Current habitat conditions in and around the creek, as confirmed by the survey for the present document, remain marginal for this species.

The two-striped garter snake (*Thamnophis hammondii*), is a California Species of Special Concern that has been found in the Mission Creek watershed and in several coastal watersheds along the Gaviota Coast (Hunt, pers. observ.). Although not observed in Lighthouse Creek during any of the surveys, including the survey for the present document, suitable habitat and prey species are present in this drainage. Consequently, there is a moderate potential for garter snakes to occur in the project area reach of Lighthouse Creek and adjacent scrub habitat.

Suitable nesting habitat for California Species of Special Concern birds, such as yellow warbler (*Dendrocia petechia*) and yellow-breasted chat (*Vireo gilvus*), is present in willow woodland associated with Lighthouse Creek. Additionally, trees, including Monterey cypress (*Cupressus macrocarpa*), Italian stone pine (*Pinus pinea*), coast live oak (*Quercus agrifolia*), and other ornamental species that occur along the riparian corridor between the subject property and the footbridge over the creek, provide nesting habitat for raptors (hawks, kestrels, vultures, owls). It is likely that yellow warblers, yellow-breasted chats, and various raptorial birds seasonally forage and possibly nest/roost in appropriate habitat along Lighthouse Creek and in La Mesa Park and these species could be disturbed by the proposed construction if it occurs during the nesting season.

Project-Related Impacts to Biological Resources and Mitigation Recommendations. Tierney and Hunt (2006) determined that the proposed residential development project would not result in any significant impacts to special-status biological resources, such as monarch butterflies or California red-legged frogs, but did identify several potential project-related impacts that could occur to water quality in Lighthouse Creek and vegetation on slopes as a result of soil erosion and sedimentation. Although the current project differs from the previous one in that it includes a 1,250 sq. ft., City-required open space area and a 567 sq. ft. play area on the existing flat areas that were graded into the east- and southeast-facing slopes decades ago, potential impacts to biological resources remain mostly the same as those described in Tierney and Hunt (2006).

The project as currently proposed could cause potentially significant impacts to water quality in Lighthouse Creek and to other biological resources on the subject property. These potential impacts are evaluated in Table 1 and mitigation measures designed to avoid or minimize impacts are discussed.

Table 1. Impact Evaluation and Mitigation Recommendations.

Project-Related Impact	Impact Severity	Recommended Mitigation
Impacts to water quality, wildlife, and wildlife habitats on slopes and in Lighthouse Creek due to slope erosion and sedimentation caused by construction	Potentially significant but can be mitigated to less than significant levels (Class II)	Implement all applicable BMPs to prevent, control, and contain soil erosion, as detailed in SWPPP to be developed for the project. Time grading and soil disturbance to occur during the dry season (May-Nov) and hydromulch all disturbed soils at onset of rainy season. A qualified biologist shall periodically check maintenance of erosion control measures and hydromulch during construction and suggest remedies where necessary. The biologist shall be present at the onset of initial site grading to salvage and relocate any animals displaced by initial site grading and vegetation grubbing.

Nesting birds, including raptors, could be disturbed by construction during nesting season	Potentially significant but can be mitigated to less than significant levels (Class II)	Time grading to occur when birds are not nesting (July-Feb). A qualified biologist shall conduct a pre-construction survey for nesting birds if initial grading is to occur between Feb and July. The results of the survey shall be submitted to the City. Construction shall be delayed until birds have fledged the nest or until the biologist determines that construction will not disturb nesting behavior.
Grading and removal of existing non-native vegetation in the building footprint could disturb native coastal bluff scrub vegetation, a special-status plant community	Potentially significant but can be mitigated to less than significant levels (Class II)	A qualified biologist shall supervise installation of orange construction fence and silt fence around the surveyed construction disturbance limits prior to initial site grading and vegetation removal. This fencing shall be maintained for the duration of construction. There is no need for a vegetative buffer from native vegetation because the construction fence will prevent native vegetation beyond this fencing from being disturbed, and the transition from non- to native vegetation on the slopes is abrupt. Vegetation to be removed from graded areas on slopes above Lighthouse Creek shall be removed by hand and dragged upslope to the building pad using ropes in order to minimize soil and vegetation disturbance on slopes.
Soil disturbance associated with grading could allow invasive, non-native vegetation to proliferate.	Potentially significant but can be mitigated to less than significant levels (Class II)	A qualified biologist shall prepare a habitat restoration plan that describes methods for removing and controlling non-native vegetation on the property and species and methods for restoring native habitat on-site using locally-occurring coastal bluff scrub species. The landscape plan for the project shall emphasize native, locally-occurring species of high wildlife value. The biologist shall review the planting palette and all landscaping plans to ensure that invasive species are not used.
Construction will remove invasive, non-native vegetation	Beneficial impact (Class IV)	A qualified biologist shall supervise removal of invasive, non-native vegetation. Mechanical and chemical methods shall be used to remove and control this vegetation and all plants shall be disposed of in a manner that does not permit their spread elsewhere on the property.

Literature Cited.

CDFG (California Department of Fish and Game). 2002. List of California terrestrial natural communities recognized by the California Natural Diversity Database. Calif. Dept. Fish and Game, Wildlife and Habitat Data Analysis Branch, Sacramento, CA. 75 pp. February edition.

Calvert, W.H. 1991. Monarch butterfly overwintering site locations in Santa Barbara County, California. Center for Conservation Biology, Stanford Univ., Stanford, CA. 62 pp.

Holland, R.F. 1986. Preliminary descriptions of the terrestrial natural communities of California. Calif. Dept. Fish and Game, Non-Game Heritage Program, Sacramento, CA. 164 pp.

Meade, D.E. 1999. Monarch butterfly overwintering sites in Santa Barbara County, California. Prep. for County of Santa Barbara Planning and Development Dept, Santa Barbara, CA. 114 pp.

Sawyer, J.O., T. Keeler-Wolf, and J.M Evens. 2008. A manual of California vegetation, 2nd ed. Calif. Native Plant Society and Calif. Dept. Fish and Game, Sacramento, CA. 1,300 pp.

Smith, C.F. 1998. A flora of the Santa Barbara Region, California. 2nd ed. Santa Barbara Botanic Garden and Capra Press, Santa Barbara, CA. 391 pp.

Tierney, R. and L.E. Hunt. 2006. Biological assessment of 1837 ½ El Camino de la Luz, Santa Barbara, California. Update of original 2002 report. Prep. for L&P Consultants, Inc., Santa Barbara. 34 pp.

Lawrence E. Hunt

Appendix 1. Plants Observed on the Subject Property on 17 August 2013
(non-native species are bolded)

Paved, Graded, and/or Formerly Landscaped Portions of the Parcel:

Algerian ivy (*Hedera helix*)
Aloe (*Aloe* sp.)
Bougainvillea (*Bougainvillea* sp.)
Bur clover (*Trifolium* sp.)
Indian fig (*Opuntia ficus-indica*)
Dragon tree (*Dracaena draco*)
Sweet fennel (*Foeniculum vulgare*)
Rip-gut brome (*Bromus diandrus*)
Ice plant (*Mesembryanthemum crystallinum*)
Hottentot fig (*Carpobrotus edulis*)
Fountain grass (*Pennisetum setaceum*)
Oleander (*Nerium oleander*)
Wild oat (*Avena fatua*)
Flax-leaved fleabane (*Conyza bonariensis*)
Unid. non-native forb
Bull mallow (*Malva nicaeensis*)
Dock (*Rumex* sp.)
Italian thistle (*Carduus pycnocephalus*)
Douglas' nightshade (*Solanum douglassii*)
California blackberry (*Rubus ursinus*)
Giant wild rye (*Leymus condensatus*)
Toyon (*Heteromeles arbutifolia*)
Lemonadeberry (*Rhus integrifolia*)
Poison oak (*Toxicodendron diversilobum*)
Coyote brush (*Baccharis pilularis*)

Riparian Corridor and Adjacent Slope:

Arroyo willow (*Salix lasiolepis*)
Coast live oak (*Quercus agrifolia*)
California blackberry (*Rubus ursinus*)
Giant wild rye (*Leymus condensatus*)
Toyon (*Heteromeles arbutifolia*)
Lemonadeberry (*Rhus integrifolia*)
Poison oak (*Toxicodendron diversilobum*)
Coast sunflower (*Encelia californica*)
Unid. acacia (*Acacia* sp.)
Victorian box (*Pittosporum undulatum*)
Coyote brush (*Baccharis pilularis*)
Coast goldenbush (*Hazardia squarrosa*)
Coastal sagebrush (*Artemisia californica*)
Douglas' nightshade (*Solanum douglassii*)
Needlegrass (*Nassella* sp.)

Appendix 2. Existing Site Conditions (photos taken 17 August 2013).

Proposed site for residence, looking northeast.

Non-native vegetation (Algerian ivy and dragon tree) obscuring view to east from building pad.

Lighthouse Creek, looking south from footbridge. Subject property reach is in background. Riparian corridor here is dominated by arroyo willow. Note invasive, non-native vegetation on slope to right of corridor.

SITE DATA

OWNER: HERB BARTHELS
1601 CLIFF DRIVE
SANTA BARBARA, CA 93109
805.965.5210

LAND USE ZONE: E-3, SPECIAL DISTRICT 3-COASTAL OVERLAY ZONE

A.P.N. 045-100-065

AVERAGE SITE SLOPE
ENTIRE PROPERTY: 49.25%
BUILDABLE AREA: 22%

PARKING: (1 EXISTING, 2 GARAGE SPACES PROPOSED

SCOPE OF WORK
(N) 2-STORY 1,505 SF SINGLE FAMILY RESIDENCE W/ 429 SF 2-CAR GARAGE, (N) PAVER DRIVEWAY

SITE COVERAGE

BUILDING:	1,409 SF	6%
DRIVEWAY:	233 SF	1%
OPEN SPACE:	21,683 SF	91%

LOT AREA (PER SURVEY): 23,885 SF

BUILDING DATA

	NET	GROSS
MAIN FLOOR:	787 SF	837 SF
LOWER FLOOR:	718 SF	777 SF
TOTAL LIVING AREA:	1,505 SF	1,614 SF
GARAGE AREA:	429 SF	475 SF

GRADING: 288 CU.YD. CUT (UNDER BUILDING)
31 CU.YD. FILL (UNDER DRIVEWAY)

USE: SINGLE FAMILY RESIDENCE

SHEET #	DESCRIPTION
A.1	SITE PLAN
A.2	FLOOR PLANS
A.3	ELEVATIONS
A.4	E.I.R. PHOTO COMPARISON
A.5	EASEMENT & UTILITY PLAN
A.6	LANDSCAPE PLAN

NOTES:

ALL ROOFS, PAVED AREAS AND YARDS, SHALL BE COLLECTED, FILTERED THEN DISSIPATED INTO LIGHTHOUSE CREEK. ANY DISCHARGE INTO LIGHTHOUSE CREEK SHALL BE DESIGNED SO AS NOT TO CAUSE EROSION. SEE RIP-RAP DISSIPATOR DETAIL.

ALL UTILITY CONDUCTORS INCLUDING ELECTRICAL SERVICE, TELEPHONE SERVICE, AND CABLE TELEVISION MUST BE PLACED UNDERGROUND FROM THEIR POINT OF ORIGIN AT THE UTILITY POLE TO THE SERVICE METER OR TERMINATION POINT AT THE STRUCTURE.

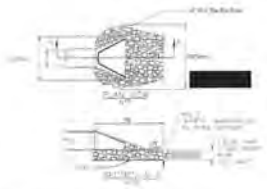
SEE FIRE DEPARTMENT LETTER (JULY 9, 2004) FOR FIRE PROTECTION REQUIREMENTS.

SOME REMOVAL OF NON-NATIVE LARGE BRUSH ANTICIPATED. ANY REMOVAL OF SIGNIFICANT PLANTINGS TO BE REPLACED BY RE-VEGETATION OF AREA WITH NATIVE PLANTINGS AT SOUTHEAST SIDE OF PROPOSED STRUCTURE.

VICINITY MAP
SCALE: SITE
N

Non-Native Vegetation:
Ru/O = Ruderal/Ornamental Species

Native Vegetation:
R = Willow Riparian Woodland
CBS = Coastal Bluff Scrub



RIP-RAP DISSIPATOR DETAIL
SCALE: NTS

City of Santa Barbara
Fire Department

Figure 1. Existing Vegetation

DATE:

REVISIONS:
NO. DATE:
10/01/07 Planning Comm
4/5/2012 Planning Comm
10/19/2012 Revision
1/09/2013 Revision

PGA
Peikert Group Architects, LLP.
102 E. Figueroa St. Suite I, Santa Barbara, CA 93101
Ph. 805.963.8269 Fx. 805.963.8184
www.peikertgroup.com

DESCRIPTION: BASE SITE PLAN, PROJECT DATA
PROJECT: Residence APN: 045-100-065
CLIENT: 1837 1/2 El Camino De La Luz
Santa Barbara, California

LICENSED ARCHITECT
PHILIP B. PEIKERT
NO. C15006
REN. 7/13
STATE OF CALIFORNIA

SHEET
A.1

Appendix H

Mitigation Monitoring and Reporting Plan

1837½ EL CAMINO DE LA LUZ RESIDENCE PROJECT
MITIGATION MONITORING AND REPORTING PROGRAM

PROJECT LOCATION

1837½ El Camino de la Luz

PROJECT DESCRIPTION

The proposed project would result in the construction of a new two-story single-family residence that would provide 1,499 square feet of livable floor area. The project site is a vacant 23,885 square foot bluff-top lot located north of and adjacent to the Pacific Ocean, south of La Mesa Park, and west of Lighthouse Creek. Access to the project site would be provided along private easements extending south from the terminus of El Camino de la Luz, which is a public street.

PURPOSE

The purpose of the 1837½ El Camino de la Luz Residence Project Mitigation Monitoring and Reporting Program (MMRP) is to ensure compliance with all mitigation measures identified in the Initial Study and Project EIR to mitigate or avoid potentially significant adverse environmental impacts resulting from the proposed project. The implementation of this MMRP shall be accomplished by City staff and the project developer's consultants and representatives. The program shall apply to the following phases of the project:

- Plan and specification preparation
- Pre-construction conference
- Construction of the site improvements
- Post Construction

I. RESPONSIBILITIES AND DUTIES

A qualified representative of the developer, approved by the City Planning Division and paid for by the developer, shall be designated as the Project Environmental Coordinator (PEC). The PEC shall be responsible for assuring full compliance with the provisions of this mitigation monitoring and reporting program to the City. The PEC shall have authority over all other monitors/specialists, the contractor, and all construction personnel for those actions that relate to the items listed in this program.

It is the responsibility of the contractor to comply with all mitigation measures listed in the attached MMRP matrix. Any problems or concerns between monitors and construction personnel shall be addressed by the PEC and the contractor. The contractor shall prepare a construction schedule subject to the review and approval of the PEC. The contractor shall inform the PEC of any major revisions to the construction schedule at least 48 hours in advance. The PEC and contractor shall meet on a weekly basis in order to assess compliance and review future construction activities.

A. PRE-CONSTRUCTION BRIEFING

The PEC shall prepare a pre-construction project briefing report. The report shall include a list of all mitigation measures and a plot plan delineating all sensitive areas to be avoided. This report shall be provided to all construction personnel.

The pre-construction briefing shall be conducted by the PEC. The briefing shall be attended by the PEC, construction manager, necessary consultants, Planning Division Case Planner, Public Works representative and all contractors and subcontractors associated with the project. Multiple pre-construction briefings shall be conducted as the work progresses and a change in contractor occurs.

The MMRP shall be presented to those in attendance. The briefing presentation shall include project background, the purpose of the MMRP, duties and responsibilities of each participant, communication procedures, monitoring criteria, compliance criteria, filling out of reports, and duties and responsibilities of the PEC and project consultants.

It shall be emphasized at this briefing that the PEC and project consultants have the authority to stop construction and redirect construction equipment in order to comply with all mitigation measures.

Once construction commences, field meetings between the PEC and project consultants, and contractors shall be held on an as-needed basis in order to create feasible mitigation measures for unanticipated impacts, assess potential effects, and resolve conflicts.

II. IMPLEMENTATION PROCEDURES

There are three types of activities which require monitoring. The first type pertains to the review of the Conditions of Approval and Construction Plans and Specifications. The second type relates to construction activities and the third to ongoing monitoring activities during operation of the project.

A. MONITORING PROCEDURES

The PEC and required consultant(s) shall monitor all field activities. The authority and responsibilities of the PEC and consultant(s) are described in the previous section.

B. REPORTING PROCEDURES

The following three (3) types of reports shall be prepared:

1. Schedule

   The PEC and contractor shall prepare a monthly construction schedule to be submitted to the City prior to or at the pre-construction briefing.

2. General Progress Reports

   The PEC shall be responsible for preparing written progress reports submitted to the City. These reports would be expected on a weekly basis during grading, excavation and construction, activities. The reports would document field activities and compliance with project mitigation measures, such as dust control and sound reduction construction.

3. Final Report

A final report shall be submitted to the Planning Division when all monitoring (other than long term operational) has been completed and shall include the following:

a. A brief summary of all monitoring activities.

b. The date(s) the monitoring occurred.

c. An identification of any violations and the manner in which they were dealt with.

d. Any technical reports required, such as noise measurements.

e. A list of all project mitigation monitors.

C. MMRP MATRIX

The following MMRP Matrix describes each initial study mitigation measure, monitoring activities and the responsibilities of the various parties, along with the timing and frequency of monitoring and reporting activities. For complete language of each condition, the matrix should be used in conjunction with the mitigation measures described in full in the Initial Study.

The MMRP Matrix is intended to be used by all parties involved in monitoring the project mitigation measures, as well as project contractors and others working in the field. The Matrix should be used as a compliance checklist to aid in compliance verification and monitoring requirements. A copy of the MMRP matrix shall be kept in the project file as verification that compliance with all mitigation measures has occurred.

MITIGATION MEASURE	PARTY RESPONSIBLE FOR IMPLEMENTATION	VERIFICATION		
		DATE	ACCOMPLISHED	COMMENTS
AES-1. Color Approval. Colors to be used on the exterior of the proposed residence shall be approved by the Single Family Design Board. Exterior colors shall be neutral or earth-tone tones. Subsequent color changes to the residence shall also be approved by the Single Family Design Board.	Applicant			
AES-2. Landscape Plan Compliance. The Owner shall comply with the Landscape Plan approved by the Single Family Design Board (SFDB). Such plan shall not be modified unless prior written approval is obtained from the SFDB. The landscaping on the Real Property shall be provided and maintained in accordance with said landscape plan, including any tree protection measures. If said landscaping is removed for any reason without approval by the SFDB, the owner is responsible for its immediate replacement. Proposed landscaping trees and shrubs shall consist of drought-tolerant species that when mature will not attain a height that exceeds the height of the proposed residence roof line. The project site property owner shall be responsible for maintaining landscaping in compliance with this requirement over the life of the project.	Applicant			
AQ-1 Construction Dust Control - Watering. During construction, use water trucks or sprinkler systems to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this should include wetting down such areas in the late morning and after work is completed for the day. Increased watering frequency should be required whenever the wind speed exceeds 15 mph. Reclaimed water should be used whenever possible. However, reclaimed water should not be used in or around crops for human consumption.	Applicant/ Contractor			
AQ-2 Soil Movement. If importation, exportation and stockpiling of fill material is involved, soil stockpiled for more than two days shall be covered, kept moist, or treated with soil binders to prevent dust generation. Trucks transporting fill material to and from the site shall be tarped from the point of origin.	Applicant/ Contractor			
AQ-3 Construction Dust Control – Gravel Pads. Gravel pads shall be installed at all access points to prevent tracking of mud onto public roads.	Applicant/ Contractor			
AQ-4 Construction Dust Control – Disturbed Area Treatment. After clearing, grading, earth moving or excavation is completed, treat	Applicant/ Contractor			

MITIGATION MEASURE	PARTY RESPONSIBLE FOR IMPLEMENTATION	VERIFICATION		
		DATE	ACCOMPLISHED	COMMENTS
the disturbed area by watering, or revegetating, or by spreading soil binders until the area is paved or otherwise developed so that dust generation will not occur.				
AQ-5 Air Quality and Dust Control. The following measures shall be shown on grading and building plans and shall be adhered to throughout grading, hauling, and construction activities: 1. The engine size of construction equipment shall be the minimum practical size. 2. The number of construction equipment operating simultaneously shall be minimized through efficient management practices to ensure that the smallest practical number is operating at any one time. 3. Construction equipment shall be maintained in tune per the manufacturer specifications. 4. Catalytic converters shall be installed on gasoline-powered equipment, if feasible. 5. If feasible, diesel construction equipment shall be equipped with selective catalytic reduction systems, diesel oxidation catalysts and diesel particulate filters as certified and/or verified by EPA or California. 6. Diesel powered equipment shall be replaced by electric equipment whenever feasible. 7. Construction worker trips shall be minimized by requiring carpooling and by providing for lunch onsite. 8. Diesel construction equipment meeting the California Air Resources Board (CARB) Tier 1 emission standards for off-road heavy-duty diesel engines shall be used. Equipment meeting CARB Tier 2 or higher emission standards should be used to the maximum extent feasible. 9. The contractor or builder shall designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holiday and weekend periods when work may not be in progress. The name and telephone number of such persons shall	Applicant/ Contractor			

MITIGATION MEASURE	PARTY RESPONSIBLE FOR IMPLEMENTATION	VERIFICATION		
		DATE	ACCOMPLISHED	COMMENTS
be provided to the Air Pollution Control District. 10. All portable diesel-powered construction equipment shall be registered with the state's portable equipment registration program OR shall obtain an APCD permit. 11. Fleet owners of mobile construction equipment are subject to the California Air Resource Board (CARB) Regulation for In-use Off-road Diesel Vehicles (Title 13 California Code of Regulations, Chapter 9, § 2449), the purpose of which is to reduce diesel particulate matter (PM) and criteria pollutant emissions from in-use (existing) off-road diesel-fueled vehicles. For more information, please refer to the CARB website at www.arb.ca.gov/msprog/ordiesel/ordiesel.htm. 12. All commercial diesel vehicles are subject to Title 13, § 2485 of the California Code of Regulations, limiting engine idling time. Idling of heavy-duty diesel construction equipment and trucks during loading and unloading shall be limited to five minutes; electric auxiliary power units should be used whenever possible.				
AQ-6. Mitigation Monitoring Compliance Reports. The Project Environmental Coordinator shall submit weekly reports to the Community Development Department, Planning Division, during demolition, excavation, grading and footing installation and biweekly reports on all other construction activity regarding MMRP compliance.	Applicant/ Contractor			
BIO-1 Habitat Restoration. Areas between the proposed building site and Lighthouse creek disturbed by project grading and construction of the drainage system shall be replanted with native plants appropriate to coastal riparian and upland areas. Iceplant, oleander, yucca, castor bean, English ivy, German ivy, and other invasive, non-native species shall be removed from this area using hand and chemical methods. Vegetation removal shall be by hand and dragged upslope to the building pad. All vegetation removal and initial site grading shall be under the supervision of a qualified habitat restoration biologist. Removed material shall be disposed of in a manner that will not result in further spread of these species. Native material used for replanting may include: encelia, California blackberry, California sage, California fuchsia, saltbush, coast goldenbush, elderberry, and lemonadeberry. Plans shall include the use of erosion control blankets and seeding of	Applicant			

MITIGATION MEASURE	PARTY RESPONSIBLE FOR IMPLEMENTATION	VERIFICATION		
		DATE	ACCOMPLISHED	COMMENTS
bare slopes to prevent short-term erosion. The replanting plan shall be developed by a qualified botanist or landscape architect and shall include provisions for installation and maintenance until plantings are established. This plan shall be provided to the Community Development Department Staff, Creeks Division, and the Single Family Design Board for review and approval prior to issuance of building permits. The plan shall be implemented prior to issuance of the Certificate of Occupancy and plantings maintained for the life of the project.				
BIO-2 Appropriate Plants/Hardscape on Bluff. Special attention shall be paid to the appropriateness of the existing and proposed plant material, and to the sloped areas. All existing succulent plants that add weight to the bluff and/or contribute to erosion shall be removed in a manner that does not disturb the root system and replaced with appropriate plant material in a manner that does not increase the rate of erosion. Plant material to be removed shall be replaced with native, drought tolerant, low water using vegetation that requires only a temporary irrigation system to establish the plantings. Replacement vegetation shall be consistent with the recommendations of the biologist's reports, dated January-February 2006 and August 23, 2013. The landscape plan shall be provided to the Community Development Department Staff, Creeks Division, and the Single Family Design Board for review and approval prior to issuance of building permits. The plan shall be implemented prior to issuance of the Certificate of Occupancy and plantings maintained for the life of the project.	Applicant			
BIO-3 Irrigation System. The irrigation system shall be designed and maintained with the most current technology to prevent a system failure. Watering of vegetation on the bluff edge / the Lighthouse Creek canyon slope shall be kept to the minimum necessary for plant survival. The drip system along the bluff edge / canyon slope shall be removed after one full season of plant growth.	Applicant			
BIO-4 Erosion Control/Water Quality Plan. An Erosion Control/Water Quality Plan shall be developed for construction activities to maintain all sediment on-site and out of the drainage system. The plan shall include Best Management Practices approved by the City, and shall include, at a minimum, the following:	Applicant			

MITIGATION MEASURE	PARTY RESPONSIBLE FOR IMPLEMENTATION	VERIFICATION		
		DATE	ACCOMPLISHED	COMMENTS
1. Minimize the area of bare soil exposed at one time (phased grading). 2. Install silt fence, sand bag, hay bale or silt devices where necessary around the project site to prevent offsite transport of sediment. 3. Bare soils shall be protected from erosion by applying heavy seeding, within five days of clearing or inactivity in construction. 4. Construction entrances should be stabilized immediately after grading and frequently maintained to prevent erosion and control dust. 5. During construction of the homes, the contractor and/or property owner shall protect the storm drain inlets from sediment-laden runoff. 6. Erosion control materials (i.e. sandbags, strawbales, and silt fencing) shall be used to trap and filter sediment before entering the storm drain. 7. Establish fuel and vehicle maintenance staging areas located away from all drainage courses, and design these areas to control runoff. 8. Maintain and wash equipment and machinery in confined areas specifically designed to control runoff. Thinners or solvents should not be discharged into sanitary or storm sewer systems. Washout from concrete trucks should be disposed of at a location not subject to runoff and more than 50 feet away from a storm drain, open ditch or surface water. 9. Implement applicable BMPs to prevent, control, and contain soil erosion, as detailed in SWPPP to be developed for the project. 10. Time grading and soil disturbance to occur during the dry season (May-Nov) and hydromulch all disturbed soils at onset of rainy season. 11. A qualified biologist shall periodically check maintenance of erosion control measures and hydromulch during construction and suggest remedies where necessary.				

MITIGATION MEASURE	PARTY RESPONSIBLE FOR IMPLEMENTATION	VERIFICATION		
		DATE	ACCOMPLISHED	COMMENTS
12. The use of herbicides for the removal of non-native plants in the proposed habitat restoration area shall be minimized to the extent practical. If herbicides must be used to ensure the removal of non-native plants, herbicide use shall be limited to the application of Glyphosate Aquamaster.™ Herbicide use on the project site shall occur only in the proposed habitat restoration area.				
BIO-5 Streambed Alteration Agreement. The applicant shall obtain a Streambed Alteration Agreement from the Department of Fish and Wildlife, prior to submittal of a building permit, for grading and installation of drainage devices within the banks of Lighthouse Creek.	Applicant			
BIO-6 Nesting Birds. Birds and their eggs nesting on or near the project site are protected under the Migratory Bird Treaty Act and pursuing, hunting, taking, capturing, killing, or attempt to do any of the above is a violation of federal and state regulations. No trimming or removing brush or trees shall occur if nesting birds are found in the vegetation. All care should be taken not to disturb the nest(s). Removal or trimming may only occur after the young have fledged from the nests(s).	Applicant			
BIO-7 Wildlife Protection. A qualified biologist shall be present at the onset of initial site grading to salvage and relocate any animals displaced by grading and vegetation grubbing.	Applicant			
BIO-8 Sensitive Habitat Protection. A qualified biologist shall supervise installation of orange construction fence and silt fence around the surveyed construction disturbance limits prior to initial site grading and vegetation removal. This fencing shall be maintained for the duration of construction.	Applicant			
CR-1 Unanticipated Archaeological Resources Contractor Notification. Standard discovery measures shall be implemented per the City Master Environmental Assessment throughout grading and construction: Prior to the start of any vegetation or paving removal, demolition, trenching or grading, contractors and construction personnel shall be alerted to the possibility of uncovering unanticipated subsurface archaeological features or artifacts. If such archaeological resources are encountered or suspected, work shall be halted immediately, the City Environmental Analyst shall be notified and the Owner shall retain an archaeologist from the most current City Qualified Archaeologists List. The latter shall be employed to assess the nature, extent and significance of any discoveries and to develop appropriate management	Applicant/Contractor			

MITIGATION MEASURE	PARTY RESPONSIBLE FOR IMPLEMENTATION	VERIFICATION		
		DATE	ACCOMPLISHED	COMMENTS
recommendations for archaeological resource treatment, which may include, but are not limited to, redirection of grading and/or excavation activities, consultation and/or monitoring with a Barbareño Chumash representative from the most current City qualified Barbareño Chumash Site Monitors List, etc. If the discovery consists of possible human remains, the Santa Barbara County Coroner shall be contacted immediately. If the Coroner determines that the remains are Native American, the Coroner shall contact the California Native American Heritage Commission. A Barbareño Chumash representative from the most current City Qualified Barbareño Chumash Site Monitors List shall be retained to monitor all further subsurface disturbance in the area of the find. Work in the area may only proceed after the Environmental Analyst grants authorization. If the discovery consists of possible prehistoric or Native American artifacts or materials, a Barbareño Chumash representative from the most current City Qualified Barbareño Chumash Site Monitors List shall be retained to monitor all further subsurface disturbance in the area of the find. Work in the area may only proceed after the Environmental Analyst grants authorization. A final report on the results of the archaeological monitoring shall be submitted by the City-approved archaeologist to the Environmental Analyst within 180 days of completion of the monitoring and prior to any certificate of occupancy for the project.				
GEO-1. Storm Water Pollution Control, Drainage Systems Maintenance and Project Site Landscaping. Owner shall maintain the drainage system and storm water pollution control devices in a functioning state and in accordance with the Storm Water BMP Guidance Manual and Operations and Maintenance Procedure Plan approved by the Creeks Division. Should any of the project's surface or subsurface drainage structures or storm water pollution control methods fail to capture, infiltrate, and/or treat water, or result in increased erosion, the Owner shall be responsible for any necessary repairs to the system and restoration of the eroded area. Should repairs or restoration become necessary, prior to the commencement of such repair or restoration work, the Owner shall submit a repair and restoration plan to the Community Development Director to determine if an amendment or a new Building Permit and Coastal Development Permit is required to	Applicant/ Contractor			

MITIGATION MEASURE	PARTY RESPONSIBLE FOR IMPLEMENTATION	VERIFICATION		
		DATE	ACCOMPLISHED	COMMENTS
authorize such work. The Owner is responsible for the adequacy of any project-related drainage facilities and for the continued maintenance thereof in a manner that will preclude any hazard to life, health, or damage to the Real Property or any adjoining property. All project site landscaping shall be designed to use native species that do not require irrigation except for their propagation. Limited areas of non-native plants may be used if long-term irrigation is not required.				
GEO-2 Foundation Design Approval. The location and design of the proposed structure foundation, which implements a caisson supported foundation system, shall be approved by a licensed Engineering Geologist or Geotechnical Engineer.	Applicant/ Contractor			
H-1 Automatic Fire Sprinklers. New structures shall be equipped with an automatic fire sprinkler system in accordance with NFPA 13D. The automatic fire sprinkler system shall be submitted to the City Fire Department for review and approval under separate permit.	Applicant/ Contractor			
H-2 Monitored Fire Alarm System. A monitored fire alarm system shall be designed and installed throughout the new structure as approved by the Fire Department. The fire alarm system shall be submitted under separate permit.	Applicant/ Contractor			
H-3 Compliance with High Fire Construction Requirements. The new residence shall be build in accordance with the City's High Fire Construction requirements.	Applicant/ Contractor			
H-4 Fire Protection System Maintenance. The property owner shall enter into a written agreement, binding on the owner and all successors, that requires continual maintenance of the automatic fire sprinkler system and monitoring of the fire alarm system.	Applicant/ Contractor			
N-1 Neighborhood Notification Prior to Construction. At least twenty (20) days prior to commencement of construction, the contractor shall provide written notice to all property owners, businesses, and residents within 300 feet of the project area. The notice shall contain a description of the project, the construction schedule, including days and hours of construction, the name and phone number of the Project Environmental Coordinator (PEC) and Contractor(s), site rules and Conditions of Approval pertaining to	Applicant/ Contractor			

MITIGATION MEASURE	PARTY RESPONSIBLE FOR IMPLEMENTATION	VERIFICATION		
		DATE	ACCOMPLISHED	COMMENTS
construction activities, and any additional information that will assist Building Inspectors, Police Officers and the public in addressing problems that may arise during construction.				
N-2 Construction Hours. Construction (including preparation for construction work) shall only be permitted Monday through Friday between the hours of 7:00 a.m. and 5:00 p.m. and Saturdays between the hours of 9:00 a.m. and 4:00 p.m., excluding the following holidays: New Year's Day January 1st* Martin Luther King, Jr. Day 3rd Monday in January Presidents' Day 3rd Monday in February Memorial Day Last Monday in May Independence Day July 4th* Labor Day 1st Monday in September Thanksgiving Day 4th Thursday in November Following Thanksgiving Day Friday following Thanksgiving Day Christmas Day December 25th* *When a holiday falls on a Saturday or Sunday, the preceding Friday or following Monday, respectively, shall be observed as a legal holiday. When, based on required construction type or other appropriate reasons, it is necessary to do work outside the allowed construction hours, contractor shall contact the City to request a waiver from the above construction hours, using the procedure outlined in Santa Barbara Municipal Code §9.16.015 Construction Work at Night. Contractor shall notify all residents within 300 feet of the parcel of intent to carry out said construction a minimum of 48 hours prior to said construction. Said notification shall include what the work includes, the reason for the work, the duration of the proposed work and a contact number.	Applicant/ Contractor			
N-3 Construction Equipment Sound Control. All construction equipment, including trucks, shall be professionally maintained and fitted with standard manufacturers' muffler and silencing devices.	Applicant/ Contractor			
PS-1 Construction Materials Recycling. Construction-related solid waste shall be minimized through source reduction, re-use and recycling. Collection bins for these materials shall be provided on the	Applicant/ Contractor			

MITIGATION MEASURE	PARTY RESPONSIBLE FOR IMPLEMENTATION	VERIFICATION		
		DATE	ACCOMPLISHED	COMMENTS
site.				
T-1 Evidence of Adequate Access. Provide evidence, satisfactory to the City Engineer and City Attorney, that the owner of the subject parcel substantially possesses the required amount of legal access that formed the basis of the original lot split.	Applicant			
T-2 Construction Traffic. The haul routes for all construction-related trucks, three tons or more, entering or exiting the site, shall be approved by the Transportation Engineer. Construction-related truck trips shall not be scheduled during peak hours (7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m.) to help reduce truck traffic and noise on adjacent streets and roadways. The route of construction-related traffic shall be established to minimize trips through surrounding residential neighborhoods.	Applicant/ Contractor			
T-3 Construction Parking. Construction parking and vehicle/equipment/materials storage shall be provided as follows: 1. During construction, free parking spaces for construction workers shall be provided on-site or off-site in a location subject to the approval of the Transportation and Parking Manager. 2. On-site or off-site storage shall be provided for construction materials, equipment, and vehicles. Storage of construction materials within the public right-of-way is prohibited.	Applicant/ Contractor			
W-1 Drainage and Water Quality. Project plans for grading, drainage, stormwater facilities, and project development shall be subject to review and approval by City Building Division and Public Works Department per City regulations. Sufficient engineered design and adequate measures shall be employed to ensure that no significant construction-related or long-term effects from increased runoff, erosion and sedimentation, urban water quality pollutants, or groundwater pollutants would result from the project	Applicant/ Contractor			

Appendix I

2012 First Revised Draft EIR Comment Letters, Responses and Topical Responses

APPENDIX I
2012 First Revised Draft EIR Comment Letters and Topical Responses

The First Revised Draft EIR prepared for the 1837½ El Camino de la Luz Residence Project was circulated for public review in March 2012, and a public hearing to consider the adequacy of the EIR was conducted by the Planning Commission on April 5, 2012. A Final EIR was not prepared pending further analysis of issues raised in public comment. A list of the agencies and persons that submitted comments on the 2012 First Revised Draft EIR is provided below. This Appendix also includes topical responses, a copy of each comment letter, and responses to the comments that were submitted.

1. Governor's Office of Planning and Research, April 13, 2012
2. Ms. JoAnne G. Thompson, March 14, 2012
3. Illegible
4. Berni Bernstein, April 4, 2012
5. Nancy Brock, April 2, 2012
6. Ray Franco, March 28, 2012
7. Bruce Peterson, March 28, 2012
8. Bruce Peterson, April 3, 2012
9. Bruce Peterson, March 28, 2012
10. Bruce Peterson, April 16, 2012
11. Greg Smith, March 28, 2012
12. Greg Smith, March 29, 2012
13. Greg Smith, March 29, 2012
14. Greg Smith, March 1, 2012
15. Greg Smith, April 14, 2012
16. Greg Smith, April 14, 2012
17. Greg Smith, April 14, 2012
18. Reinard T. Knur, Geotechnologies, April 13, 2012
19. Greg Smith, April 16, 2012
20. Reinard T. Knur, Geotechnologies, April 16, 2012
21. Tony Fischer, April 10, 2012
22. Rafael Franco, March 17, 2012

Many of the comments submitted on the First Revised Draft EIR were related to the following topics:

1. The location of the ocean bluff edge on the project site.

2. The location of the top of the Lighthouse Creek canyon slope on the project site.

3. The analysis of potential ocean bluff stability impacts at the project site.

4. The rate of ocean bluff erosion at the project site.

5. Vehicle access to the project site.

Responses to these comment topics are provided below.

Topical Response No. 1: Location of the Ocean Bluff Edge on the Project Site.

A response to public comments related to the location of the ocean bluff edge (top of bluff) on the project site is provided below. The response describes how the top of bluff location was originally determined, and summarizes the results of further analysis that was conducted to identify where the bluff edge on the project site is located.

Anikouchine (2005) reported that the top of the ocean bluff at the project site was first identified by a geologist (Fisher) in 2001. The previously identified top of bluff location was confirmed by Dr. Anikouchine in his 2005 report to the City that is attached to the Revised Initial Study as "Exhibit E" (see EIR Appendix A). On page 9 of the 2005 report, two cross sections of the ocean bluff at the project site are provided and the location of the original bluff edge is denoted. The caption for the cross-section drawings indicates: "*note the rounded, convex-upward shape of the area above the sea cliff in both profiles*." The Coastal Commission definition of the bluff edge indicates that "*in cases where the top edge of the cliff is rounded away from the face of the cliff as a result of erosional processes related to the presence of a steep cliff face, the bluff line or edge shall be defined as the point nearest the cliff beyond which the downward gradient of the surface increases more or less continuously until it reaches the general gradient of the cliff*." As shown by the cross-sections prepared by Anikouchine, the bluff edge was identified below the rounded portions of the bluff and at the point where the downward gradient of the surface increases more or less continuously until it reaches the general gradient of the cliff.

The location of the ocean bluff top was re-evaluated by Earth Systems Pacific (2013a) and it was determined that the top of the bluff is located south of and adjacent to the proposed building pad, generally following the location of an existing concrete curb and drainage swale. At the southeastern corner of the paved area, the bluff top follows a moderately broad ridgeline that trends down to the mouth of Lighthouse Creek. This top of bluff location is consistent with the Coastal Commission definition that refers to the "landward edge of the topmost riser." The revised top of bluff location, and its location in relation to the proposed residence, is depicted on EIR Figures 3.3-1 (Site Plan) and 5.2-1 (Revised Top of Bluff Location). City of Santa Barbara staff concur with the revised top of bluff location identified by Earth Systems Pacific, and California Coastal Commission geologist Mark Johnsson (2013) has reviewed the revised top of bluff location and indicated that he concurs with the revised location.

Topical Response No 2: Location of the Top of the Lighthouse Creek Canyon Slope on the Project Site.

The top of the western bank of Lighthouse Creek on the eastern portion of the project site was identified by Tierney (2002) as part of the evaluation of the project site's biological resources and impacts to those resources that would result from the implementation of the proposed project. The biological resources report is attached to the Revised Initial Study as "Exhibit D" (see EIR Appendix A). Tierney identified the top of bank as "*…the point that the gentle and then moderately-steep slope intersects with the sheer bank leading down to the creek bed.*"

The location of the top of the Lighthouse Creek canyon slope on the project site was re-evaluated by Earth Systems Pacific (2013) and it was determined that the top of the canyon that contains Lighthouse Creek on the project site is generally located east of and adjacent to the existing asphalt pad that has been installed on the relatively level portion of project site. The revised top of slope location and its location in relation to the proposed residence is depicted on EIR Figure 5.2-2 (Canyon Top of Slope and Borehole Locations). As depicted on Figure 5.2-2, the identified top of slope extends roughly north to south across the central portion of the proposed building area. City of Santa Barbara staff concur with the revised top of the canyon slope location identified by Earth Systems Pacific, and California Coastal Commission geologist Mark Johnsson (2013) has also concurred with the revised location of the top of the canyon slope.

Topical Response No. 3: Analysis of Potential Ocean Bluff Stability Impacts at the Project Site.

A response to public comments regarding the stability of the ocean bluff on the project site is provided below. The response includes a summary of the slope stability analyses that have been prepared for the project.

In response to direction provided by the Planning Commission in 2007, a geological investigation at the project site was conducted in 2009 by Dr. Anikouchine to determine if a suspected bedding plane fracture that had been reported by others existed on the site. It was important to determine if the fracture was present because previous reviews of the project site geology indicated that the fracture could be a plane of weakness along which a block slide slope failure could occur, and that such a block slide could involve movement of all of the material west of the fracture, potentially resulting in a significant impact to the proposed project. To confirm the presence or absence of the bedding plane fracture, a geologic inspection trench was created on the project site. Inspection of the trench concluded that there was no evidence of the suspected bedding plane fracture. Therefore, the proposed building site would not be affected by the type of block slide slope failure previously described by other investigators. Additional information regarding this investigation is provided in EIR Appendix B.

A 2011 slope stability analysis by Dr. Anikouchine evaluated several potential slope failure mechanisms that could have the potential to affect the project site. The 2011 investigation concluded that based on geologic conditions, a wedge-type slope failure would be the slope movement mechanism most likely to affect the project site. Subsequent analysis of this type of slope failure mechanism determined that the slope should be considered to be stable and that the slope would remain stable after the development of a new residence within the proposed building envelope. Mitigation measures are also identified by the EIR to further reduce the potential for slope stability-related impacts, including measures: GEO-1 (Storm Water Pollution Control, Drainage Systems Maintenance and Project Site Landscaping); BIO-2 (Appropriate Plants/Hardscape on Bluff); BIO-3 (Irrigation System); and W-1 (Drainage and Water Quality). These measures ensure that storm water at the project site would be properly managed, and that landscaping and irrigation do not accelerate the potential for bluff erosion. The slope stability investigation provided additional analysis to evaluate potential effects to the proposed residence in the unlikely event that a slope failure did occur at the project site. This additional evaluation considered the effects of the largest possible landslide that could be reasonably expected to affect the project site (i.e., movement along the lowest bedding plane that intersects a fracture in the bluff west of the project parcel). That slope movement evaluation determined if such a failure were to occur, the project site but not the proposed building footprint, and the adjoining property to the west could be affected.

Comments submitted regarding the slope stability analysis provided by the First Revised Draft EIR expressed a variety of general concerns about slope stability at the project site and in the project area. These types of comments do not specifically address the adequacy of the analysis provided by the EIR and will be forwarded to decision-makers so they will be aware of these general concerns. Other comments expressed opinions regarding the methodologies and data used to evaluate the potential for slope stability impacts to affect the proposed project, and many of these types of comments were submitted by persons who are not a registered geologist, or a certified engineering geologist or geological engineer. In regard to the opinions expressed in these comments, please note that Dr. Anikouchine is a certified engineering geologist with extensive experience with geological conditions in the project region and conducting slope stability evaluation in coastal areas. Further, California Coastal Commission geologist Mark Johnsson (2013) has reviewed the 2011 slope stability analysis prepared by Dr. Anikouchine and indicated that he concurs with the analysis and conclusions of the report. Comments related to the adequacy of the slope stability analysis provided by the EIR will be forwarded to decision-makers so they will be aware of those concerns.

Some of the comments that address the adequacy of the slope stability analyses included in the EIR were submitted by a certified engineering geologist. These comments generally express dissenting opinions related to the study conclusions, the interpretation of field observations and explorations, and the analysis methodologies used to evaluate the stability of the project site ocean bluff. In response to these comments, it should be noted that extensive detail regarding the methodologies used to evaluate the

stability of the ocean bluff on the project site are included in Dr. Anikouchine's 2009 and 2011 slope stability reports that are included in EIR Appendices B and C. Also, California Coastal Commission geologist Mark Johnsson (2013) has reviewed the 2011 slope stability analysis report and indicated that he concurs with its analysis and conclusions. Further, CEQA Guidelines Section 15204 (Focus of Review) subsection (c) indicates that in review of a Draft EIR "*reviewers should explain the basis for their comments, and should submit data or references offering facts, reasonable assumptions based on facts, or expert opinion supported by facts in support of the comments*." As indicated by this section of the *CEQA Guidelines*, providing a dissenting opinion or expressing disagreement with analysis presented by the EIR by itself does not provide the substantial evidence necessary to conclude that the project's slope stability analysis is inadequate, or that the project's slope stability impacts are significant or cannot be reduced to a less than significant level with the implementation of proposed mitigation measures. Finally, *CEQA Guidelines* Section 15151 (Standards for Adequacy of an EIR) indicates that "*disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have not looked for perfection but for adequacy, completeness, and good faith effort at full disclosure."* Therefore, the slope stability analyses presented in the EIR and Appendices B and C are considered adequate to evaluate the slope stability impacts of the proposed project and no additional analysis or revisions to the analysis that has been conducted is required.

Topical Response No 4: Rate of Ocean Bluff Erosion at the Project Site.

The potential impacts of erosion of the ocean bluff on the project site (bluff retreat) provided by the First Revised Draft EIR was based on an assumption that the project site ocean bluff erodes landward at an average rate of approximately four inches per year. Comments submitted on the 2012 EIR questioned the validity of the four inches per year estimate. Additional information regarding the rate of bluff retreat at the project site has been added to the Second Revised EIR. A summary of the information provided by the Second Revised Draft EIR is provided below.

The City of Santa Barbara Safety Element (2013) indicates that several studies of ocean bluff retreat rates have been conducted in the Santa Barbara area. One study evaluated erosion rates over a 70-year period and determined that the highest retreat rate was approximately 12 inches per year, while the average city-wide erosion rate is eight inches per year. The estimated rates of sea cliff retreat vary due to local differences in the composition and structure of the cliffs, the effects of bluff-top development, and barriers located at the base of the cliffs such as cobbles, boulders, or rip rap.

K-C Geotechnical (1987) indicated a retreat rate of six to eight inches per year at the project site based on a report by Thomas W. Dibble Jr. (1986), which was prepared for the parcel at 1837 El Camino de la Luz. Norris (1988) estimated a rate of four inches of bluff retreat per year at the project site based on the review of aerial photographs taken in 1943, 1954 and 1986. CGG Consultants (1996) reviewed a series of aerial

photographs dated between 1928 and 1995 and concluded that the top of the bluff at the paved parking area had not changed in over 65 years, and estimated the bluff retreat rate to be "less than four inches per year." Fisher (2001) reported that a site 0.56 miles to the west of the project site (station WHEELER) had zero inches of retreat since 1927.

The most recent evaluation of bluff retreat rates at the project site was conducted by Earth Systems Pacific (2013a). The Earth Systems Pacific evaluation was based on a comparison of the conditions shown on a 1953 aerial photograph and a current topographic map, with stereographic interpretation of the 1953 photograph performed using manual and digital/computer stereo-scope techniques. The results were then geo-registered and plotted onto a 2010 digital Las Mesa ortho photograph using the computer program Global Mapper. This methodology resulted in a digitally-aided plot that is more accurate than previous bluff retreat analyses based on manual methods. The new analysis determined that the maximum bluff erosion retreat over the 59-year period between 1953 and 2012 was five feet, or an average rate of 1.02 inches of retreat per year. The entire Earth Systems Pacific report is provided in EIR Appendix D.

Topical Response No 5:

Comments submitted on the 2012 EIR expressed concerns regarding the physical and legal adequacy of vehicle access to the project site. A response to those comments is provided below.

The ability of the project to provide adequate access along existing easements was evaluated by the Revised Initial Study prepared for the project (EIR Appendix A). The Initial Study includes proposed mitigation measure T-1, which requires that the project comply with a Conditional Certificate of Compliance condition of approval that was approved by the City in 1999. The Initial Study concluded that compliance with the condition of approval/mitigation measure would reduce the project's long-term access-related impact, and short-term construction equipment access impacts, to a less than significant level.

The existing access easements that would be used to provide access to the proposed residence were evaluated by the Santa Barbara Fire Department and determined to be adequate with the implementation of proposed mitigation measures, including measure H-1, which requires that the proposed structure be equipped with an automatic fire sprinkler system.

Short-term construction vehicle access to the project site would be facilitated by using equipment appropriately sized to travel within the 7.5-foot driveway easement that provides access to the project site. The project applicant has indicated that the following vehicles, or similar types of vehicles, would be used during project construction.

Vehicle Type	Model (typical)	Typical Uses	Maximum Width	Length
Pickup Truck	Ford F250	Hauling building materials, soil, etc.	6.58 ft.	18.83 ft.
Front End Loader	John Deere H130	Grading/foundation preparation	5.15 ft.	9.3 ft.
Drill Rig	R10 Man Portable	Drilling caisson holes	4.58 ft.	4.08 ft.

Letter No. 1

STATE OF CALIFORNIA

GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH

EDMUND G. BROWN JR.
GOVERNOR

KEN ALEX
DIRECTOR

April 13, 2012

RECEIVED
APR 16 2012
CITY OF SANTA BARBARA
PLANNING DIVISION

Kathleen Kennedy
City of Santa Barbara
630 Garden Street
Santa Barbara, CA 93101

Subject: 1837 1/2 El Camino de la Luz Residence
SCH#: 2005041031

Dear Kathleen Kennedy:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. The review period closed on April 12, 2012, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Scott Morgan
Director, State Clearinghouse

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report
State Clearinghouse Data Base

SCH# 2005041031
Project Title 1837 1/2 El Camino de la Luz Residence
Lead Agency Santa Barbara, City of

Type EIR Draft EIR

Description The project consists of the construction of a 1,505 sf 2-story single family residence with an attached 429 sf garage on a 23,885 sf vacant bluff-top lot. Grading quantities total approximately 288 cubic yards of cut and 21 cubic yards of fill. Access to the site would be provided by private easements extending south from the terminus of El Camino de la Luz.

Lead Agency Contact

Name Kathleen Kennedy
Agency City of Santa Barbara
Phone (805) 564-5470 x4560 **Fax**
email
Address 630 Garden Street
City Santa Barbara **State** CA **Zip** 93101

Project Location

County Santa Barbara
City Santa Barbara
Region
Lat / Long
Cross Streets Oliver Road / Cliff Drive / Meigs Road
Parcel No. 045-100-065
Township **Range** **Section** **Base**

Proximity to:

Highways Hwy 225, 101
Airports Santa Barbara
Railways UPRR
Waterways Lighthouse Creek, Pacific Ocean
Schools Washington ES, Monroe ES, SB City College
Land Use Vacant lot / E-3 Zone (Single Family Residential) and SD-3 (Coastal Overlay Zone) / Residential, 5 units per acre

Project Issues Air Quality; Archaeologic-Historic; Coastal Zone; Cumulative Effects; Drainage/Absorption; Forest Land/Fire Hazard; Geologic/Seismic; Landuse; Noise; Public Services; Recreation/Parks; Schools/Universities; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Wildlife; Aesthetic/Visual; Biological Resources; Flood Plain/Flooding; Growth Inducing; Population/Housing Balance

Reviewing Agencies Resources Agency; California Coastal Commission; Department of Fish and Game, Region 5; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; Caltrans, Division of Aeronautics; California Highway Patrol; Caltrans, District 5; Regional Water Quality Control Board, Region 3; Department of Toxic Substances Control; Native American Heritage Commission

Date Received 02/27/2012 **Start of Review** 02/28/2012 **End of Review** 04/12/2012

Note: Blanks in data fields result from insufficient information provided by lead agency.

Comment Letter No. 1
Governor's Office of Planning and Research
Date: April 13, 2012

1-1. No response is required regarding the distribution of the Revised Draft EIR to various State agencies. No comments regarding the First Revised Draft EIR were received from the Office of Planning and Research or other State agencies.

Ms JoAnne G Thompson
1903 El Camino De La Luz
Santa Barbara, CA 93109-1926

DISTRIBUTED TO: DATE: 3/29/12
PLANNING COMMISSION (7)
SR. PLANNER, ASST. CITY ATTY.
CASE PLANNER APPLICANT('S)
AGENT PC SEC, ENTERED AS INT
PARTY ON DATE:
BY:

Letter No. 2

March 14, 20

Kathleen Kennedy, Associate Planner
City of Santa Barbara, Planning Division
P.O. Box 1990
Santa Barbara, CA 93102-1990

Re: 1837½ El Camino de la

Dear Ms. Kennedy:

My concern about the home planned for 1837½ El Camino de la Luz is focused on the danger of slides in this area. I have lived at 1903 El Camino de la Luz since May, 1976. My home is down the next driveway to the west of Dr. Barthel's 1837½ El Camino de la Luz lot. On the evening of Feb. 14, 1978, after quite a long rainstorm, two homes to my west slid down the hillside along with quite a bit of the hillside itself. At least one other home sustained major damag from this; and most of us in this "danger zone", including me, lost property on the oceanslide slope next to our homes. Before the actual slippage, cracks appeared in the homes tha subsequently slid. The City had Donald Weaver, engineering geologi study this area. He told the owners of the two homes their hon were going to slide so they were able to leave before it happ There has been a recent series of weekly articles in the Sant Barbara News Press by Dr. Ed Keller of the Dept. of Earth Sciences, Environmental Studies Program, U.C.S.B., explaining the Monterey shale configuration here, which stated "this landslide has been with us for thousands of years. The coast bulged out at that location prior to the landslide, and the are remains a continuing, potential landslide hazard."

2-1

Therefore, no houses should be built in this slide-prone area. Just the activities involved in the building proces may be enough to start the land moving. And, as I sai

at a hearing some time ago, what good will it do for anyone to build a home and then have it and other homes lost because of a slippage? 2-1

Sincerely,

JoAnne G. Thompson

JoAnne G. Thompson

RECEIVED
MAR 15 2012
CITY OF SANTA BARBARA
PLANNING DIVISION

Comment Letter No. 2
JoAnne G. Thompson
Date: March 14, 2012

2-1. This comment expresses concerns regarding the effects of the 1978 El Camino de la Luz landslide and the potential for the proposed project to be adversely affected by slope movement. The Second Revised Draft EIR describes the 1978 landslide and identifies the probable causes of that landslide (Page 5.2-3), and the area affected by the slide is depicted on EIR Figure 5.2-7. The Second Revised Draft EIR also notes that the main portion of the slide was approximately 200 feet west of the proposed project site.

The stability of the project site was extensively evaluated by the Second Revised Draft EIR. That analysis concluded that the project site coastal bluff would remain stable after the development of the proposed residence, however, the addition of increased storm water and/or irrigation water to the project site could adversely affect the stability of the project site. The EIR provides proposed mitigation measure GEO-1 (Storm Water Pollution Control, Drainage Systems Maintenance and Project Site Landscaping), which specifies drainage and landscaping requirements to minimize the infiltration of water into the project site and to reduce the identified slope stability impact to a less than significant level. Additional information related to the stability of project site ocean bluff and the anticipated effects of bluff erosion at the project site are provided by Topical Response No. 3: Analysis of Potential Ocean Bluff Stability Impacts at the Project Site; and Topical Response No. 4: Rate of Ocean Bluff Erosion at the Project Site.

Dear Planning Commission,

never put up a House
1,850 sq 1's garage 429 square
feet on this Coastal Life Zone
the protected bluff, necessary
the private development, no
government funding forever,
no grading - 288 cubic yards +
20 cubic yards fill, no roads,
Save all as is. It is good
people really, as they
run their dogs ~~on the~~ STATS
urgent develop this protected
dog area. Never put in 52
story house. Stop the boondoggle
come to town. Bellwell for the hearings
Save S.B. this to full Indian
emergency develop - 50,000 Indians and there,
They helped all to ~~[illegible]~~ - Kanamonold be
the next to be helped Save all from
no bulldozing no desperation
building land generally
affect the land the people living there
Save the Coast + the Crazy Indian
Tribe of 1522 + after 90,000 years
lived to dwell with no Watch out Saving
Eternal Beings Forever more
Bellwell + Hoop, Save the Earth
50,000 Indians
are there
90,000 People
help Tend the
children

Sincerely
Linda Westbury
Pamela Westbury

Thanking you
Bellwell
Bellwell
Bellwell

Re: 1837 1/2
Comments for
Environmental
Comment Review Hearings
Bellwell Bellwell
Bellwell Bellwell
Please record at the
Hearing, 4-5-12 Thank
you Bellwell
Hoop

DISTRIBUTED TO: DATE: 4/5/12
PLANNING COMMISSION (7)
SR. PLANNER, ASST. CITY ATTY.
CASE PLANNER APPLICANT('S)
AGENT PC SEC, ENTERED AS INT
PARTY ON DATE:
BY:

3-1

RECEIVED
APR 03 2012
CITY OF SANTA BARBARA
PLANNING DIVISION

Comment Letter No. 3
Unknown
Date: April 2, 2012

3-1. The comments provided in this letter are not legible and therefore a response cannot be provided. This letter is included in the Final EIR and is available for review by decision-makers that will consider the proposed project.

Letter No. 4

Kennedy, Kathleen

From: Rodriguez, Julie on behalf of Community Development PC Secretary
Sent: Wednesday, April 04, 2012 3:40 PM
Cc: Kennedy, Kathleen; Vincent, Scott
Subject: FW: 1837 1/2 El amino De La Luz

Public Comment letter received....

From: Berni Bernstein [mailto:bernibernstein@hotmail.com]
Sent: Wednesday, April 04, 2012 2:32 PM
To: Community Development PC Secretary; Berni Bernstein
Subject: 1837 1/2 El amino De La Luz

Aprl 4, 2012

Re: 1837 1/2 El Camino De La Luz

As the "Public -at-large" member of the Single Family Design Board, I have been contacted by several neighbors regarding the proposal to build a two story home on this vacant lot. I have scanned the proposal and visited the site.

Shoreline Park and this same street have had landslides in recent years. Two homes actually fell down the cliff on El Camino de la Luz. This senstive blufftop is not for building. 4-1

Given the risky history for building, a new home of this magnitude does not seem right.

Sincerely,
Berni Bernstein
Single Family Design Board member

Comment Letter No. 4
Berni Bernstein
Date: April 4, 2012

4-1. This comment expresses opinions regarding safety risks associated with constructing homes in bluff top areas. The comment does not address the adequacy of the environmental impact analysis included in the Revised Draft EIR. In regard to slope stability issues that could affect the proposed project, please refer to Topical Response No. 3: Analysis of Potential Ocean Bluff Stability Impacts at the Project Site.

Letter No. 5

de la Luz

CA 93109

1909 El Camino

Santa Barbar,

2 April 2012

Ms Kathleen Kennedy
Associate Planner
City of Santa Barbara, Planning Division
630 Garden Street
Santa Barbara, CA 93102

Dear Ms Kennedy,

The overarching goal is to protect and preserve the stunningly beautiful and extremely fragile ocean bluffs that define the Mesa area.

Focus needs to be on "the top of bluff" with an explicit line delineated from Leadbetter Beach to Hendry's Beach. Many shoreline property owners have site plans with the "top of bluff" designated by survey or geology report, but there is not a definitive designation for the length of the Mesa. With such a consistent demarcation, following the Coastal Act definition of "top of bluff", proposed ideas for construction that impinge upon the 75 year setback (18371/2 El Camino de la Luz) or are over the bluff edge on a previous landslide (1921 & 1925 El Camino de la Luz) could be (as they should be!) squelched promptly as "impossible by Coastal Commission guidelines" for the safety and integrity of the area. 5-1

The Santa Barbara City policy for construction near the ocean edge should be forthright and coherent. A clear policy will give the Planning Commission and Staff the ability to say, "No, this is not a legal site.", to the flawed building idea that needs to be denied at inception.

Sincerely,

Nancy Boeseke Brock

Comment Letter No. 5
Nancy Boeseke Brock
Date: April 2, 2012

5-1. This comment indicates that a top of bluff determination should be an "explicit line" that future projects must comply with, and expresses other opinions related to the evaluation of proposed projects in bluff top areas. The comment does not address the adequacy of the environmental impact analysis included in the Second Revised Draft EIR. In regard to identification of the top of bluff at the project site, please refer to Topical Response No. 1: Location of the Ocean Bluff Edge on the Project Site.

Letter No. 6

Kennedy, Kathleen

Subject: FW: 1837.5 El Camino de la Luz

DISTRIBUTED TO: DATE: 3/29/12
PLANNING COMMISSION (7) via mail
SR. PLANNER, ASST. CITY ATTY.
CASE PLANNER APPLICANT('S)
AGENT PC SEC, ENTERED AS INT
PARTY ON DATE:
BY:

From: Rayfranco@aol.com [mailto:Rayfranco@aol.com]
Sent: Wednesday, March 28, 2012 3:09 PM
To: Kennedy, Kathleen
Cc: brucefpeterson@cox.net; kaishin@mac.com; kaishin@me.com; thomassloan@me.com; joannakmorgan@gmail.com; stan@firstcrescent.com; Rayfranco@aol.com
Subject: Re: 1837.5 El Camino de la Luz

Kathy,

My comments are generally summarized in my letter of March 17, and the attached Barthels EIR Notes 3/16/12 were my notes as I went through the EIR....one slipped expletive should have been deleted, but my emotions got ahead of me. Please accept my apology.

We have prepared a presentation by ten neighbors and I will request 20 to 30 minutes at the hearing. Our comments can be summarized as follows:

1. We dispute the "bluff edge" used in the EIR. It is inconsistent with California Code of Regulations, Title 14, Section 13577(h)(2). We will ask the Planning/Local Coastal Commission for a ruling on this. If the Commission agrees with our interpretation of the law, many of the subsequent issues may go away. 6-1

2. The report makes a finding that the visual impacts are significant but could be mitigated by the redesign of the house within a prescribed envelope. We contend that this envelope oversteps the bluff edge and may not comply with the creek preservation ordinance. If we follow the Coastal Act, this becomes an invalid building envelope. 6-2

3. Visual impacts have been analyzed from the park, but not from the ocean. The Coastal Act requires this analysis. 6-3

4. Geotechnical conclusions have been drawn from a simple 4 ft. excavation of the Monterey formation at the top of the bluff. We believe these to be erroneous and insufficient. Standard practice requires exploration down to and below the lowest unsupported planes, and slope stability calculations across many different planes and sections. This was not donw. There is clearly an attempt to manipulate the numbers to come get to the 1.14 factor of safety. The percentages of marl and claystone used in the calculation are inconsistent with the bedding plane profiles described earlier in the report. The weights of the stones used in the calculation are not consistent with standard tables; actual samples should have been weighed in the lab. Those profiles described in the report would yield a factor of safety less than 1.1. No calculations are provided to conclude either way.

5. The Calculations used by Dr. Anikouchine in the Draft and Final EIR of 2005/2008 yielded a pseudostatic factor of safety of 0.5. His input included wildly irregular cohesion values of 12,590 lbs./sq. ft. for Layer 1 and 9,999,000 lb/sq. ft. his unit weights for these layers were 120 and 130 lbs/cft. Lab results of his 2009 study were dramatically different. This was cause for lack of confidence in his capability as an Geological Engineer. He is not a licensed Geotechnical Engineer.

6-4

6. The conclusion of the report that the Moterey formation is safe because it is buttressed is false. The cross sections in the report clearly indicate unsupported bedding planes. This was also noted in the Geotechnologies Inc. Report of three years ago and by other reports reviewed by Dr. Anikouchine.

7. The potential planes of failure for the Monterey formation are conveniently stopped at the incorrect "bluff edge". Dr. Anikouchine's exploratory trenches clearly indicate that these bedding planes extend well on to the proposed building pad.

8. Similarly the report indicates two fractures perpendicular to the bluff which could cause potential block or wedge failures. These fractures are conveniently stopped at the bluff edge. These fractures could have been caused by stresses from the 1978 slide or by seismic activity. No exploration has been done to draw valid conclusions.

9. The proposed building envelope noted for mitigation clearly oversteps the bluff edge into the creek basin. There is no analysis of the impacts of creek erosion on this side of the bluff. 6-5

10. The rate of seacliff retreat used in the report (4"/yr) is inconsistent with the Local Coastal Plan rate of (8"/yr). Adopting the Ca. Coasta Commission standard for set backs, if the bluff is stable which we dispute, would be (8" X 75 yrs) + 10 ft buffer = 60 ft. This set back is beyond the northerly property line of the subject parcel. We will show photometric evidence of the seacliff retreat and subsequent landslides just below the parcel. 6-6

11. The report omits comments on the impact of the Mesa Fault considered as an active fault in the Seismic Safety Element of the General Plan. 6-7

12. Considering what has transpired over the past 22 years on this project, the way the geologist worked for the applicant and the City at the same time, and the very biased and erroneous conclusions, we believe there is a conflict of interest and a new report is required signed by an Engineering Geologist and a Geological Engineer as required by the Building Code. 6-8

13. The transportation and access issues ave been resolved and noted in the EIR. Our position is clear that the original access required at the time of the lot split was 15 ft and the parcel has a maximum access easement of 7.5 ft. across my property. 6-9

Finally we reserve the right to further comment following the presentation on April 5th.

Thank you very much for your patience and assistance. Please let me know if you need anything else from our side.

Ray Franco and neighbors

Comment Letter No. 6
Ray Franco
Date: March 28, 2012

6-1. Please refer to Topical Response No 1: Location of the Ocean Bluff Edge on the Project Site. The location of the top of the ocean bluff at the project site was revised in the Second Revised Draft EIR and an evaluation of the project based on the revised top of bluff location determined that the project would be consistent with applicable Coastal Act policies and regulations, the City's Local Coastal Program and the Safety Element. The EIR also concluded that potential bluff retreat-related impacts would be reduced to a less than significant level with the implementation of mitigation measure GEO-1 (Storm Water Pollution Control, Drainage Systems Maintenance and Project Site Landscaping).

6-2. Please refer to response 6-1 regarding the location of the proposed residence in regard to the location of the top of bluff at the project site.

Please refer to Topical Response No. 2: Location of the Top of the Lighthouse Creek Canyon Slope on the Project Site. The location of the top of the Lighthouse Creek canyon slope at the project site was revised in the Second Revised Draft EIR and an evaluation of the project based on the revised top of slope location determined that potential slope stability impacts would be reduced to a less than significant level with the implementation of mitigation measure GEO-2 (Foundation Design Approval) The creek preservation ordinance referred to by this comment applies to Mission Creek only and does not establish setback requirements for Lighthouse Creek.

6-3. The Second Revised Draft EIR evaluates the potential for the proposed project to impact important public views from locations on the beach near the project site (Page 5.1-33). That analysis concluded the project would not result in significant visual aesthetic impacts and would not affect views the Santa Ynez Mountains. The project site and the proposed residence would become less visually prominent when observed from viewpoints located on the ocean because the distance between the project site and possible viewing locations would be increased. Therefore, the project would result in less than significant visual aesthetic impacts to offshore viewpoints.

6-4. Please refer to Topical Response No. 3: Analysis of Potential Ocean Bluff Stability Impacts at the Project Site.

6-5. Please refer to Topical Response No. 2: Location of the Top of the Lighthouse Creek Canyon Slope on the Project Site.

6-6. Please refer to Topical Response No. 4: Rate of Ocean Bluff Erosion at the Project Site.

6-7. As shown on Figure 8 of the City's 2013 Safety Element, the Mesa Fault is located approximately 1.5 miles north of the project site and is classified as an "apparently active" fault. Due to the separation distance between the fault and the project site, it

would not have the potential to result in a ground rupture impact at the project site. As indicated by the Revised Initial Study prepared for the project (EIR Appendix A), compliance with applicable building codes would reduce potential ground shaking effects at the project site to a less than significant level. No further analysis of the possible effects of the Mesa Fault on the proposed project is required.

6-8. The February 11, 2011 email from City Staff Daniel Gullet, which is attached to a March 17, 2012 comment letter also submitted by Mr. Franco (comment letter 22) clearly indicates that Dr. Anikouchine has not prepared project-related studies under the direction of the project applicant (Dr. Barthels). Additionally:

- All work conducted by Dr. Anikouchine related to the analysis and review of the proposed project has been conducted to implement scopes of work developed with and approved by the City of Santa Barbara Planning Division.

- All work conducted by Dr. Anikouchine related to the analysis and review of the proposed project has been conducted in accordance with contract requirements between the City of Santa Barbara and Rodriguez Consulting Inc, the preparer of the Project EIR. Throughout the entire EIR preparation process, Dr. Anikouchine has worked exclusively as a subconsultant to Rodriguez Consulting Inc.

- Payment for all work conducted by Dr. Anikouchine related to the analysis and review of the proposed project has been provided by Rodriguez Consulting Inc.

6-9. Please refer to Topical Response No. 5: Vehicle Access to the Project Site.

Kennedy, Kathleen

Subject: FW: EIR Review - 1837 1/2 El Camino de la Luz

Letter No. 7

From: Bruce Peterson [mailto:brucefpeterson@cox.net]
Sent: Wednesday, March 28, 2012 6:58 PM
To: Kennedy, Kathleen
Subject: Fwd: EIR Review - 1837 1/2 El Camino de la Luz

DISTRIBUTED TO: DATE: 2/29/12
PLANNING COMMISSION (7) via mail
SR. PLANNER, ASST. CITY ATTY.
CASE PLANNER APPLICANT('S)
AGENT PC SEC, ENTERED AS INT
PARTY ON DATE:_____
BY:_____

Kathy,
These six concerns listed below, although brief, I would like passed on to the Planning Commission.
Thank You Again,
Bruce Peterson

Begin forwarded message:

Kathy,

Thank you for providing this information.
The areas I am most interested in are-

1. Access to parcel 7-1
2. Top of Bluff definition, Ipe California Costal Commission Guidelines, used to determine necessary setbacks 7-2
3. Geology - I am sure that the Reviewer is a different Geologist than the one who conducted the latest study 7-3
4. Impact on Public Park Views, i. e. La Mesa Park and Public Walking Bridge - looking South 7-4
5. Effects upon neighborhood residents during construction, parcel being 350 feet from Public street and all building material and ` labor must pass through a 7.5 foot easement 7-5
6. Proposed utility access for electric, gas, water, sewer,telephone, cable, etc. 7-6

Portions of the EIR that address these concerns would help greatly,
Thank You,
Bruce

Comment Letter No. 7
Bruce Peterson
Date: March 28, 2012

7-1. This comment expresses a general concern about access to the project site but does not indicate any specific concerns. Please refer to Topical Response No. 5: Vehicle Access to the Project Site.

7-2. This comment expresses a general concern regarding the location of the top of the ocean bluff on the project site. The location of the top of the ocean bluff at the project site was revised in the Second Revised Draft EIR. An evaluation of the project based on the revised top of bluff location determined that the project would be consistent with applicable Coastal Act policies and regulations, the City's Local Coastal Program and the Safety Element. The EIR also concluded that potential bluff retreat-related impacts would be reduced to a less than significant level with the implementation of mitigation measure GEO-1 (Storm Water Pollution Control, Drainage Systems Maintenance and Project Site Landscaping). Please refer to Topical Response No. 1: Location of the Ocean Bluff Edge on the Project Site.

7-3. The intent of this comment is not clear. As indicated in Dr. Anikouchine's 2005 report to the City (Appendix A, Exhibit E), the project site has been reviewed by numerous geologists.

7-4. The Second Revised Draft EIR provides an extensive analysis of the project's impacts to important public scenic views including views from La Mesa Park and the bridge across Lighthouse Creek. The EIR's analysis concluded that the proposed project would have the potential to result in significant impacts to important public scenic views from those and other identified locations. The EIR also identified mitigation measures that would reduce the identified impacts to a less than significant level.

7-5. Please refer to Topical Response No. 5: Vehicle Access to the Project Site. Access to the project by construction vehicles was evaluated by the Revised Initial Study prepared for the project, and it was concluded that compliance with proposed mitigation measure T-1 would be "…adequate to allow construction equipment to traverse the private easements to access the subject property…" With the implementation of this mitigation measure, temporary construction-related impacts of the project would not be eliminated but would be reduced to a less than significant level. In addition, recommended mitigation measure T-2 requires that the "haul route" for all construction-related trucks three tons or more in size that enter or exit the project site be approved by the Transportation Engineer.

7-6. The intent of this comment is not clear and the comment does not address the adequacy of the environmental review provided by the Revised Draft EIR. However, the project site plan (EIR Figure 3.3-1) shows the location of proposed new underground sewer, water, gas, electricity, telephone and cable utilities located in the driveway that provides access to the project site.

Letter No. 8

Kennedy, Kathleen

From: Bruce Peterson [brucefpeterson@cox.net]
Sent: Tuesday, April 03, 2012 8:53 AM
To: Kennedy, Kathleen
Cc: rayfranco@aol.com; Stan Krome; Greg Smith; Tom Sloan
Subject: Creek Setbacks

Kathy,
A new issue was brought to my attention several days ago, and I would like the following to be added to the public comment given to the Planning Commission. Please respond if this is possible.

Dear Commissioners,
I recently learned, through my better sighted neighbors, that the proposed single family home at 1837.5 El Camino de la Luz S. B. 93109 is to intrude into Lighthouse Creek. I was able to 8-1
contact George Johnson, in the Creeks Division at the City Parks and Recreation Department, and he explained the recommended setbacks for any buildings near City creeks.
As a result of city voters passing Measure B, about 12 years ago, to protect our City's creeks,
MINIMUM SETBACKS FROM TOP OF

BANK ARE 25 FEET. George Johnson was familiar with Lighthouse Creek, and further informed me that Top Of Bank would be defined as the area where the land becomes flat, or, in other words, the area where the existing asphalt starts. 8-1

Thank You for your consideration in reviewing the Draft EIR.

Bruce Peterson
1937 El Camino de la Luz
Santa Barbara, Ca. 93109

Comment Letter No. 8
Bruce Peterson
Date: April 3, 2012

8-1. Please refer to Topical Response No. 2: Location of the Top of the Lighthouse Creek Canyon Slope on the Project Site. In addition, the City has not adopted a top of creek bank setback standard that is applicable to Lighthouse Creek.

Kennedy, Kathleen

Subject: FW: 1837 1/2 El Camino do la Luz

Letter No. 9

DISTRIBUTED TO: DATE: 3/29/12 via mail
PLANNING COMMISSION (7)
SR. PLANNER, ASST. CITY ATTY.
CASE PLANNER APPLICANT('S)
AGENT PC SEC, ENTERED AS INT
PARTY ON DATE:
BY:

From: Bruce Peterson [mailto:brucefpeterson@cox.net]
Sent: Wednesday, March 28, 2012 5:15 PM
To: Kennedy, Kathleen
Cc: rayfranco@aol.com; Stan Krome; Greg Smith; Tom Sloan
Subject: Fwd: 1837 1/2 El Camino do la Luz

Kathy,
I would like this letter below, the historical account, provided to the planning commissioners to read.
Thank You.
Bruce Peterson

Begin forwarded message:

From: Bruce Peterson <brucefpeterson@cox.net>
Date: March 6, 2012 10:19:34 AM AKST
To: "Kennedy, Kathleen" <KKennedy@SantaBarbaraCA.gov>
Cc: Greg Smith <kaishin@me.com>, rayfranco@aol.com, Stan Krome <SKrome@FirstCrescent.com>, Tom Sloan <thomassloan@me.com>
Subject: Re: 1837 1/2 El Camino do la Luz

Kathy,

Thank you for your response.
I would like to clarify my comments.

First, I will quote from your email to Greg Smith on March 5, 2012.

"T-1 Evidence of Adequate Access. Provide evidence, satisfactory to the City Engineer and City Attorney, that the owner of the subject parcel substantially possesses the required amount of legal access that formed the basis of the original lot split."

The words "basis of the original lot split" were recorded easements of 15 feet from El Camino de la Luz to the lot designated as 1837.5 El Camino de la Luz.

9-1

Herbert Barthels, who purchased the property on December 7m 1976 for $24,500, after previous owners Brewer and Jekings had left the lot vacant. At April 1989, Herbert Barthels made official inquires to develop the lot. He soon discovered the lot did not meet the requirements. It turned out the easement between Morgan at 1841 and Peterson at 1837 is 9 feet wide, and is about 100 feet in length.
Public records show Santa Barbara Title company abided by the terms of the Title Policy and paid Herbert Barthels when the defect was discovered in 1989.
Herbert Barthels was not satisfied. He appealed a lower court ruling the Appelate Court of Ventura County, seeking compensation from Santa Barbara Title in the amount of $800,000 ---Yes. Eight Hundred Thousand for the price of the lot, which he had paid $24,500 just a decade earlier. He also sued for $280,000 for his time to hire architects and other development professionals. The Court ruled with the lower Court and told Herbert Barthels he could cash the check in the amount of $24,500 for the lot, then $21,524 for the interest and out of pocket expenses, in addition he received for his time spent hiring professionals from Santa Barbara Title. The

lawsuit was based on the lot at 1837.5 El Camino de la Luz, being worthless due to lack of required 15 ft. easement.

Lastly, June 4, 1997, Stephen Wiley, assistant City Attorney, writes a letter to Barthels informing him that "the city cannot process an application.... until Dr. Barthels demonstrates that the 15 ft. wide easement access originally represented to the City Council as the necessary vehicular access to the parcel does in fact exist and can legally be utilized in perpetuity." Mr. Wiley further referenced a stipulation filed in Morgan V Barthels, et. al. (Santa Barbara Superior Court Case NO 186256) wherein Barthels stipulated that he would "not now and will at no time in the future claim an easement over or across THE WESTERLY 7.5 FEET". 9-1
I can provide more documentation regarding this when Ray Franco is available in one week.

My question is, based on the information that I provided, why does the application being processed?

Best Regards,

Bruce & Grace Peterson
1837 El Camino de la Luz
Santa Barbara, Ca. 93109

Comment Letter No. 9
Bruce Peterson
Date: March 28, 2012

9-1. This comment expresses opinions of the commenter and provides background information regarding the project applicant's acquisition of the project site. The comment does not address the adequacy of the environmental review provided by the Revised Draft EIR. CEQA Guidelines Section 15088 requires the Lead Agency to provide written responses to comments that address "environmental issues." Since the comment does not address an environmental issue, no additional response is required. The comment has been included in the Final EIR to inform decision-makers of the commenter's opinions.

Letter No. 10

RECEIVED
APR 16 2012
CITY OF SANTA BARBARA
PLANNING DIVISION

From: Bruce Peterson <brucefpeterson@cox.net>
Subject: **Draft EIR**
Date: April 16, 2012 6:14:18 AM GMT-08:00
To: Kathleen Kennedy <kkennedy@santabarbaraca.gov>
Cc: "rayfranco@aol.com" <Rayfranco@aol.com>, Greg Smith <kaishin@me.com>, Stan Krome <SKrome@FirstCrescent.com>, Joanna Morgan <joannakmorgan@gmail.com>, Tom Sloan <thomassloan@me.com>

Kathy,

16 Aptil 2012

I, like my neighbor Greg Smith, gave my 2 minutes of speaking time at the April 5, 2012 Planning Commission Hearing to Ray Franco so he could present our concerns and point out errors and omissions, however, he was cut short by 7 minutes, so I feel compelled to add this to the public record and to be included in the comments for the Draft EIR.

To whom it may concern-
The purpose of this letter is to question the East and South boundaries of the BUILDING ENVELOPE AS CURRENTLY CHOSEN IN THE DRAFT EIR for the project proposed at 1837.5 El Camino de la Luz, Santa Barbara, Ca. 93109.
EASTERN BORDER OF PROPOSED ENVELOPE
1. Public views from La Mesa Park, benches and footbridge are impeded by a structure that sticks out into the creek it blocks blue water panoramic vistas. This Public View Corridor forms a small canyon and is appropriately named Lighthouse Creek on City maps. 10-1
2. Top of Bank. as defined by Santa Barbara Creeks Division, Parks and Recreation Department, is located where the asphalt protective covering terminates on the East side of the property. Although not in Municipal Code, only Mission Creek, at this time has that status, the Creeks Division recommends a minimum of 25 feet from the Top Of Bank. This would move the Eastern line building envelope Westward to approximately 30 feet from Western property line. 10-2
SOUTHERN BORDER OF PROPOSED ENVELOPE
1. The California Coastal Commission clearly states if a step like condition occurs near the top of a Bluff, the landward side of the Bluff will be considered the Top of Bluff.
This is the exact condition that is observed at the Southeast corner of the building envelope described and pictured in the Draft EIR. That was the area, after removing brush and Ivy, was used as a picnic area decades ago. Due to bluff-top erosion, it is only accessible with a strong set of legs. During the site visit on April 3, 2012 not one member of the Planning Commission or the entourage traversed the bluff-face to view the Top of Bluff as shown in the Draft EIR. The furthest anyone wanted to explore was the Top of Bluff as surveyed by Penfield and Smith, which is where the protective 10-3

layer of asphalt terminates. A degree in geology is not needed to see the logic that formed the bases of the California Coastal Commission 's definition.

2. Rate of Bluff Retreat

I will keep this simple with local examples-

a. 1921 and 1925 El Camino de la Luz -Feb. 14 1978. Result was 2 homes destroyed.

b. 6707 Del Playa Isla Vista. 1990's. While I owned this property 20 feet of bluff retreated during the 5 years I owned it, as was the case with many other Del Playa properties. Result was subsequent owner(s) removed 30 feet from the oceanside of the two story duplex. The county, when issuing building permits in the 1960's underestimated the rate of bluff retreat. The economic life was less than half of what had been expected. 10-4

c, Shoreline Park January 2008. This recent bluff failure,
on land managed by knowledgeable city staff, shows the episodic nature of bluff slides, and is not a yellow light,of caution, but a red light to stop. The Shoreline Park landslide is 2000 yards from the proposed project at 1837.5 El Camino de la Luz. Result is loss of sidewalks , 4 foot high chain link fencing, and 120 foot long by 60 foot wide usable walking paths in the Park.

SUMMARY AND RECOMMENDED ACTION BY EIR CONSULTANTS---

1. Hire a competent geologist, one that is versed in California Coastal Commission determinations of the Top of Bluff. Use the same standards that were found in the recent document MST 2009-00495, presented at the Planning Commission December 1, 2011. 10-5

2. Contact Creeks Division of Parks and Recreation to arrive at proper Top of Bank from Lighthouse Creek. then consider the setback they recommend, as you may know this is relativity new, following the passage of Measure B by Santa Barbara City voters in 2000. 10-6

3. Seismic Safety Element relating to bluff retreat. a Certified Engineering Geologist should make the determination, and redraw the 75 year setback line from the California Coastal Commission defined Top of Bluff. 10-7

4. Coastal Act Development Policy, section 30241, 10-8
Protect our Public Views.

Thank you for your consideration-

Bruce Peterson

Santa Barbara

Footnote-

Hypothesis Theory Experimentation Observation Discovery Proof

Visit 1837.5, walk the yellow cation tape delineating Top of Bluff in current EIR drawings, then implement The Scientific Method- .

Comment Letter No. 10
Bruce Peterson
Date: April 16, 2012

10-1. The Second Revised Draft EIR provides an extensive analysis of the project's impacts to important public scenic views including views from La Mesa Park and the bridge across Lighthouse Creek, including loss of ocean views. The EIR's analysis concluded that the proposed project would not result in significant impacts to ocean views, but could have the potential to result in significant impacts to important public scenic views due to future landscape tree growth and changes to the color of the proposed residence. The EIR identified mitigation measures that would reduce those potential impacts to a less than significant level.

10-2. Please refer to Topical Response No. 2: Location of the Top of the Lighthouse Creek Canyon Slope on the Project Site. The location of the top of the Lighthouse Creek canyon slope at the project site was revised in the Second Revised Draft EIR and an evaluation of the project based on the revised top of slope location determined that potential slope stability impacts would be reduced to a less than significant level with the implementation of mitigation measure GEO-2 (Foundation Design Approval). As indicated by this comment, the City has not adopted a top of creek bank setback standard that is applicable to Lighthouse Creek.

10-3. Please refer to Topical Response No. 1: Location of the Ocean Bluff Edge on the Project Site.

10-4. Please refer to Topical Response No. 3: Analysis of Potential Ocean Bluff Stability Impacts at the Project Site; and Topical Response No. 4: Rate of Ocean Bluff Erosion at the Project Site.

10-5. Please refer to Topical Response No 1: Location of the Ocean Bluff Edge on the Project Site.

10-6. Please refer to Topical Response No. 2: Location of the Top of the Lighthouse Creek Canyon Slope on the Project Site. The City has not adopted a top of creek bank setback standard that is applicable to Lighthouse Creek.

10-7. Please refer to Topical Response No. 3: Analysis of Potential Ocean Bluff Stability Impacts at the Project Site; and Topical Response No. 4: Rate of Ocean Bluff Erosion at the Project Site.

10-8. The Second Revised Draft EIR includes an analysis of the project's consistency with Coastal Act Section 30251, which addresses the protection of scenic and visual qualities of coastal areas (Page 6-5). Coastal Act Section 30241, as referenced by this comment, pertains to the preservation of prime agricultural land in coastal areas. The EIR's analysis determined that with the implementation of proposed mitigation measures AES-

1 (Color Approval) and AES-2 (Landscape Plan Compliance), the proposed project would be consistent with the requirements of Coastal Act Section 30251.

Letter No. 11

Kennedy, Kathleen

From: Greg Smith [kaishin@me.com]
Sent: Wednesday, March 28, 2012 4:25 PM
To: Kennedy, Kathleen
Subject: Re: 1837 1/2 El Camino de la Luz

DISTRIBUTED TO: DATE: 3/29/12
PLANNING COMMISSION (7) via Mail
SR. PLANNER, ASST. CITY ATTY.
CASE PLANNER APPLICANT('S)
AGENT PC SEC, ENTERED AS INT
PARTY ON DATE:
BY:

Dear Ms Kennedy,
I would like to present the following comments to the Commission:

My neighbors, especially Ray Franco, have commented at length, so there is little for me to add. My wife and I are in a somewhat different situation from the rest of our neighbors because we live next-door to the proposed project (to the west), because we bought our home here recently, and because we bought in reliance upon assurances from many sources, including the City, that a permit could not be obtained to build a residence on this lot.

11-1

When we bought our house at 1839 El Camino de la Luz two years ago, we inquired about the vacant lot next door. We were assured by the seller and others that the lot could not be built upon. The reasons given were backed up by very convincing evidence. It was proved to our satisfaction that we would be safe from having a construction project just outside our window. The owner himself, the courts, the City Engineer and the City Attorney were all shown to be in agreement that this was not a lot upon which anyone could build a house. We relied, in part, on these three items in the public record:

1. The owner, Dr. Barthels, has claimed -- in court -- that this lot is worthless because it does not have a 15-foot access easement and that therefore he would not be able to build on it. The title company and a court agreed, and the title company paid Dr. Barthels his entire purchase price, plus expenses. Thus, Dr. Barthels has been made whole after his mistaken purchase of this lot which he has successfully claimed to be worthless. He should not now be heard to claim that it is a proper building site and therefore very valuable. *Barthels v. Santa Barbara Title Company,* 1994, is here quoted:
   - "Barthels, a local dentist, planned to build his residence on the parcel. In June of 1989, during the permitting process, he learned that the access easement was only seven and a half feet wide and not 15 feet as represented by the title company. The City refused to issue a building permit without a 15 foot wide easement. * * * Barthels sued the Title Company alleging abstractor's negligence in determining that Barthels had a 15 foot wide easement. * * * At trial Barthels testified that in 1989 when he learned of the deficit in title, the property was worth $800,000 with the 15 foot easement and nothing without the easement."
   -
2. On December 8, 1999, under the Seal of the City of Santa Barbara, the City Engineer, R. Patrick Kelly, issued a Conditional Certificate of Compliance, recorded in the Official Records, in the Office of the County Recorder, which stated,
   - **The real property described herein is required to comply with the following specific condition:**

     Provide evidence, satisfactory to the City Engineer that the owner of the parcel described herein substantially possesses <u>the required amount of legal access that formed the basis of the originally approved lot split.</u>

All permits of the City of Santa Barbara needed by the owner of the real property described herein for the development of improvements, including any development of improvements to implement the above condition, and permits and other grants of approval for the development of the real property in the future **shall be subject to the condition listed above. . . . [T]he fulfillment and implementation of the condition set forth herein shall be required prior to any subsequent issuance of City permits or other grants of approval for development of the real property.** 11-1

3. A letter from the City Attorney was submitted to the Planning Division in 1997 stating,
   - "After reviewing all the materials submitted as well as all the materials contained within City records, including particularly the minutes of the May 1958 City Council approval of the lot split which created the parcel at 1837 1/2 Camino de la Luz, **it is our conclusion that the required legal access to the parcel is not clearly and definitively established from a legal standpoint. As a result, the City cannot process an application for the development of that parcel with a single family home until you and Dr. Barthels demonstrate that the 15 foot wide easement access originally represented to the City Council as the necessary vehicular access to the parcel does in fact exist and can legally be utilized in perpetuity."**

My wife and I also relied on our observation that the potential building pad was less than 60 feet deep from the entrance to the edge of the bluff. Allowing for a safe setback, under today's rules, no house could be squeezed into this space.

Our house is a flat-roofed single-story house built on a deeper cut than Barthels' lot. The neighbors behind us can see over our house to the ocean. We believed that no decent human being would try to build a two-story house next door -- one which would block the views of his neighbors -- and that even if such a rude act were attempted, the City would not allow it.

We relied on the principle of burden of proof. To us, the record shows a prima facie case against Barthels' plans. The burden should be on him to show that the status of the lot is not as stated by the City Attorney (above) and others, including Barthels himself in his suit against Santa Barbara Title Company in which he claimed the property was worthless without a 15-foot easement. Absent such a showing, he must not be allowec to continue trying to develop what appears, from all the evidence, to be a proper site only in his imagination. With the burden of proof on him, we believe that it is unfair to allow him to proceed with his plans, thus forcing his neighbors to argue against them.

Finally, we wish to express our solidarity with our neighbors, all of whom oppose the proposed project.

Respectfully submitted,

Greg Smith
1839 El Camino de la Luz

Comment Letter No. 11
Greg Smith
Date: March 28, 2012

11-1. This comment expresses opinions and provides information regarding a variety of issues related to the project. The commenter asserts that the project site is not a buildable lot and provides background information regarding the project applicant's acquisition of the project site. These comments do not address the adequacy of the environmental impact analysis included in the Revised Draft EIR. CEQA Guidelines Section 15088 requires the Lead Agency to provide written responses to comments that address "environmental issues." Since the comment does not address an environmental issue, no additional response is required. The comment has been included in the Final EIR to inform decision-makers of the commenter's opinions.

Letter No. 12

Kennedy, Kathleen

From: Greg Smith [kaishin@me.com]
Sent: Thursday, March 29, 2012 11:11 AM
To: Kennedy, Kathleen
Cc: Joanna Morgan; Stan Krom; Ray Franco; Bruce Peterson; Tom Sloan; Judith Smith; Tom Morrison; David Magnusson
Subject: False statement in EIR, Impact of construction

Kathy, PLEASE ALSO INCLUDE MY COMMENTS BELOW

To Kathleen Kennedy, Associate Planner, City of Santa Barbara Planning Division:

Dear Ms Kennedy,

Reference is made to the published notice I have received from your office, HEARING FOR THE 1837½ EL CAMINO DE LA LUZ RESIDENCE PROJECT - MST2002-00214.

1. False statement in your notice and in the EIR
I object the very wording of the notice. The statement, "Access to the site would be provided by private easements", is so misleading as to be false. This language is repeated frequently in the EIR. For the purpose of building a house, access would not be provided. The only access available is, at one point, only 7.5 feet wide. I agree that access to the property can be provided for pedestrians and pack animals, even laborers with wheelbarrows, but a mid-size car, which is 6.5 feet wide at the mirrors, can pass with only 6 inches clearance on each side. A small pickup with a skilled driver might make it through with only occasional scratches. You can be sure that the owners of the properties on either side will not allow anything wider to pass because we all oppose this project with a passion and have been fighting it for two decades. To say, "access would be provided", is, I am sorry to say, a lie.

12-1

2. Impact of construction
One cannot build a house with this lack of private access, at the end of El Camino de la Luz, without depriving a much larger community of people--not just the adjacent property owners--of their reasonable rights of ingress and egress, turn-around space and parking. Every weekday, so many trucks would have to stop in the cul-de-sac that many of us who rely on the public road would find it almost continuously blocked to some extent. Truckloads of building materials would have to be carried down the lane while the trucks waited in the cul-de-sac, blocking passage of cars to and from at least four other driveways. Hoses for pumped concrete would have to run 300 feet down the easement while the huge cement truck blocked access to and from 1839, 1903 and 1905 El Camino de la Luz. Just one truck can prevent everybody from turning around.

The Notice states: "Grading quantities total approximately 288 cubic yards of cut and 21 cubic yards of fill." How are 267 cubic yards of surplus cut going to be removed? No vehicle capable of hauling more than one cubic yard will be allowed to visit the site. That's 267 trips up and 267 trips down the narrow lane. We would have to live next to this folly. And what machinery will do this cutting and filling? Perhaps 200 laborers with shovels? It would be easier for a camel to pass through the eye of a needle than for materials for this project to reach their intended destination.

So, to sum up, saying that "access would be provided" is tantamount to pernicious lie. ***I request, therefore, that in the future the Commission remove this or any similar language from your communications to the public.*** Access has not been granted! Adequate access for construction purposes will not be permitted. To say so is a slander of our property rights. I believe that, to be honest, any project description must contain words to the

effect that access appears to be only 7.5 feet wide and that any claim of a wider easement is being aggressively contested by the owners of the properties over which an easement is claimed.

There are six property owners surrounding the Barthels lot, all of whom are adamantly opposed to his seemingly perpetual attempts to perform the alchemy of turning this scrap of a parcel into a golden homesite. I believe that I speak for the others in saying that we are very disturbed by the apparent willingness of the City even to accept plans for review. At the very least, language to the effect that "access to the site would be provided by private easements" must not be allowed to be repeated over and over in the published documents, especially including the EIR.

Very truly,

Gregory M. Smith 12-1
1839 El Camino de la Luz

HEARING FOR THE 1837½ EL CAMINO DE LA LUZ RESIDENCE PROJECT - MST2002-00214

PROJECT LOCATION: The project site is located at 1837½ El Camino de la Luz.

PROJECT DESCRIPTION: The proposed project involves construction a 1,505 square foot (net), two-story single family residence with an attached 429 square foot garage on a 23,885 square foot vacant bluff-top lot. Grading quantities total approximately 288 cubic yards of cut and 21 cubic yards of fill. Access to the site would be provided by private easements extending south from the terminus of El Camino de la Luz.

Comment Letter No. 12
Greg Smith
Date: March 29, 2012

12-1. This comment expresses opinions regarding the proposed project, and the adequacy of the existing driveway access to the project site particularly in regard to access by construction vehicles.

In regard to opinions related to the proposed project, those opinions do not address the adequacy of the environmental impact analysis included in the Revised Draft EIR. CEQA Guidelines Section 15088 requires the Lead Agency to provide written responses to comments that address "environmental issues." Since the opinions do not address an environmental issue, no additional response is required. The comment has been included in the Final EIR to inform decision-makers of the commenter's opinions.

In regard to the adequacy of the proposed project site access, please refer to Topical Response No. 5: Vehicle Access to the Project Site. Access to the project by construction vehicles was evaluated by the Revised Initial Study prepared for the project, and it was concluded that compliance with proposed mitigation measure T-1 (Evidence of Adequate Access) would be "…adequate to allow construction equipment to traverse the private easements to access the subject property…" With the implementation of this mitigation measure, temporary construction-related impacts of the project would not be eliminated but would be reduced to a less than significant level. In addition, recommended mitigation measure T-2 requires that the "haul route" for all construction-related trucks three tons or more in size that enter or exit the project site be approved by the Transportation Engineer.

Letter No. 13

Kennedy, Kathleen

From: Greg Smith [kaishin@me.com]
Sent: Thursday, March 29, 2012 1:50 PM
To: Kennedy, Kathleen
Cc: Joanna Morgan; Stan Krom; Ray Franco; Bruce Peterson; Judith Smith; Tom Sloan; Tom Morrison
Subject: Re: 1837.5 El Camino de la Luz

Kathy,
Please have these comments placed in the record.

My neighbors and I are being unnecessarily and unfairly hurt by the hearing process.

The applicant must be required to address first things first.
I would like to discuss the threshold issue, the question that logically needs to be decided first. We shouldn't be arguing "what kind of house" until we resolve the question of whether any house at all can be built under the rules--and I'm referring to the rules governing a lot split, as well as all the rules regarding access for various purposes. The point is that there are questions of law that need to be addressed first, and that the burden of proof is on the applicant. Ray Franco and others have made the prima facie case that the alleged lot split was a mistake (if not fraudulent). The applicant has not rebutted these assertions.

The original lot split must be considered invalid
It has been argued that 1837.5 is a legal lot and that "in 2009 it was determined that the parcel does have legal access, although it is only 7.5 feet wide in one area". I contend that the original lot split was improper and that this fact cannot be undone. If, in 2009 it was determined that the parcel does have (barely) legal access, whoever made this determination must have been referring to something other than the absolute, unalterable 15-foot requirement for the ORIGINAL LOT SPLIT. There may now be legal access for some purpose (probably not construction), but there never was the legal access required for a lot split.

13-1

Do we need to look at this issue now?
Yes! You say that it is a "mitigation measure" that the owner provide evidence of the required access. That does not negate the fact that it is also logically imperative that this issue be considered first. As you say, it was determined a long time ago that eventually the City Engineer and the City Attorney must be satisfied, but that doesn't mean that we cannot now recognize an obvious truth and act on it.

Perhaps, however contrary to procedural logic, you "do not need to have a final resolution on the access issue in order to proceed with the processing of the proposed project." Perhaps the present question of sufficient access can be debated, but it is indisputable that, in the words of the quoted T-1, "the required amount of legal access that FORMED THE BASIS OF THE ORIGINAL LOT SPLIT" is 15 feet. A mistaken (or fraudulent) claim of 15-foot-wide access was made on application for the lot split. After the purported lot split, it was proved that, in fact, such access did not exist. Any subsequent determination that a legal lot was created is virtually meaningless and is in danger of being overturned by the courts.

Now the applicant is trying to skip over the threshold issue in an apparent attempt to take the permit process so far that it might be possible, at the last minute, to get final approval while my neighbors and I are distracted and fail somehow to present adequately the case I am trying to make now. I purchased my house in reliance upon undisputed facts and clear law that proved to me that no one could build a house on this fragment of a lot. I cannot afford to let a threshold issue be put off. We need to stop to arguing "what kind of house", a dispute that can go forever. My wife and I cannot rest until there are no more hearings that assume that a house legally could be built.

We have two separate questions of access easement--one then and one now.
What is the required amount of access for purposes of deciding this threshold issue? Could it be less than 15 feet, as determined in 2009? No! First one must look to the law at the beginning. The 15-foot requirement cannot be changed because it is the "amount of legal access that formed the basis of the original lot split". At the genesis of this whole dispute--on day one--we see the absence of a fundamental requirement for a lot split. Any purported lot split that did not provide a 15-foot access easement for the split-off portion is invalid. The act of creation is void. There is no legal separate building site. Period. I would contest any subsequent official declaration to the contrary. If this is a "lot", it is in the realm of the imaginary. What we have is land with a label, but with a true status in limbo.

There is a law suit brewing
One cannot proceed as if the lot split itself existed if this basis (condition precedent) for a lot split did not exist. No basis for existence equals no existence -- except in magical thinking. Whatever the status of this scrap of a parcel, it was not created legally. Subsequent attempts to make it a legal lot should not be allowed to make it so by denying the law that existed at the time of its creation. Because it is not a legal lot, we do not reach the question of whether there is now sufficient access. It is a moot point. Any determination that this is a legal lot can, and should be overturned.

13-1

Conclusion
It is my contention that the Commission cannot hear an application for construction on a "lot" that does not legally exist. Alternatively, if the Commission insists that this is a legal lot, I submit that a law suit is brewing that might conclude with a finding that neighbors such as I have been injured by the City dragging us through this hearing process without first having Barthels address the threshold issue. The applicant must be required to address first things first. Otherwise, I and my neighbors are being unnecessarily hurt by the process.

Very truly,

Gregory M. Smith
(who lives next door and who purchased his home in reliance upon the logic of the above).

RESPONDING TO YOUR LETTER POINT-BY-POINT:

On Mar 5, 2012, at 4:25 PM, Kennedy, Kathleen wrote:

Greg,

> Thank you for providing comments on this project. As you know, we will be accepting comments up until April 16th as well as at the Planning Commission hearing on April 5th.

> Originally (in 2006 and before) a mitigation measure was prepared to address the access issue as follows:

"T-1 Evidence of Adequate Access. Provide evidence, satisfactory to the City Engineer and City Attorney, that the owner of the subject parcel substantially possesses the required amount of legal access that formed the basis of the original lot split."

As you can see, it was determined a long time ago that we did not need to have a final resolution on the access issue

BUT THERE IS STILL THE ISSUE OF WHETHER IT IS A LEGAL LOT. THIS HAS BEEN RESOLVED

in order to proceed with the processing of the proposed project. The mitigation measure listed above is still included in the EIR and therefore will be a condition of approval for the project.
GOOD -- BUT THAT DOESN'T MEAN THAT WE CAN IGNORE THE FACT THAT THE BASIS FOR THE ORIGINAL LOT SPLIT WAS MISTAKEN OR FRAUDULENT.

13-1

However, as you know, in 2009 it was determined that the parcel does have legal access, although it is only 7.5 feet wide in one area.

7.5 FEET IS NOT LEGAL ACCESS FOR A LOT SPLIT. ALSO, ALTHOUGH IT IS NOT MY MAIN POINT, 7.5 FEET IS NOT SUFFICIENT ACCES FOR PURPOSES OF BUILDING A HOUSE.

All associated documents related to this are currently being reviewed by City staff.

You state in your other emails that "the law says 15 feet". What law are you referring to?

I WILL ASK AN ATTORNEY TO LIST FOR YOU ALL THE RULES, REGULATIONS, ORDINANCES, STATUTES, COURT OPINIONS, COMMON-LAW AND CONSTITUTIONAL PRINCIPALS THAT MAKE UP "THE LAW" WHICH "SAYS" 15 FEET IS A RULE THAT IS DISPOSITIVE IN THIS CASE.

Thank you,
Kathy

Kathleen A. Kennedy, LEED AP
Associate Planner
City of Santa Barbara
Community Development Department
Planning Division
630 Garden Street, P.O. Box 1990
Santa Barbara, CA 93102
Tel: 805-564-5470, Extension 4560
Fax: 805-897-1904
email: kkennedy@SantaBarbaraCa.gov
www.SantaBarbaraCa.gov

Comment Letter No. 13
Greg Smith
Date: March 29, 2012

13-1. This comment expresses opinions regarding the validity of the lot split that created the project site parcel, and asserts that the proposed project should not be considered at this time because it has not be adequately demonstrated that the project site is a legal lot or that adequate access can be provided.

The manner in which the project parcel was created is not an environmental issue evaluated by the Revised Draft EIR. CEQA Guidelines Section 15088 requires the Lead Agency to provide written responses to comments that address "environmental issues." Since the comment does not address an environmental issue, no additional response is required. The comment has been included in the Final EIR to inform decision-makers of the commenter's opinions.

Please refer to topical response No. 5: Vehicle Access to the Project Site regarding the adequacy of project site access.

Letter No. 14

-----Original Message-----

From: Greg Smith [mailto:kaishin@me.com]

Sent: Thursday, March 01, 2012 4:33 PM

To: Kennedy, Kathleen

Cc: Joanna Morgan; Stan Krom; Ray Franco; Bruce Peterson; Judith Smith; Tom Sloan

Subject: 1837.5 El Camino de la Luz

Dear Ms Kennedy,

I don't understand why a concept review hearing should even be considered for a lot which is not a legal building site. Having the hearing implies that Barthels could build there. Before he can prove he has the requisite access, he should not be allowed to proceed as if he had a right to build a residence, whatever the concept. Not only has he not proved that it is build-able lot, the opposite has been shown convincingly.

I request that Mr. Barthels not be allowed to argue his case before the Planning Commission until he can rebut the evidence that his property is not a legal site for any residence. To allow him to proceed with his plans, and to make his neighbors argue against them, is to assume as fact a status which is not supported by the evidence. The burden should be on him to show that the status of the lot is not as stated by the City Attorney (see below) and others, including Barthels himself in his suit against Santa Barbara Title Company in which he claimed the property was worthless without a 15-foot easement. Absent such a showing, he must not be allowed to continue trying to develop what appears, from all the evidence, to be a proper site only in his imagination. 14-1

Again, I ask that this proposed development be be blocked until the owner can show that the requirement of a 15-foot access easement somehow has ceased to exist.

Very truly,

Gregory M. Smith

1839 El Camino de la Luz

Comment Letter No. 14
Greg Smith
Date: March 1, 2012

14-1. This comment expresses the opinion that the project site is not a legal building site. CEQA Guidelines Section 15088 requires the Lead Agency to provide written responses to comments that address "environmental issues." Since the comment does not address an environmental issue, no additional response is required.

Letter No. 15

Kennedy, Kathleen

From: Greg Smith [gms@gregmsmith.com]
Sent: Saturday, April 14, 2012 1:10 PM
To: Kennedy, Kathleen
Cc: Ray Franco; Stan Krom; Bruce Peterson; Tom Sloan; Tom Morrison; Judith Smith; Joanna Morgan; Tony Fischer; David Magnusson; Jim Brooke
Subject: 1837.5 El Camino de la Luz

Kathy, Please add these final comments to the record.

After having attended the hearing on the Draft EIR, I have the following comments:

1. At the hearing, I and several of my neighbors were denied our fair amount time to make our case because we ceded our time to Ray Franco for him to represent us and then Mr. Franco's time was limited to only 15 minutes. Mr. Franco had asked for 20 to 30 minutes and we gave him our time so as to give him the time he needed. Enough of us ceded time to Mr. Franco for him to have the 20 or 30 minutes he requested. If I had known that Mr. Franco would have been thus limited, I would have requested my time. My case is unique in that I bought my property recently and relied on the record concerning the lot split and the lack of access. Thus, my case has the element of detrimental reliance on the City's published rulings and statements. My concerns were not expressed because my agent, Mr. Franco, was denied the time I had ceded to him. Also, in general, the applicant was granted much more time than his opponents. 15-1

2. The applicant is contradicting himself and is not beeing challenged by the Commission to defend the contradiction. We have presented abundant evidence that this lot never was a legal site for a residence -- that it has been defective from the beginning. The applicant should be prevented from effectively arguing the contrary because of the legal principle (estoppel) that precludes a person from asserting a fact or a claim inconsistent with a position he previously took, either by conduct or words, especially where the representation has been relied or acted upon by others. The applicant, in his pleadings in the case of Barthels v. Santa Barbara Title Company, alleged that this lot was worthless. The City had refused to issue a building permit without a 15 foot wide easement. The applicant sued the title company and won, recovering his entire purchase price, plus expenses, on the ground that no one could build there. Now he is claiming the opposite.

15-2

3. I am worried that with every minute the Commission considers the applicant's plans and arguments the Commissioners are implying that he has the right to build on this lot. We have made the prime facie case that he does not, because the lot has had a defect from the time of its creation. The burden of proof is now on the applicant to show he has the required amount of access--that somehow this defect has been cored. As the threshold issue of access is pushed further and further into the future, the momentum of the project tends to overwhelm the fact that no house can be built on a lot with only 7.5 feet of access. At the recent hearing, I was alarmed that some of the Commissioners acted as if it had been decided that the applicant had a right to build a house on this lot and that only the details needed to be decided. The applicant has not met his burden of proof on this issue. Therefore, I believe it is improper for any the Commissioners to imply that he has.

4. We, the neighbors in opposition, are being treated unfairly in that restrictions that apply to some other applicants for projects in similar situations are not being imposed on the applicant in this case. It seems to me that the rules have been bent in this applicant's favor. I am referring to rules regarding the location of "top of bluff", the required setback, the extent of geological/engineering analysis, the logistics of getting materials to the site and removing over 250 cubic yards of cut, etc. We have shown proof--and will present more--that other applicants on this same bluff have been held to stricter rules. There seems to be a bias in favor of this applicant, or at least the inadvertent application of a double standard. 15-3

5. The Coastal Zone Commission has rules regarding "top of bluff", setback and other matters different from those that appesr to be in use in this application. So far, in this case, little or no effort has been made to determine and apply these overriding rules. The applicant seems to telling us the rules, avoiding the inconvenience of respecting the Coastal Commission. 15-4

6. There is a public easement for a beach-access trail which crosses the applicant's land (and my land also) recorded in Instrument No.16515 in Book 762 Page 304 of Official Records. Counsel for the City expressed no knowledge of this public easement and the applicant has shown no plans to accommodate the public. 15-5

Submitted by Gregory Smith, 1839 El Camino de la Luz

Comment Letter No. 15
Greg Smith
Date: April 14, 2012

15-1. This comment provides introductory remarks and does not address the adequacy of the environmental impact analysis included in the Revised Draft EIR. CEQA Guidelines Section 15088 requires the Lead Agency to provide written responses to comments that address "environmental issues." Since the comment does not address an environmental issue, no additional response is required.

15-2. This comment expresses opinions regarding the determinations of a previous court case pertaining to the project property, and asserts that the project site does not have adequate vehicle access.

The previous court case is not an environmental issue evaluated by the Revised Draft EIR. CEQA Guidelines Section 15088 requires the Lead Agency to provide written responses to comments that address "environmental issues." Since the comment does not address an environmental issue, no additional response is required. Please refer to Topical Response No. 5: Vehicle Access to the Project Site related to comments regarding vehicle access to the project site.

15-3. This comment addresses several project-related issues, including the location of the top of the ocean bluff on the project site, geologic and engineering analysis related to the project, and potential short-term construction-related impacts resulting from the use of the access driveway.

In regard to the location of the top of the ocean bluff on the project site, please refer to Topical Response No 1: Location of the Ocean Bluff Edge on the Project Site.

The comment regarding the geologic and engineering analysis conducted for the project does not identify specific concerns that can be responded to. However, in regard to recent analysis conducted for the project please refer to Topical Response No. 2: Location of the Top of the Lighthouse Creek Canyon Slope on the Project Site, and Topical Response No. 3: Analysis of Potential Ocean Bluff Stability Impacts at the Project Site.

In regard to construction-related access to the project site, please refer to Topical Response No. 5: Vehicle Access to the Project Site. Access to the project by construction vehicles was evaluated by the Revised Initial Study prepared for the project, and it was concluded that compliance with proposed mitigation measure T-1 (Evidence of Adequate Access) would be "…adequate to allow construction equipment to traverse the private easements to access the subject property…" With the implementation of this mitigation measure, temporary construction-related impacts of the project would not be eliminated but would be reduced to a less than significant level. In addition, recommended mitigation measure T-2 (Construction Traffic) requires that the "haul route" for all

construction-related trucks three tons or more in size that enter or exit the project site be approved by the Transportation Engineer.

15-4. Please refer to Topical Response No 1: Location of the Ocean Bluff Edge on the Project Site. The location of the top of the ocean bluff at the project site was revised in the Second Revised Draft EIR and an evaluation of the project based on the revised top of bluff location determined that the project would be consistent with applicable Coastal Act policies and regulations. The EIR also concluded that potential bluff retreat-related impacts would be reduced to a less than significant level with the implementation of mitigation measure GEO-1 (Storm Water Pollution Control, Drainage Systems Maintenance and Project Site Landscaping).

15-5. This comment refers to a public easement for beach access that crosses the project site. Project-related impact to beach access was not an environmental impact evaluated by the EIR, however, the Plans and Policies Analysis section of the Second Revised Draft EIR (Section 6.0) evaluates the project's consistency with City Local Coastal Program Policy 2.1, which requires that "*Public access in the coastal bluff areas of the City shall be maximized consistent with the protection of natural resources, public safety, and private property rights.*" The analysis of the project's consistency with this policy states that the project site includes an informal access path that extends down the coastal bluff to the beach, and access to the path is provided by a three-foot wide easement located along the western perimeter of the project site. The analysis concluded that the proposed project would not make any alterations to the existing beach access pathway or impede use of the existing access easement.

Each of the five properties that use the driveway has a recorded beach access easement over the project site. There is no evidence of a public beach access easement on the project site.

Letter No. 16

Kennedy, Kathleen

From: Greg Smith [kaishin@me.com]
Sent: Sunday, April 15, 2012 8:45 AM
To: Kennedy, Kathleen
Cc: Ray Franco; Stan Krom; Joanna Morgan; Bruce Peterson; Judith Smith; Tony Fischer; Tom Sloan; Tom Morrison
Subject: Request that the City take immediate action
Attachments: Barthels Demand Letter 4-13-12 revised.pdf; ATT00001.htm

Kathy,
Please include this letter in the comments on the Draft EIR.
A PDF version is attached.
Here is a text version:

Gregory M. Smith
1839 El Camino de la Luz
Santa Barbara, CA 93109-1924
(805) 962-2689
gms@gregmsmith.com

Mr. James Armstrong
City Administrator
City of Santa Barbara
City Hall, De La Guerre Plaza
Santa Barbara, CA 93101

Mr. Stephen Wiley
City Attorney
City of Santa Barbara
740 State Street, Suite 210
Santa Barbara, CA 93101

April 14, 2012

Re: **1837.5 El Camino de la Luz; Faulty EIR Excavation**

Dear Mr. Armstrong and Mr. Wiley:

The purpose of this letter is to request that the City take immediate action to correct a condition on the above property caused by the trenching and back-filling carried out by the City's consultant, Dr. William Anikouchine. An EIR has been prepared and circulated for a proposed residence on the adjoining property to my house. As part of the EIR soils investigation, the City's consultant directed the excavation of trenches to take samples and to conduct a visual inspection. The excavation was requested by the Applicant, Dr. Barthels, who paid for the excavation and back-filling directly. The excavation and faulty back-filling exposes my property to a potential landslide.

The consultant and the Planning Commission were advised by my neighbor, Ray Franco, at previous EIR hearings that this was a potential hazard. The City's consultant assured the Planning Commission that the trenches would be restored with 95% compaction. When asked how, his response was "they do this all the time".

City Planning Department staff was asked who directed the geologist to conduct the trenching. Staff stated that in June 2009 Dr. Anikouchine violated the City's protocol by working directly for the Applicant in carrying out the trenching and inspection, but that the City still considered him to be the City's geology consultant for the preparation of the EIR.

16-1

The trenches were dug and refilled under Dr. Anakouchine's direction without following industry standard compaction procedures. City Inspectors were not present. Water was not available on site. Neighbors witnessed and photographed the process. Within weeks of capping off the excavation, the subsoil began to collapse. The proposed EIR contains false information about how the trenches were filled and re-compacted.

This work was done under an arrangement with the City in an area with a history of catastrophic slides on our bluffs. The trenching and backfilling changes the drainage patterns toward my property. The surface drainage now lubricates the highly expansive bentonite bedding planes that dip toward and below my property. Additionally, the subsurface drainage from uphill properties can collect within the trench that the City's consultant has created below the alluvium and into the bedrock and clay bedding planes.

The existing conditions can be easily confirmed with new borings testing for compaction. I am requesting that the City without delay engage a licensed geologic engineer to determine the compaction of the trenches and the extent of the hazard created by the City's consultant. Dr. Anikouchine is not a licensed geologic engineer. If compaction is not found to be as claimed in the EIR, the trenches must be re-excavated and the hazard cured.

16-1

As you know, access to this site is very limited and inadequate. Neighbors will insist that any work be completed using the existing access easements and that City's consultants not trespass as was done when Dr. Anikouchine directed the trenching.

The existing condition is detrimental to my property. I request immediate action to test the existing conditions and to correct immediately any and all deficiencies in the back-filling and compaction carried out under the direction of the City's consultant. I am requesting that the City provide me information within ten calendar days of how it intends to proceed.

Thank you for your urgent attention to this matter.

Sincerely,

(signed) Gregory M. Smith

cc: Mayor Helene Schneider and Members of the City Council
Kathleen Kennedy, City Planning contact for EIR comments
Rodriguez Consulting, Inc.
Tony Fischer, Attorney at Law

Comment Letter No. 16
Greg Smith
Date: April 14, 2012

16-1. This comment expresses opinions regarding the manner in which a geological inspection trench constructed at the project site was backfilled, and asserts that Dr. Anikouchine worked directly for the project applicant.

Comments related to the backfilling of the geological inspection trench constructed at the project site do not address the adequacy of the environmental impact analysis included in the Revised Draft EIR. In regard to comments regarding Dr. Anikouchine, please refer to the February 11, 2011 email from City Staff member Daniel Gullet, which is attached to a March 17, 2012 comment letter submitted by Mr. Franco (comment letter 22), which clearly indicates that Dr. Anikouchine has not prepared project-related studies under the direction of the project applicant. Additionally:

- All work conducted by Dr. Anikouchine related to the analysis and review of the proposed project has been conducted to implement scopes of work developed with and approved by the City of Santa Barbara Planning Division.

- All work conducted by Dr. Anikouchine related to the analysis and review of the proposed project has been conducted in accordance with contract requirements between the City of Santa Barbara and Rodriguez Consulting Inc, the preparer of the Project EIR. Throughout the entire EIR preparation process, Dr. Anikouchine has worked exclusively as a subconsultant to Rodriguez Consulting Inc.

- Payment for all work conducted by Dr. Anikouchine related to the analysis and review of the proposed project has been provided by Rodriguez Consulting Inc.

Letter No. 17

Gregory M. Smith
1839 El Camino de la Luz
Santa Barbara, CA 93109-1924
(805) 962-2689
gms@gregmsmith.com

Mr. James Armstrong
City Administrator
City of Santa Barbara
City Hall, De La Guerre Plaza
Santa Barbara, CA 93101

Mr. Stephen Wiley
City Attorney
City of Santa Barbara
740 State Street, Suite 210
Santa Barbara, CA 93101

April 14, 2012

Re: **1837.5 El Camino de la Luz; Faulty EIR Excavation**

Dear Mr. Armstrong and Mr. Wiley:

The purpose of this letter is to request that the City take immediate action to correct a condition on the above property caused by the trenching and back-filling carried out by the City's consultant, Dr. William Anikouchine. An EIR has been prepared and circulated for a proposed residence on the adjoining property to my house. As part of the EIR soils investigation, the City's consultant directed the excavation of trenches to take samples and to conduct a visual inspection. The excavation was requested by the Applicant, Dr. Barthels, who paid for the excavation and back-filling directly. The excavation and faulty back-filling exposes my property to a potential landslide. 17-1

The consultant and the Planning Commission were advised by my neighbor, Ray Franco, at previous EIR hearings that this was a potential hazard. The City's consultant assured the Planning Commission that the trenches would be restored with 95% compaction. When asked how, his response was "they do this all the time".

City Planning Department staff was asked who directed the geologist to conduct the trenching. Staff stated that in June 2009 Dr. Anikouchine violated the City's protocol by working directly for the Applicant in carrying out the trenching and inspection, but that the City still considered him to be the City's geology consultant for the preparation of the EIR.

The trenches were dug and refilled under Dr. Anakouchine's direction without following industry standard compaction procedures. City Inspectors were not present. Water was not available on

site. Neighbors witnessed and photographed the process. Within weeks of capping off the excavation, the subsoil began to collapse. The proposed EIR contains false information about how the trenches were filled and re-compacted.

This work was done under an arrangement with the City in an area with a history of catastrophic slides on our bluffs. The trenching and backfilling changes the drainage patterns toward my property. The surface drainage now lubricates the highly expansive bentonite bedding planes that dip toward and below my property. Additionally, the subsurface drainage from uphill properties can collect within the trench that the City's consultant has created below the alluvium and into the bedrock and clay bedding planes.

The existing conditions can be easily confirmed with new borings testing for compaction. I am requesting that the City without delay engage a licensed geologic engineer to determine the compaction of the trenches and the extent of the hazard created by the City's consultant. Dr. Anikouchine is not a licensed geologic engineer. If compaction is not found to be as claimed in the EIR, the trenches must be re-excavated and the hazard cured. 17-1

As you know, access to this site is very limited and inadequate. Neighbors will insist that any work be completed using the existing access easements and that City's consultants not trespass as was done when Dr. Anikouchine directed the trenching.

The existing condition is detrimental to my property. I request immediate action to test the existing conditions and to correct immediately any and all deficiencies in the back-filling and compaction carried out under the direction of the City's consultant. I am requesting that the City provide me information within ten calendar days of how it intends to proceed.

Thank you for your urgent attention to this matter.

Sincerely,

Gregory M. Smith

cc: Mayor Helene Schneider and Members of the City Council
Kathleen Kennedy, City Planning contact for EIR comments
Rodriguez Consulting, Inc.
Tony Fischer, Attorney at Law

Comment Letter No. 17
Gregory Smith
Date: April 14, 2012

17-1. This comment expresses opinions regarding the manner in which a geological inspection trench constructed at the project site was backfilled, and asserts that Dr. Anikouchine worked directly for the project applicant.

Comments related to the backfilling of the geological inspection trench constructed at the project site do not address the adequacy of the environmental impact analysis included in the Revised Draft EIR. In regard to comments regarding Dr. Anikouchine, please refer to the February 11, 2011 email from City Staff member Daniel Gullet, which is attached to a March 17, 2012 comment letter submitted by Mr. Franco (comment letter 22). The email clearly indicates that Dr. Anikouchine has not prepared project-related studies under the direction of the project applicant. Additionally:

- All work conducted by Dr. Anikouchine related to the analysis and review of the proposed project has been conducted to implement scopes of work developed with and approved by the City of Santa Barbara Planning Division.

- All work conducted by Dr. Anikouchine related to the analysis and review of the proposed project has been conducted in accordance with contract requirements between the City of Santa Barbara and Rodriguez Consulting Inc, the preparer of the Project EIR. Throughout the entire EIR preparation process, Dr. Anikouchine has worked exclusively as a subconsultant to Rodriguez Consulting Inc.

- Payment for all work conducted by Dr. Anikouchine related to the analysis and review of the proposed project has been provided by Rodriguez Consulting Inc.

Letter No. 18

Geotechnologies, Inc.
Consulting Geotechnical Engineers
Celebrating 40 Years of Service 1971-2011

RECEIVED
APR 16 2012
CITY OF SANTA BARBARA
PLANNING DIVISION

April 13, 2012
File Number 19515-01

Franco and Associates, Inc.
12345 Ventura Boulevard
Studio City, California 91604

Attention: Mr. Ray Franco

Subject: Geotechnical Engineering Commentary
Proposed Single Family Residence
1837½ El Camino de la Luz, Santa Barbara, California

References: *Reports by Geotechnologies, Inc.:*
Geotechnical Engineering Commentary, dated September 5, 2012.

Reports by William Anakouchine, PhD.:
Geological Inspection Trench at 1837½ Camino de la Luz, dated August 25, 2009, (No File No.);
Geological Investigation of Slope Stability at 1837½ Camino de la Luz, dated November 9, 2011, (No File No.).

Dear Mr Franco:

This letter transmits the results of a third party geotechnical review of the above-referenced documents for the subject site. The title of the report is listed and the review comments immediately follow. 18-1

William Anakouchine, PhD., Report dated August 25, 2009, Geological Inspection Trench at 1837½ Camino de la Luz, (No File No.).

On Trench Location

The purpose of the report was to address the engineering significance of a bedding plane fissure identified in a report by R.J. Smith from 1980 and CFG in 1996. The author does not clearly identify the fissure that nor is it's location shown (as identified by Smith or CFG) on any attached map. An exploration program was initiated to find the bedding plane fissure trench since "Disparate results were obtained from their maps" and "The cause of this is the location and accuracy of measurements of the attitude of the Monterey strata on the subject parcel made by Smith and by CGF (sic)."

A trench was excavated to a depth of 8 feet and exposed marine terrace deposits and well bedded siltstone, claystone and marl of the Monterey Formation. No evidence of a bedding plane fissure was found.

The reviewer is not provided with enough assurance that the geologic feature was clearly identified considering that the feature was identified in reports as much as 30 years old in an highly dynamic beach cliff environment. The trench excavation by the author may not have been located or oriented appropriately to conclusively refute the presence of the fissure.

On Backfilling

It is the understanding of this firm that the trench backfill has settled several inches. However, according to the report : "... the trench was backfilled with original material which was moistened and compacted to approximately 95% relative compaction."

The settling trench backfill represents a low spot on the slope and is a site for water accumulation and percolation. Water should not be introduced directly to the bedrock as it presents an opportunity to weaken the rock, increase the weight of the rock and increase porewater pressure in the slope. All of the effects will contribute to the instability of the slope. The trench should be re-excavated and backfilled properly.

The use the term and value "95% relative compaction" suggest a high degree of effort was used to backfill and it is implied that the backfill was closely monitored and tested. No compaction test results to substantiate the degree of relative compaction are presented in the report.

On Validity of Field Observations

"The writer was able to examine the strata at the base of the coastal bluff where the putative fissure was reported to exist by Smith and CFG (sic). The writer observed that a seam of fissile shale about 1½ inch thick interbedded between strata of thick marl strata had been scoured out to a depth of an inch or so by wave erosion. The scour apparently had been misinterpreted as a pervasive open fissure or petroliferous seam by the previous investigators."

According to Norris (1988) the average annual bluff erosion is 4 inches per year. Therefore, the average length of eroded bluff should be 48 inches. Nuanced features observed of the bluff face 30 years ago would have already been eroded away by the date of author's observations.

On Geologic Material Sampling and Data Use

The report states that "Three samples were taken from the trench at locations shown on Figures 2 and 3". One of the soil/rock samples was admittedly remolded. Direct shear test results from two samples are provided.

In order to remold soil or rock samples, the initial density and moisture content of the geologic material must be known in order to replicate the properties of the soil sample. No measurement of the properties is mentioned in the report. Therefore the reviewer has no assurance that the remolded samples are remotely close to the engineering properties that a "remolded" sample must try to replicate.

In the analysis of slope stability, the standard of care dictates that the investigator attempts to identify the weakest representative geologic material that comprises the slope to be analyzed. This is because, a slope failure will most likely occur that within the weakest material. No matter what sample is obtained, there is always the possibility that a weaker one exists at the site given the limited opportunity that an investigator has to expose and find appropriate samples. To mitigate this shortcoming, most investigators obtain numerous samples from the field, select only the weakest for testing, and use the weakest result in the analysis.

No discussion is provided in the report that an effort was made to identify and select the weaker materials encountered, nor are there sufficient samples taken or tests performed to provide confidence that the weakest rock strength is selected. Therefore, the validity of the results from the slope stability analysis utilizing the engineering properties from a limited testing pool is questionable.

If the rock comprising the slope is homogenous and isotropic then a small number of samples may be appropriate. However, the author provides several photos in his reports that show the thinly bedded appearance of the rock indicating the rock is anything but homogenous and isotropic. A very large number of samples should be obtained and tested or a very detailed inspection of the rock should be performed to ensure that only the weakest of rock samples are selected, tested, and utilized in the stability analyses.

The laboratory results presented in the report dated August 25, 2009 were not supplemented with additional data. The values for soil/rock density were weighted, to obtain a singular weight for simplicity in calculations. However, the dry weight for one of the rock types was used, not a saturated weight, as conservative design assumption should dictate.

Report by William Anakouchine dated November 9, 2011, Geological Investigation of Slope Stability at 1837½ Camino de la Luz, (No File No.).

On the Approach to Slope Stability Analysis

The method to perform calculations for the slope stability analysis utilizes an oversimplification of the slope orientation, rock orientation and fracture orientation that does not reflect the complexity of the slope. For example, the measured fracture orientations and bedding plane orientation are reduced (averaged) to two surfaces that intersect each other.

The slope stability analyses are not performed along a distinct bedding plane or fracture or a range of computer generated alternatives through the existing topography. The analyses are based on synthetically derived geometries that do not reflect the variability of the site.

The author presents a discussion regarding mode of potential slope failure and believes it to be wedge shaped. The results of the analysis for only this form analysis are described. Calculations for other methods are not provided. Most stability analyses consider multiple methods of failure and present results that reflect the consider the lowest factor of safety ans the most likely. It is the opinion of the reviewer that other methods of analysis should be considered, analyzed, and presented.

On the Use of the Slope Stability Equation

The author does not provide input or output data sheets from the stability analysis program used for the slope stability model. Therefore, the reviewer cannot verify the assumptions or the variables used in the analysis.

The author mentions that the equation for factor of safety slope was modified to suit the site conditions. No discussion appears that further explains or shows what has been modified.

Results of Plane Failure Analysis

The minimum factors of safety allowed by most building officials are 1.5 for static conditions and 1.10 for pseudostatic conditions. The author states:

"All of the attitudes of strata cropping out of the coastal bluff that have poles plotted inside the kinematic envelope on Figure 9 have factors of safety of 1.14 or greater. A factor of safety greater than 1.1 is considered to represent stability under seismic conditions. Most of the strata attitudes measured in the study area have factors of safety exceeding 1.2 for the existing slope."

If the value is 1.2, then the slope is clearly not sufficiently stable for development.

On The Effect of Water Elevation on the Slope Stability

There is insufficient discussion or diagrammatic representation to understand how this important parameter was applied to the analysis. The same lack of clarity applies to the results of the parametric analysis of the water table.

On the Selection of Analysis Alternatives

Figure 13 is titled "Isometric representation of the coast from Lighthouse Creek to about Oliver Street viewed toward the NW'. The Figure is not referenced or citation given to other authors, so it can only be assumed that the map is Anakouchine's own work.

The subject parcel is shown by the black outline. Several arcuate-shaped lines appear on the Figure in red color. The red lines "outline individual landslide scars". Three landslide scars occur within the subject parcel boundary. Only a very small portion of the site is not enveloped by the landslide scars. The report does discuss or analyze the impact to the site these landslides (that appear on the author's own map) have on the site. These landslides should be adequately investigated, identified, and analyzed based on the current standard of practice.

On Bluff Erosion

The author believes the slope is capable only of a wedge shaped failure and therefore the geometry does not lend itself to consideration of bluff erosion. The conclusion "It would seem that it would not be necessary to include a landslide setback to the estimate of the 75-year erosional setback for the subject parcel." The ensuring argument supporting this claim is not justified in the report. Other nearby slope failures do not fit the model presented in the report.

On the Conclusion

The conclusion states: "An analysis of the stability of the coastal bluff at the subject parcel indicates that under conservative estimation of geological and physical conditions, the bluff face is stable." It is the opinion of the reviewer that this conclusion is not adequately substantiated by the data and analysis presented in the report.

An additional conclusion "Marine erosion at the subject parcel is not expected to induce landslides until the bluff reaches a height of 60 ft." Again, this conclusion is not substantiated by the analysis presented in the report.

Should you have any questions please contact this office.

Respectfully submitted,
GEOTECHNOLOGIES, INC.

REINARD T. KNUR
C.E.G. 1547, G.E. 2755

RTK:km

Distribution: (6) Addressee

Comment Letter No. 18
Geotechnologies, Inc.
Date: April 13, 2012

18-1. Please refer to comment letter No. 19 where Mr. Greg Smith requests that the April 13 version of the Geotechnologies report be replaced by an updated April 16 version. No responses to the superseded report are required.

Letter No. 19

Kennedy, Kathleen

From:	Greg Smith [kaishin@me.com]
Sent:	Monday, April 16, 2012 11:34 AM
To:	Kennedy, Kathleen
Cc:	Reinard Knur; Ray Franco; Stan Krom; Joanna Morgan; Bruce Peterson; Tom Morrison; Tom Sloan; Judith Smith
Subject:	Revised Geotechnical Engineering Commentary
Attachments:	19515-01 commentary ltr 4-16-12.pdf.pdf; ATT00001.htm

Kathy,
Sorry to add to the mountain of paper. Our geotechnical engineer has just submitted a revised and edited version of his April 13 commentary. Please substitute this April 16 version for the April 13 version. Thank you. -- Greg 19-1

Commentary of Geotechnologies, Inc., Consulting Geotechnical Engineers
Re: 1837.5 El Camino de la Luz
4/16/2012

Comment Letter No. 19
Greg Smith
Date: April 16, 2012

19-1. Mr. Greg Smith requested that the April 13 version of the Geotechnologies report be replaced by an updated April 16 version. No responses to this comment letter are required.

Letter No. 20

Geotechnologies, Inc.
Consulting Geotechnical Engineers
Celebrating 40 Years of Service 1971-2011

April 16, 2012
File Number 19515-01

Franco and Associates, Inc.
12345 Ventura Boulevard
Studio City, California 91604

Attention: Mr. Ray Franco

Subject: Geotechnical Engineering Commentary
Proposed Single Family Residence
1837½ El Camino de la Luz, Santa Barbara, California

References: *Reports by Geotechnologies, Inc.:*
Geotechnical Engineering Commentary, dated September 5, 2012.

Reports by William Anakouchine, PhD.:
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Geological Investigation of Slope Stability at 1837½ Camino de la Luz, dated November 9, 2011, (No File No.).

Dear Mr Franco:

This letter transmits the results of a third party geotechnical review of the reports by William Anakouchine, PhD for the subject site. The title of the report is listed and the review comments immediately follow.

20-1

William Anakouchine, PhD., Report dated August 25, 2009, Geological Inspection Trench at 1837½ Camino de la Luz, (No File No.).

On Trench Location

The purpose of the report was to address the engineering significance of a bedding plane fissure identified in a report by R.J. Smith from 1980 and CFG in 1996. An exploration program was initiated to find the bedding plane fissure trench since "Disparate results were obtained from their maps" and "The cause of this is the location and accuracy of measurements of the attitude of the Monterey strata on the subject parcel made by Smith and CGF (sic)."

A trench was excavated to a depth of 8 feet and exposed marine terrace deposits and well bedded siltstone, claystone and marl of the Monterey Formation. No evidence of a bedding plane fissure was found.

The author does not clearly identify the fissure that nor is it's location shown (as identified by Smith or CFG) on any attached map. The author also does not provided with enough assurance that the geologic feature was clearly identified considering that the feature was identified in reports as much as 30 years old in a highly dynamic beach cliff environment. The trench excavation by the author may not have been located or oriented appropriately to conclusively refute the presence of the fissure.

"The writer was able to examine the strata at the base of the coastal bluff where the putative fissure was reported to exist by Smith and CFG. The writer observed that a seam of fissile shale about 1½ inch thick interbedded between strata of thick marl strata had been scoured out to a depth of an inch or so by wave erosion. The scour apparently had been misinterpreted as a pervasive open fissure or petroliferous seam by the previous investigators."

According to Norris (1988) the average annual bluff erosion is 4 inches per year. Therefore, the average length of eroded bluff should be 48 inches. Nuanced features observed in the bluff face 30 years ago would have already been eroded away by the date of author's observations.

On Backfilling 20-1

It is the understanding of this firm that the trench backfill has settled several inches in the time since backfilling. However, according to the report: "... the trench was backfilled with original material which was moistened and compacted to approximately 95% relative compaction."

The settling trench backfill represents a low spot on the slope and is a site for water accumulation and percolation. Water should not be introduced directly to the bedrock as it presents an opportunity to weaken the rock, increase the weight of the rock and increase porewater pressure in the slope. All of the effects will contribute to the instability of the slope. The trench should be re-excavated and backfilled properly.

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In the analysis of slope stability, the investigator should attempt to identify the weakest representative geologic material that comprises the slope to be analyzed. This is because a slope failure will most likely occur within or along the weakest material. No matter what sample is obtained, there is always the possibility that a weaker one exists at the site given the limited opportunity that an investigator has to expose and find appropriate samples. To mitigate this shortcoming, most investigators obtain numerous samples from the field, select only the weakest for testing, and use the weakest result in the analysis. 20-1

No discussion is provided in the report that an effort was made to identify and select the weakest materials encountered, nor are there sufficient samples taken or tests performed to provide confidence that the weakest rock strength is selected. Therefore, the validity of the results from the slope stability analysis utilizing the engineering properties from a limited testing pool is questionable.

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The slope stability analyses are not performed along a distinct bedding plane, or fracture, or a range of computer-generated alternatives through the existing topography. The analyses are based on synthetically derived geometries that do not reflect the variability of the site.

The author presents a discussion regarding mode of potential slope failure and believes it to be wedge shaped. The results for only this method of analysis are described. Most stability analyses consider multiple methods of failure and present results that reflect the consider the lowest factor of safety ans the most likely. It is the opinion of the reviewer that other methods of analysis should be considered, analyzed, and presented. 20-1

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The author does not provide input or output data sheets from the stability analysis program used for the slope stability model. Therefore, the reviewer cannot verify the assumptions or the variables used in the analysis.

The author mentions that the equation for factor of safety slope was modified to suit the site conditions. No discussion is provided that further explains or shows what has been modified.

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The minimum factors of safety allowed by most building officials are 1.5 for static conditions and 1.10 for pseudostatic conditions. The author states:

"All of the attitudes of strata cropping out of the coastal bluff that have poles plotted inside the kinematic envelope on Figure 9 have factors of safety of 1.14 or greater. A factor of safety greater than 1.1 is considered to represent stability under seismic conditions. Most of the strata attitudes measured in the study area have factors of safety exceeding 1.2 for the existing slope."

If the factor of safety is 1.2, then the slope is clearly not sufficiently stable for development.

On The Effect of Water Elevation on the Slope Stability

There is insufficient discussion or diagrammatic representation to understand how this important parameter was applied to the analysis. The same lack discussion applies to the results of the parametric analysis of the water table.

On the Selection of Analysis Alternatives

Figure 13 is titled "Isometric representation of the coast from Lighthouse Creek to about Oliver Street viewed toward the NW'. The Figure is not referenced or citation given to other authors, so it can only be assumed that the map is the author's own work.

The subject parcel is shown by the black outline. Several arcuate-shaped lines appear on the Figure in red color. The red lines "outline individual landslide scars". Three landslide scars occur within the subject parcel boundary. Only a very small portion of the site is not enveloped by the landslide scars. The report does discuss or analyze the impact to the site these landslides (that appear on the author's own map) have on the site. These landslides should be adequately investigated, identified, and analyzed. 20-1

On Bluff Erosion

The author believes the slope is capable only of a wedge shaped failure and therefore the geometry does not lend itself to consideration of bluff erosion. The conclusion "It would seem that it would not be necessary to include a landslide setback to the estimate of the 75-year erosional setback for the subject parcel." The ensuing argument supporting this claim is not justified in the report. Other nearby slope failures do not fit the model presented in the report.

On the Conclusion

The conclusion states: "An analysis of the stability of the coastal bluff at the subject parcel indicates that under conservative estimation of geological and physical conditions, the bluff face is stable." It is the opinion of the reviewer that this conclusion is not adequately substantiated by the data and analysis presented in the report.

An additional conclusion "Marine erosion at the subject parcel is not expected to induce landslides until the bluff reaches a height of 60 ft." Again, this conclusion is not substantiated by the analysis presented in the report.

Should you have any questions please contact this office.

Respectfully submitted,
GEOTECHNOLOGIES, INC.

20-1

REINARD T. KNUR
C.E.G. 1547, G.E. 2755

REGISTERED PROFESSIONAL ENGINEER
REINARD T. KNUR
No. 2755
Exp. 12/31/12
GEOTECHNICAL
STATE OF CALIFORNIA

PROFESSIONAL GEOLOGIST
REINARD T. KNUR
NO. 1547
CERTIFIED
ENGINEERING
GEOLOGIST
STATE OF CALIFORNIA

RTK:km

Distribution: (6) Addressee

Email to: [rayfranco@aol.com], Attn: Ray Franco

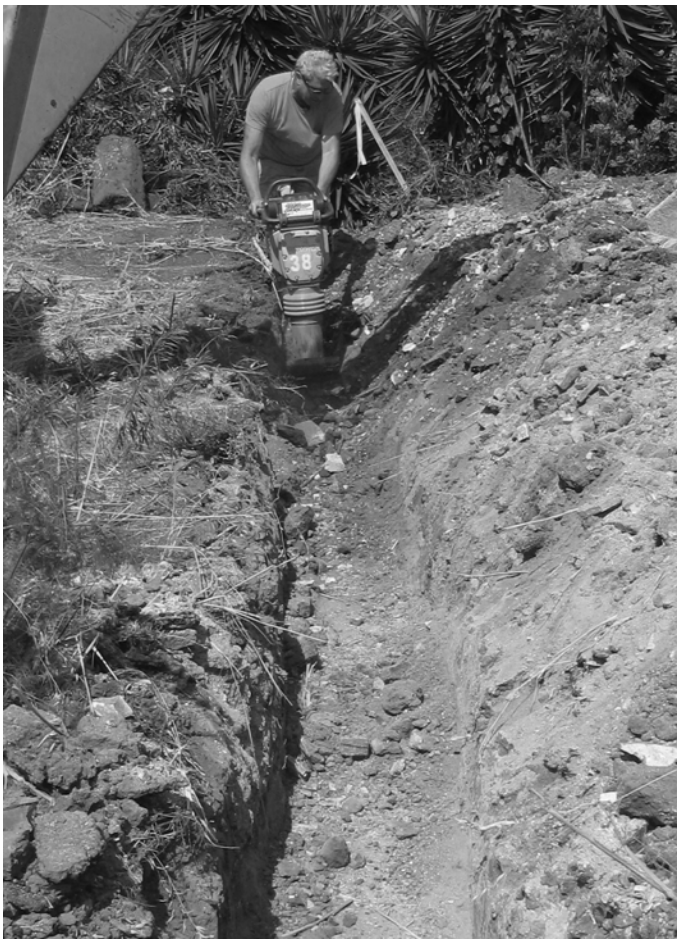
Comment Letter No. 20
Geotechnologies, Inc.
Date: April 16, 2012

20-1. This letter provides comments regarding two reports prepared by Dr. William Anikouchine that were used as references to prepare the project EIR. Dr. Anikouchine is a registered geologist and a certified engineering geologist with over 37 years of experience in the fields of shoreline erosion, coastal oceanography and engineering geology, and conducting slope stability analyses. The reports he prepared for the project EIR are titled: Geological Inspection Trench at 1837½ Camino de la Luz (August 25, 2009); and Geological Investigation of Slope Stability at 1837½ Camino de la Luz (November 9, 2011). Please refer to Topical Response No. 3: Analysis of Potential Ocean Bluff Stability Impacts at the Project Site for additional background information regarding the preparation of the 2009 and 2011 reports. The 2009 and 2011 reports are included in their entirety in the Second Revised Draft EIR as Appendix B and Appendix C, respectively.

Comments regarding the 2009 and 2011 reports pertain to the location of an on-site temporary geological inspection trench that was constructed on the project site; the backfilling of the trench; geological material sampling from the trench and the data derived from the samples; the approach used to conduct the slope stability analyses for the project site; and the results of the analyses. The individual comments address a range of issues but generally indicate that additional investigation, material sampling, analysis, and supporting information should have been included in both reports.

In response to the review comments, it should be noted that extensive detail regarding the methodologies used to evaluate the stability of the ocean bluff on the project site are included in Dr. Anikouchine's 2009 and 2011 reports. Also, California Coastal Commission geologist Mark Johnsson (2013) reviewed the 2011 slope stability analysis report and indicated that he concurs with its analysis and conclusions. Further, *CEQA Guidelines* Section 15151 (Standards for Adequacy of an EIR) indicates that "*disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have not looked for perfection but for adequacy, completeness, and good faith effort at full disclosure.*" Therefore, the slope stability analyses presented in the EIR and Appendices B and C are considered adequate to evaluate the slope stability impacts of the proposed project and no additional analysis or revisions to the analysis that has been conducted is required.

In regard to the comment related to backfilling the temporary geological inspection trench constructed at the project site, the commenter states that a "high degree of effort" would have been required to achieve the stated 95% relative compaction of the soil removed and then replaced into the trench. The following photograph was taken as the project site trench was being backfilled and shows that a high degree of effort was provided to compact soil placed back into the trench by using a mechanical compactor.



Letter No. 21

RECEIVED
APR 11 2012
CITY OF SANTA BARBARA
PLANNING DIVISION

Tony Fischer
Attorney at Law
2208 Anacapa Street
Santa Barbara CA 93105
Tel: 805 563 6784
Fax: 805 456 3881
fischlaw@cox.net

April 10, 2012

City of Santa Barbara, Planning Division,
Attn: Kathleen Kennedy, Associate Planner, P.O.
Box 1990, Santa Barbara, CA 93102-1990
KKennedy@SantaBarbaraCa.gov.
630 Garden Street
Santa Barbara CA 93103

Re: Draft EIR : 1837 ½ El Camino de la Luz, conflict of interest -- geologic services

Dear Ms. Kennedy:

I represent the group of neighbors to the project including Ray Franco related to the referenced subject.

The list of events which follows is based in part upon a review of some files of the Planning Division of the Community Development Department related to the environmental review and staff review of the proposed project. A copy of some of the documents reviewed is being forwarded in that they confirm the information listed. 21-1

In January 2006: Funding was provided for the City agreement with William Anikouchine, PHD to complete a peer review of the literature related to geologic conditions at 1837 ½ El Camino de la Luz. It appears that he was paid $7,200.00 for those services by the City.

In May 2006: City entered into a contract with Rodriguez Consulting, Inc. for the preparation of an EIR for the proposed house and garage at the property located 1837 ½ El Camino de la Luz owned by Herbert E. Barthels. Mr. Anikouchine was named and identified as one of the persons involved in writing portions of the EIR related to the geology of the site located on the bluff of the California coast.

On May 22, 2008, the City Planning Commission had a hearing on the draft EIR. It did not approve the EIR and requested additional information.

Before June 16, 2009: The owner of 1837 ½ El Camino de la Luz contacted William Anikouchine, PHD, and made arrangements for him to provide geologic services related to the proposed project.

On June 16, 2009: William Anikouchine, PHD, a Certified Engineering Geologist, arrived at 1837 ½ El Camino de la Luz accompanied with a backhoe and operator. Based upon Mr. Anikouchine's report of what happened, they proceed to trench a portion of the site, to conduct an inspection of the sides and bottom of the trench, to document findings, and to take samples.

On June 24, 2009: Barthels paid Contractors Tractor Service, $3,607.00 (Check No. 1659) the amount of the invoice submitted to William Anikouchine for the trenching (June 16, 2009), backfill and compact (June 17, 2009), and repair asphalt (June 23, 2009).

On August 3, 2009: DA Associated issued an invoice to William Anikouchine in the amount of $1,100.00 for "Stress Tests on two clay samples taken from trench."

On August 25, 2009: William Anikouchine, PHD, submitted to Dan Gullett, Associate Planner, City of Santa Barbara his seven page report dated August 25, 2009 related to his observations.

On September 10, 2009: Mr. Barthels signed his Trust check number 1674 in the amount of $1,100.00 payable to D.A. Associates. 21-1

On July 29, 2009: Rodriguez Consulting, Inc. submitted to Dan Gullett, City of Santa Barbara Planning Division, a request for a revised contract amendment for the EIR project, Agreement No. 22,079. It includes in Table I the estimated cost of a Backhoe/Operator ($2,000), Sample Testing ($1,500), Site Restoration ($300) and services by Mr. Anikouchine for Study Preparation, Site Investigation and Report Preparation ($5,000).

On December 26, 2009: Mr. Barthels in a letter to Dan Gullett, City Planning, informed him regarding the payments to Contractors Tractor Service and BA Associates. He enclosed a copy of the invoices and checks.

On February 11, 2011: Dan Gullett, a City Planner, states in an email his understanding that the owner of the property, on advice of his attorney, directly contacted William Anikouchine for the purpose of obtaining his services related to geologic investigation of the site. He states that this was a "breach of protocol" and that at the time of the services it had not been "funded or authorized by the City."

Based upon the above, beginning in 2005, William Anikouchine, as part of the City's review of the project site, has provided geologic services to the City of Santa Barbara and has

been paid for those services by the City. In that role, Mr. Anikouchine is a consultant to the City and assisting the City in determining whether to approve an application submitted by Mr. Barthels.

In May 2006, Rodriguez Consulting, Inc. signed an agreement to prepare the draft and final EIR for the project, his contract included obtaining geologic services from William Anikouchine related to the review of the prior studies of the site and responding to questions and comments of a geologic nature related to the proposed project. In this role, Mr. Anikouchine was a "consultant" engaged in assisting the City of Santa Barbara in determining whether to approve an application submitted by Mr. Barthels.

In June of 2009, based upon the email of Mr. Gullett dated February 11, 2011 and the other documents, William Anikouchine agreed with the property owner to perform geologic services, for which he would be paid, including trenching, investigation, sampling, testing and reporting his results. In this role, Mr. Anikouchine was working for Mr. Barthels and was entitled to payment by Mr. Barthels. In June of 2009 there was no agreement between the EIR consultant and the City for services related to trenching or a geologic investigation by Mr. Anikouchine. Based upon the documents, it does not appear that any City inspectors were present for any part of the trenching operation in June, 2009 or that Rodriguez Consulting had anyone at the site during any of the activities involving the trenching in June of 2009. 21-1

During the hearing before the Planning Commission, the Commission was presented with photos of the trench site which depicted that the claims by the consultant regarding the compacting of the trench during the replacement of the materials in June of 2009 are contradicted by the sink hole which developed at the same location as the trenching. As was reported to the Planning Commission, the sink hole was covered over or "patched" a few days before the site visit by the members of the Planning Commission.

When Mr. Anikouchine agreed to provide services at the request of Mr. Barthels, he disqualified himself from any future role as a consultant to the City or to Rodriquez Consulting, Inc., related to City's decision making process for this project because such a role would create an impermissible financial conflict of interest.

Government Code Section 87100 states: "No public official at any level of state or local government shall make, participate in making or in any way attempt to use his official position to influence a governmental decision in which he knows or has reason to know he has a financial interest."

The regulations of the Fair Political Practices Commission require consultants to refrain from making or participating in a governmental decision that has a reasonably foreseeable

material financial effect on his or her personal financial interests. Those regulations apply regardless of whether the individual is required to file a statement of economic interests. In this situation, Mr. Anikouchine entered into a financial arrangement with property owner Mr. Barthels to provide services involving more than $500.00. The services included performance of an inspection of conditions in the trench to be opened at the site , obtaining tests of soil samples, and writing of reports of the observations and his interpretation of the observations. The inspection results relate directly to the governmental decision pending with the City. (See sections 18701, 18705.3 and 18734 of the FPPC Regulations.) The requirement to refrain from participation is based upon the basic concepts involving conflicts of interest including but not limited to the understanding that no person can serve two masters and the understanding reflected in the regulations of the Fair Political Practices Commission that money does influence decisions.

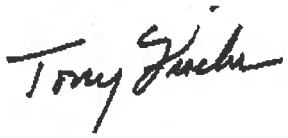
21-1

Based upon the above, William Anikoucine will continue to be in violation of the Conflict of Interest laws if he continues to participate in this EIR review and approval process.

The Planning Commission should decline to make decisions regarding the suitability of the site based upon the opinions of a consultant under these circumstances.

If you have any questions regarding this matter, do not hesitate to contact me.

Very truly yours,



Tony Fischer, Attorney

cc: Planning Commissioners

City of Santa Barbara, Planning Division,
Attn: Kathleen Kennedy, Associate Planner, P.O.
Box 1990, Santa Barbara, CA 93102-1990
KKennedy@SantaBarbaraCa.gov.
630 Garden Street
Santa Barbara CA 93103

Re: Draft EIR : 1837 ½ El Camino de la Luz, conflict of interest -- geologic services

Dear Ms. Kennedy:

Attached is a copy of documents to be put with the letter dated April 10, 2012. It should help anyone trying to evaluate the information provided at the hearing and in the letter.

Tony Fischer, Attorney
2208 Anacapa Street
Santa Barbara CA 93105
fischlaw@cox.net
805 563 6784

H. E. Barthels
1701 Shoreline Dr.
Santa Barbara, CA 93109

Debra

12-26-09

RECEIVED
JAN 04 2010
CITY OF SANTA BARBARA
PLANNING DIVISION

Mr. Don Gallegos Planning
Fr: Herb Barthels
Re: E.I.R. Contract Amendment
1837 El Camino de la Luz

I am responding to your letter referring to the Rodriguez Consulting, Inc proposal to complete the environmental document for this property. The ongoing time has been a difficult path since the initial blockage of access on 1-14-08. Your department has requested $23,280.00 for the amendment. I have paid direct costs for part of the geologic update expenses. These were

Contractors Tuscan Service (Steve Swartz) $3,607.
DA Associates - soils testing $1,100.
$4,707.

I am sending $18,573.22 to put this process to completion.

Yours for a timely resolution,

H. E. Barthels

Herb Barthels
1701 Shoreline Drive
Santa Barbara, CA
#93109

El Camino de la Luz
Not Delivered

City of Santa Barbara
Planning & Development
630 Garden St
Santa Barbara, CA 93101

SANTA BARBARA CA 93
30 DEC 2009 PM 3

9310281990

Contractors Tractor Service
1205 Laguna Street
Santa Barbara, Ca. 93101
License # 556-338
Phone 805-962-0439

COPY

To:
Dr. Will Anikouchine

Responsible Party / Herb Barthels
Re: 1837 ½ El Camino de la Luze

6/16 Move in loader backhoe / Excavate ~ 50 ' x 7 ' x 2 ' wide trench to allow for Geologic survey. Back fill with native material & compact with 140 pound wacker.

6/17 continue as above additional ~ 30 ', backfill and compact .

SUBTOTAL $1260.00

6/23 Move in 6' wide bobcat loader. Grade site; sweep pad to discover original trench line. Excavate down 3" to facilitate asphalt patch over trench. Clean and prepare sides of old trench line (prep existing asphalt to facilitate adherence of patch) Haul in asphalt. Spread, level rake, and compact with vibraplate.

Haul in 50 gallon drum of water (no water on site). Haul in 20 90 lb. bags of concrete premix. Form 15' of perimeter 6" x 4" curb (Curb was broken on 6/16 to to facilitate trenching). Mix concrete on site and finish trowel curb.

SUBTOTAL $1675.00

Material
Asphalt & Concrete mix

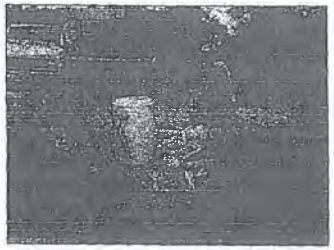
SUBTOTAL $672.78

$3607.78 TOTAL

PAID
CK 1654

FIG 2 to 12 has

6/09



Following Geological Trenching

H. E. Barthels
1701 Shoreline Dr.
Santa Barbara, CA 93109

H. E. Barthels
oreline Dr.
CA 93109

Money Market Fund

UA 12-09-1985
HERBERT E BARTHELS TRUST
1701 SHORELINE DR
SANTA BARBARA CA 93109-2025

1659

DATE 6-24-09

62-22/311

PAY TO THE ORDER OF Steve Schwartz $ 3,607.78

Three thousand six hundred seven 78/100 DOLLARS

NOT VALID FOR LESS THAN $250.00

Payable Through
Wachovia Bank, National Association
Wilmington, DE 19803

FOR Trench Bobcat

Herbert E Barthels

⑈000300165995⑈:031600225:8509905616042 9⑈

Prop.

COPY

COPY

DA Associates, Inc.
P.O. BOX 2004
BUELLTON, CA 93427
(805)688-5429

Invoice

	INVOICE #
8/3/2009	9924

Anakouchine, William
1636 Hillcrest Rd
Santa Barbara, CA 93103

WORK ORDER ...		

DESCRIPTION	AMOUNT
Laboratory Testing - Direct Shear Testing	1,100.00
Shear tests on two clay samples taken from trench.	
Approved for payment W. Anikouchine.	
Jail Samples	
9-10-09 Pb. Vaus chk # 1674	
Total	$1,100.00

Vanguard® Prime
Money Market Fund

HERBERT E BARTHELS JR
UA 12-09-1995
HERBERT E BARTHELS TRUST
1701 SHORELINE DR
SANTA BARBARA CA 93109-2025

1674

DATE 9-10-09

PAY TO THE ORDER OF DA Associates $ 1,100.00

One thousand one hundred 00/100 DOLLARS

Payable Through
Wachovia Bank, National Association
Wilmington, DE 19805

NOT VALID FOR AMOUNTS OVER $250.00

FOR

Herbert E Barthels

⑈1003001674⑈ ⑆031100225⑆ 8509485561 04 29⑈

Rodriguez Consulting, Inc.
Environmental Review and Planning Services

July 29, 2009

Mr. Dan Gullett
City of Santa Barbara Planning Division
P.O. Box 1990
Santa Barbara, CA 93102-1990

Reference: Revised Contract Amendment Proposal for the 1837½ El Camino de la Luz Project EIR. Agreement No. 22,079.

Dear Mr. Gullet:

At the June 5, 2008 Planning Commission hearing for the El Camino de la Luz project, several commissioners requested that the geologic investigation requirements of EIR mitigation measure GEO-3a be conducted and the results of the investigation be incorporated into the Final EIR. The purpose of the investigation is to provide additional information about a possible "bedding plane fissure" that may or may not be located on the project site, and to determine if the feature could result in significant slope stability impacts to the project. This letter provides a scope of work and cost estimate to complete the following tasks:

- Conduct the requested geologic site investigation
- Prepare a Recirculated Draft EIR that updates analysis and information provided in the May, 2007, Proposed Final EIR
- Prepare a revised Proposed Final EIR
- Prepare a Certified Final EIR

Preparation of the EIR for the El Camino de la Luz project has included the completion of various tasks that were not included in the original scope of work. These tasks have generally been associated with the geologic/slope stability issues associated with the project, and have included items such as: a substantial work effort by Dr. Anikouchine to provide detailed responses to public comments submitted regarding responses to comments provided in the Proposed Final EIR; Dr. Anikouchine's attendance at hearings and meetings; a previous attempt to conduct a geological investigation at the project site that was suspended because access to the site was denied; and on-going coordination efforts with City staff regarding the EIR's assessment of project-related geologic impacts. Due to these unanticipated project-related costs, the funds remaining in the approved project contract (approximately $1,600 as of August 4, 2008) are not adequate to cover

2111 Monterey Street, Santa Barbara, California 93101
Phone: (805) 682-3413 • FAX: (805) 682-5123 • E-Mail: rodriguezaicp@aol.com

the costs of completing the geologic investigation requested by the Planning Commission and the costs associated with completing the project's environmental review process. This proposed contract amendment includes the tasks and associated costs required to complete the environmental review for the El Camino de la Luz project.

Proposed Scope of Work

Geologic Site Investigation. The on-site geologic investigation and assessment of the reputed fissure will be conducted by Dr. William Anikouchine, who will be responsible for organizing and conducting the field investigation, and the preparation of a report detailing the results of the site investigation. A revised scope of work to be completed by Dr. Anikouchine is attached to this letter. This updated scope of work includes laboratory testing of rock samples obtained from the project site. Proposed revisions to the previously submitted geologic investigation scope of work are shown in strikeout/underline format.

Prepare the Recirculated Draft EIR. The proposed geologic investigation may provide new information that warrants recirculation of the previously circulated but not certified EIR prepared for the El Camino de la Luz project. In addition, the cumulative impact analyses for the Aesthetics and Geology sections included in the May, 2007, Proposed Final EIR are out of date, and CEQA now requires that EIRs provide an analysis of the project's potential climate change impacts. To address these environmental review requirements, Mr. Steve Rodriguez will prepare a Recirculated Draft EIR in accordance with the requirements of CEQA Guidelines 15088.5. The following sections and analysis will be provided in the Recirculated Draft EIR:

- An Introduction describing the purpose of the Recirculated Draft EIR, and CEQA requirements for preparing, circulating and commenting on a Recirculated Draft EIR.
- An updated Summary section that includes all of the proposed project's impacts, proposed mitigation measures, and previously evaluated alternatives.
- An updated Environmental Setting section that includes a new cumulative project table and map.
- The cumulative impact analysis for the Aesthetics section will be updated. No other revisions to the Aesthetics section are proposed.
- An updated Geology section that incorporates new information provided by the geologic site investigation. An updated cumulative analysis will also be provided and previously proposed mitigation requirements will be updated as necessary.

Since the site investigation is implementing the requirements of a proposed mitigation measure, the results of the investigation will be summarized in EIR section 5.2.5 (Mitigation Measures and Residual Impacts). The complete site investigation report will be added to the EIR as Appendix F and included in the Recirculated Draft EIR.

- A climate change analysis will be added to the EIR and provided in EIR section 7.0, which will be renamed "Other Required CEQA Sections." Due to the small size of the proposed project, it is not expected that its climate change impacts will be significant and only a minor level of effort has been allocated for this task.

- Update the Mitigation Monitoring and Reporting Plan as necessary.

Substantive revisions to the above sections will be made in strikeout/underline format to facilitate the review of new information. No changes to the Project Description, Alternatives, or Plans and Policy Analysis sections as they are presented in the May, 2007, Proposed Final EIR are proposed, and no substantive changes to the project-specific analysis of aesthetic impacts are proposed.

An Administrative Draft Recirculated Draft EIR will be prepared and submitted to the City for review and comment. Revisions to the document will be made to address review comments and up to 20 copies of the Recirculated Draft EIR will be printed. Copies of the EIR on CD can also be provided.

Prepare the Proposed Final EIR. This document will include revised sections from the Recirculated Draft EIR, responses to review comments submitted on the Recirculated Draft EIR, and sections from the May, 2007 Proposed Final EIR that were not revised. The cost to prepare responses to comments has assumed that approximately 10 letters and 75 individual comments will be received. One printed copy and one copy of the Proposed Final EIR on CD will be submitted to the City for review and comment. After responding to review comments from the City, 15 copies of the Proposed Final EIR will be printed. Copies of the EIR on CD can also be provided.

Prepare the Certified Final EIR. Comments that are received during the decision-making process and review of the Proposed Final EIR will be incorporated into a Certified Final version of the EIR. Ten copies of the Certified Final EIR will be provided along with a copy on CD.

Meetings and Hearings. Steve Rodriguez and Will Anikouchine will be available to attend meetings with City Staff and one additional Planning Commission hearing.

Cost Estimate and Schedule

Rodriguez Consulting, Inc. will complete the tasks listed on Table 1 for a total cost not to exceed $24,880. This cost includes a total of $12,300 for the preparation of the geologic site investigation and report by Dr. Anikhouchin, as well as his continued participation in project-related meetings, hearings and response to public comments. After deducting the budget remaining from the original contract to prepare the El Camino de la Luz project EIR (approximately $1,600), the total proposed contract amendment amount is $23,280.

It is anticipated that all work tasks described in this scope of work to prepare the Administrative Draft Recirculated Draft EIR will be completed within one month of receiving authorization to proceed. The Draft Recirculated EIR, Proposed Final EIR, and Certified Final EIR will each be provided to the City within 10 working days of receiving review comments.

I hope this scope of work meets the needs of the City. Please feel free to call me if you have any questions regarding this proposed contract amendment.

Sincerely,

Steve Rodriguez

Rodriguez Consulting, Inc.
Steve Rodriguez, AICP

Table 1
1837½ El Camino de la Luz Project EIR
Additional Cost Estimate

Task	Staff	Hours	Rate/Hr	Cost
Site Investigation Study Preparation Site Investigation Report Preparation Backhoe/Operator Sample Testing Site Restoration	Anikouchine Anikouchine Anikouchine --	4 8 8 --	$250 --	$5,000 $2,000 $1,500 $300
Prepare Recirculated Draft EIR	Rodriguez	54	$90	$4,860
Prepare Proposed Final EIR/Responses to Comments	Anikouchine Rodriguez	8 30	$250 $90	$2,000 $2,700
On-going coordination and meetings with City Staff	Anikouchine Rodriguez	2 8	$250 $90	$500 $720
Attend PC Certification Hearing	Anikouchine Rodriguez	4 4	$250 $90	$1,000 $360
Prepare Certified Final EIR	Rodriguez	8	$90	$720
Printing Costs Recirculated Draft EIR (21 bound, CD's as needed) Final EIR (16 bound, CDs as needed) Certified Final (10 bound, 1 CD)	--	--	--	$2,500
Project Management	Rodriguez	8	$90	$720
Subtotal	--	--	--	$24,880
Remaining Contract Amount	--	--	--	<$1,600>
TOTAL CONTRACT AMENDMENT AMOUNT				$23,280

City of Santa Barbara
Community Development Department

COPY

www.SantaBarbaraCA.gov

Director's Office
Tel 805.564.5502
Fax: 805.564.5506

Building & Safety
Tel 805.564.5485
Fax: 805.564.5476

Housing & Redevelopment
Tel 805.564.5461
Fax: 805.564.5477

Planning
Tel 805.564.5470
Fax: 805.897.1904

Rental Housing Mediation Task Force
Tel 805.564.5420
Fax: 805.564.5477

630 Garden Street
PO Box 1990
Santa Barbara, CA
93102-1990

August 13, 2009

~~ORIGINAL~~

Dr. Herbert E. Barthels
1701 Shoreline Drive
Santa Barbara, CA 93109

RE: EIR Contract Amendment for 1837 ½ El Camino de la Luz Residence

Dear Dr. Barthels;

The City has received and accepted a contract amendment proposal from Rodriguez Consulting, Inc., to complete the environmental document for the 1837 ½ El Camino de la Luz Residence project.

The enclosed proposal includes a scope of work and cost estimate to complete the following:

- Conduct a geologic site investigation and subsequent studies, as requested by the Planning Commission
- Prepare an updated draft EIR for recirculation
- Prepare a proposed Final EIR
- Prepare a certified Final EIR

A current EIR account balance sheet is also enclosed ($1,681.37 remains in the account).

In order to proceed, please provide two checks payable to the City of Santa Barbara in the amount of $23,280 for the Contract Amendment and in the amount of $3,492 for contract management (15% of EIR contract amount, as required in the current fee resolution).

Please contact me at Tel. (805) 564 - 5470 if you have questions.

Sincerely,

Daniel Gullett, Associate Planner

Encl: Rodriguez Consulting, Inc. Contract Amendment Proposal
Current EIR funding balance

City of Santa Barbara
Community Development Department

www.SantaBarbaraCA.gov

COPY

September 7, 2010

Dr. Herbert E. Barthels
1701 Shoreline Drive
Santa Barbara, CA 93109

Director's Office
Tel 805 564 5502
Fax 805 564 5506

Building & Safety
Tel 805 564 5485
Fax 805 564 5476

Housing & Redevelopment
Tel 805 564 5461
Fax 805 564 5477

Planning
Tel 805 564 5470
Fax 805 897 1904

Rental Housing Mediation Task Force

630 Garden Street
PO Box 1990
Santa Barbara, CA
93102-1990

RE: Amendment to Agreement 23,400 -EIR Contract for 1837½ El Camino de la Luz Residence

Dear Dr. Barthels-

The City has received and accepted a contract amendment proposal to complete the geological work required to evaluate slope stability of the 1837 ½ El Camino de la Luz site following the results of the geologic trench investigation.

A cost estimate from the EIR consultant prepared by the EIR sub-contractor dated August 31, 2010 is enclosed in addition to a letter identifying the scope of work.

The scope of work includes:

- A geologic field investigation;
- A kinematic analysis;
- A slope stability analysis; and
- A report of findings and results.

In order to proceed, please submit two checks to me payable to the City of Santa Barbara in the following amounts:

- $6,000 for the additional contract work; and
- $900 for contract management (15% of EIR contract amount, as required in the current fee resolution).

Please contact me at (805)564-5470 x4550 if you have questions.

Sincerely,

Daniel Gullett, Associate Planner

enclosures:

1. Cost estimate to perform geological field examination, analysis, and evaluation, and prepare a report
2. Letter from William Anikouchine outlining additional information needed to resolve slope stability issues

---

City Administr. - Copy

SEP 16 2010
CITY ADMINISTRATOR'S OFFICE
SANTA BARBARA

COPY

Herb Barthels
1701 Shoreline Dr.
Santa Barbara, CA 93109
(805) 965-2196
Fax (805) 986-1016

DATE 9-10-10

TO City Atty Steve Wiley & Scott C. City Atty Scott Vincent

SUBJECT El Camino de la Luz Matter

NO. of Pages 1 Amendment 23,400 Contract

Dear Steve & Scott - I have recently been notified by the Planning & Development Dept. that additional fees are now required for an amendment to the on-going E.I.R. (Letter Enclosed)

As I understand, there exists an overall balance of $[illegible] + project management fees still remaining in the 23,400 E.I.R. contract.

I feel the new amounts of $6000.00 & $900.00 now requested from the Planning Department could be well absorbed into the balance in the account which you now hold. Please advise.

With kindest regards -

H. Eb Barthels

965-2196

c.c. City Administrator

City of Santa Barbara
Office of the City Attorney
www.SantaBarbaraCA.gov
Stephen P. Wiley · City Attorney · Tel: 805.564.5326 · Fax: 805.897.2532
Street Address: 740 State Street, Suite #201 Santa Barbara, California 93101
Mailing Address: Post Office Box 1990 Santa Barbara, California 93102

September 23, 2010

Dr. Herb Barthels
1701 Shoreline Drive
Santa Barbara, CA 93109

Re: Fees for Environmental Review for 1837 ½ El Camino De La Luz

Dear Dr. Barthels:

On Tuesday, September 21, 2010, City Attorney Wiley and I received your letter dated September 10, 2010 regarding the fees for the environmental review of your proposed project at 1837 1/2 El Camino de la Luz. In your letter, you suggest the cost of the revised scope of Dr. Anikouchine's geological study ($6,000) and the associated contract management fee ($900) can and should be taken from the outstanding balance of $15,932.15 on the contract with Rodriguez Consulting for the preparation of the Environmental Impact Report (EIR).

I have discussed the status of the contract with Rodriguez Consulting with staff from the Community Development Department. I am told that the remaining balance on the contract with Rodriguez Consulting is earmarked for required work in connection with the preparation of the EIR, including the preparation of the draft and final reports themselves and the conduct of public hearings required for the certification of the final EIR. The geologic investigation proposed by Dr. Anikouchine is beyond the scope of the original contract with Rodriguez Consulting for the preparation of the EIR and was therefore not included in the original cost estimate.

The City will not contract for additional work on the preparation of the EIR unless sufficient funds to cover the cost of the additional work have been deposited with the City. The funds currently on account with the City are necessary to pay for anticipated and required services of Rodriguez Consulting under the original contract. Applying the funds earmarked for the Rodriguez Consulting contract to Dr. Anikouchine's revised geologic study would leave the contract with Rodriguez Consulting under funded. It is not appropriate for the City to apply funds in a manner that leaves an executed City contract under funded.

Any unexpended funds that remain on account following the certification of the EIR and the expiration of the applicable statute of limitation will be returned to you.

Very truly yours,

N. Scott Vincent
Assistant City Attorney

NSV/lp

cc: Stephen P. Wiley, City Attorney
Daniel Gullet, Associate Planner ✓

RECEIVED
SEP 23 2010
CITY OF SANTA BARBARA
PLANNING DIVISION

City of Santa Barbara
Community Development Department

Memorandum

RECEIVED
NOV 30 2010
CITY ATTORNEY

DATE: November 29, 2010

TO: (IN ORDER)
Scott Vincent, Assistant City Attorney III
TO Brenda Monser, Finance Department
Mark Howard, Interim Risk Manager
Jim Armstrong, City Administrator
Cynthia Rodriguez, City Clerk Services Manager
RETURN TO → ALISON DEBUSK, PROJECT PLANNER

FROM: Daniel Gullett, Associate Planner

SUBJECT: AMENDMENT TO AGREEMENT FOR PROFESSIONAL SERVICES, RODRIGUEZ CONSULTING, INC.

Attached are three original copies of an Amendment to Agreement 23,400 with Rodriguez Consulting, Inc. for your review and signature. This agreement is required to complete an Environmental Impact Report for the 1837 ½ El Camino de la Luz Residence project (MST2002-00214).

When you have completed your review and signed all three copies, please send it on to the next person on the above list.

If you have any questions, please call me at ext. 4550. Thanks for your assistance.

Attachments:
3 copies of Agreement

Y:\PLAN\Environ. Review\Contracts\Cover Memo for Signatures on 3 Agrmnts - 1837.5 ECDLL 2 Amendment.doc

Comment Letter No. 21
Tony Fischer
Date: April 10, 2012

21-1. Comments in this letter assert that Dr. Anikouchine has worked directly for the project applicant, which has resulted in a conflict of interest.

Please refer to the February 11, 2011 email from City Staff member Daniel Gullet, which is attached to a March 17, 2012 comment letter submitted by Mr. Franco (comment letter 22). The email clearly indicates that Dr. Anikouchine has not prepared project-related studies under the direction of the project applicant. Additionally:

- All work conducted by Dr. Anikouchine related to the analysis and review of the proposed project has been conducted to implement scopes of work developed with and approved by the City of Santa Barbara Planning Division.

- All work conducted by Dr. Anikouchine related to the analysis and review of the proposed project has been conducted in accordance with contract requirements between the City of Santa Barbara and Rodriguez Consulting Inc, the preparer of the Project EIR. Throughout the entire EIR preparation process, Dr. Anikouchine has worked exclusively as a subconsultant to Rodriguez Consulting Inc.

- Payment for all work conducted by Dr. Anikouchine related to the analysis and review of the proposed project has been provided by Rodriguez Consulting Inc.

Letter No. 22

Rafael Franco
1835 El Camino de la Luz
Santa Barbara, CA 93109

DISTRIBUTED TO: DATE: 3/29/12
PLANNING COMMISSION (7) via mail
SR. PLANNER, ASST. CITY ATTY.
CASE PLANNER APPLICANT('S)
AGENT PC SEC, ENTERED AS INT
PARTY ON DATE:
BY:

RECEIVED
MAR 22 2012
CITY OF SANTA BARBARA
PLANNING DIVISION

March 17, 2012

Ms Kathleen A Kennedy, LEED AP
Associate Planner
City of Santa Barbara
630 Garden St.
Santa Barbara 93102

Re: 1837.5 El Camino de la Luz Draft EIR

Dear Ms. Kennedy,

First I wish to apologize for your tedious assignment on this project. You are the eighth planner assigned to this project over the past twenty two years; much of what follows may seem redundant, but every time the draft EIR is updated there is a new design or issue, and the fundamental questions are unanswered.

1. **Definition of Top of Bluff** – The neighbors have previously submitted comments and exhibits re the Coastal Act definition. These are omitted from the draft EIR. Our comment #25 in the atachment addresses this issue. 22-1

2. **Significant Impact on Views From Mesa Park** – The proposed mitigating measures are (a) Redesign the house and (b) Build within the prescribed envelope. The house has been redesigned several times; isn't this EIR supposed to study the final design? 22-2 Secondly, the prescribed mitigating envelope extends beyond the top of bluff as defined by law. This is not a viable mitigating measure. Please see the attached exhibits previously submitted.

3. **Geology** – Detailed comments are listed below. Serious questions remain about the credibility of the various reports by Dr. Anikouchine. We do not question his credentials, but no sections or calculations are included in his reports to substantiate his conclusions specifically about the potential planar slide and the extension thereof into the proposed building site or its effect on neighboring properties. There are inconsistent omissions of the extension of the unsupported bedding planes indicated in his 2011 21-3 report vs. his detailed cross sections in his letter to Dan Gullet in 2009. The report also omits the peer review by Geotechnologies, Inc Sep. 5, 2007, or Dr. Anikouchine's response. The report contracted for by the City of Santa Barbara following the 1978 landslide is also omitted. This report indicates the "Zone of Potential Failure" (PML . 12) crossing the propose building site. Comments and drawings regarding this issue were submitted as Figure E in my letter of Aug 27, 2007 also omitted from this draft EIR. A copy of this letter is enclosed.

4. **Conflict of Interest** – The neighbors have repeatedly questioned the use of Dr. Anikouchine as the reviewer of his own analysis. Normal procedures for engineering analysis require preparation of geotechnical reports by a licensed Engineering Geologist and a Geotechnical Engineer. These reports generally include test results and calculations that substantiate the conclusions. The report is then submitted for peer review by City engineers or subcontract engineers. That has not been done in this case; there are no test data, calculations, or peer review. While the conclusions of Dr. Anikouchine may ultimately be proven correct, the process is flawed. 22-4

5. **Site Access and Trespassing Issues** – The issues regarding access were resolved and approved by the Superior Court in 2009. In summary, access to the site is limited to 7.5 ft across my property and 9 ft along 1837 El Camino de la Luz. We believe this is deficient of the site access required at the time of subdivision, but that may be a future legal issue. The practical issue however in one of viability of an extended 9ft driveway without trespassing. As the attached photos indicate, the very first excavation by Dr. Anikouchine in 2009 clearly show his trespass on 1837. To conclude in the EIR that this is a temporary and non-significant impact is incredible; Dr. Barthels or his agents have been doing this for 22 years. 22-5

6. **Other Reports** – As indicated by emails to and from Dan Gullet on 2/11/11 Dr. Barthels has engaged Dr Anikouchine independently on the advise of his attorney. This work was not done under contract for the EIR. Last year, Dr. Barthels visited the site with representatives of a nationally renowned Geotechnical firm seeking a second opinion. What were their conclusions? There have been 20 reports and opinion letters dealing with geotechnical issues on this project. Only Dr. Anikouchine's opinion is included in the EIR. 22-6

Again I apologize for this tedium, but this is a timeless and very serious concern for all involved. Thank you for your consideration.

Rafael Franco

Atachment EIR Comments

Enclosures

A. Geotechnologies, Inc. Report September 5, 2007
B. William Anilouchine response 25 February 2008
C. Geotechnologies, Inc. Commentary of Slope Stability Analysis May 20, 2008
D. Coastal Commission Exhibits defining Top of Bluff
E. Rafael Franco letter August 27, 2007
F. Photos of trespass by Dr Anikouchine and uncompacted backfill
G. Emails with Dan Gullet indicating work by Dr. Anikouchine independent of City.

7. Barthel EIR Notes 3/16/2012

1. Figure 3.3-1 Incorrectly shows a 10 ft access easement. The easement is 9 ft. 22-7
2. Figure 3.3-1 Incorrectly shows top of bluff inconsistent with Coastal commission 22-8
3. Fig. 3.3-2 New elevations East side now exceeds the 15 foot building envelope 22-9
4. Fig. 3.3-2 Understory walls not permitted 22-10
5. Fig 3.3-3 West elevation exceeds 15 ft envelope **Recheck** 22-11
6. Sec. 3.5 Project Objectives Does the project minimize environmental impacts re. slope stability and obstruction of scenic views? 22-12
7. Figure 5.1-1 incorrectly identifies the location of the proposed residence as shown on 3.3-1 site plan. 22-13
8. 5.1-16 Significant aesthetic impact of current design. Mitigation proposed is a revised design. 22-14
9. 5.1-17 Computer simulations were created in 2006. This is a different design. 22-15
10. Fig. 5.1-5 Holy shit Good visual 22-16
11. Fig. 5.1-9 Clearly indicates the house is over the bluff as defined by the Coastal Commission 22-17
12. 5.1.5 AES-1a Revised Project Design mitigation stipulates the easterly limit of the residence as the 86-foot contour. This clearly is over the top of bluff. **The existing grade is 100-foot.** 22-18
13. 5.2 Geologic Analysis by Dr Anikouchine employed by developer. He is the reviewer of his own work. 22-19
14. 5.2-2 *"the orientation of bedding planes at the project site have a somewhat different orientation and block slide type of sea cliff failure is not the type of failure most likely to affect the project site."* **Incorrect....get corroboration.** 22-20
15. 5.2-2 Previous Geologic Investigations omits the City contracted geologic investigation which draws the potential zone of failure right through the middle f the proposed development. 22-21
16. 5.2-3 "*Anikouchine and others identified evidence of a large landslide located in the southeast corner of the property. This failure might have been exacerbated by the removal of lateral support by erosion in Lighthouse Creek".* This conclusion is wrong; the creek terminates approximately 20 ft above sea level at a massive boulder creating a waterfall. There is no lateral erosion extending to the area of the slide. The weathered shale slopes at 30 degrees towards the southwest. The bluff has been naturally retreating by undermining wave action and normal rain erosion. Thirty years ago, we could walk up this bluff. Now it is almost vertical. 22-22
17. 5.2-5 The stated length of excavated segments is incorrect (45 ft and 31 ft). This is contradictory to the Anikouchine letter to Dan Gullet of 25 August 2009. In this letter indicates 19 ft. No compaction was done after excavation resulting in subsequent subsidence which changed the drainage course. Dr. Anikouchine testified that compaction would be done. Not doing so exposed the slope to potential failure. 22-13
18. Fig. 5.2-1 by Anikouchine *"indicates the expected position of subcrop of the Monterey formation bedding plane that was encountered at the bottom of the trench."* This matches exactly the zone of failure in City's geotechnical report prepared after the 1978 El Camino de la Luz landslide. The trench was 8 ft deep. The water now drains to the bottom of this trench. 22-14
19. 5.2-9 "*The geologic inspection trench was excavated, inspected and backfilled in a single day. The soil excavated from the trench was moistened, placed into the trench* 22-15

and compacted to 95% relative compaction." This statement is false. There was no compaction equipment on site and no water available. We have photographs of all this and the subsequent subsidence. The area was repaved only after insistence by the neighbors.

20. Fig.5.2-3 The easterly fracture coincides with the southeast slide identified by Anikouchine and others. 22-26
21. 5.2-17 "*Based on the geological conditions of the project site and surrounding area, the 2011 slope stability analysis concluded that a wedge-type slope failure, would be the type of slope movement most likely to affect the project parcel. The ancient landslide in the southeast corner of the project parcel and the El Camino de la Luz slide of 1978 also appear to be wedge-type failures."* We agree with the conclusions re the project parcel. 22-27
22. 5.2-17 "*That analysis (2011) determined that after implementation of the project, the project site coastal bluff would have a factor of safety of 2.6 which indicates stable slope conditions."* **This is incredulous. No cross sections or calculations were provided to substantiate this conclusion.** 22-28
23. 5.2-19 "*As depicted on Fig. 5.2-5, the possible wedge failure area could affect the project site, but does not include the proposed building footprint."* But it would take down the house next door. 22-29
24. Fig. 5.2-5 We agree with the projected failure, but there is no cross section indicating the upper limit. The drawing conveniently stops at the line proposed as "top of bluff" by the architect. A cross section extending from the bottom sea level of the bluff would indicate a much failure block extending significantly further into the proposed project site. That projection is the guideline used by the Coastal Commission to define the "top of bluff". **See the CC exhibits attached. The letter of 25 Aug. 2009 to Dan Gullet includes a cross section clearly indicating the unsupported bedding planes.** 22-30
25. 6.2 Coastal Act – There is no discussion of the definition of "top of bluff". This is a critical issue for the project. **EIR response comments 4-5 misinterprets the Coastal Act guidelines for determining the top of bluff. These guidelines state, "In cases where the top edge of the cliff is rounded away from, the face of the cliff as a result of erosional processes related to the presence of the steep cliff, the bluff line or edge shall be defined as the point nearest the cliff beyond which the downward gradient of the surface increases more or less continuously until it reaches the general gradient of the cliff". SS13577 (h)(2) deals with the termination of the coastal bluff line (versus canyon bluff line) in map view. "The termini of the bluff line, or edge along the seaward face of the bluff , shall be defined as a point reached by bisecting the angle formed by a line coinciding with the general trend of the bluff line along the inland facing portion of the bluff. Five hundred feet shall be the minimum length of bluff line or edge to be used in making these determinations". The line used to define the top of bluff for this project is incorrect; it is cross gradient to the contours of the bluff. Based on the prescriptive "500 ft" requirement, the house is clearly over the bluff and the mitigating construction envelope proposed s over the edge of the bluff. These exhibits were previously provided to staff but are not included in the current EIR.** 22-31
26. 6.1 Views - <u>Potentially Consistent with Proposed Mitigation Measures</u> –The proposed mitigation measure is to redesign the house. So what is this EIR evaluating? Isn't it about the proposed project? 22-32
27. <u>Anikouchine Letter to Dan Gullet 25 Aug., 2009 - "</u>*The fissle beds and claystone seams probably have minimum shearing strength in the substrate materials at the subject* 22-33

parcel....The strata under the subject parcel dip southward at an average angle of 24 degrees. However the N 60 degree W strike of the strata is not parallel to the E-W trend of the toe of the coastal bluff so they are buttressed to the west. This condition has caused failures of the coastal bluff elsewhere along the Santa Barbara shoreline to be rotational about an axis normal to the bluff face."

28. Anikouchine Letter…2009 Cohesion values are 1/10th of those stated in his 2005 report. Why is there such disparity? Where are the calculations? Where are these values derived? 22-34

Geotechnologies, Inc.
Consulting Geotechnical Engineers

439 Western Avenue
Glendale, California 91201-2837
818.240.9600 • Fax 818.240.9675

September 5, 2007
File Number 19515

Franco and Associates, Inc.
12345 Ventura Boulevard
Studio City, California 91309

Attention: Mr. Ray Franco

Subject: Geotechnical Engineering Commentary
Proposed Single Family Residence
1837½ El Camino De La Luz
Santa Barbara, California

Dear Mr Franco:

This letter transmits the Geotechnical Engineering commentary regarding proposed development for the subject site. This letter was prepared to provide a third party evaluation regarding the geotechnical issues regarding the development of an appropriate geology-based building setback for the proposed residence. No subsurface exploration was performed by this firm, although a site reconnaissance and limited geologic mapping were done. Previous geotechnical engineering reports, aerial photographs and documents relating to the proposed development were reviewed.

Should you have any questions please contact this office.

Respectfully submitted,
GEOTECHNOLOGIES, INC.

REINARD T. KNUR
C.E.G. 1547, G.E. 2755

RTK:km

Distribution: (6) Addressee

A

GEOTECHNICAL ENGINEERING COMMENTARY

PROPOSED SINGLE FAMILY RESIDENCE

1837 ½ El CAMINO DE LA LUZ

SANTA BARBARA, CALIFORNIA

INTRODUCTION

This firm has been retained to provide an evaluation of the issues in deriving a geology-based building setback for the proposed single family development. There is concern that the project as presented to date may adversely impact the coastal bluff and nearby existing development. The building setback as presented on available plans, appears to be have been based on a topographically derived "Top of Bluff". However, there is little agreement with the position between two recent surveys of the existing "Top of Bluff". It is the finding of this firm however, that the geologic aspects of the site have greater impact on the development of a reasonable building setback than the application of the "Top of Bluff". It is not the intent of this firm to establish such a line, but to instead identify the geologic issues that should be considered to develop such a setback line. Previous work by others does not appear to consider the geologic issues in preparation of such a line. The following commentary is primarily focused primarily on slope stability and the necessity to establish a realistic setback from the top of the coastal bluff.

This letter is not intended to evaluate all of the geologic issues confronting development of the site, but is intended to bring attention to the available resources for the establishment of a building setback line. The greater purpose of such a line to minimize degradation to the coastal bluffs and to not contribute to the instability to adjacent properties. As stated in the California Coastal Act (California Public Resources Code, Section 30253):

"New development shall:

(1) minimize risks to life and property in areas of high geologic, flood, and fire hazard.

(2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural land forms along bluffs and cliffs. "

The central issue addressed in this letter is development of a reasonable building setback in keeping with the California Coastal Act and the minimum requirements of the building practice as outlined in the Uniform Building Code. The development of a setback in the should consider the following steps:

a) Complete an accurate assessment of the geologic materials comprising the slope,
b) Representation of the of the geologic conditions on a geologic map of suitable accuracy and coverage,
c) Preparation of Cross Section(s) drawn through the slope that represent the most critical direction in terms of slope stability,
d) Analysis of the stability of the slope using data, assumptions and methods consistent with the illustrated geologic framework. The stability analysis should identify the potential failure plane with a factor of safety of 1.5 or greater for static analyses. A separate calculation should be performed to identify the potential failure plane with a factor of safety of 1.1 for pseudostatic conditions (earthquake loading),

e) Applying a sea cliff erosion rate for the design life of the structure to the potential failure planes determined above and reevaluation of the slope stability analysis with consideration of the new slope profile. The intersection of the top of the potential failure plane and the ground surface will provide a single point on the building setback line setback line.
f) The steps c through e should be repeated as necessary to establish a setback line across the site. The judicious section of Cross Sections can minimize the number of analyses needed.

These steps take into consideration items outlined in the "Recommended Procedures for Implementation of DMG Special Publication 117, Guidelines for Analyzing and Mitigating Landslide Hazards In California (Blake, T. F., Hollingsworth, R.A., and Stewart, J.P., 2002) and "Establishing Development Setbacks from Coastal Bluffs" (Johnsson, M.J., 2005).

This report provide a background of the general site conditions and local geology. The following commentary provides addition clarification to the steps a) through f) outlined above. The scope of work included review of available geotechnical engineering reports regarding the site and vicinity. In addition, available published information regarding the geology of the site vicinity, City of Santa Barbara permit files were also reviewed. A site visit to visually inspect the exposed geologic materials comprising the sea cliff was performed on August 6, 2007. Lastly, personnel of the California Coastal Commission were contacted. No subsurface investigation or testing of the engineering properties of the geologic materials was performed.

SITE CONDITIONS

The site is located in the Mesa area of the City of Santa Barbara at the terminus of El Camino De La Luz. The site is irregular in shape and approximately 0.52 acres in area. A small, relatively flat area near the northwest corner of the site descends to the south ending at a beach and to the east ending at a perennial creek. The flat portion of the site is up to elevation 112 feet and has a slight southeast surface gradient. The toe of the slope and the southern limit of the property nearly coincide at elevation 10 feet. Therefore, the maximum total relief across the site is nearly 110 feet. The perennial creek bottom ranges in elevation from 70 to 40 feet before cascading in a waterfall to the beach elevation near 10 feet. The site is shown relative to nearby topographic features on the attached Local Geologic Map.

A terrace (or topographic bench) is located southeast of the main, flat area of the site. The terrace is nearly flat at an elevation of 95 feet. This area appears to have been used as a picnic location as a firepit and walls were found during the site reconnaissance. Review of an aerial photograph of this area dated 1965, shows a small structure on this terrace. The site topography is shown on the attached Site Survey by Penfield and Smith (2006).

This site is vegetated with coastal brush and annual grasses. A trail leads from the flat portion of the site across the bluff face to the beach below. The trail appears to have been improved in the past, but is currently in disrepair. The neighboring development consists of single family residences.

PROPOSED DEVELOPMENT

The subject site is proposed to be developed with a single family residence. The residence will be two levels in height. The second story will have a finish floor elevation near elevation 110 feet. The first story will be excavated into the slope, and will have a finished floor elevation approximately 10 feet below the existing site elevation. Grading will consist of excavation for the lower floor elevation.

LOCAL GEOLOGY

The local geology consists of late Pleistocene older marine terrace deposits consisting of sandy silt, sand, and clay with a basal gravel or cobble layer. These poorly cemented materials range in thickness from 5 to 60 feet thick and extend inland as a broad sheet several hundreds of feet, (Minor. S.A. et al, 2003). The basal surface of the marine terrace descends to the south at a gentle gradient as shown on the attached Local Geologic Map. The older marine terrace represents remnants of a prehistoric sea level position.

Underlying the marine terrace material is bedrock consisting of interbedded claystone and siltstone with lesser quantities of chert or siliceous siltstone, limestone and dolomitic siltstone. The beds range in thickness from 1/16 inch to several feet thick. Tar was observed in fractures found in the hard, but brittle layers in the formation. Individual beds in the Monterey Formation range in consistency from soft to very hard. The range in hardness results in a very uneven slope profile, where the hard, cherty beds are resistant to wave and water runoff erosion, forming prominent ridges and vertical cliff faces. The soft beds are generally not visible, due to the presence of vegetation and providing a plane of weakness for sloughing, or other mechanism of slope instability.

Bedding in the Monterey Formation is easily visible from the beach and appears to generally dip to the southwest at moderate angles from 24 to 55 degrees. In certain areas, the bedding is slightly to moderately folded due to either deformation simultaneous with deposition or due to tectonic activity from such sources as the Lavigia Fault. Folding in the bedrock has lead to small synclines and anticlines that dip to the south and have been daylighted due to coastal erosion.

Cross Section A-A' was drawn in the down dip direction of bedding planes that are exposed on the cliff face. The cross section shows bedding dipping 35 degrees in a southwest direction and is relatively planar. The available data suggests that no folds occur across the site, however, this representation should be verified with deep, downhole logged borings.

EL CAMINO DE LA LUZ LANDSLIDE

A prominent geologic feature in the site vicinity is the El Camino De La Luz Landslide. Significant movement of this slide occurred on February 14, 1978 whereby two homes located at the edge of the slide were destroyed several others were damaged or threatened. The slide was described in a report by Pacific Materials Laboratory, Inc. dated March 6, 1978. The slide is shown relative to the subject site on the attached Landslide Location Map. The location of the landslide was superimposed from the work by Pacific Materials. The site is located approximately 130 feet east of the slide. The slide measured 550 along the coast and 400 feet perpendicular to the coast. The slide moved as much as 150 feet. The toe of the slide extended as much as 80 feet beyond the current sea cliff edge. The loss of material is due to erosion of the soft, disturbed materials from wave action.

Limited subsurface work was performed at the time, however, it was concluded that failure occurred along a bedding plane or planes and a curved surface that cut across bedding planes. The slide was triggered by water from heavy rainfall that preceded the date of failure and from disposal of water to the ground surface from nearby homes.

The potential for further movement of the slide and environs was also discussed in the report. Based on the orientation of daylighted (unsupported) bedding planes the area considered as a zone of potential failure was indicated on their geologic map as a line"Potential Short Term Plane of Failure".

The line has been transferred to the Landslide Location Map and to the Site Survey. It should be noted that the line nearly coincides with the proposed structure.

It was noted in the report that the El Camino De La Luz landslide has moved in the past. The presence of a landslide scarp predating the 1978 event is evident in aerial photographs. However, based on the available information, only minimal geotechnical investigation has been performed on the El Camino De La Luz landslide to characterize the potential for future failure or mitigate against such failure.

INTERPRETATION OF TOP OF BLUFF

In order to avoid the potential damage that may occur due to hazards such as the nearby landslide, a building setback is commonly established from a position referred to as the "Top of Bluff". Due to the irregular topography of the site vicinity and the irregular profile that the bluff presents, the position of this line has been interpreted by two different surveyors with different results. One interpretation was developed by the Peikert Group Architects (dated October 23, 2003, revised on December 30, 2005). Another interpretation is shown on the Site Survey and was developed by Penfield and Smith in a survey dated June 29, 2006. The two "Top of Bluff" lines are nearly coincident at the west property line, however they diverge markedly to the east. It appears the difference in interpretation is based on the presence of topographic bench located southeast of the

level pad area. It is not the intent of this report to judge the accuracy of either survey, however the basis for the "Top of Bluff" definitions is rooted in the California Coastal Act. A diagrammatic representation of three different slope conditions is presented for clarification, Figures 1, 2, and 3. Each of the definitions is determined purely by topographic features and not the underlaying geologic structure. As is discussed below, the geologic structure, not the topographic features, impacts the development of a building setback line for the site. Therefore, the interpretation of "Top of Bluff" is not considered further in this text.

GEOLOGIC COMMENTARY

The following items described below represent standard, state of the practice procedures that should be followed for development of a building setback. The lettering sequence follows that presented in the earlier in this report.

a) Complete and accurate assessment of the geologic materials comprising the slope.

The subsurface work performed on the subject site consists of two borings drilled by Buena Engineers in 1971 to a depth of 14 ½ feet and three borings borings drilled by Pacific Geoscience in 1987 to a maximum depth of 13 feet. Given the relief is over 100 feet, borings should be drilled and logged by

a geologist to a point below the lowest unsupported (current and future) bedding plane to identify geologic structure.

The engineering properties of the onsite geologic materials require adequate evaluation. The most recent geotechnical engineering report were field work was performed (Pacific Geoscience, 1987) did not provide the results of such testing. Guidelines for the selection and evaluation of geologic materials for slope stability analyses are presented in the report "Recommended Procedures for Implementation of DMG Special Publication 117, Guidelines for Analyzing and Mitigation Landslide Hazards in California" (Blake Hollingsworth, and Stewart, et. al, 2002).

b) Representation of the of the geologic conditions on a geologic map of suitable accuracy and coverage.

Any geologic map used for the analysis should show the limits of the property, and the topography of salient features nearby, such as the toe of the ocean bluff and the creek bottom. In addition, due to the presence of large landslide to the east, the map should show the relationship of the site relative to the landslide. Two maps were available to this firm that provide reasonable coverage and are presented for illustration purposes. The attached Landslide Location Map shows the site relative to the El Camino Del La Luz Landslide and the Site Survey shows the proposed structure relative to nearby topographic features. No attempt was made to show the detailed geology of the site for purposes of this letter.

c) Preparation of Cross Section(s) drawn through the drawn though the dimension that represents the most critical direction in terms of potential failure.

Two schematic Cross Sections were drawn through the site and presented in a letter by William Anakouchine, Ph. D. dated March 16, 2005. The presented cross sections need to illustrate the subsurface geology to provide the parameters for proper stability analysis of the slope.

Based on the topography shown on the Site Survey, Cross Section A-A' was prepared by this firm. With limited subsurface information available, the cross section represents a best estimate of the bedrock orientation. The bedrock inclination is based on measurements of bedrock exposures by Pacific Materials (1978) and this firm.

The cross section does not show the individual beds of siltstone, claystone, and chert that appear in the slope as would be the case in an appropriate analysis. The cross section schematically shows the location of the first daylighted bedding plane. This plane represents an unsupported bedding surface and is considered at the cusp of failure in slope stability analysis. The surface manifestation of the daylighted plane is located several feet further landward of the location of the "Top of Bluff" as presented by the surveyors which is based solely on topographic features.

d) Analysis of the slope stability using methods, data, and assumptions consistent with the illustrated geologic framework.

Stability analysis should focus on the orientation of the bedding planes, along which is the weakest direction of rock strength. The nearby landslide likely occurred along a such bedding plane (Pacific Materials, 1978). In a rigorous analysis, both circular shaped failure surfaces, planar failure surfaces or a combination of both should be analyzed. The analysis method or failure surface slope that yields the lowest factor of safety for any potential failure surface should be used as the basis for development of the building setback. The objective of the analysis should be to identify the position of a surface where the stability of the slope has a factor of safety of 1.5 or greater. The analysis should also use bedrock strengths that are representative of the on-site materials and with properties that are likely to occur during the life of the structure, such as a saturated condition.

The analysis should also consider the effects of pseudostatic loads (earthquake loading). The procedure described in the referenced Guidelines described in (Blake, Hollingsworth, and Stewart, 2002) is rigorous, however, parameters commonly accepted by reviewing agencies are a seismic coefficient of 0.15 and a minimum factor of safety of 1.1.

The daylighted bedding planes shown on the attached Cross Section A-A' do not reflect existing bedding planes with analyzed factors of safety as described above. Analysis will likely yield positions still further inland from those shown.

e) **Applying a cliff erosion rate for the design life of the structure to the profile determined above and reevaluation of the slope stability analysis with consideration of the new slope profile.**

The stability of the slope should be consider not only the conditions that occur during the design phase of the project but also during the design life of the project. Sea cliff erosion rates for the site vicinity have been estimated to range from 4 to 8 inches per year (Norris, 1988, CFG Consultants,1996, Fisher, 2001). Using the daylighted bedding plane as a point of reference and assuming the bedrock structure is fairly uniform through the site in an inland direction, the future daylighted plane is shown. The portion of this plane is based on a 75-year design life and the minimum and maximum erosion rates.

Based on the minimum erosion rate cited, a 25-foot offset to the daylighted bedding plane is calculated. This position is well within the building footprint as shown on Cross Section A-A'. If the highest erosion rate is used, a 50 feet setback is calculated and the entire structure is within the setback zone. Again, these building setback positions do no consider the set backs based on a factor of safety.

f) **The steps c through e should be repeated as necessary to establish a setback line across the site.**

Due to the complex shape of the site and likely variations is bedrock structure, the 75 year setback line should be determined at several positions around the site. Additional consideration should be given to the creek located on the east side of the site.

CONCLUSIONS AND RECOMMENDATIONS

Based on review of available documentation, a building setback line has been established by others based on a topographic interpretation of the "Top of Bluff" with a setback based on the conservative sea cliff erosion estimate of 25 feet. It is the finding of this firm that the geologic structure has not been considered in establishing the building setback. Since a relatively simplistic approach yields a position further inland from those shown by the surveyors. Slope stability analysis considering the geologic structure and utilizing representative geologic materials strengths should be performed. The procedures for such analysis are readily available and should be followed as part of the establishment of the setback line.

Enclosures: References
Local Geologic Map
Site Survey
Landslide Location Map
Figure 1, Top of Bluff- Definition 1
Figure 2, Top of Bluff - Definition 2
Figure 3, Top of Bluff - Definition 3
Cross Section A-A'

REFERENCES

Anakouchine, William, Ph.D., March 16, 2005, Peer Review of Geologic Analysis for a Project at 1837½ El Camino De La Luz, No Job Number.

Blake, T.F., Hollingsworth, R.A., and Stewart, J.P., eds., 2002, Recommended Procedures for Implementation of DMG Special Publication 117 Guidelines for Analyzing and Mitigating Landslide Hazards In California, Southern California Earthquake Center.

Buena Engineers, May 17, 1971, Preliminary Soil Investigation and Engineering Geology Report for a Single Family Residence on El Camino De La Luz in the La Mesa Area, Santa Barbara, California, no job number.

Fisher Geologic, December 2, 2001, Engineering Geologic Update Report, 1837½ El Camino De La Luz Santa Barbara, no job number.

Johnsson, M.J., 2005, Establishing Development setbacks from Coastal Bluffs, in Magoon, O.T., Converse, H. Baird, B., Jines, B. and Miller-Henson, M., eds, California and the World Ocean, -02, Revisiting and revising California Ocean Agenda: Reston Virginia, American Society of Civil Engineers, p. 396-416.

Minor, S.A., Kellogg, K.S., et. al, 2003, Preliminary Geologic Map of the Santa Barbara Coastal Plain Area, Santa Barbar County, California, U.S. Geoligc Survey, Open File Report 02-136, Version 1.1, map scale 1:24,000.

Norris, Ph. D, R.M., November 8, 1988, Untitled report,

Pacific Geoscience, April 9, 1987, Soils Engineering Investigation of 1857 El Camino De La Luz, Santa Barbara, California, No job number.

Pacific Materials Laboratory, Inc., March 6, 1978, Preliminary Landslide Investigation, Sea Cliff Property, El Camino De La Luz, Santa Barbara, California, Lab no. 2993-G2, File No 8-4859-2.

Penfield and Smith, July 2007, Topographic Map, work order 17383.01, Map Scale 1:120.

State of California, 2007, Public Resources Code, Division 20, California Coastal Act, http://www.coastal.ca.gov/coastact.pdf.

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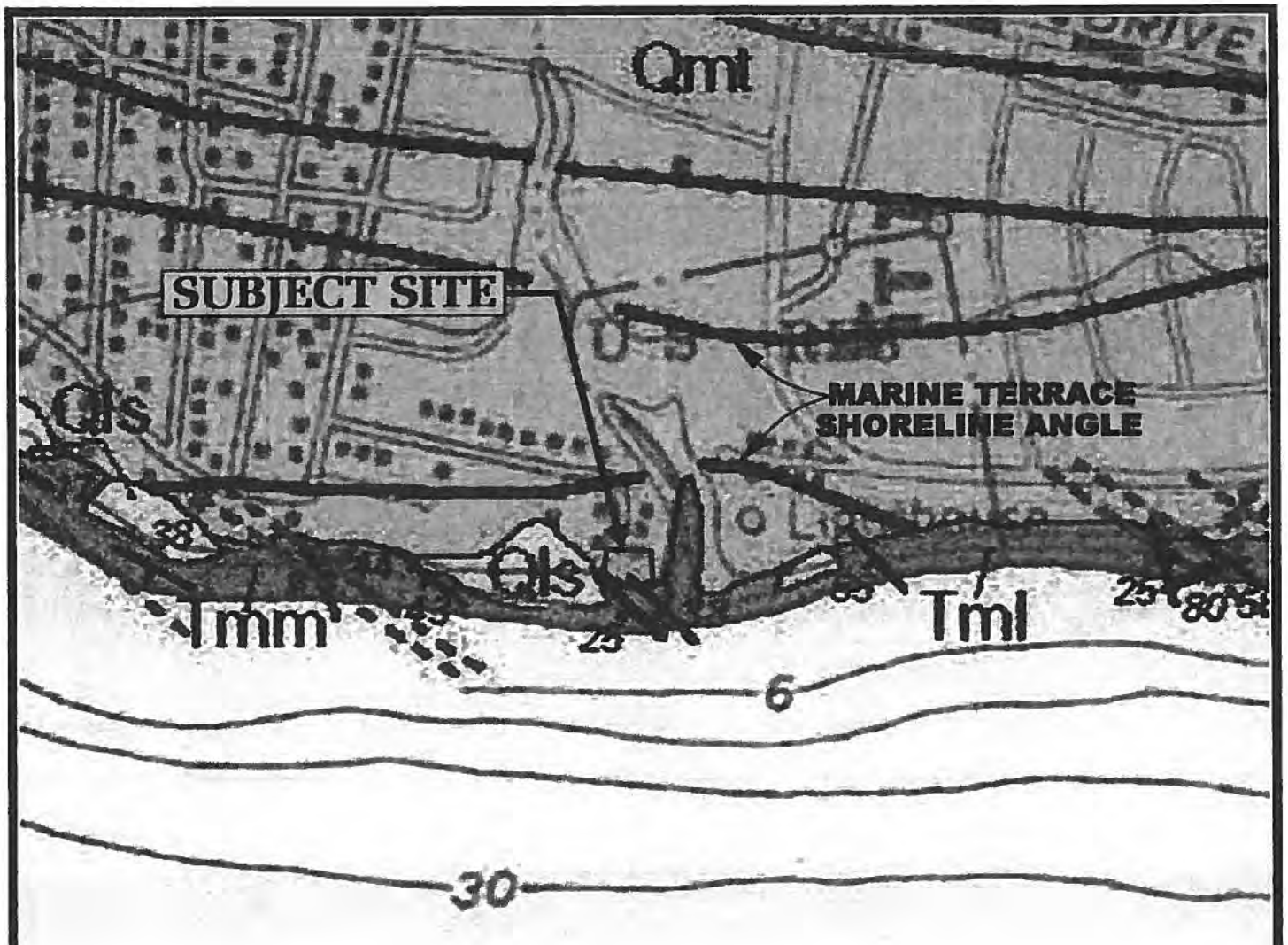

SCALE IN FEET

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LEGEND

Qmt: Marine Terrace Deposits
Tmm - Monterery Formation (middle shale unit)
Tml - Monterey Formation (lower calcareous unit)

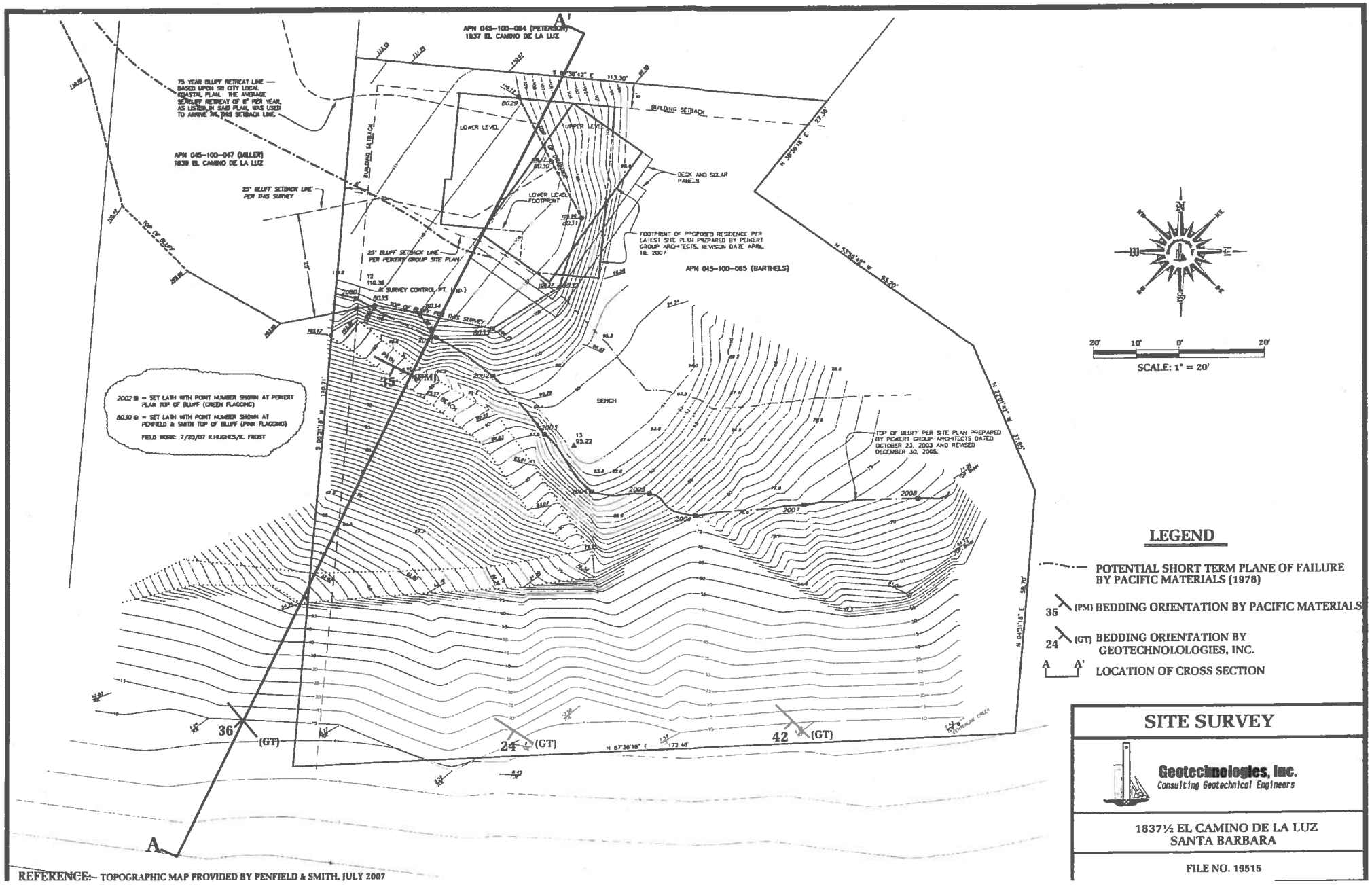
REFERENCE: **Preliminary Geologic Map of the Santa Barbara Coastal Plain Area**
Minor, S.A., Kellogg, K.S., et al 2003

LOCAL GEOLOGIC MAP

Geotechnologies, Inc.
Consulting Geotechnical Engineers

1837½ EL CAMINO DE LA LUZ
SANTA BARBARA

FILE NO. 19515



LEGEND

- POTENTIAL SHORT TERM PLANE OF FAILURE BY PACIFIC MATERIALS (1978)
- 35 (PM) BEDDING ORIENTATION BY PACIFIC MATERIALS
- 24 (GT) BEDDING ORIENTATION BY GEOTECHNOLOLOGIES, INC.
- A A' LOCATION OF CROSS SECTION

SITE SURVEY

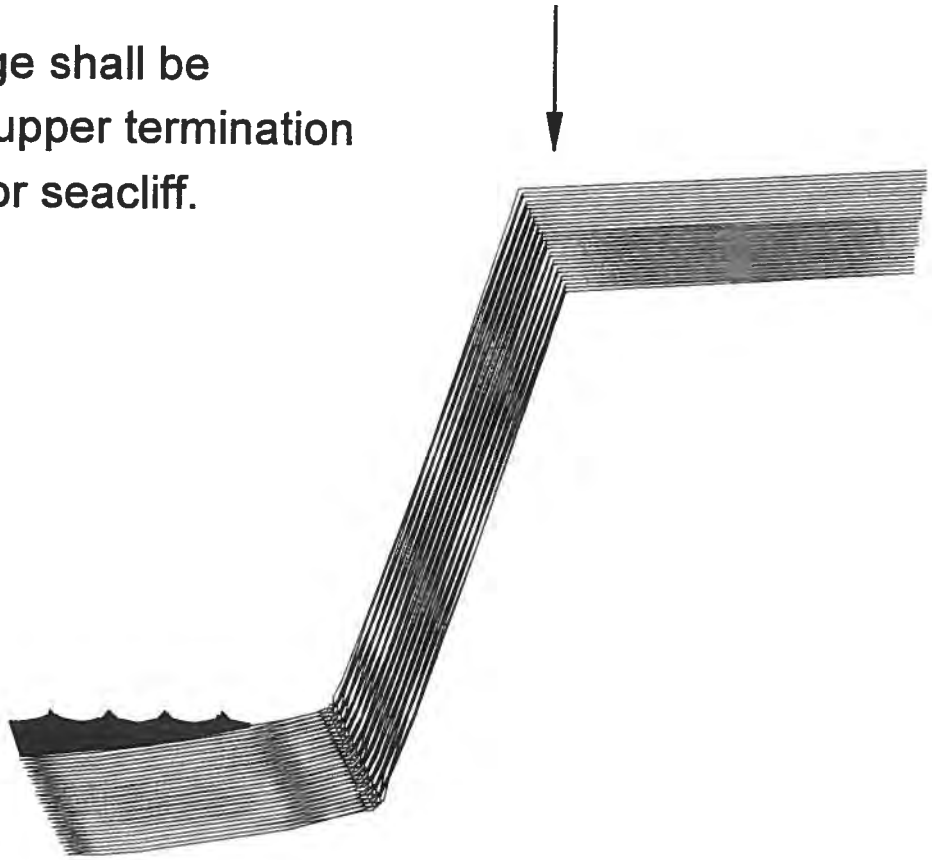
Geotechnologies, Inc.
Consulting Geotechnical Engineers

1837½ EL CAMINO DE LA LUZ
SANTA BARBARA

FILE NO. 19515

REFERENCE:– TOPOGRAPHIC MAP PROVIDED BY PENFIELD & SMITH, JULY 2007

Bluff line or edge shall be defined as the upper termination of a bluff, cliff, or seacliff.



REFERENCE: CALIFORNIA COASTAL ACT, CALIFORNIA CODE OF REGULATIONS, TITLE 14, §13577 (h)(2)
REPRINTED FROM CALIFORNIA COASTAL COMMISSION STAFF PRESENTATION

TOP OF BLUFF - DEFINITION 1

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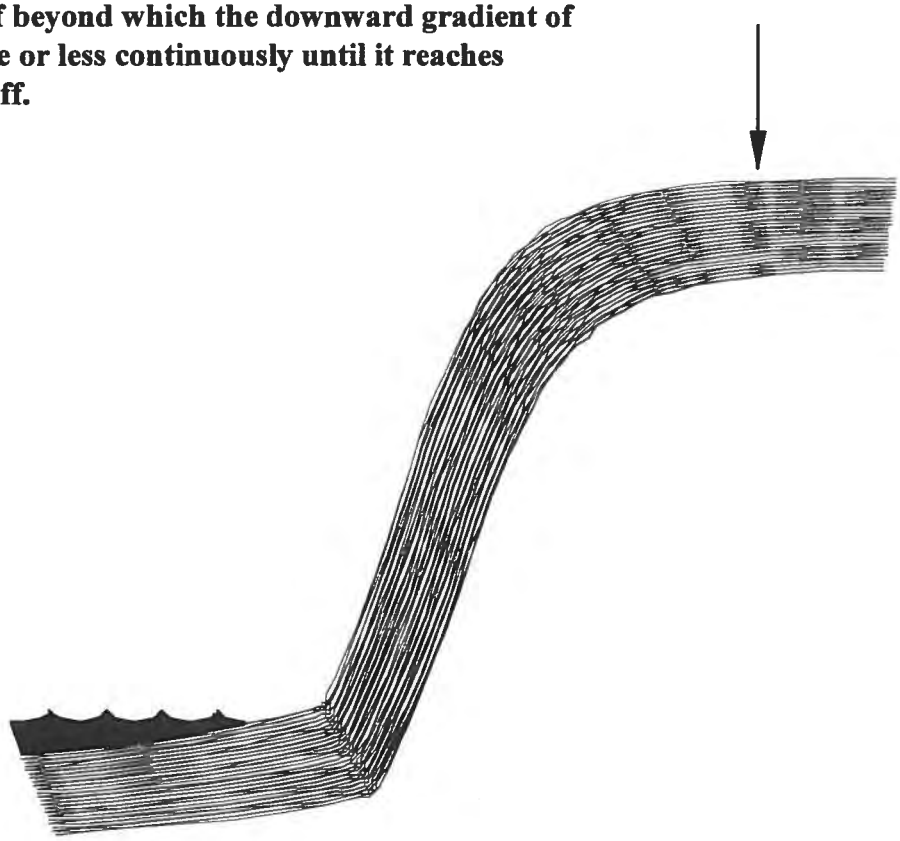
FILE NO. 19515

FIGURE I

In cases where the top edge of the cliff is rounded away from the face of the cliff as a result of erosional processes related to the presence of the steep cliff, the bluff line or edge shall be defined as that point nearest the cliff beyond which the downward gradient of the surface increases more or less continuously until it reaches general gradient of the cliff.



N

REFERENCE: CALIFORNIA COASTAL ACT, CALIFORNIA CODE OF REGULATIONS, TITLE 14,§13577 (h)(2)
REPRINTED FROM CALIFORNIA COASTAL COMMISSION STAFF PRESENTATION

TOP OF BLUFF - DEFINITION 2

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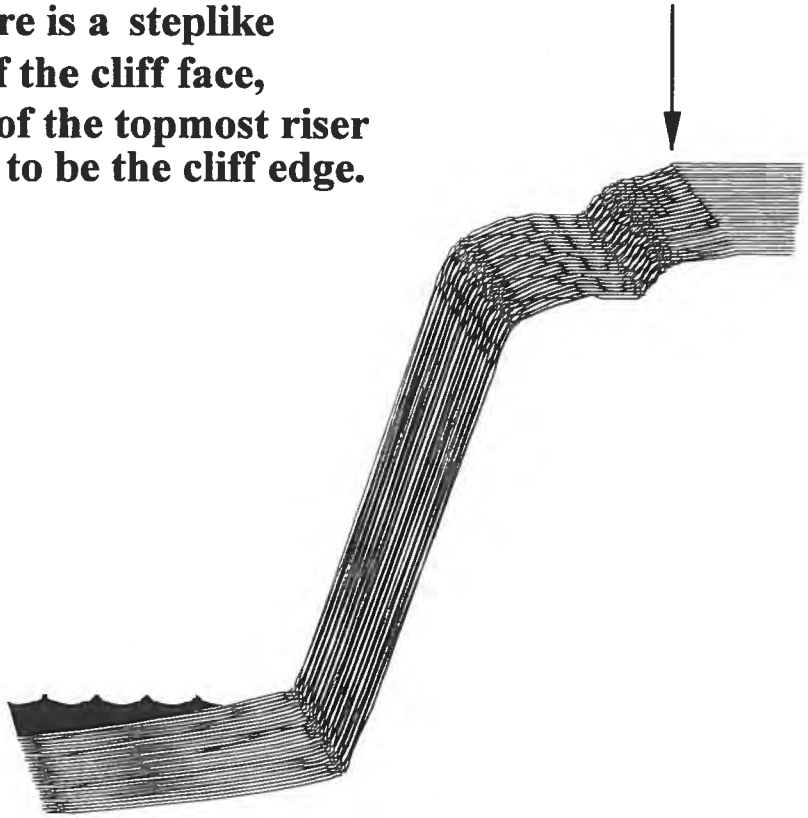
1837½ EL CAMINO DE LA LUZ
SANTA BARBARA

FILE NO. 19515 | FIGURE II

In a case where there is a steplike feature at the top of the cliff face, the landward edge of the topmost riser riser shall be taken to be the cliff edge.



REFERENCE: CALIFORNIA COASTAL ACT, CALIFORNIA CODE OF REGULATIONS, TITLE 14, §13577 (h)(2)
REPRINTED FROM CALIFORNIA COASTAL COMMISSION STAFF PRESENTATION

TOP OF BLUFF - DEFINITION 3

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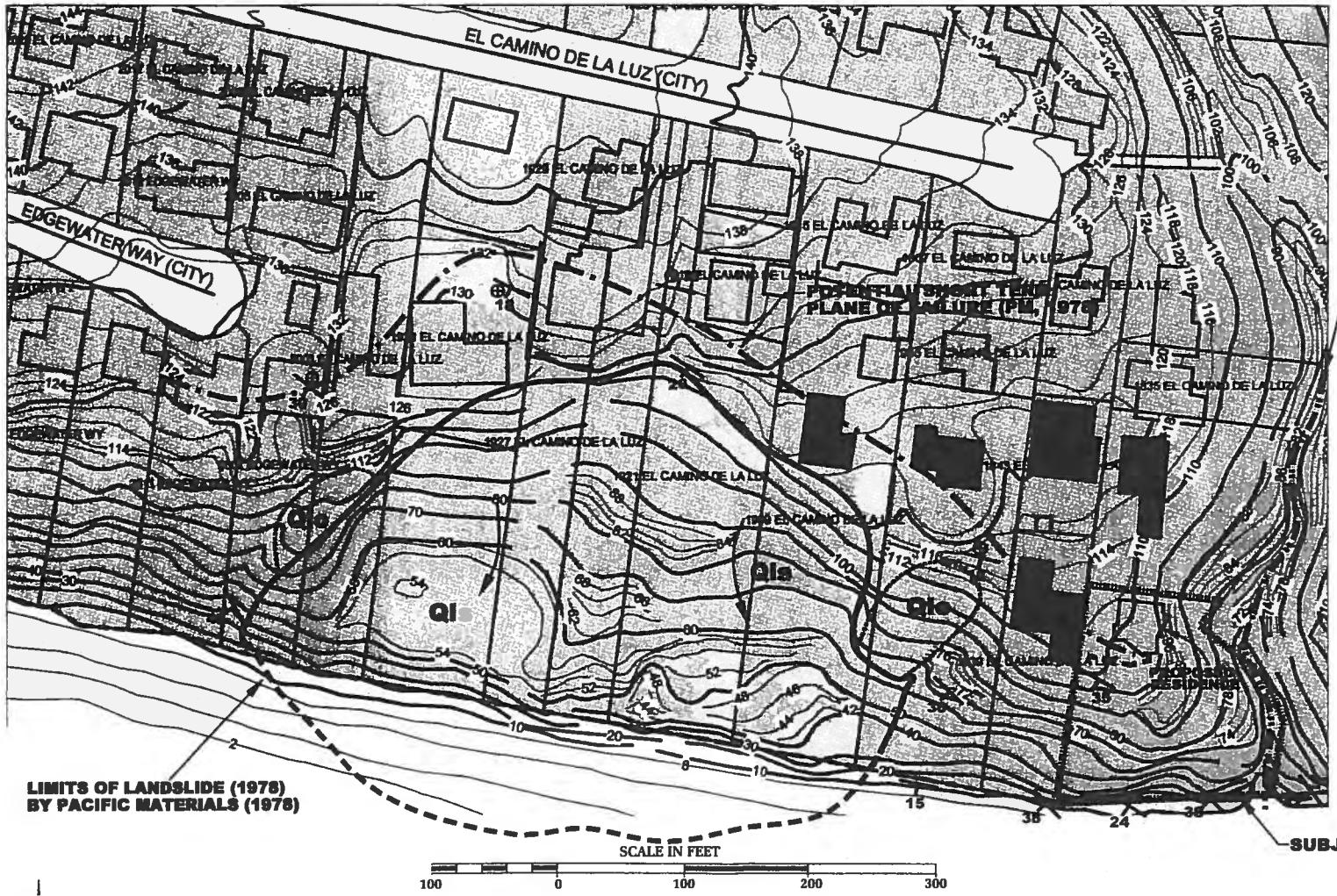
FILE NO. 19515 | FIGURE III



REFERENCE: GEOLOGY ADAPTED FROM PACIFIC MATERIALS LABORATORY, INC. 1978
TOPOGRAPHIC MAP FROM CITY OF SANTA BARBARA, UNDATED

LEGEND

- **Qls** QUATERNARY LANDSLIDE - FEBRUARY 1978
- **Qlo** QUATERNARY LANDSLIDE - OLDER
- STRIKE AND DIP OF BEDDING
- TEST PIT

LANDSLIDE LOCATION MAP

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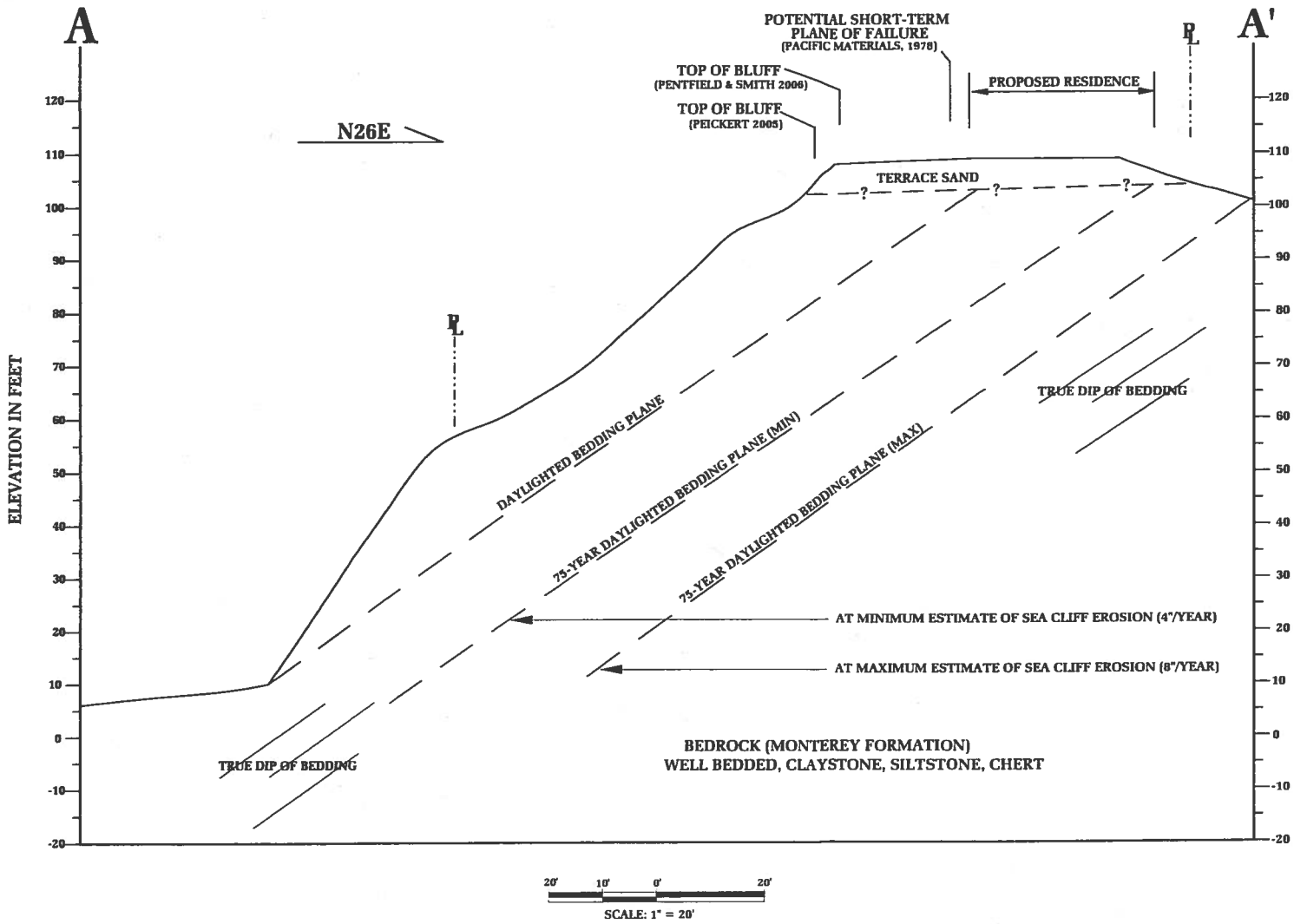
SANTA BARBARA

FILE NO. 19515



CROSS SECTION A-A'

Geotechnologies, Inc.
Consulting Geotechnical Engineers

1837½ EL CAMINO DE LA LUZ
SANTA BARBARA

FILE NO. 19515

WILLIAM ANIKOUCHINE, PH.D
CONSULTANT IN MARINE AND EARTH SCIENCES

Mr. Daniel Gullett
City of Santa Barbara Planning Division
P.O. Box 1990
Santa Barbara CA 93102

25 February 2008

This is my report concerning work I was requested to perform as per the stated scope of work given in my letter to you of 7 December 2007. The reported tasks are listed below:

1. GEO-3a Building Pad Inspection – The objective of this task was to complete the geologic investigation of the proposed building site as required by EIR mitigation measure GEO-3. This measure requires an evaluation of the building pad area to determine if a reported "bedding plane fissure" is located on the proposed building site. This investigation is required to include a visual inspection of the project site to determine if the fissure can be adequately evaluated by removing vegetation that may be obscuring its location. If it is determined that a visual inspection would not be adequate to locate or assess the fissure, the mitigation measure requires that a trench to bedrock be constructed in an attempt to locate the fissure and evaluate the potential for it to result in slope stability impacts.

   In preparing to execute this task an inquiry was made of Dr. Barthels regarding the Plate II map missing from my copy of the Smith 1980 geologic report. Dr Barthels provided me with his files and in them I was able to find the missing map and also the missing Plate 3 Geologic map for the CFG report of 19 June 1996 to Dr. Barthels. An extract of each of these maps is given in Figure 1.

EXHIBIT J

B

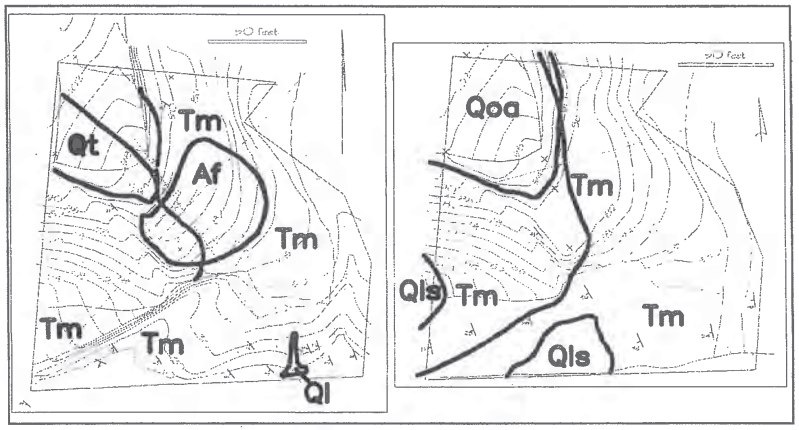


Figure 1. Excerpts from geologic maps by CGF (on left) and Smith (on right). Topographic contours are brown. Geologic contacts are heavy black lines. The formation symbols are Qt = Quaternary terrace materials, Af = Atrificial fill, Tm = Monterey formation, Ql or Qls = Quaternary (Recent) landslide debris, and Qoa = Quaternary older alluvium. The attitude of the Monterey strata is shown by the strike and dip symbols. The light green line indicates the paved area. Magenta lines indicate the oceanographic verge of the bluff and the break in slope along the creek. The creek is shown as a cyan line. Note that its lower reach is deflected eastward. Pale blue lines are the trace of cross-sections prepared by the authors of the maps. Small blue X's are the writer's GPS control points. The heavy blue lines represent the calculated position of the putative "open bedding plane fissure" derived from data on each map.

The maps in Figure 1 provide information for estimating where the feature Dr. Smith called a "continuously open bedding plane fissure of slide potential" is located on Dr. Barthels' property. A technique wherein the intersection between a dipping stratum and the surface topography can be determined was applied to each map by the writer to verify Dr. Smith's and CFG's results. Their results presumably were obtained using the same technique.

A comparison of the lines of the putative "bedding plane fissure" on both maps shows considerable differences in position near the paved area. It is evident that the exact position of the fissure, if it indeed exists needs to be determined by visual inspection of a trench or pit transecting the vicinity of the paved area.

Using the maps in Figure 1 an initial inspection of the Barthels parcel was made to ascertain where vegetation could be removed to allow an inspection excavation to be made. It was determined that a "weedwacker" could not remove the vegetation. Rather, a backhoe that would dig the inspection trench was to have cleared obscuring vegetation in the process of digging the trench.

The writer arranged to have the backhoe excavate the required inspection trench on 14 January 2008. On that date Mr. Rodriguez and the backhoe operator reported to me that two automobiles had been parked in a manner to block access to the Barthels parcel. I notified Mr. Gullett of the City of Santa Barbara Planning Division and Dr. Barthels to see if the blocking vehicles could be removed or some other means of access used. Neither of these options was successful so the trench excavation and inspection was cancelled after 2 hours of effort. As a result, the project applicant's request to comply with the requirements of mitigation measure GEO-3 could not be conducted.

2. Mr. Franco's has submitted comments regarding geology in his 9-6-07 document. Here is my response to his comments (in red where cited). The document is not paginated so my comments are keyed to the headings and paragraph numbers used in Mr. Franco's document.

GEOLOGICAL IMPACTS

1. Mr. Franco is mistaken about what the hachuring on the map in Figure 1 of my report represents. My report indicates that the cross-hatched area is the paved parking area, not the proposed building envelope.

2. The line Mr. Franco refers to is identified in the Weaver report in the 6 March 1978 Pacific Materials Laboratory, Inc. document as a "Potential short term plain (sic) of failure" (see legend of cross section A-A'). Weaver refers to a "Zone of Potential Failure" in the text of his report. A short term failure along the indicated plane has not occurred for 30 years. Apparently Dr. Weaver's surmise regarding the likelihood of immanent failure along the plane was in error. Furthermore, the dot-dash line Weaver put on his map to represent the failure plane does not extend as far to the east as Mr. Franco's annotated exhibits (his Figures B and F) indicate.

3. Mr. Franco modified Figure 1 of my report to show landslide boundaries extending seaward in his Figures B and F. The modified figures are incorrect. Figure 2 in my report is a photograph of the wave-cut platform offshore of the slide at low tide. Figure 2 shows clearly that none of the present platform was involved in the slide.

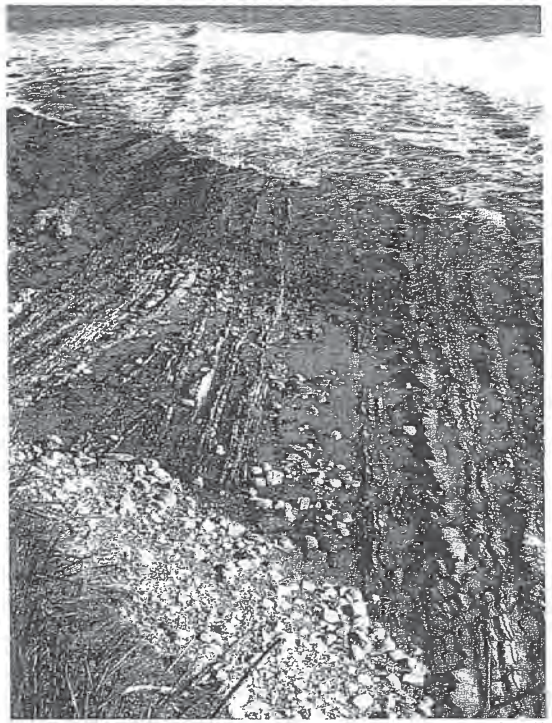


Figure 2. View downward and to the SE from the Barthels parcel at low tide. Monterey strata can be seen extending to the toe of the coastal bluff below the landslide at the SE corner of the parcel. The boulders at the toe are winnowed from landslide debris by wave action. Note the large angle between the strike of the strata and the trend of the bluff face.

For a close-up look at this condition, visit the recent (late January 2008) slide at Shoreline Park. Steps lead to the beach where one can inspect the toe of the slide and ascertain that, here also, the wave cut platform under the beach sand was not involved in the slide.

4. Figure 1 in my report was intended, as is stated in its caption, to show information gleaned from the reports that I reviewed as well as my own observations in the field. The extent of the Camino de la Luz landslide of Feb 1978 and mapped surface features are indicated on my Figure 2. The map in this figure was taken

from Weaver's report; it shows the relationship to the Barthels parcel and indicates older Quaternary landslides in the area by the symbol Qlo. The symbol Qls is used to represent the February 1978 landslide material in Cross Section B-B' in Weaver's report, but this symbol is not used on his map.

The purpose of my report was to perform a peer review of the work of others. I performed slope stability analyses to evaluate whether landslides should have been considered an issue. This effort was not intended to be engineering design work which is guided by the Uniform Building Code.

Pronouncements by Mr. Franco regarding factors to be included in my report are without merit because he is not qualified (and prohibited by law) to assess the nature of the bedrock under the parcel, how the adjacent creek might act as a lubricant, and the proximity of the La Vigia fault.

CONFLICTING PARAMETERS

1 through 4. These are reiterations of Mr. Franco's assertions in the previous section of his document. They have been addressed above.

CORRECTIONS AND RESPONSE COMMENTS

13. Abundant data can be found in the technical literature for estimating of the shear strength of lithologic units such as the Monterey marl. Such data are appropriate for the purpose intended in the stability analysis performed for my peer review.

14. The setback line shown on Figure 1 in my report is to illustrate that marine erosion rates do not apply at verges not being actively attacked by waves. Such verges are attacked by terrestrial and/or bluff failure. Terrestrial erosion proceeds at markedly slow rates. Bluff failure proceeds episodically such that a characteristic rate of bluff retreat is probabilistic and should be considered accordingly. Nonetheless, the method of evaluating historical shoreline retreat includes inescapably the effects of bluff failure.

16. I use a slope stability analysis program that performs the analysis by several methods. The Spencer method is superior to the Janbu method for circular and non-circular failure plane analysis, but neither is as conservative as the simplified Bishop's method that I used after performing preliminary block slide analysis and random-shaped surface analyses. It should be noted that Mr. Franco is not qualified to evaluate the applicability of the method of analysis.

17. The profiles are intended to show the shape of the topographic surface, not the location of the Barthels parcel.

18. This comment inappropriately characterizes general rock mass strength and geologic principles.

3. Analysis of Reinhard Knur's "Geotechnical Engineering Commentary" (5 September 2007).

I have read Mr. Knur's commentary and have the following remarks to offer. They are keyed to the page and headings (in red) used in Mr. Knur's commentary.

INTRODUCTION

Page 3. Third line from bottom – The usual procedure for slope stability analysis is to search for critical failure planes with factors of safety less than 1.5. These would indicate a hazard of low stability requiring further analysis and the inclusion of a landslide setback in the overall setback distance. The method that Mr. Knur seems to be citing requires an *a priori* knowledge of the shape and general position of a potential failure plane having a factor of safety of 1.5 under static conditions. One seldom has this information available initially.

LOCAL GEOLOGY

Page 6. Last line – The older marine terrace represents an elevated littoral zone. Given the tectonics of this region, it is not possible to determine the former eustatic position of the sea level at the subject site.

Page 7. Last two lines of the first paragraph – How does Mr. Knur knows that soft beds are present in the Monterey formation at the site when he states that they "generally are not visible"?

Next to the last line – This sentence contradicts the assertion made in the previous paragraph. Small, probably syngenetic folds have been noted on the subject parcel by Smith (1980), CFG (1996), Fisher (2001) and the writer (see Figure 2). These folds are extremely important because they represent asperities in bedding planes which strongly impede bedding plane slippage.

Figure 1. Photo to the NW from the beach toward the Barthel's parcel. Note that the bedding is interrupted by small folds and undulations (see also Figure 3). Note also that no soft beds appear in the outcrops. The bluff in the right half of the photo is a landslide scarp. The material at the right edge of the figure is a landslide block that has broken away from the rock mass on the left side of the figure along that scarp. Movement of the slide was toward the right and not down dip toward the viewer. (Photo by the writer, 10 March 2005)

EL CAMINO DE LA LUZ LANDSLIDE

Page 8. Last paragraph – Dr. Weaver (1978) does not state the basis or method for determining the shape and location of the "Potential Short Term Plane of Failure." Mr. Knur's does not either.

Page 9. First two lines – The "potential short term failure plane" shown on Mr. Knur's map passes through, or is adjacent to every one of the ten coastal homes between 1839 and 2001 Camino de la Luz and also 2007 and 2011 Edgewater Way. These houses are still here 30 years after this line was drawn on Dr. Weaver's (1978) map. Perhaps it is time to rename the line to something that more accurately describes what it represents.

GEOLOGIC COMMENTARY

Page 10. a) The section underlying the subject parcel is exposed in the coastal bluff. It hardly seems necessary to drill a hole over 100 ft deep to examine the rocks comprising the bluff that is 150 ft away. Geologic structure could not be ascertained by just one drill hole in any case. Further, it would be necessary to drill only 40 ft to intersect all the strata that would be unbuttressed in 75 years of a hypothetical 8 in/yr of erosion as Mr. Knur indicates in his cross-section A-A'.

Page 11. First complete paragraph – The cited reference, Blake Hollingsworth & Stewart (2002) is an excellent guide for the analysis of soils. However the

authors hardly consider rocks in anything but general terms. Rocks at and near the earth's surface are inevitably broken to various degrees (see Figure 2) so the analysis of strength parameters of rocks as if they were homogeneous or even anisotropic soils is misleading. The literature of rock mechanics should be cited here instead.

Page 12. Second paragraph – The Cross-Section A-A' is not the best estimate of bedrock orientation in the Barthels' parcel. The lines drawn on Mr. Knur's cross-section are trigonometric constructions that identify the strata above a certain bedding plane that are not buttressed laterally.

Figure 2 shows that the bedding planes of the Monterey strata at the site are not smooth planes as suggested by Mr. Knur, but are planes disrupted by the asperities of folds. The geologic maps of Smith (1980) and CFG (1996) both show folds in the Monterey strata. They also show that the dip of the strata is not uniformly 35°, but is variable from 17° to 25° at the beach, from 50° to 40° on the bluff and from 20° to 25° at the verge and bluff-top. Such small folds and homoclinal variation in dip in the true character of the orientation of the Monterey strata at the site. This character plus the obvious fractured nature of the strata should instruct one to expect a mode of failure other than a simple block slide down dip. This is further borne out by the nature of the block slide shown in Figure 2. That failure took place across the dip of the strata and the direction of motion appears not to have been down dip.

Page 12. Third paragraph – As above, the bedding should not be shown as a straight line (suggesting smooth bedding) in the cross-section. Unsupported (unbuttressed) strata exist in the face of the bluff, but the actual geologic conditions there indicate that slope failure is more likely to occur in a different mode than bedding plane slippage.

It is not clear what the cited surface manifestation is and what topographical feature is being used for the analysis.

Page 13. First paragraph – My slope stability analyses included considerations of both block sliding and circular failure.

My report was not intended to determine a setback, but rather to perform a peer review of the setback determined by previous workers.

Second paragraph – A seismic coefficient of 0.5 was used in my pseudo-static analyses. This value was suggested by the Santa Barbara Department of Building and Safety as used by them. This probably put more conservatism in the method than is actually necessary to depict a typical case. Such acceleration, if prolonged, would cause widespread

destruction of structures and produce conditions far more serious than local slope failure.

Third paragraph – This assertion is speculation only.

Page 14. First paragraph – Mr. Knur makes an assumption of "fairly uniform" bedrock "structure". This is not warranted as shown in the items above and by the appearance of the strata in Figures 2 and 3.

Second paragraph – This calculation follows a method advocated by Johnsson (2003) for calculating a coastal setback by considering the rate of marine erosion and the stability of the present coastal bluff. His method of determining the coastal setback consists of deciding upon a project life (75 years in the present case) and applying a rate of bluff retreat to that interval. If the bluff is shown to be stable, no slope stability setback need be added. An arbitrary buffer zone setback of 10 feet is then to be added to obtain the design setback. Such a buffer is unwarranted because the aleatory aspect of slope failure is already accommodated by stipulating a minimum factor of safety.

My slope stability analyses indicate that the bluff is stable and only marine erosion need be considered in deriving a coastal setback.

Page 15. Second paragraph – Second sentence – This is not true. The attitudes of the strata have been measured by Smith (1980), CFG (1996), Fisher (2001) and the writer. The structures distorting the planar bedding were considered at length.

The words starting with "Since a relatively…" do not form a sentence. The meaning of this fragment is not clear. The sentence following the fragment mentioned above is a general truism. Such a slope stability analysis has peen performed by the writer to augment my peer review. Block sliding along unbuttressed bedding planes is probably not as likely as failure along fracture surfaces in the Monterey strata inasmuch as the latter has occurred at the SE corner of the Barthels parcel.

Of course, uncertainty exists in trying to determine future landslide events at the subject parcel. It is the task of engineering and architectural designers to take such uncertainty into account.

SUMMARY AND CONCLUSIONS

The Knur report appears to be a general treatment of geotechnics and slope setback methodology. In this sense the report is accurate, but his application of the general principles of slope stability to the Barthels site omits important details that cause his statements and conclusions to be inappropriate.

Mr. Knur describes the mode of failure of smooth, regularly-bedded strata that strike parallel to the trend of the bluff face. This mechanism is valid, but is not applicable at the Barthels site The few attitude measurements shown on the "Site Survey" map in Mr. Knur's report illustrate that the Monterey strata strike at an angle to the trend of the bluff face (see also Figure 2). This means that the strata are buttressed on their western extent. The only way a block slide could occur is if a nearly vertical failure plane develops so as to cause detachment of a block which then would rotate downward along a bedding plane (see Figure 4). The failure would be controlled more by the lateral strength of the strata sequence than by the shear strength of a weak interbedded stratum which at this site would be controlled by the presence of fold asperities on the bedding plane.

The coastal setback determined by Mr. Knur is excessive and is based upon faulty methodology. He applies the marine erosion rate to his cartoons of the "top of bluff" as if that feature eroded at such a rate. It doesn't. It erodes at a much slower rate determined by terrestrial processes. The rate of marine bluff erosion is measured by the retreat with time of the toe of the bluff because the toe is the most recognizable reference in historical aerial photographs and topographic maps. This method of determining the erosion rate includes the episodic and highly erratic incidence in time and space of bluff failure by landslides so there is no justification for considering slope failure by landslides separately

Figure 2. Monterey strata exposed in the bluff at the Barthels parcel. View is NW toward the Barthels parcel. The failure plane is delimited in red. The white ledge in the landslide block detached from the layer seen at the left side of the scene. Rotational motion toward the channel of the creek (off the view to the right) explains the configuration of the strata in this scene.

as if the probability of the occurrence of a landslide at the site in the next 75 years is 1. It certainly isn't.

I trust that this response is suitable for your purposes. Please contact me if you have any questions or comments.

William Anikouchine

REGISTERED GEOLOGIST
WILLIAM ANIKOUCHINE
No. 55-1384
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA

William Anikouchine PhD

REFERENCES

Pacific Materials Laboratory 1978 – "Preliminary Landslide Investigation, Sea Cliff Property, El Camino de la Luz, Santa Barbara, California for City of Santa Barbara" by D. W. Weaver & D. F. Hoffman for Pacific Materials Laboratory 6 March 1978.

Smith 1980 - "Feasibility of Site Development 1837 ½ El Camino de la Luz" by R. J. Smith 29 October 1980.

CFG 1996 – "Proposed Building Site 1837½ El Camino de la Luz, Santa Barbara, California" CFG Consultants 19 June 1996.

Fisher 2001 – Letter titled "Engineering Geologic Update Report, 1837 ½ El Camino de la Luz, Santa Barbara" Fisher Geologic 2 December 2001.

Blake, T. F., Holllingsworth, 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", SCEC/ASCE – L.A. Section.

Johnson, M. (2003) - "Memorandum to Coastal Commission and Interested Parties, Establishing Development Setbacks from Coastal Bluffs" 16 January 2003.

Minor et al (2006) - "Preliminary Geologic Map of the Santa Barbara Coastal Plain Area, Santa Barbara County, California" U.S. Geologic Survey Open File Report 02-136 (version 1.2).

Knur, R. T (2007) – "Geotechnical Engineering Commentary, Proposed Single.Family Residence, 1837 ½ El Camino De La Luz, Santa Barbara, California" Geotechnologies, Inc. 5 September, 2007.

May 20, 2008
Geotechnologies, Inc.
Reinard Knur

Re: Commenatry Of slope Stability Analysis by Dr. Anikouchine

Hi Ray ,

Enclosed are a few thoughts and observations regarding the slope stability analysis presented in letter by William Anikouchine, PhD dated March 16, 2005.

I printed a few pages from the webpage for the slope stability program that Dr. Anikouchine used. The diagram under "Plane Failure Analysis" shows the inputs required. With the exception of the soil/rock strength properties, the diagram descriptions match the list given by Dr. Anikouchine, so we have some idea what he was doing. Still, the program oversimplifies the complexities of the geology, geologic material strenghts, and water surface. The program may be suitable as a back of the envelope, first iteration of a slope stability calculation, but it should not be promoted as the final true representation of the slope.

Other issues with the analysis are:

The analysis is performed on a schematic diagram of the slope, and not an accurate point-by-point, presentation of the actual conditions of the slope.

The analysis does not consider the proposed slope conditions with the additional surcharge to be caused by the proposed construction that would add the instability of the slope.

A scaled printout of the slope geometry and analysis is not provided. There is no way to assess the shape of the slope used, the distribution of the geologic materials, or the location of the modeled failure planes.

A complete output of the values used in the analysis and the calculation sheets showing the final results are omitted from the presentation. Again there is no way to assess the appropriateness of the assumptions used. The values shown on page 14 are independent from the program and may not reflect values used in the analysis.

The type of slope stability analysis used, the Simplified Bishop Method, calculated potential failure surfaces that have a "curved" bottom surface. The rock exposed in the subject slope is planar with some minor folding. Rock with such planar surfaces fails primarily along a bedding plane and is referred to as "translational " movement. The results from any analysis that considers only curved surfaces is not applicable to a slope with distinctly planar surfaces. "Translational" and "curved" failure surfaces represent end members of a continuum of landslide failure shapes.

C

The program used for the stability calculations is not a conventional, commercially available slope stability program that has been validated by wide peer usage. It is a program freely available over the internet.

Assuming everything was correct in the analysis, Dr Anakouchine reported a factor of safety range of 0.469 (slope failure) to 6.7 (stable slope). Given this extremely wide disparity of results, further site specific analysis using site specific data and a true representation of the slope (not a schematic one) is needed.

The analysis does not does not benefit from any onsite geotechnical information that would yield further insight into the rock orientation (folding) and to the presence of individual bedding planes that may have a low strength. Such layers referred by Weaver in his 1982 report as the "expansive bentonitic clay layers" were a contributory factor in the adjacent Camino de la Luz Landslide. Unless geologic observation of the subsurface structure is performed, the presence and location of such beds would not be known and cannot be ignored.

Dr. Anikouchine uses rock strength values obtained by the Hoek-Brown criterion which relies on theoretical relationships when according to the Hoek Brown paper (2002), no suitable methods for estimating rock mass are available. Again the use of values derived in such a manner may be suitable for a first order approximation of calculation, but should not be relied upon for determination of slope stability and structure design. To cite the unreasonableness of the Hoek-Brown results, Dr. Anikouchine incorporates a cohesion of 12590 pound per square foot for the bedrock where a value range of 288 to 254 pound per square foot is reported in a published report by the California Geological Survey. Dr. Ankouchine rock strength value is 60 times stronger than that published by the California Geological Survey. Dr. Anakouchines conclusion that the slope is stable is based on the use of this unrealistically high cohesion value.

Attachments; Shear Strength properties (2 pages)
Slope Stability Software - Edwin Bane Kroeger ((4 pages)

D

Bluff edge delineation

- Largely a topographic analysis
  - Establish definitions
  - Apply uniformly
- Expertise required
  - Surveyor
  - Geologist

Roles of surveyor

- California Business and Professional Code § 8726:

  "A person…practices land surveying within the meaning of this chapter, who…does or offers to do any one or more of the following:

  …

  b) Determines the configuration or contour of the earth's surface, or the position of fixed objects related thereto, by means of measuring lines and angles, and applying the principles of mathematics or photogrammetry."
- Generally, a person practicing surveying must be a State-licensed Land Surveyor or registered Civil Engineer

Roles of geologist

- Interpret the data obtained by a surveyor
- Conduct surveys for geologic purposes

  California Business and Professional Code § 8727:

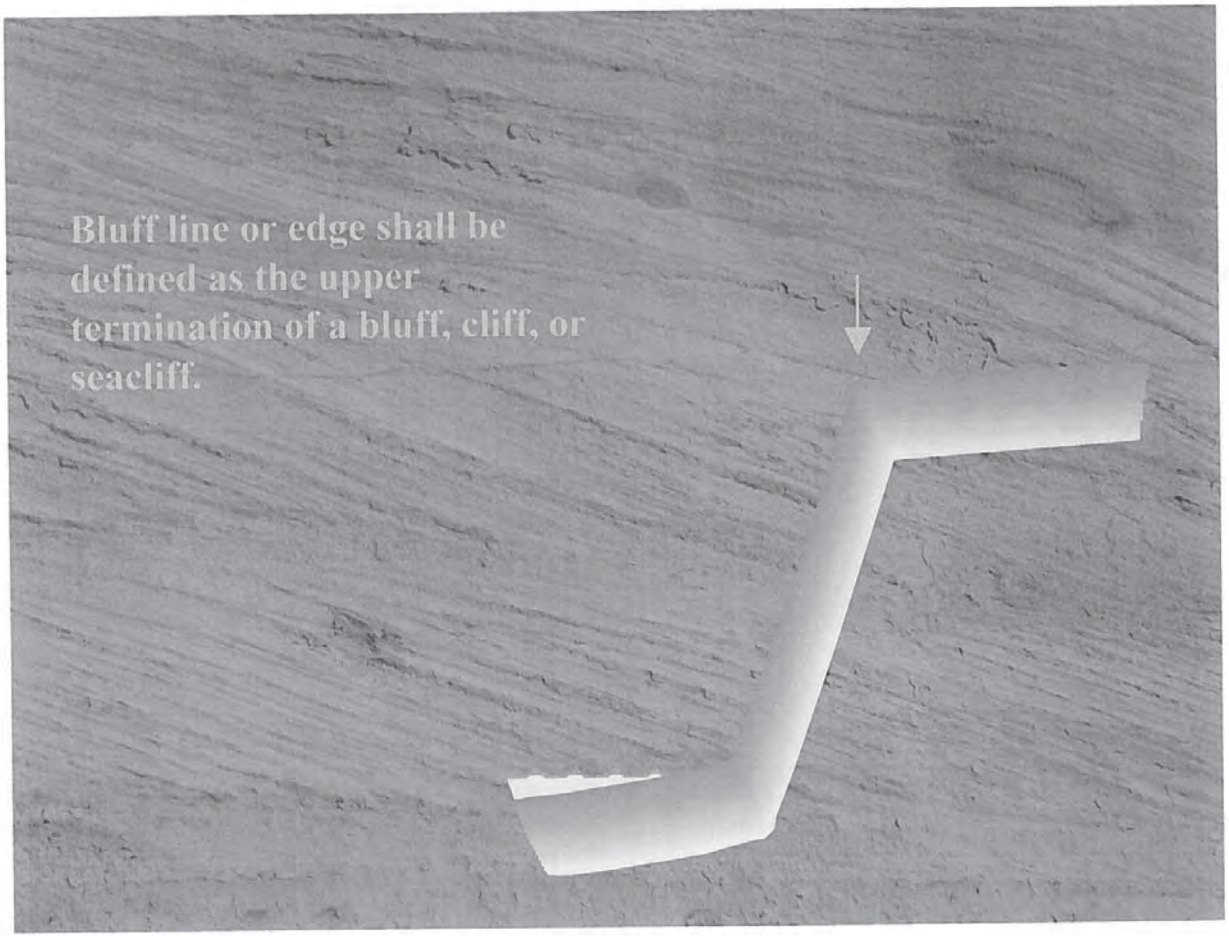
  "Surveys made exclusively for geological or landscaping purposes, which do not involve the determination of any property lines do not constitute surveying within the meaning of this chapter"

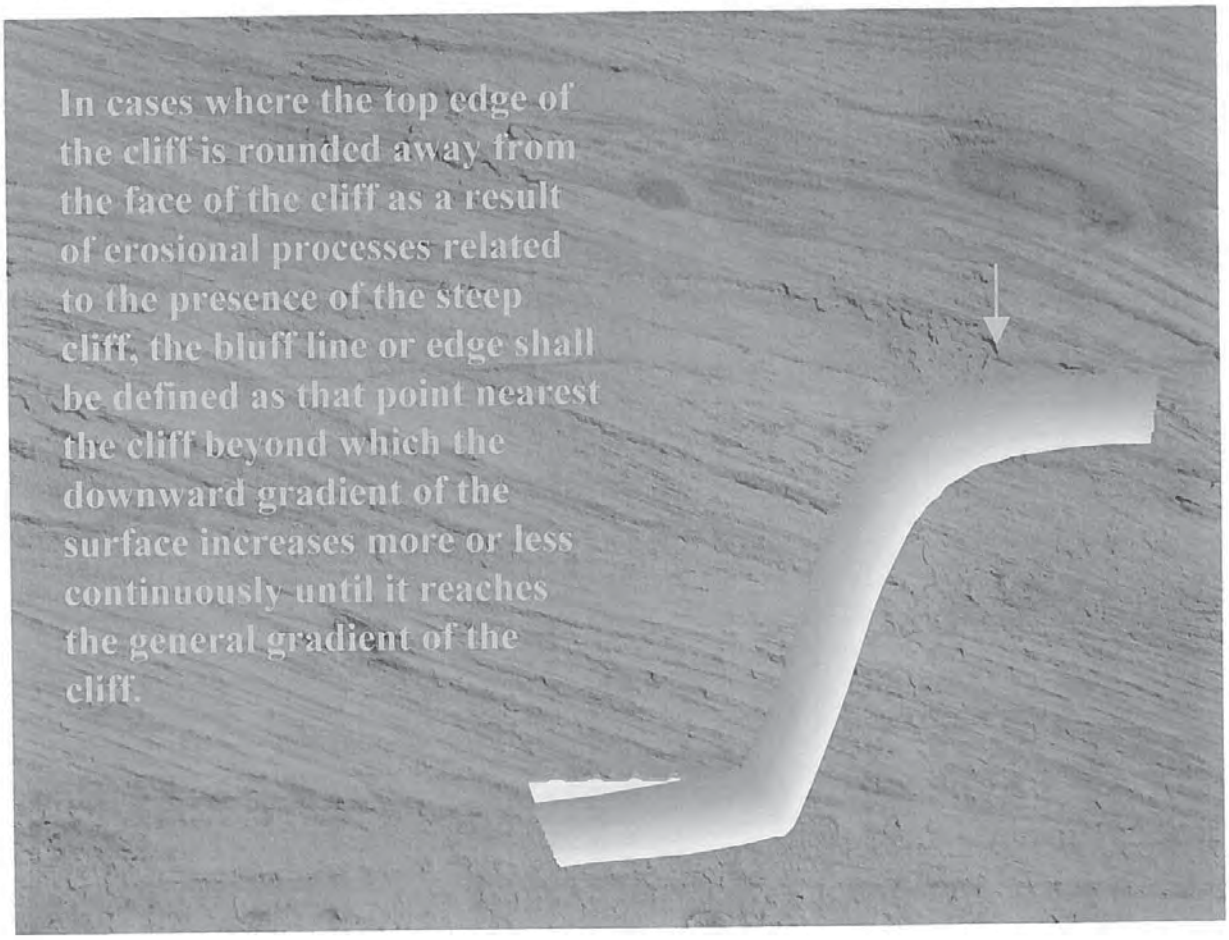
- Provide geologic knowledge as necessary to define the position of the natural bluff edge

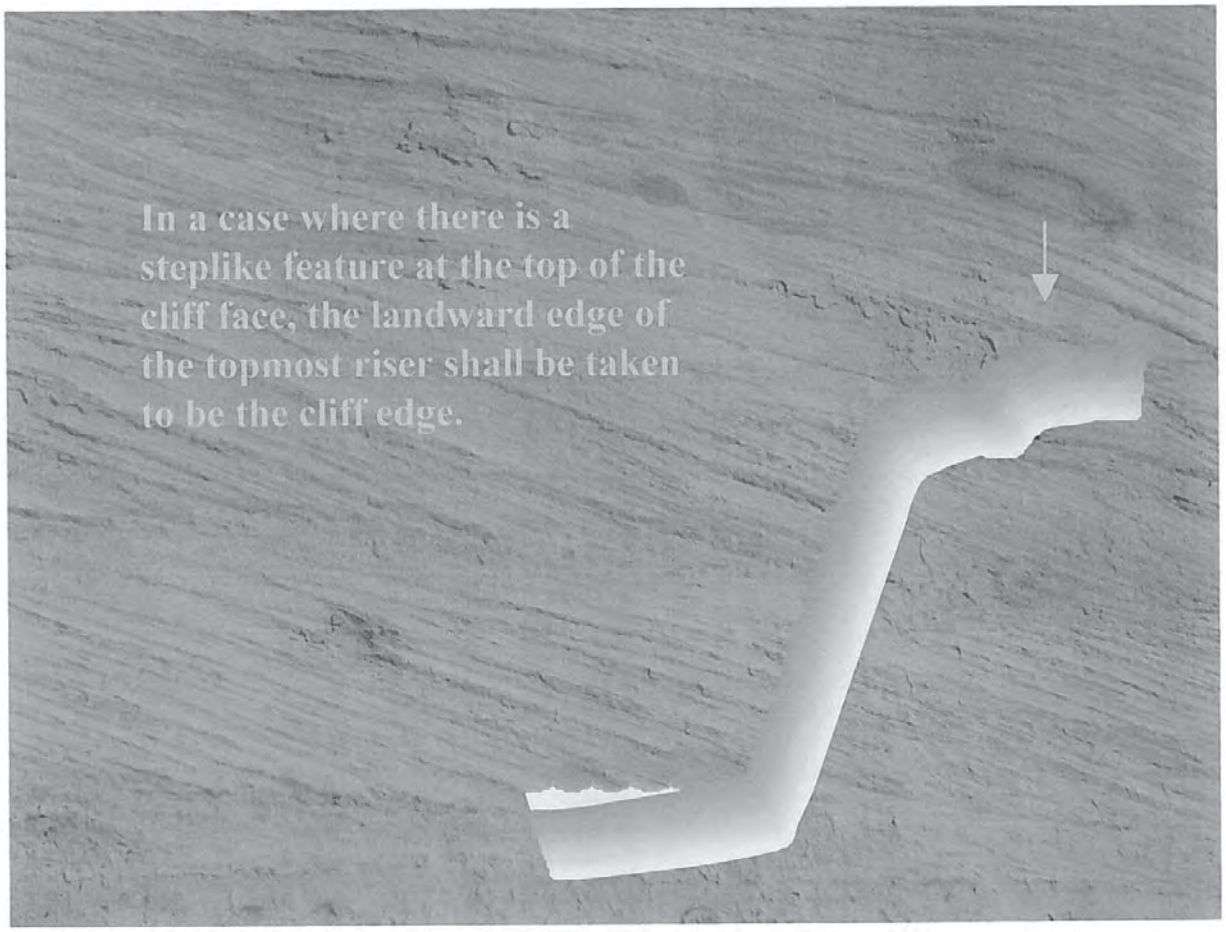
*

California Code of Regulations, Title 14, § 13577 (h) (2)

- Section of Coastal Act Regulations dealing with jurisdictional boundaries (appealeable area)
- Only part of a the coastal act defining bluff edge
- Some Local Coastal Plans define bluff edge differently


Bluff line or edge shall be defined as the upper termination of a bluff, cliff, or seacliff.


In cases where the top edge of the cliff is rounded away from the face of the cliff as a result of erosional processes related to the presence of the steep cliff, the bluff line or edge shall be defined as that point nearest the cliff beyond which the downward gradient of the surface increases more or less continuously until it reaches the general gradient of the cliff.

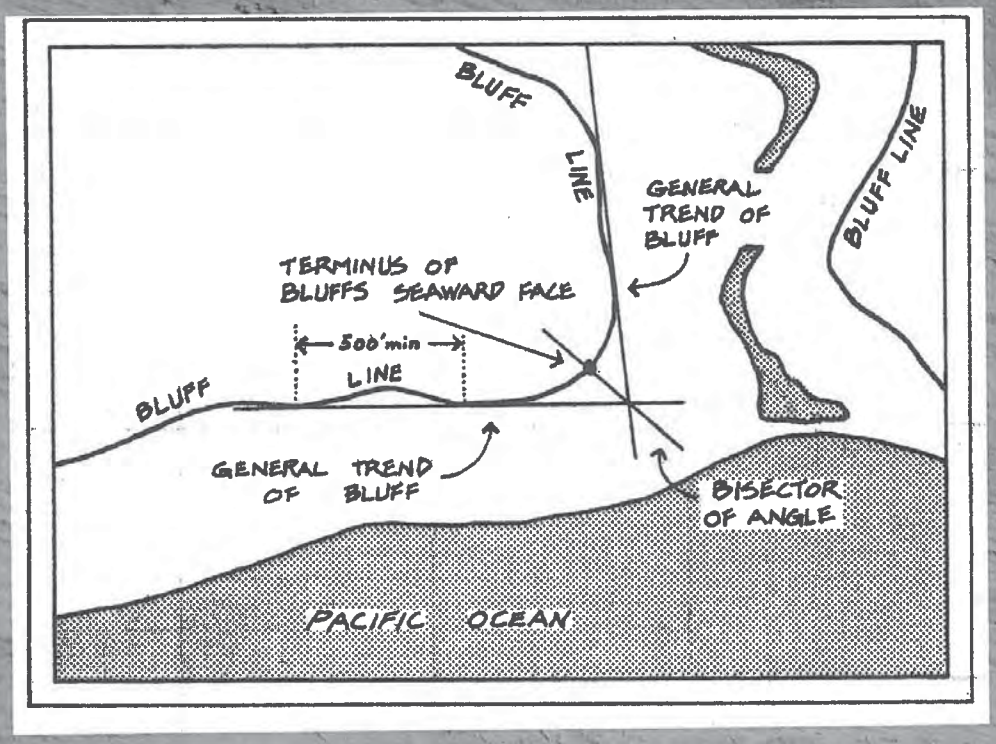

In a case where there is a steplike feature at the top of the cliff face, the landward edge of the topmost riser shall be taken to be the cliff edge.

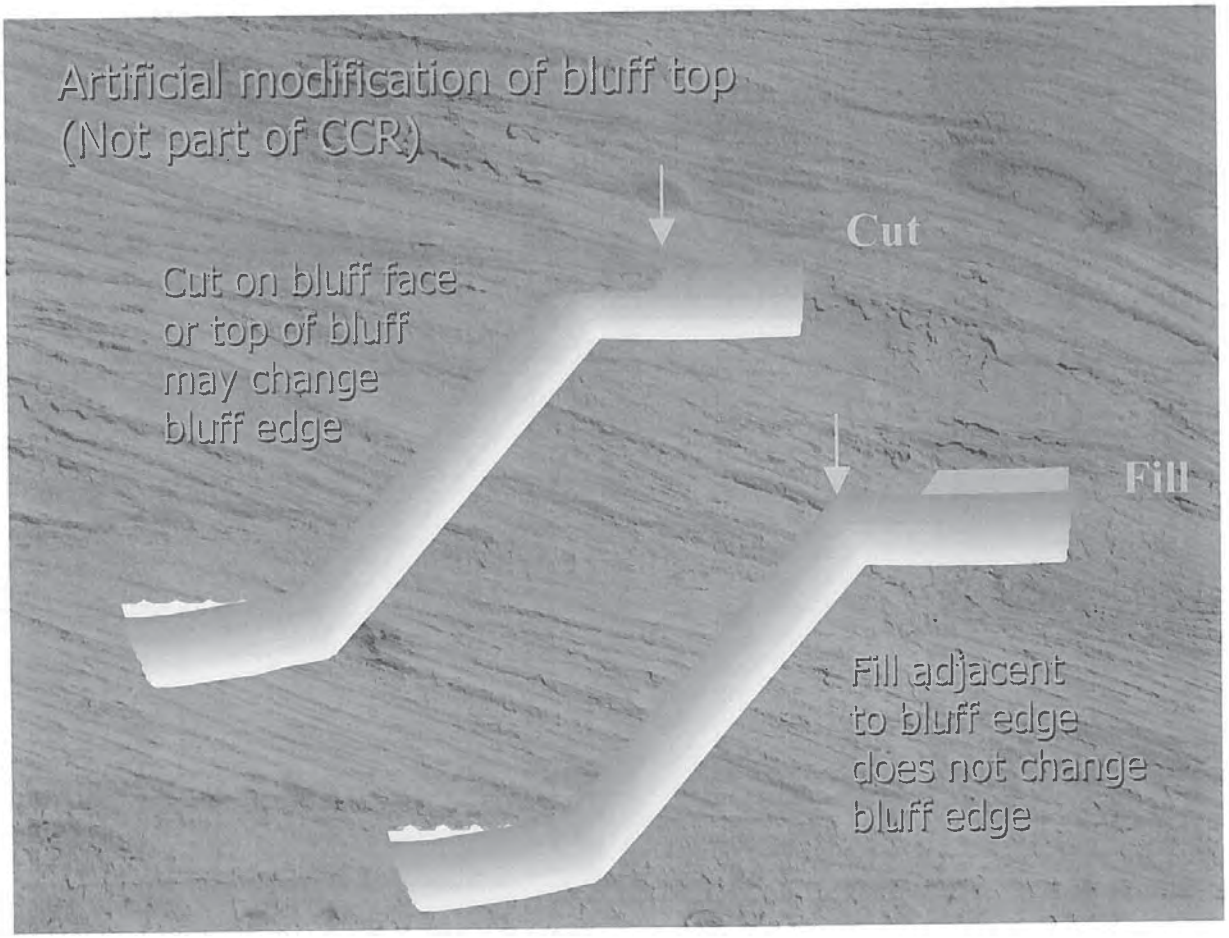
Bluff edge line is locus of points defining bluff edge in profile

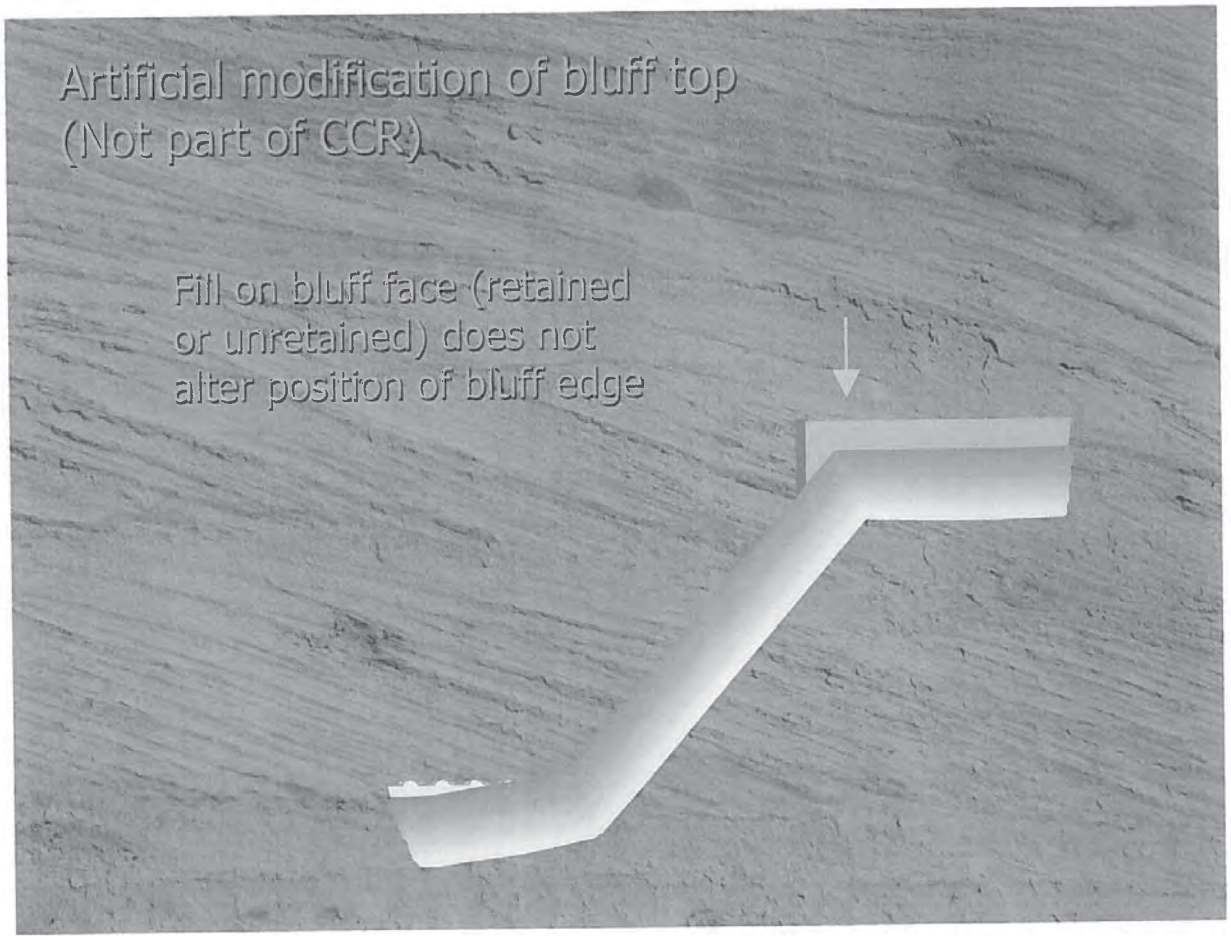
Last part of § 13577 (h) (2) deals with termination of coastal bluff line (versus canyon bluff line) in map view

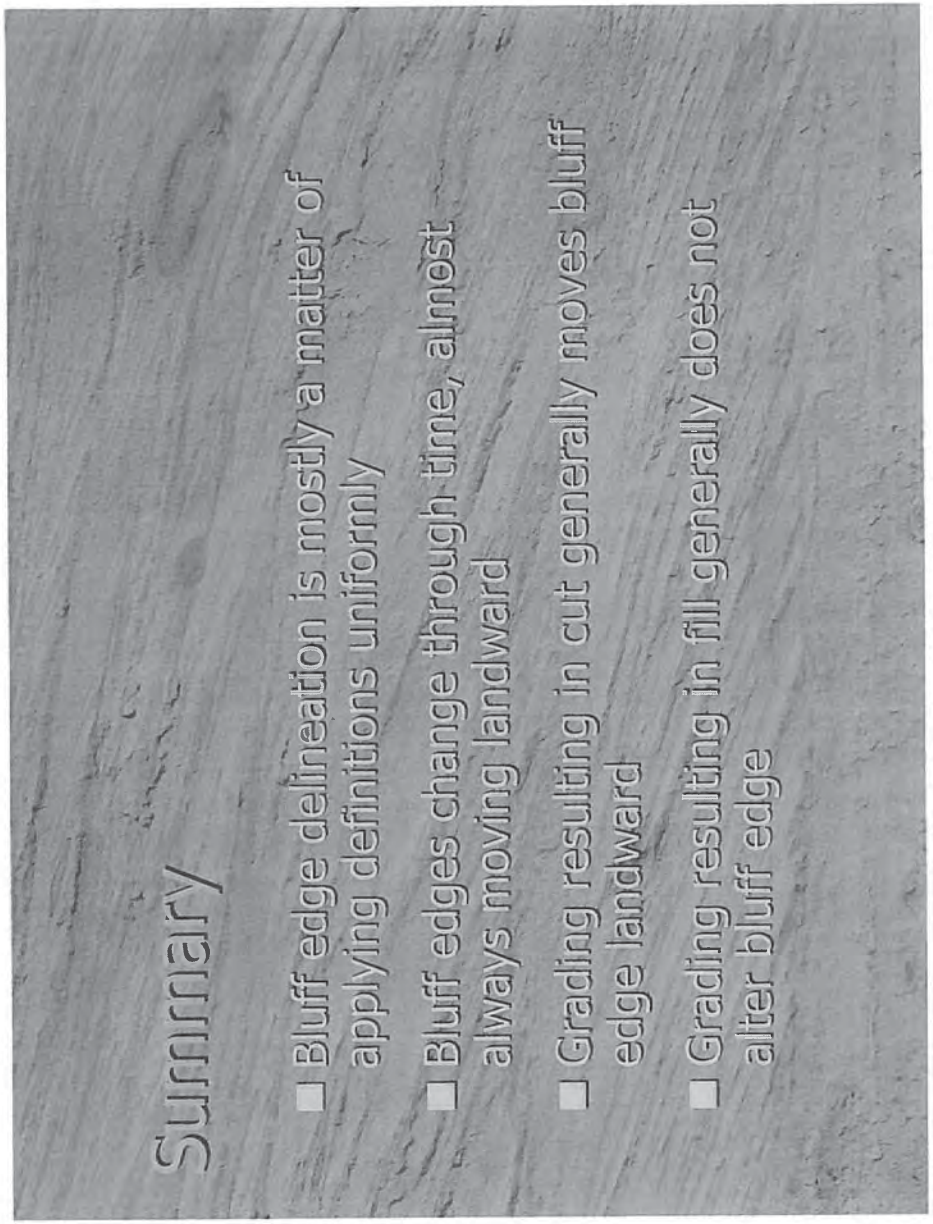
The termini of the bluff line, or edge along the seaward face of the bluff, shall be defined as a point reached by bisecting the angle formed by a line coinciding with the general trend of the bluff line along the seaward face of the bluff, and a line coinciding with the general trend of the bluff line along the inland facing portion of the bluff. Five hundred feet shall be the minimum length of bluff line or edge to be used in making these determinations.

Figure 8 of 28 December 1979 Staff Report recommending definition of bluff line termini




Artificial modification of bluff top
(Not part of CCR)
Cut
Cut on bluff face or top of bluff may change bluff edge
Fill
Fill adjacent to bluff edge does not change bluff edge


Artificial modification of bluff top
(Not part of CCR)
Fill on bluff face (retained or unretained) does not alter position of bluff edge



Franco

Rafael Franco
1835 El Camino de la Luz
Santa Barbara, CA 93109

August 27, 2007

Planning Commission
City of Santa Barbara
Community Development Department
630 Garden St.
Santa Barbara, CA 93102

Re: **Proposed Environmental Impact Report**
1837.5 El Camino de l Luz
SCH No. 2005041031
May 2007

Honorable Commissioners:

Eighteen years ago, the owner of the subject property started the process to develop a single family residence on this parcel. Despite legal setbacks and settlements, the owner continued to pursue the development. Two years ago, this Planning Commission acknowledged the significant aesthetic impact to the public views and required a focused EIR to study these impacts and as required by CEQA, alternative projects that could result in reduced impacts or no impact. Although this was to be a focused EIR on the view issues, those studies could not be conclusive without considering other impacts resulting from the study of alternatives. Most important among these were the geophysical impacts on this and adjoining properties.

You are being asked to certify this EIR; that is, **to attest this document as being true, accurate and complete**. The following comments and exhibits will clearly show that after two years of preparation, **this proposed EIR is still inaccurate and incomplete, and thus not certifiable by this Commission.**

SIGNIFICANT AESTHETIC IMPACTS

The aesthetic impacts are correctly identified. These are impacts to public ocean views, violations of the Local Coastal Plan and City policies. The EIR concludes that by lowering the East elevation by 10 ft and the west elevation by 5 ft (error in the EIR, see Fig.3.3-2), a building envelope can be created that would reduce the impact to less than significant. The EIR admits that this is a subjective viewpoint, and we believe that this is a judgment to be made by the Commission and not biased by the opinion of the author.

E

Alternatives 1 and 2 clearly have lesser impacts, and the owner has since submitted other plans to ABR for review; yet, this document ignores the lesser impact alternatives. The EIR further deletes the requirement to reduce the height of the building by using a flat roof, even though the applicant has done this in his most current design. This design is not considered in this EIR. Why was this condition deleted? We believe that CEQA requires the study of the project; the way the EIR is drafted, a box could be built as long as it fit within the building envelope described in Figure 5.1-10. This figure identifies the "**Permitted Building Envelope**". We believe that the word "**Permitted**" is erroneous and prejudicial; this building envelope has not been permitted by anyone.

Needless to say, we believe that the proposed building envelope is still a significant aesthetic impact that will reduce public views in violation of the Local Coastal Plan and City policies.

GEOPHYSICAL IMPACTS

The EIR relies on a report by Dr. Anikouchine, which reviewed 17 previous geotechnical reports or letters of opinion. Dr. Anikouchine's report contains a number of errors and omissions significant to the final location of the project and its impact on public views.

1. The report reads "*The building envelope chosen by* (Dr.) *Smith is just east of the paved area (cross-hatched on Fig. 1). He declared that the paved area was unsuitable as a building site because of an open fissure that he observed from the beach and which projected northward*". The cross-hatched area drawn by Dr. Anikouchine is clearly in the wrong place. Dr. Anikouchine has drawn this suitable building pad on top of the existing paved area. The proposed house and building envelope straddle the paved area and the incorrectly plotted pad by Dr. Smith. See our Figure A.

2. Figure 1 omits a line indicating a "**Boundary of "Zone of Potential Failure**" in the Pacific Materials Lab report prepared for the City of Santa Barbara following the 1978 landslide of over 1million cubic yards just east of the subject parcel. This line coincided with Dr. Smith's observance of an open fissure in the bedrock. See our exhibis B and C.

3. Dr. Anikouchine minimizes the impact of the landslide at the southeast corner of the subject parcel by stopping the designation of the slide at the southerly property line. In fact, the slide extends to the ocean. When projected on his Figure 1, the impact of the slide is significantly greater that implied by Dr. Anikouchine. See our Figure B.

4. Figure 1 also omits the designation of the two previous landslides Qlo (older) and Qls (1978). This is relevant to the analysis of potential failure of the subject parcel. The 1978 landslide was a translational failure along a bedding plane surface. (Weaver 1982). Dr. Anikouchine performed slope stability calculations for a rotational failure contending that this was justifiable by the nature of the slide at the southeast corner of the property. This does not obviate the requirement to comply with code and complete slope stability calculations for planar failure along the lowest unsupported bedding plane. The site is underlain by massive unsupported bedding planes of Monterey shale, next to a creek (lubricant source), and within one half mile of the La Vigia Fault. **To ignore these factors is a significant omission.** Our Figure D superimposes the unsupported landmass on Dr. Anikouchine's Figure 3 of the report.

CONFLICTING PARAMETERS

Our Figure E superimposes conflicting parameters over the proposed building envelope.

1. The "**Zone of Potential Failure**" runs right under the proposed envelope. This is a conclusion of the Pacific Materials Lab study completed for the City of Santa Barbara (Weaver 1978).

2. Dr. Anikouchine incorrectly cross hatches the permissible building pad.

3. Dr. Smith (1980) recommended a building pad east of the paved area. The proposed building envelope straddles the paved area, the "**Zone of Potential Failure**", and the incorrect cross-hatched pad.

4. When extended to the ocean, the existing southeast slide suggest a much greater impact and exposed bedding planes directly below the proposed pad.

CORRECTIONS AND RESPOSE COMMENTS

1. Sec. 1.3 refers to the Initial Study as Appendix A. This is incorrect, Appendix A is limited to Special Biological Resources. The Initial Study follows the "Planning Commission Minutes of Jan 11, 2007.

2. Page 2-5, 1a.1 is crossed out. Why?

3. Page 2-8, GEO-3a notes mitigation with the condition "*Prior to the issuance of a grading permit, ground cover vegetation in the area of the proposed building shall be removed to facilitate the observation of the suspected asphaltum bed/bedding plane fracture.....Based on the visual inspection, additional slope stability analysis may be required.*" This is a postpartum resolution inconsistent with normal geotechnical studies and practices. Does the report avoid exploration and analysis because a few bushes are in the way?

4. Page 2-10, T-1. After 31 years of ownership and 18 years of trying, the owner has yet to produce evidence of adequate access to the site. Legal decisions of the

California Court of Appeals have been submitted to the Planning Department on several occasions. We were recently surprised that staff was unaware of this and other records previously submitted. Understandably, the project is now managed by the sixth City Planner assigned to this case, but these items should not be ignored as part of the record. A copy of this decision is attached.

5. Figure 3.3.1 shows a plan different that the most recent plan submitted to the ABR for review. The square footages shown on 3-5 are wrong.

6. Figure 3.3.2 shows an East elevation of 35 ft and a West elevation of 21 ft. The "*Permitted Building Envelope*" indicates comparable elevations of 25 ft and 15 ft. Does the building envelope slope from 15 ft down to the 25 ft West elevation? On page 5.1-23 of the report, reference is made to a mitigating 5 ft. reduction in height along the West elevation. This should be corrected; 21 – 15 = 6 ft.

7. Page 4-5 Omits the proposed project at 1921 El Camino de la Luz, the site of the 1978 landslide.

8. Page 5.1-15 concludes that the proposed house would not be out of character with the surrounding neighborhood. As we have pointed out before, the existing houses were sited in a stair stepped fashion with eight foot set backs to protect the views of all the neighbors and to maximize the views from the park. The location of this house ignores that precedent.

9. Page 5.1-17 "*A determination whether a 10% loss of existing ocean views would result in a 'substantial' view reduction is subject to personal interpretation. However due to the view angle provided from the benches area towards the project site, the proposed residence would be seen as a prominent visual feature within the existing view corridor.*" We agree with this statement and conclude that this is an aesthetic impact that cannot be mitigated, even with the reduced height of the proposed building envelope. It is not just the height, it is the intrusion into the creek area that reduces the view corridor. A red pimple on one's face is less than 1% of the view; however, millions of dollars are spent annually to cover blemishes.

10. PAGE 5.1-17 The recommendation for a flat roof is deleted. Why?

11. PAGE 5.1-36 The recommendation for a flat roof is deleted. Why?

12. Page 6-1 Sec. 6.2 quotes California Coastal Act Section 30251 and concludes that "*As presently designed, the proposed project would be inconsistent with the requirements of this policy that new development be sited and designed to protect views to the ocean*". The paragraph suggests that the project should be redesigned and reduced. The redesigned project should be the subject of the EIR, otherwise the EIR is incomplete.

13. Page 10-14, Answer 3-1. states that Dr. Anikouchine was given all the information needed to complete his report. The fact is that only two of the firms, whose 17 reports were reviewed, did any borings, those were limited in depth and scope, and none of the test data was provided to the reviewer. Dr. Anikouchine had no independent personal data. Data used for his analysis was generic data for the Monterey shale, not site-specific data. This is unacceptable by reviewing agencies in California.

14. Page 10-14, Answer 3-2a states that "*the setback line depicted in Dr. Anikouchine's report provides an accurate representation of the location of the proposed setback line from the top of bluff given the size and scale of the figure*". This is incorrect; see our Figure F. We disagree with Fisher's definition of top of bluff because it is inconsistent with the Coastal Commission's definition and methodology for determination, and uses the lower previously graded artificial edge as the top of bluff as opposed to following the natural contour initially established.

15. Page 10-15, Answer 3-2c disputes Penfield and Smith's survey of the top of bluff because the contours did not extend down to the ocean. A complete survey down to the ocean floor has been submitted to the Planning Department indicating the same conclusions. The main objection to the Fisher definition of top of bluff is that it starts at the edge of the existing paved pad and then dives steeply across grades to grab a lower ledge to define the top of bluff. This is inconsistent with the Coastal Commission's directive to follow the top contours.

16. Page 10-16 Answer 3-3 We partially agree with the comment "*the landslide at the SE corner of the subject parcel indicates that the mode of sliding was not a block slide down a weak dip surface, but instead followed a failure plane that transected the rock mass across the bedding.*" The use of a rotational slide surface in the slope stability may have been justified for this slide, but it ignores a potential block slide in a SW direction with unsupported bedding planes dipping at a generally agree angle of 26 degrees. The 1978 slide was such a block slide (Weaver 1982).

    Dr. Anikouchine performed a slope stability analysis , but he used the wrong method. See our previously submitted summary of Methods of Analysis (Appendix D of the EIR). The Bishops Method used by Dr. Aqnikouchine is used for circular failures. Jambu's Method is one of three methods used for non-circular failures. Our Figure D shows the extensive landmass of exposed Monterey shale bedding planes along Dr. Anikouchine's profile.

    His conclusion that this slide took place at one time is questionable. The rubble mass is a series of surficial cumulative slides. Having observed the process at this particular location over twenty-five years, I can describe the erosion as follows. A surficial slide takes place, the bedrock is exposed, new vegetation takes hold on the face of the rock and its roots begin to break down the edge of the rock, rains

saturate the vegetation and the broken down rock, when saturation and weight exceed the resistive strength of the rock, a surficial slide takes off, it exposes a new face of the rock, and the process starts all over again.

For the record, twenty-five years ago, we used to be able to walk up the cliff that now slopes at 75 degrees. The drainage concrete swale from the westerly property used to extend all the way across to the creek.

17. Page 10-16 Answer 3-4 Dr. Anikouchine drew two profiles along which his slope stability analysis was calculated. Dr. Anikouchine's two profiles do not accurately depict the location of the parcel. The profiles shown on Figure 3, page 9 of his report indicate a horizontal dimension of 294 ft along the N 16 E axis. The actual dimension of the subject parcel is 170.71 ft along the West property line, and 175 ft along N 16 W. The section does not indicate the location of the proposed project and therefore leads to the wrong conclusion that the project is located safely atop an expansive terrace. Our Figure D correctly shows the location of the subject property line.

18. Page 10-16 Answer 3-5 To assert that "*laboratory test samples are notoriously inaccurate and tend to overestimate the strength of rock masses in situ*", is absurd. **Laboratory tests are required by code and are normal practice**. The assumed and resultant values derived by Dr. Anikouchine are significantly more benign than comparable laboratory test values determined for Monterey shale.

19. Page 10-17 Answer 3-6 We agree that the marine erosion at the base of the coastal bluff is greater than the top of bluff. The more significant issue is that this erosion exposes more bedding planes and increases the probability of block failure.

20. Page 10-25 Answer 4-3 No photo simulation is provided for the project recently submitted to the ABR. The author states we have not provided a basis or justification to support the suggested conclusion that the visual impacts cannot be mitigated. The basis is very clear and visible. The report agrees that the proposed project is a significant aesthetic impact. The fact that the proposed mitigation is to lower the height of the building offers no better basis or justification to conclude that this is sufficient mitigation. The height of the project is one impact, the location of the project is overwhelmingly a more serious contributor to the aesthetic impact.

21. Page 10-25 Answer 4-4a This issue is not about "*disagreement among experts*", this is about errors and omissions previously described in this letter.

22. Page 10-26 Answer 4-4b The comment that only two geologists did any borings was made to illustrate the incomplete investigation of the site and resolution of conflicting reports presented by the developer. None of these consultants performed slope stability calculations in their reports. The reports were mostly cursory and often conflicting opinions. The developer kept asking the question from different consultants until he got an answer he liked. The reviewer did the slope stability calculation. This is highly unusual since it now places the liability of this conclusion on the City. The response "*no comment is required*" ignores the issue.

23. Page 10-26 Answer 4-4d "*A substantial amount of information about the geological conditions that exist at the project site is provided by the 17 previous investigations that have been prepared for the site.*" This information should be included in the EIR, there is no reason to exclude it. Furthermore one must ask, why would 17 reports be required for such a simple project and why didn't any geologist or engineer do a slope stability analysis?

24. Page 10-27 Answer 4-4f "*the description of project site containing terrace sand soils is from the assessment of project site conditions provided by CFG Consultants (1996)*". How id they know that? They did no borings or excavation of the site. The two firms that did actual borings or site excavations were Buena (1971) from which no geologic logs or analyses of samples were provided in their report, and Pacific Geosciences whose log information is similarly not available. Conflicting conclusion of consultants who have not dug below the asphalt is further proof of the necessity for additional investigation.

25. Page 10-27 The answers listed on this page end with 4-5. The next page starts with 5a. What happened to 4-6, through 4-9?

26. Page 10-28 Answer 6 states that "*the proposed project would not require the exportation of soil from the project site*". This statement is false and patently ignorant of the construction process.

For all of the above reasons, we feel that the proposed final EIR is incomplete and inconclusive and should not be certified by the Santa Barbara Planning Commission. Thank you for your consideration.

Respectfully submitted,

Rafael Franco
1835 El Camino de la Luz

Linda L. Franco
1835 El Camino de la Luz

Joanna Morgan
1843 El Camino de la Luz

Stan Krome
1843 El Camino de la Luz

Bruce Peterson
1837 El Camino de la Luz

Grace Peterson
1837 El Camino de la Luz

Tom Sloan
1841 El Camino de la Luz

Tina Sloan
1841 El Camino de la Luz

Peter Miller
1839 El Camino de la Luz

Jennifer Miller
1839 El Camino de la Luz

Jerry Lu Wright
~~Gerri Lou~~ Wright
1833 El Camino de la Luz

Sketes (Horace) WRIGHT
1833 El Camino de la Luz

Attachments:

Figure A Comment and depiction of incorrect plotting of Dr. Smith's building pad

Figure B Information omitted in Dr. Anikouchine's Figure 1

Figure C Plot of the 1978 slide and Zone of Potential Failure

Figure D Location of subject parcel and area of exposed bedding planes

Figure E Superimposed Conflicting Parameters

Figure F Corrected setback line on Dr. Anikouchine's plan

Weaver report, May 1982 changing his conclusions of the nature of the 1978 slide.

Daily Appellate Report Tuesday, September 27, 1994, Herbert E. Barthels v. Santa Barbara Title Company.

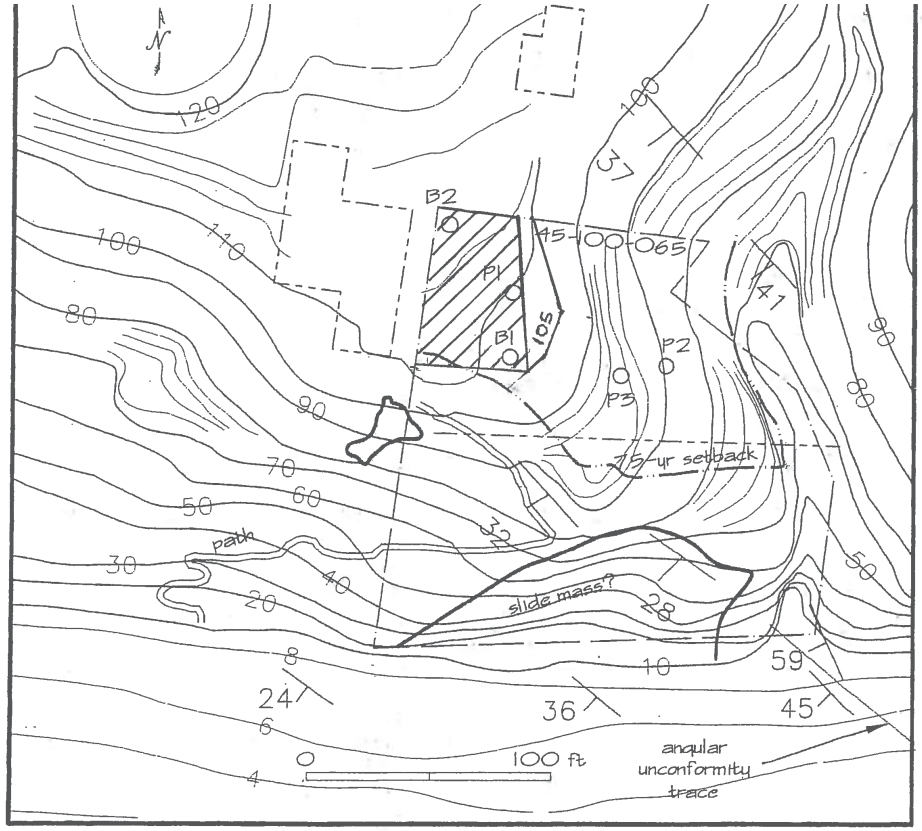
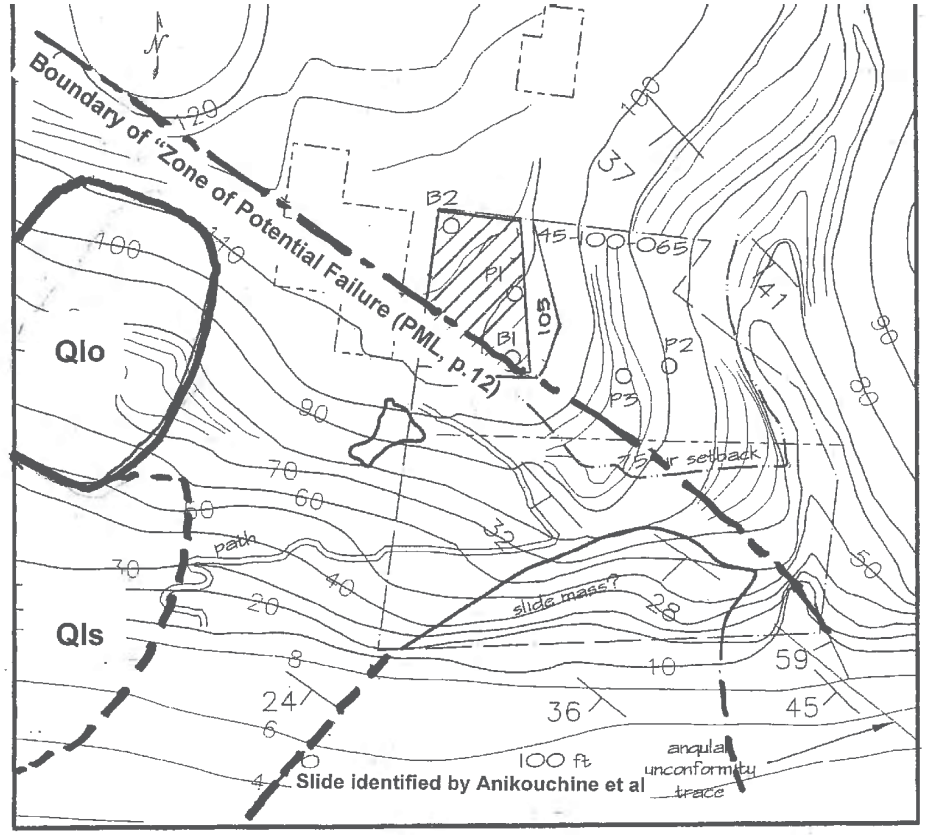


Figure 1. Geologic and topographic map of the subject site and vicinity. Information gleaned from the materials reviewed have been placed on this map. The map includes the reviewer's field observations as well. Buena Engineers soil borings are labeled B1 & B2. Pacific Geoscience borings are P1, P2 & P3.

" The building envelope chosen by Smith is just east of the paved area (cross-hatched on Fig. 1). He declared that the paved area was unsuitable as a building site because of an open bedding fissure that he observed from the beach and which projected northward". Anikouchine report March 2005.

Note that the cross-hatched area on Figure 1 is the major part of the paved area. The paved area is outlined by the 105 ft contour. The drawing and the text are contradictory.

Figure A



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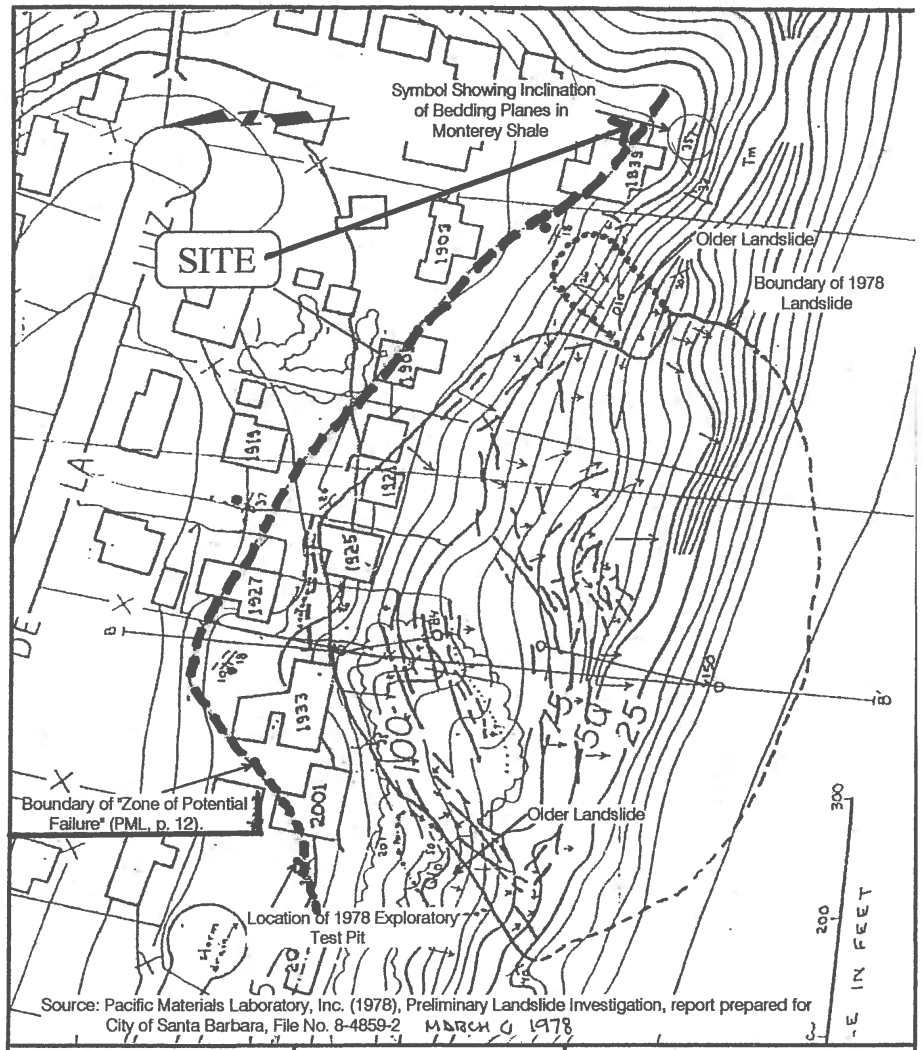
Qlo Quotanary Landslide: older

Qls Quontanary Landslide: Feb., 1978

Figure B



fisher geologic

PORTION OF GEOLOGIC MAP BY WEAVER, 1978

Project Site
1909 El Camino de la Luz
Santa Barbara, California
Project No. 021103

Figure 2

Figure C

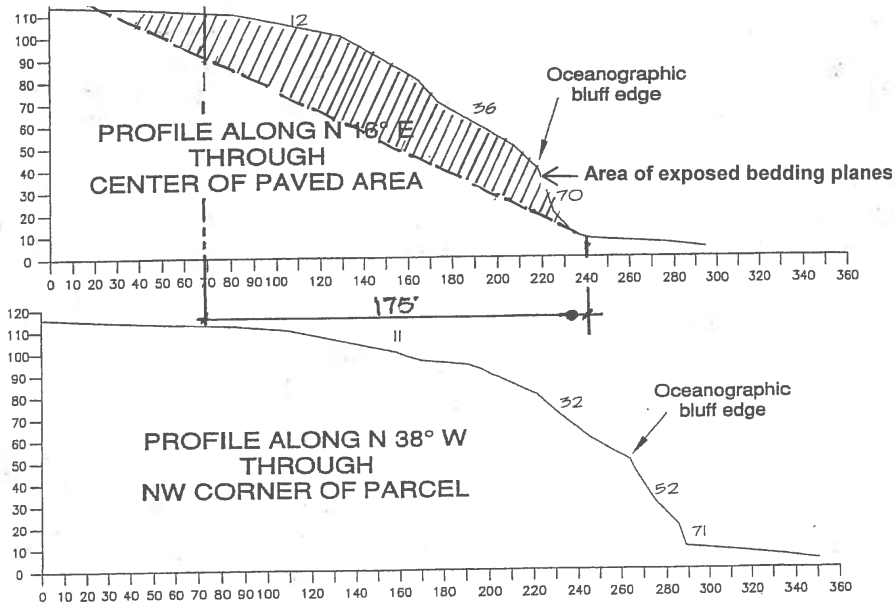
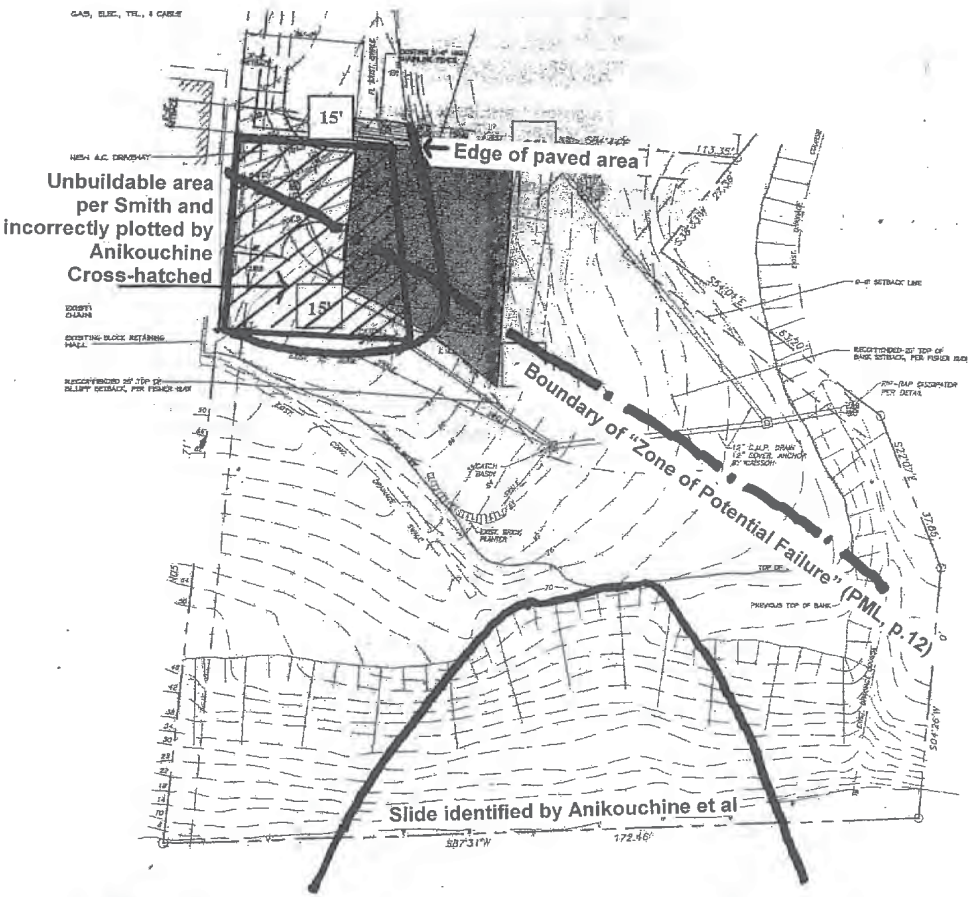


Figure 3. Topographic profiles through the subject parcel. The numbers indicate the local slope in degrees. Note the rounded, convex-upward shape of the the area above the sea cliff in both profiles.

Note: Crosshatched area represents the land mass above the lowest unsupported bedding plane susceptible to sliding.

The subject property along N 16 E is only 175 ft deep.

Figure D



Permitted Building Envelope

25' Maximum Building Elevation (feet) Above Existing Grade*

* The four maximum building elevation points form a plane above the existing grade of the project site. The height of any structure located on the project site must be located within the building envelope and may not extend above the plane.

Not to Scale

City of Santa Barbara

1837½ El Camino del la Luz

Figure 5.1-10

Development Footprint and Maximum Building Height

Figure E

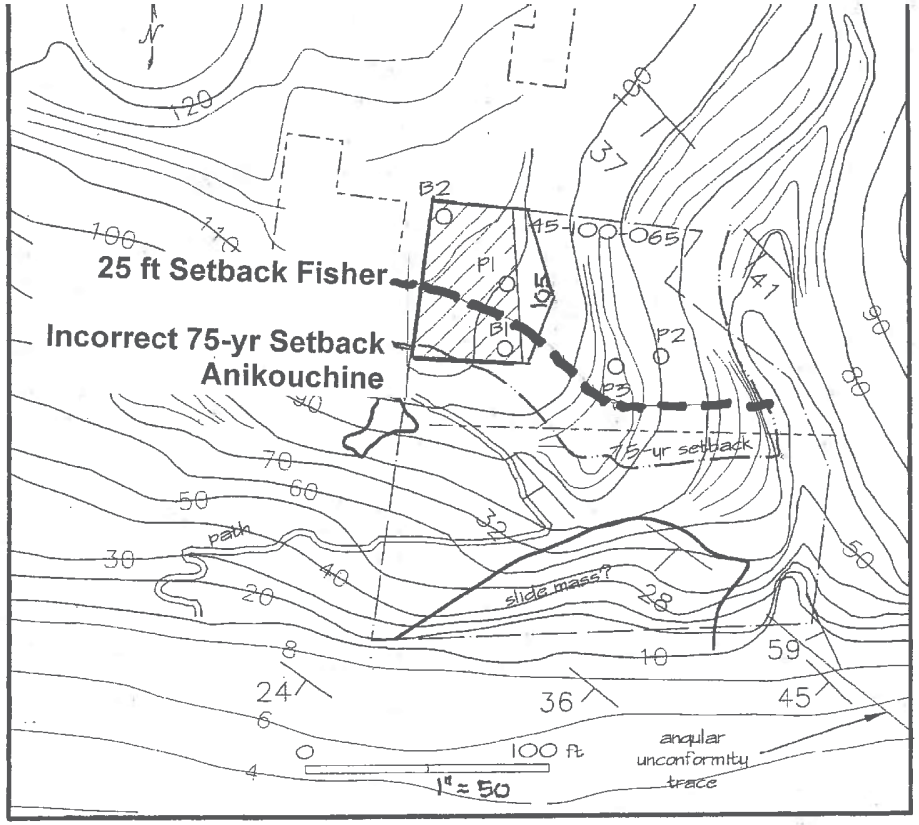


Figure 1. Geologic and topographic map of the subject site and vicinity. Information gleaned from the materials reviewed have been placed on this map. The map includes the reviewer's field observations as well. Buena Engineers soil borings are labeled B1 & B2. Pacific Geoscience borings are P1, P2 & P3.

Note: Anikouchine incorrectly plotted the top of bluff as defined by Fisher. He calls it "75-yr setback".

Figure F

DONALD W. WEAVER & ASSOCIATES
Consulting Geologist

May 6, 1982

Mr. Robert Doolittle
1933 El Camino De La Luz
Santa Barbara, California 93109

Dear Mr. Doolittle:

Pursuant to your request, we submit herewith our evaluation and recommendations concerning mitigation of the existing landslide hazards on your property at 1933 Camino De La Luz. This report is intended to serve as a guideline for partial alleviation of the landsliding potential on your property and the immediately adjacent area. It must be understood that the slide hazard will not be eliminated by adhering to the following recommendations, but only that the usable life of the structure may be extended. Indeed, it is our opinion that it is not economically feasible to stabilize the slide mass and the relatively undisturbed bedrock immediately in back of the slide scarp. Thus, this report is not intended to provide recommendations for slide or bedrock stabilization. This report is prepared solely for your own use and information and is based upon conditions as they exist on this date.

Geology and Structure of the Area

In the vicinity of your property, an approximately 10 foot thick cover of loosely cemented sand, known as Pleistocene Older Alluvium, overlies the siliceous, low density, organic rich shale of the Miocene Monterey Formation. The contact between these two formations is discordant and is inclined southward towards the sea.

1150 NORTH FAIRVIEW AVENUE • GOLETA, CALIFORNIA 93117 • (805) 967-6908

Structurally, the Monterey beds trend in a northwesterly direction; oblique to the sea cliff, and are inclined to the southwest at angles of 10 to 35 degrees. No major faults are present in the immediate area of the slide, although the shales are extensively fractured and distorted. These fractures act as planes of weakness in the Monterey Formation, as demonstrated by the approximate coincidence of the headwall scarp of the landslide and several fracture zones.

Description and Causes of the Landslide

The El Camino De La Luz landslide took place on February 14, 1978, destroying the residences at 1921 and 1925 El Camino De La Luz (Pacific Materials Lab. File No. 8-4859-2). Landsliding occurred on a southwest dipping bedding plane within the Monterey Formation which served as the basal detachment surface of the slide. This surface is exposed in several of the test pits which you have excavated on the slide as a part of your own continued investigation. Demonstration of the existence of this continuous planar detachment surface coincident with local bedding in the Monterey Formation, has caused us to alter our previous interpretations concerning the types of movement which took place during sliding. It is now our belief that there were only minor amounts of rotational movement involved and that the major sense of movement was translational along the bedding plane surface. Location of the detachment surface relative to the strand line at the toe of the landslide has not been determined, and determination of its location is beyond the scope of this report. *

Exceptionally heavy rainfall during the 1977-78 winter months in combination with uncontrolled drainage of water from the adjacent properties into the slide mass, served as the main cause of the landslide. Percolation of large amounts of water into fractures and along bedding planes in the Monterey Formation resulted in increased loading of the

slide mass and a decrease in the factors resisting slide motion. These factors in conjunction with undercutting of the prehistoric slide mass by wave action, daylighted bedding plane surfaces, and the presence of expansive bentonitic clay layers, all contributed to the detachment and sliding of the fractured block.

Over and above the natural causes of rock failure as they apply to the El Camino De La Luz landslide are those factors that were man induced. In our opinion, the triggering mechanism that provided the most significant influence to reinitiate movement in the old landslide body was the uncontrolled drainage involving large areas of land adjacent to the landslide mass and south of El Camino De La Luz. Virtually every household surrounding this mass contributed to its failure. This was done simply by not controlling the waters that ran down the drives, off rooftops and yards.

Conclusions and Preliminary Remedial Actions

As we concluded in our earlier report, the El Camino De La Luz landslide was a predictable event that could possibly have been avoided if reasonable care and attention had been given to the control of surface waters.

The slide was translational in nature and sliding took place on a southwest dipping planar bedding surface in the Monterey Formation. Significant amounts of water in the slide mass in conjunction with the other factors cited above triggered the landslide.

In accordance with our earlier recommendations, partial mitigation of the landslide hazard has been achieved by capturing all surface waters and conducting them to the base of the slide. In addition, it appears that the majority of the open surface cracks and fissures have been filled in order to reduce the infiltration of the surface water into the slide mass and adjacent area at the head of the slide.

Recommendations

Although the enactment of the above remedial measures has somewhat mitigated the landslide hazard, the potential for future mass wasting is still very high. Elimination of the landslide hazard through stabilization of the slide and buttressing of the head wall scarp of the slide is not economically feasible due to the high costs associated with retaining structures and the inadequate footing at the base of the slide. It is our opinion, however, that mitigative measures can be taken which may prolong the usable lifetime of the threatened structures.

Based on our reinterpretation of the nature of movement as translational, we suggest that the following steps be followed to help mitigate the potential for future sliding:

1. All existing fractures and fissures should be filled with fine-grained, nonexpansive material and tamped by hand. Filling of these cracks will reduce percolation of water into the slide mass.

2. A series of 14 foot wide benches should be cut into the stable bedrock material beneath the slide so that they slope away from the slide and drain along their length to the west. These benches will act to key the overlying fill material into the bedrock; the fill will thereby act as a buttress against the head wall scarp (see Figure 1). During the preliminary grading of these benches, we suggest that the local top soils be stored and preserved so that they can be restored during the final grading and enhance revegetation of the graded surface.

3. A continuous series of 4" diameter perforated Orangeburg pipe should be installed at the rear of each of the benches. These pipes should be packed in gravel of greater diameter than the perforations, and the perforations should be placed facing downward to prevent clogging

of the pipes with fill material. All percolating waters captured in these pipes should be channeled into a sealed drain which will carry the water out of the slide mass and onto the beach below. Coordination of the subsurface drainage with control of surface waters will reduce the risk of the slide mass becoming oversaturated in the future.

4. Backfilling and compaction of fill material derived from the slide mass itself should follow emplacement of the subsurface drainage system. The contact between the fill and the backtilted benches should be cleared of any organic materials. Furthermore, we recommend that the slope angle extending from the top of the head wall scarp to the top of the sea cliff not exceed a 2:1 slope. We recognize however, that the supply of local fill material may preclude development of a 2:1 slope. If this is the case, it is our opinion that a 1.5:1 slope represents the steepest advisable final slope angle.

5. Prompt revegetation of the final graded surface using the preserved local soils as a seed bed is strongly recommended. We suggest that seeding of a grass such as soft chest or barley and vetch be undertaken in early November with germination initiated by moderate amounts of irrigation. Permanent revegetation of the surface should utilize low water demand plants with extensive root systems. We suggest planting of native brush species with vigorous root systems, such as Ceanothus, to reduce erosion of the surface. We specifically do not recommend the use of ice plant as a ground cover.

6. Surface waters from all properties adjacent to the landslide area must continue to be captured and channeled to the base of the slide mass.

7. We also suggest that during the grading, if access to the beach is available, that any large boulders present on the beach be concentrated at the base of the slide to act as a partial barrier to wave action.

Summary

The above recommendations are designed to partially mitigate the future landslide potential on your property. Application of these procedures may increase the usable life of the structures currently threatened by the landslide.

We would like to reiterate that complete stabilization of the head wall scarp is not economically feasible relative to the value of the structure which you wish to protect. Therefore, continued mass wasting of the toe of the slide by wave action is inevitable. In addition, the undetermined location of the basal detachment surface relative to the beach precludes final evaluation of the inherent instability of the slide block. If, however, the detachment surface extends below the strand line the potential for future mass wasting, although still pronounced, is considerably lower.

While the procedures outlined herein may well increase the usable life expectancy of structures currently threatened by landslides, no representation as to the duration of such usable lives is made herein.

If we can be of any further assistance to you concerning this matter, please do not hesitate to call upon us.

Sincerely,

Donald W. Weaver
Engineering Geologist
State of California EG#917

John O.D. Byrd
Project Geologist

DWW:pb

EXHIBIT 5

ORDER

Cite as 94 Daily Journal D.A.R. 13440

HERBERT E. BARTHELS,
Plaintiff and Appellant,
v.
SANTA BARBARA TITLE COMPANY
et al.,
Defendants and Respondents.

2d Civil No. B076806
(Super. Ct. No. 182179)
(Santa Barbara County)
California Court of Appeal
Second Appellate District
Division Six
Filed September 23, 1994

THE COURT:

IT APPEARING that the opinion filed August 24, 1994, in the above matter meets the standard for publication pursuant to California Rules of Court, rule 976(b),

IT IS HEREBY ORDERED that the same is certified for publication.

REAL PROPERTY

Title Abstractor's Negligence in Failing to Discover Easement's Insufficiency Didn't Cause Loss of Property Value.

Cite as 94 Daily Journal D.A.R. 13440

HERBERT E. BARTHELS,
Plaintiff and Appellant,
v.
SANTA BARBARA TITLE COMPANY
et al.,
Defendants and Respondents.

2d Civil No. B076806
(Super. Ct. No. 182179)
(Santa Barbara County)
California Court of Appeal
Second Appellate District
Division Six
Filed August 24, 1994

In this action for title abstractor's negligence, we hold that the negligence of the abstractor did not cause the property to lose value. Therefore, the property owner is not entitled to damages measured by the loss in value of the property. We also hold the trial court correctly determined other aspects of the award of damages. We affirm.

FACTS

In 1976, Herbert Barthels purchased the last beach front parcel of property in the City of Santa Barbara (the City). He paid $24,500 for the unimproved lot. Escrow was through the Santa Barbara Title Company (Title Company) which also issued a policy of title insurance. The policy insured title to the lot and an appurtenant easement for access 15 feet wide.

Barthels, a local dentist, planned to build his residence on the parcel. In June of 1989, during the permitting process, he learned that the access easement was only seven and a half feet wide, and not 15 feet as represented by the Title Company. The City refused to issue a building permit without a 15 foot wide easement. The Title Company tendered $42,875, representing the purchase price as increased by the title insurance policy inflation endorsement.

Barthels sued the Title Company alleging abstractor's negligence in determining that Barthels had a 15 foot wide easement. Barthels prayed for damages for loss of value of his property, money spent on construction plans and expenses incidental to processing permit applications. The Title Company did not deny it was negligent. The only question, therefore, was the amount of damages.

At trial Barthels testified that in 1989 when he learned of the defect in title, the property was worth $800,000 with the 15 foot easement and nothing without the easement. Barthels claimed that through 1992 he had out of pocket expenses for such items as property taxes and architectural and engineering fees in the amount of $27,381.25. The Title Company agreed that Barthels expenses were $21,524.40 through 1989, the year Barthels discovered the defect in title.

Barthels also claimed $280,000 as compensation for his own time devoted to development of the parcel. He testified he spent 1400 hours and was claiming $200 per hour as the value of his time.

The trial court found that the measure of damages for the Title Company's negligence was not the $800,000 loss in economic value of the property, but the $42,875 offered by the Title Company. The court told Barthels he could cash the Title Company's previously tendered check in that amount.

The trial court also awarded Barthels $21,524.40 for out of pocket costs expended until the defect in title was discovered. As to compensation for Barthels' time, the court found 150 hours represented the time Barthels expended that avoided the need to hire others. The court stated Barthels was not entitled to compensation at his billable rate as a dentist. Although he rescheduled

patients, he did not lose any. The trial court found that a fair rate would be $66.66 per hour. It awarded Barthels $10,000 as compensation for his time. The trial court found no basis for awarding Barthels attorney's fees for prosecuting the negligence action. It therefore awarded a total of $31,524.40 in addition to the amount already tendered by the Title Company.

DISCUSSION

I

Barthels contends the trial court erred in failing to award him $800,000 for loss of economic value of his property. We disagree.

The measure of damages for negligence is ". . . the amount which will compensate for all the detriment proximately caused thereby . . . ." (Civ. Code, § 3333.) The question here is whether the negligence of the Title Company caused the property to lose economic value. Barthels testified the property had no economic value because it lacked a sufficient easement for access. Nothing the Title Company did or did not do caused the property to lack a sufficient access easement. A sufficient easement simply never existed. Thus, the Title Company cannot be liable for any loss of economic value of the property caused by the lack of the easement.

Garton v. Title Ins. Trust Co. (1980) 106 Cal.App.3d 365 illustrates the role of causation in assessing damages for abstractor's negligence. There the abstractor failed to disclose that the plaintiffs' parcel was subject to a mineral interest in a third party. Plaintiffs sought an order requiring the abstractor to obtain a release of the mineral interest. In upholding the sustaining of a demurrer the court stated: "The first element of proximate cause is cause in fact. [Citations.] Nothing defendants did or did not do in any way caused the land to be subject to the Archibalds' mineral interest. . . . Since the acts or omissions of the defendants did not cause the land to be subject to the Archibalds' interest the cost of removing that interest is not a proper measure of plaintiffs' damages, nor are plaintiffs entitled to an order requiring the defendants to obtain a release of that interest." (Id. at pp. 382-383.)

Here the Title Company's negligence caused Barthels to spend $24,500 on a valueless parcel of property. Damages in the amount of $24,500 plus interest are adequate to compensate Barthels for the loss of that money. The trial court apparently believed Barthels was adequately compensated for the loss of his purchase money by payment of the $42,875 policy limits. That amount represents the purchase price plus an inflation factor specified in the policy. Although interest and not a title policy inflation factor is ordinarily used to measure damages in tort (see 6 Witkin, Summary of Cal. Law (9th ed. 1988) Torts, § 1397, p. 868), Barthels does not complain on appeal that the trial court erred in substituting the inflation factor for interest.

Barthels' reliance on Overholtzer v. Northern Counties Title Ins. Company (1953) 116 Cal.App.2d 113 is misplaced. There in discussing liability under a policy of title insurance the court stated, "It seems quite apparent to us that liability should be measured by diminution in the value of the property caused by the defect in title as of the date of the discovery of the defect, measured by the use to which the property is then being devoted." (Id. at p. 130.)

But liability under a policy of title insurance, as discussed in Overholtzer, is determined according to the provisions of the insurance contract. The Overholtzer's action was brought on the contract of title insurance. Here, the measure of a title insurer's liability under contract is not relevant. Instead, the instant case is based on negligence. Under the circumstances presented here, holding the Title Company liable for loss of value on a theory of negligence would violate Civil Code 3333. That section limits damages for negligence to the detriment proximately caused by the Title Company's act or omission.

II

Barthels also contends the trial court erred in awarding other damages.

Barthels argues that the trial court should not have stopped at the end of 1989 in calculating damages for his out of pocket expenses. But 1989 is the year Barthels discovered the defect in title. The City refused to issue a building permit, and he knew the land had no value. The trial court did not err in refusing to award damages for expenses made on land after Barthels learned it was worthless.

Barthels argues he should have been awarded damages for loss of income. But the trial court found no credible evidence Barthels lost any income. The trial court did award Barthels $10,000 for the time he spent that avoided the need to hire someone else.

Barthels complains the trial court awarded damages for some of the time he spent, but not all. The trial court was not convinced that all the time Barthels said he spent was reasonably necessary for the development of the parcel. The trial court committed no error. Barthels simply failed to carry his burden of proof. We must treat all evidence unfavorable to the judgment as not having sufficient verity to be accepted by the trier of fact. (GHK Associates v. Mayer Group, Inc. (1990) 224 Cal.App.3d 856, 872.) We have no power on appeal to consider the credibility of a witness or to weigh the evidence. (Kimble v. Board of Education (1987) 192 Cal.App.3d 1423, 1427.)

Barthels also complains that the amount awarded was calculated at $66.66 per hour, rather than the $200 hourly fee of a dentist. But in developing his property, Barthels was not performing the work of a dentist. Instead of compensating Barthels at the hourly rate of a dentist, the trial court properly measured compensation by the reasonable hourly rate for a person doing the type of work Barthels performed in developing his property. There was no credible evidence of the reasonable hourly rate for such work. But because Barthels had the burden of proof, if the trial court erred at all, it erred in awarding Barthels anything for his work. Thus there was no prejudice to Barthels in measuring compensation by $66.66. No reversal is

warranted. (See People v. Watson (1956) 46 Cal.2d 818, 836.)

Finally, Barthels claims the court erred in failing to award attorney's fees. Code of Civil Procedure section 1021 provides in part, "Except as attorney's fees are specifically provided for by statute, the measure and mode of compensation of attorneys and counselors at law is left to the agreement, express or implied, of the parties . . . ." There being no statute or agreement providing for attorney's fees in this matter, the trial court was correct in refusing to award them.

The judgment is affirmed. Costs are awarded to respondents.

GILBERT, J.

We concur:
STONE, P. J.
YEGAN, J.

Patrick L. McMahon, Judge
Superior Court County of Santa Barbara

James T. Lindsey for Plaintiff and Appellant.

Gibbs, Giden, Locher, Fleming & Acret, Joseph M. Giden, Lawrence B. Parker, and Michael I. Giden for Defendants and Respondents.

CIVIL PROCEDURE

Plaintiff in Intervention Isn't Liable for Prevailing Defendant's Costs Dating From Filing of Original Complaint.

Cite as 94 Daily Journal D.A.R. 13442

GERALD GARCIA, JR. et al.,
Plaintiffs,
v.
HYSTER COMPANY,
Defendant and Respondent;

TRAVELERS INSURANCE COMPANY,
Intervener and Appellant.

No. F019160
(Super. Ct. No. 212196)
California Court of Appeal
Fifth Appellate District
Filed September 23, 1994

APPEAL from a judgment of the Superior Court of Kern County. Rebecca A. Wiseman, Judge.

Mullen & Filippi, Pamela L. Goe, Yohman and Jensen, and Rick Jensen for Intervener and Appellant.

Marrone, Robinson, Frederick & Foster and J. Alan Frederick for Defendant and Respondent.

PROCEDURAL HISTORY

On October 1, 1990, plaintiffs Gerald Garcia, Jr. and Laura Garcia filed a complaint against defendant/respondent Hyster Company. The complaint charged that, while operating an "order picker" designed and manufactured by Hyster Company, Gerald Garcia was crushed between the order picker and a cross-beam. The complaint sought damages for Gerald Garcia's physical and mental injuries and medical expenses, his lost earnings, and Laura Garcia's loss of consortium.

Hyster Company answered with a general denial and various affirmative defenses, among which were the allegations that Gerald Garcia's employer, North American Phillips Lighting Corporation, had workers' compensation insurance and that said insurance had "expended certain sums" toward Gerald Garcia's medical care and disability payments. Consequently, Hyster Company sought a reduction of any damages awarded by the amount of medical care, treatment, and disability payments made by the workers' compensation carrier.

On the same day it answered the complaint, Hyster Company cross-complained against North American Phillips Lighting Corporation, again seeking a set-off against any award on the complaint of the workers' compensation benefits, if any, paid to Gerald Garcia.

The matter was set for a mandatory settlement conference on May 1, 1992, with trial set for May 26. The settlement conference was continued to May 22. During the intervening period, plaintiff in intervention/appellant Travelers Insurance Company, with the court's permission, filed its complaint in intervention against Hyster Company. Travelers alleged that, as a proximate result of Hyster's negligence, it had been compelled to pay workers' compensation benefits to Gerald Garcia in an undetermined amount; the complaint sought reimbursement for sums expended in paying workers' compensation benefits to Gerald Garcia, and "[r]easonable litigation expenses and reasonable attorney's fees incurred in preparation and prosecution of this action pursuant to Labor Code Section 3856 ...."

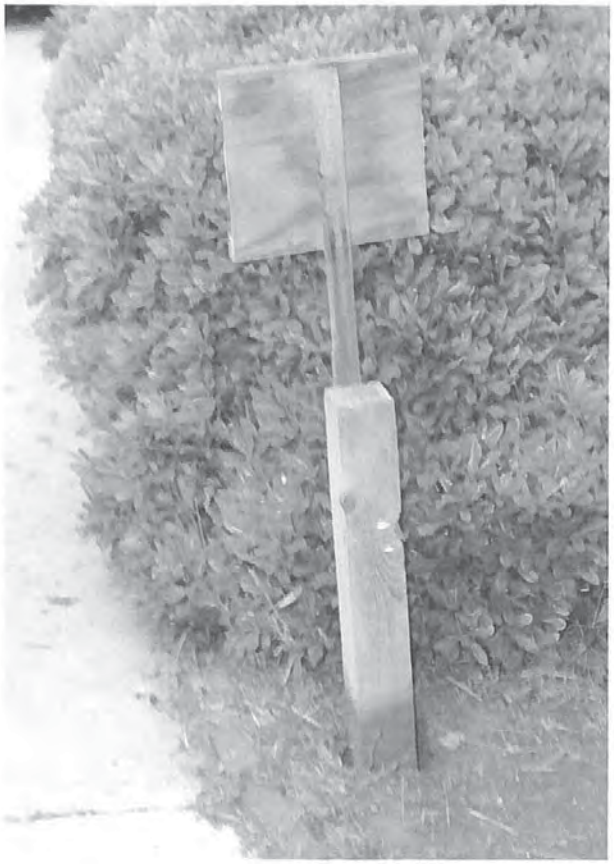
On May 28, 1992, Hyster Company made a statutory compromise offer to Travelers of $5,001, pursuant to Code of Civil Procedure [1] section 998. The offer was not accepted by Travelers.

On May 29, 1992, the Garcias' suit against Hyster Company settled for $62,500; one term of the settlement was that each party bear its own fees and costs. [2]

On June 5, 1992, Hyster Company answered the complaint in intervention with a general denial.

The complaint in intervention against Hyster Company came on for trial on September 29, 1992. During the course of the trial, intervener Travelers

F



Subj: **Re: 1837.5 El Camino de la Luz - Additional geologic work**
Date: 2/11/2011 2:45:43 P.M. Pacific Standard Time
From: Rayfranco@aol.com
To: DGullett@SantaBarbaraCA.gov, stan@firstcrescent.com, brucefpeterson@cox.net, david@hrwmlaw.com, pmiller@jdrconsulting.net, tsloan@sloanled.com
CC: DKato@SantaBarbaraCA.gov, DAndaloro@SantaBarbaraCA.gov, mhetrick@santabarbaraca.gov, Rayfranco@aol.com

Thank you for the update.

As you point out in your email, the work done by Dr. Anikouchine more than one year ago was under contract directly with Dr. Barthels, not under the City's direction. There are two issues of concern.

1. As you note in your disclaimer, Dr. Anikouchine was not working for the City, therefor an unbiased person could conclude that there is now a conflict of interest, he works for the developer and he is also the reviewer for the City. Any conclusions from his work are in our opinion, suspect.

2. At the last Planning Commission hearing, I questioned the methodology of excavation proposed by Dr. Anikouchine. Specifically the deep proposed deep trenching and the following re-compaction. To this question, Dr. Anikouchine stated that they would be re-compacting the trenches to Code requirements. In fact, Dr. Anikouchine did not do this. The result of this careless and shoddy work was significant settlement that created water collection trenches that direct water into the substrata, and potentially exacerbating the risk of slip plan failures.

Based on the two statements above, we continue to object to the use of Dr. Anikouchine as the geotechnical consultant for the EIR.

Finally, please let us know what the time limits are for development applications with the City of Santa Barbara. Applications for this project have been filed for more than twenty years.

Thank you.

In a message dated 2/11/2011 2:08:49 P.M. Pacific Standard Time, DGullett@SantaBarbaraCA.gov writes:

> El Camino de la Luz neighbors-
>
> Please be advised that Will Anikouchine will be visiting the 1837.5 site next week to conduct additional visual geologic field investigation (no heavy equipment involved).
>
> Dr. Anikouchine continues his role as a subcontractor on the project EIR. As you may recall, he is working for Steve Rodriguez, the City's EIR contractor for the project. Regarding the trenching work completed by Dr. Anikouchine in June 2009, as stated before, it was part of the City-approved Scope of Work, but it had not been funded or authorized by the City at the time it was done. According to Dr. Barthels, following the completion of the 2009 access settlement agreement, he was advised by his attorney to contact Dr. Anikouchine directly to proceed with the work. This was not consistent with the City's protocol and all parties have been reminded that the City manages the EIR contract work. The City continues to consider Dr. Anikouchine to be qualified and unbiased in his role on this project.
>
> Please let me know if you have questions.
>
> Regards-
>
> Dan Gullett
>
> 564-5470 x4550

Comment Letter No. 22
Rafael Franco
Date: March 17, 2012

22-1. Please refer to Topical Response No. 1: Location of the Ocean Bluff Edge on the Project Site.

22-2. CEQA Guidelines Section 15088.5 (Recirculation of an EIR Prior to Certification) indicates that an EIR is to be recirculated when "significant new information" is added to the EIR. The original (2006) Draft EIR included a proposed mitigation measure (AES-1a, Revised Project Design) that identified a three dimensional building envelope on the project site. The same mitigation measure is also included in the Revised Draft EIR. With the implementation of mitigation measure AES-1a, the height of a new residence on the project site would be reduced when compared to the project evaluated by the original EIR, and the project's impacts to important public views would be reduced to a less than significant level. In response to the requirements of mitigation measure AES-1a, the project applicant submitted a new project design for consideration by City staff and the Planning Commission. Staff evaluated the revised project design and determined that it substantially complies with mitigation requirements of mitigation measure AES-1a, and that the new project design would fulfill the intent of the mitigation measure to reduce project-related impacts to important public scenic views to a less than significant level. Changes to a project that occur to comply with mitigation requirements are not considered to be significant new information that must be evaluated in a new EIR. Therefore, the Revised Draft EIR was not amended to evaluate the aesthetic impacts of the new project design.

The Second Revised Draft EIR does provide an evaluation of the visual aesthetic impacts to the most recent project design. As described in Second Revised Draft EIR Section 1.1 (Project Overview), Section 1.4 (EIR Preparation History for the Proposed Project), and Section 5.1 (Visual Aesthetics) the revised design of the proposed residence would not result in significant visual aesthetic impacts to ocean views. As a result, the previously proposed building envelope mitigation measure included in the Draft EIR and Revised Draft EIR is no longer required. Visual aesthetic impacts of the currently proposed project related to landscaping and building color would be reduced to a less than significant level with the implementation of proposed mitigation measures AES-1 (Color Approval) and AES-2 (Landscape Plan Compliance).

Please refer to Topical Response No 1: Location of the Ocean Bluff Edge on the Project Site. The location of the top of the ocean bluff at the project site was revised in the Second Revised Draft EIR. An evaluation of the project based on the revised top of bluff location determined that the project would be consistent

with applicable Coastal Act policies and regulations, the City's Local Coastal Program and the Safety Element.

22-3. Please refer to Topical Response No 3: Analysis of Potential Ocean Bluff Stability Impacts at the Project Site, which addresses comments related to slope stability conditions at the project site and the slope stability impacts of the proposed project. In regard to items identified by this comment as not being included in the Revised Draft EIR, each of those items are now included in the Second Revised Draft EIR as attachments to this comment letter.

22-4. This comment expresses opinions related to the process that has been implemented to evaluate the geological conditions of the project site. The process outlined by this comment (i.e., peer review requirements) is typically used for technical reports that are prepared under the direction of a project applicant. That is not the case for the proposed project as none of Dr. Anikouchine's project-related reports have been prepared under the direction of the project applicant. In addition, California Coastal Commission geologist Mark Johnsson (2013) reviewed the 2011 slope stability analysis report and indicated that he concurs with its analysis and conclusions.

22-5. This comment expresses concerns of the commenter regarding the provision of adequate vehicle access to the project site. Please refer to Topical Response No. 5: Vehicle Access to the Project Site.

22-6. The February 11, 2011 email from City Staff member Daniel Gullet, which is attached to Mr. Franco's March 17, 2012 comment letter as Attachment G, clearly indicates that Dr. Anikouchine has not prepared project-related studies under the direction of the project applicant (Dr. Barthels). In addition, please be advised that:

- All work conducted by Dr. Anikouchine related to the analysis and review of the proposed project has been conducted to implement scopes of work developed with and approved by the City of Santa Barbara Planning Division.

- All work conducted by Dr. Anikouchine related to the analysis and review of the proposed project has been conducted in accordance with contract requirements between the City of Santa Barbara and Rodriguez Consulting Inc, the preparer of the Project EIR. Throughout the entire EIR preparation process, Dr. Anikouchine has worked exclusively as a subconsultant to Rodriguez Consulting Inc.

- Payment for all work conducted by Dr. Anikouchine related to the analysis and review of the proposed project has been provided by Rodriguez Consulting Inc.

- In regard to the comment regarding the "20 reports and opinion letters dealing with geotechnical issues on this project" a review and summary of those studies is included as Exhibit E of the Revised Initial Study prepared for the project (Second Revised EIR Appendix A). The findings of one of the previous reports (Smith, 1980) was the basis for conducting additional geotechnical investigations at the project site as part of the project EIR (Anikouchine, 2009), which is included in Appendix B of the Second Revised EIR.

22-7. Please refer to Topical Response No. 5: Vehicle Access to the Project Site. In addition, Section 9.1.4 (Impacts Found Not to be Significant – Transportation/Circulation) of the Second Revised Draft EIR states that the width of the project site access driveway easement varies from 15 to 7.5 feet.

22-8. Please refer to Topical Response No 1: Location of the Ocean Bluff Edge on the Project Site. The location of the top of the ocean bluff at the project site was revised in the Second Revised Draft EIR and an evaluation of the project based on the revised top of bluff location determined that the project would be consistent with applicable Coastal Act policies and regulations, the City's Local Coastal Program and the Safety Element. The EIR also concluded that potential bluff retreat-related impacts would be reduced to a less than significant level with the implementation of mitigation measure GEO-1 (Storm Water Pollution Control, Drainage Systems Maintenance and Project Site Landscaping).

22-9. Please refer to response 22-2. The building envelope height restriction mitigation measure previously included in the Draft and Revised Draft EIR is no longer included as a mitigation measure in the Second Revised Draft EIR. The mitigation measure is no longer required because as shown on Second Revised Draft EIR Figure 3.3-7, the western and eastern elevations of the current project design conform to the height requirements of the previously required mitigation measure (15 and 25 feet, respectively).

22-10. Please refer to Second Revised Draft EIR Section 6.3 (Single Family Residence Design Guidelines). The analysis concludes that the current project design would be consistent with Guideline requirements, such as recommendations to limit the visibility of foundation walls.

22-11. Please refer to Responses 22-2 and 22-9.

22-12. The impacts of the proposed project related to slope stability and impacts to scenic views were extensively evaluated by the Second Revised Draft EIR. That analysis concluded that the project would not result in a significant obstruction of scenic views, but would have the potential to result in significant visual aesthetic

impacts from landscaping proposed for the project site and from possible future changes to the color of the proposed residence. The analysis also concluded that the project would have the potential to result in significant slope stability impacts if inadequate site drainage was provided on the project site. Mitigation measures are identified by the EIR to reduce the identified impacts to a less than significant level. Therefore, with the implementation of proposed mitigation measures, the project would be consistent with the objectives described in Second Revised Draft EIR Section 3.5.

22-13. EIR Figure 5.1-1 (Project Area) is an aerial photo of the project site vicinity and does not attempt to depict the location of the proposed building footprint. The red area depicted on Figure 5.1-1 is labeled "proposed building site" and generally depicts the area on the project property that would be used for the development of the proposed residence. Please refer to EIR Figure 3.3-1 (Site Plan) for the location of the proposed residence footprint.

22-14. Please refer to Response 22-2.

22-15. Computer simulations of the currently proposed project design are included in the Second Revised Draft EIR.

22-16. No response required.

22-17. Please refer to Topical Response No 1: Location of the Ocean Bluff Edge on the Project Site. The location of the top of the ocean bluff at the project site was revised in the Second Revised Draft EIR and an evaluation of the project based on the revised top of bluff location determined that the project would be consistent with applicable Coastal Act policies and regulations, the City's Local Coastal Program and the Safety Element. The EIR also concluded that potential bluff retreat-related impacts would be reduced to a less than significant level with the implementation of mitigation measure GEO-1 (Storm Water Pollution Control, Drainage Systems Maintenance and Project Site Landscaping).

22-18. Please refer to Response 22-2.

22-19. Please refer to Response 22-6.

22-20. This comment expresses an opinion of the commenter that a block slide is not the type of slope failure likely to affect the project site, however, no basis for this opinion is provided. The EIR provides extensive analysis indicating why a wedge-type failure is the slope movement mechanism most likely to affect the project site. Also, please refer Topical Response No. 3: Analysis of Potential Ocean Bluff Stability Impacts at the Project Site.

22-21. Please refer to Topical Response No. 3: Analysis of Potential Ocean Bluff Stability Impacts at the Project Site.

22-22. Please refer to Topical Response No. 3: Analysis of Potential Ocean Bluff Stability Impacts at the Project Site.

22-23. The location of the geologic exploration trench constructed on the project site is depicted by EIR Figure 5.2-4 (Project Site Geologic Exploration Trench/Figure 1 of Dr. Anikouchine's 2009 report). Those figures identify the dimensions of the trench as being 31 and 45 feet long. Dr. Anikouchine's 2009 report also indicates that trench area was restored by replacing soil removed from the trench and compacting it, replanting removed vegetation, and replacing curbs and paving that were disturbed.

22-24. Please refer to Topical Response No. 3: Analysis of Potential Ocean Bluff Stability Impacts at the Project Site. Dr. Anikouchine's 2009 report indicates that trench area was restored by replacing soil removed from the trench and compacting it, replanting removed vegetation, and replacing curbs and paving that were disturbed.

22-25. Please refer to Responses 22-23 and 20-1.

22-26. Please refer to Topical Response No. 3: Analysis of Potential Ocean Bluff Stability Impacts at the Project Site.

22-27. No response required.

22-28. Please refer to Topical Response No. 3: Analysis of Potential Ocean Bluff Stability Impacts at the Project Site.

22-29. The theoretical area that could be affected by a wedge-type failure depicted on EIR Figure 5.2-8 (Project Site Geology and Theoretical Wedge Failure Area/Figure 4 of Dr. Anikouchine's 2011 report) would affect both the project site and the property located west of and adjacent to the project site. However, the slope stability analysis included in the EIR concludes that with the implementation of proposed mitigation measures GEO-1 (Storm Water Pollution Control, Drainage Systems Maintenance and Project Site Landscaping) and GEO-2 (Foundation Design Approval) the proposed project would not result in significant bluff stability impacts.

21-30. Please refer to Topical Response No. 3: Analysis of Potential Ocean Bluff Stability Impacts at the Project Site.

22-31. Please refer to Topical Response No 1: Location of the Ocean Bluff Edge on the Project Site. The location of the top of the ocean bluff at the project site was

revised in the Second Revised Draft EIR. An evaluation of the project based on the revised top of bluff location determined that the project would be consistent with applicable Coastal Act policies and regulations, the City's Local Coastal Program and the Safety Element.

22-32. Please refer to Responses 22-2.

22-33. This comment only provides an excerpt from Anikouchine's 2009 report regarding the geologic inspection trench constructed at the project site (Revised Draft EIR Appendix B). No response is required.

22-34. Please refer to Topical Response No. 3: Analysis of Potential Ocean Bluff Stability Impacts at the Project Site.

Appendix J

Final EIR Comment Letters and Responses

APPENDIX J

Final EIR Comment Letters and Responses

The Second Revised Draft EIR prepared for the 1837½ El Camino de la Luz Residence Project was circulated for public review between October 17 and November 30, 2016, and a public hearing to consider the adequacy of the EIR was conducted by the Planning Commission on November 17, 2016. A list of the agencies and persons that submitted comments on the 2016 Second Revised Draft EIR is provided below. This Appendix also includes topical responses that address issues that were raised by multiple commenters, a copy of each comment letter, responses to the individual comments submitted on the Second Revised Draft EIR, and responses to comments of the Planning Commission at the November 17, 2016 hearing.

Public Agencies

1. Governor's Office of Planning and Research, November 29, 2016
2. California Coastal Commission, December 1, 2016
3. United States Department of the Interior, Fish and Wildlife Service, December 6, 2016

Community/Interest Groups

4. Santa Barbara Urban Creeks Council, November 17, 2016
5. Citizens to Protect & Preserve the Mesa's Coastal Bluffs, Greg Judith Smith, Venskus & Associates, November 30, 2016

Individuals

6. Lou DeBourbon, November 29, 2016
7. Kim and Joe Finegold, November 14, 2016
8. Rafael Franco, November 17, 2016
9. Rafael Franco, November 19, 2016
10. Joanna Morgan and Stan Krome, October 28, 2016
11. Joanna Morgan and Stan Krome, November 21, 2016
12. Joanna Morgan and Stan Krome, November 23, 2016
13. Bruce Peterson, October 26, 2016
14. Gregory M. Smith, November 30, 2016
15. Judith Smith, November 19, 2016
16. Judith Smith, November 30, 2016
17. Scott and Lesley Wiscomb, November 11, 2016

Applicant's Representative

18. Hollister & Brace, November 7, 2016

City of Santa Barbara

19. Planning Commission Minutes, November 17, 2016

TOPICAL RESPONSES

Many of the comments submitted on the Second Revised Draft EIR were related to the following topics:

1. The location of the ocean bluff edge on the project site.
2. The location of the top of the Lighthouse Creek canyon slope on the project site.
3. The analysis of potential ocean bluff stability impacts at the project site.
4. The rate of ocean bluff erosion at the project site.
5. Access to the project site and to the beach.

Responses to these comment topics are provided below.

Topical Response No. 1: Location of the Ocean Bluff Edge on the Project Site.

A response to public comments related to the location of the ocean bluff edge (top of bluff) on the project site is provided below. The response describes how the top of bluff location was originally determined, and summarizes the results of further analysis that was conducted to identify where the bluff edge on the project site is located.

California Coastal Act regulations provide for identifying the location of a coastal bluff edge, or top of bluff, for the purpose of considering development setbacks from unstable coastal slope areas. Geologist Dr. Anikouchine (2005) reported that the top of the ocean bluff at the project site was first identified by a geologist (Fisher) in 2001. The previously identified top of bluff location was confirmed by Dr. Anikouchine in his 2005 report to the City that is attached to the Revised Initial Study as "Exhibit E" (see EIR Appendix A). On page 9 of the 2005 report, two cross sections of the ocean bluff at the project site are provided and the location of the original bluff edge is denoted. The caption for the cross-section drawings indicates: "*note the rounded, convex-upward shape of the area above the sea cliff in both profiles*." A portion of the Coastal Act regulations definition of the bluff edge (CCR, Title 14, §13577) states that "… *In cases where the top edge of the cliff is rounded away from the face of the cliff as a result of erosional processes related to the presence of a steep cliff face, the bluff line or edge shall be defined as the point nearest the cliff beyond which the downward gradient of the surface increases more or less continuously until it reaches the general gradient of the cliff. …*" As shown by the cross-sections prepared by Dr. Anikouchine, the bluff edge was identified below the rounded portions of the bluff and at the point where the downward gradient of the surface increases more or less continuously until it reaches the general gradient of the cliff.

The location of the ocean bluff top was re-evaluated by Earth Systems Pacific (2013a, EIR Appendix D) and determined to be located south of and adjacent to the proposed building pad, generally following the location of an existing concrete curb and drainage swale. At the southeastern corner of the paved area, the bluff top follows a moderately broad ridgeline that trends down to the mouth of Lighthouse Creek. This top of bluff location is consistent with the portion of the Coastal Act regulations definition that states: "… *In a case where there is a steplike feature at the top of the bluff face, the landward edge of the topmost riser shall be taken to be the cliff edge.* …" The revised top of bluff location, and its location in relation to the proposed residence, is depicted on EIR Figures 3.3-1 (Site Plan) and 5.2-1 (Revised Top of Bluff Location). Both City of Santa Barbara staff and California Coastal Commission geologist Mark Johnsson (2013) concur with the revised top of bluff location based on the review of the Earth Systems Pacific report, the topography of the site, and site visits. City of Santa Barbara staff attended a site visit with Mark Johnsson and discussed the revised top of bluff location with him by telephone.

Topical Response No. 2: Location of the Top of the Lighthouse Creek Canyon Slope on the Project Site.

The top of the western bank of Lighthouse Creek on the eastern portion of the project site was identified by Tierney (2002) as part of the evaluation of the project site's biological resources and impacts to those resources that could result from the implementation of the proposed project. The biological resources report is attached to the Revised Initial Study (Exhibit D of EIR Appendix A). Tierney identified the top of bank as "…*the point that the gentle and then moderately-steep slope intersects with the sheer bank leading down to the creek bed.*"

The location of the top of the Lighthouse Creek canyon slope on the project site was re-evaluated by Earth Systems Pacific (2013, EIR Appendix E) and it was determined that the top of the canyon that contains Lighthouse Creek on the project site is located east of and adjacent to the existing asphalt pad that has been installed on the relatively level portion of project site. The revised top of slope location and its location in relation to the proposed residence is depicted on EIR Figure 5.2-2 (Canyon Top of Slope and Borehole Locations). As depicted on Figure 5.2-2, the identified top of slope extends roughly north to south across the central portion of the proposed building area. Both City of Santa Barbara staff and California Coastal Commission geologist Mark Johnsson (2013) concur with the revised top of the canyon slope location identified by Earth Systems Pacific based on the review of the Earth Systems Pacific report, the topography of the site, and site visits. City of Santa Barbara staff attended a site visit with Mark Johnsson and discussed the report with him by telephone.

Topical Response No. 3: Analysis of Potential Ocean Bluff Stability Impacts at the Project Site.

A response to public comments regarding the stability of the ocean bluff on the project site is provided below. The response includes a summary of the slope stability analyses that have been prepared for the project.

In response to direction provided by the Planning Commission in 2007, a geological investigation at the project site was conducted in 2009 by Dr. Anikouchine to determine if a suspected bedding plane fracture that had been reported by others existed on the site. It was important to determine if the fracture was present because previous reviews of the project site geology indicated that the fracture could be a plane of weakness along which a block slide slope failure could occur, and that such a block slide could involve movement of all of the material west of the fracture, potentially resulting in a significant impact to the proposed project. To confirm the presence or absence of the bedding plane fracture, a geologic inspection trench was created on the project site. Inspection of the trench concluded that there was no evidence of the suspected bedding plane fracture. Therefore, the proposed building site would not be affected by the type of block slide slope failure previously described by other investigators. Additional information regarding this investigation is provided in EIR Appendix B.

A 2011 slope stability analysis by Dr. Anikouchine evaluated several potential slope failure mechanisms that could have the potential to affect the project site. The 2011 investigation concluded that based on geologic conditions, a wedge-type slope failure would be the slope movement mechanism most likely to affect the project site. Subsequent analysis of this type of slope failure mechanism determined that the slope should be considered to be geologically stable and that the slope would remain stable after the development of a new residence within the proposed building envelope. Mitigation measures are also identified by the EIR to further reduce the potential for slope stability and erosion-related impacts, including measures: GEO-1 (Storm Water Pollution Control, Drainage Systems Maintenance and Project Site Landscaping); BIO-2 (Appropriate Plants/Hardscape on Bluff); BIO-3 (Irrigation System); and W-1 (Drainage and Water Quality). These measures ensure that storm water at the project site would be properly managed, and that landscaping and irrigation do not accelerate the potential for bluff erosion. The slope stability investigation provided additional analysis to evaluate potential effects to the proposed residence in the unlikely event that a slope failure did occur at the project site. This additional evaluation considered the effects of the largest possible landslide that could be reasonably expected to affect the project site (i.e., movement along the lowest bedding plane that intersects a fracture in the bluff west of the project parcel). That slope movement evaluation determined if such a failure were to occur, the lower portion of the property and the adjoining property to the west could be affected, but not the proposed development area.

Comments submitted regarding the slope stability analysis expressed a variety of general concerns about slope stability at the project site and in the project area. These types of comments do not specifically address the adequacy of the analysis provided by the EIR and will

be forwarded to decision-makers so they will be aware of these general concerns. Other comments expressed opinions regarding the methodologies and data used to evaluate the potential for slope stability impacts to affect the proposed project, and many of these types of comments were submitted by persons who are not a registered geologist, or a certified engineering geologist or geological engineer. In regard to the opinions expressed in these comments, please note that Dr. Anikouchine is a certified engineering geologist with extensive experience with geological conditions in the project region and conducting slope stability evaluation in coastal areas. Further, California Coastal Commission geologist Mark Johnsson (2013) has reviewed the 2011 slope stability analysis prepared by Dr. Anikouchine and indicated that he concurs with the analysis and conclusions of the report. Comments related to the adequacy of the slope stability analysis provided by the EIR will be forwarded to decision-makers so they will be aware of those concerns.

Some of the comments that address the adequacy of the slope stability analyses included in the EIR were submitted by a certified engineering geologist. These comments generally express dissenting opinions related to the study conclusions, the interpretation of field observations and explorations, and the analysis methodologies used to evaluate the stability of the project site ocean bluff. In response to these comments, it should be noted that extensive detail regarding the methodologies used to evaluate the stability of the ocean bluff on the project site are included in Dr. Anikouchine's 2009 and 2011 slope stability reports that are included in EIR Appendices B and C. Also, California Coastal Commission geologist Mark Johnsson (2013) has reviewed the 2011 slope stability analysis report and indicated that he concurs with its analysis and conclusions. Further, CEQA Guidelines Section 15204 (Focus of Review) subsection (c) indicates that in review of a Draft EIR "*reviewers should explain the basis for their comments, and should submit data or references offering facts, reasonable assumptions based on facts, or expert opinion supported by facts in support of the comments*." As indicated by this section of the *CEQA Guidelines*, providing a dissenting opinion or expressing disagreement with analysis presented by the EIR by itself does not provide the substantial evidence necessary to conclude that the project's slope stability analysis is inadequate, or that the project's slope stability impacts are significant or cannot be reduced to a less than significant level with the implementation of proposed mitigation measures. Finally, *CEQA Guidelines* Section 15151 (Standards for Adequacy of an EIR) indicates that "*disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have not looked for perfection but for adequacy, completeness, and good faith effort at full disclosure.*" Therefore, the slope stability analyses presented in the EIR and Appendices B and C are considered adequate to evaluate the slope stability impacts of the proposed project and no additional analysis or revisions to the analysis that has been conducted is required.

Topical Response No. 4: Rate of Ocean Bluff Erosion at the Project Site.

The potential impacts of erosion of the ocean bluff on the project site (bluff retreat) provided by the First Revised Draft EIR was based on an assumption that the project site ocean bluff erodes landward at an average rate of approximately four inches per year. Comments

submitted on the 2012 EIR questioned the validity of the four inches per year estimate. Additional information regarding the rate of bluff retreat at the project site was added to the Second Revised EIR. A summary of the additional information provided in the EIR is provided below.

The City of Santa Barbara Safety Element (2013) indicates that several studies of ocean bluff retreat rates have been conducted in the Santa Barbara area. One study evaluated erosion rates over a 70-year period and determined that the highest retreat rate was approximately 12 inches per year, while the average city-wide erosion rate is eight inches per year. The estimated rates of sea cliff retreat vary due to local differences in the composition and structure of the cliffs, the effects of bluff-top development, and barriers located at the base of the cliffs such as cobbles, boulders, or rip rap.

K-C Geotechnical (1987) indicated a retreat rate of six to eight inches per year at the project site based on a report by Thomas W. Dibble Jr. (1986), which was prepared for the parcel at 1837 El Camino de la Luz. Norris (1988) estimated a rate of four inches of bluff retreat per year at the project site based on the review of aerial photographs taken in 1943, 1954 and 1986. CGG Consultants (1996) reviewed a series of aerial photographs dated between 1928 and 1995 and concluded that the top of the bluff at the paved parking area had not changed in over 65 years, and estimated the bluff retreat rate to be "less than four inches per year." Fisher (2001) reported that a site 0.56 miles to the west of the project site (station WHEELER) had zero inches of retreat since 1927.

The most recent evaluation of bluff retreat rates at the project site was conducted by Earth Systems Pacific (2013a). The Earth Systems Pacific evaluation was based on a comparison of the conditions shown on a 1953 aerial photograph and a current topographic map, with stereographic interpretation of the 1953 photograph performed using manual and digital/computer stereo-scope techniques. The results were then geo-registered and plotted onto a 2010 digital Las Mesa ortho photograph using the computer program Global Mapper. This methodology resulted in a digitally-aided plot that is more accurate than previous bluff retreat analyses based on manual methods. The new analysis determined that the maximum bluff erosion retreat over the 59-year period between 1953 and 2012 was five feet, or an average rate of 1.02 inches of retreat per year. A 20 percent increase in retreat rate was added to account for potential acceleration due to sea level rise or other uncertainties, resulting in a total retreat rate of 1.22 inches per year and a 75- year setback of 7.6 feet from the top of bluff. The entire Earth Systems Pacific report is provided in EIR Appendix D.

Topical Response No. 5: Access to the Project Site and to the Beach.

<u>Access to the Project Site</u>

The ability of the project to provide adequate access along existing easements was evaluated by the Revised Initial Study prepared for the project (EIR Appendix A). The Initial Study includes proposed mitigation measure T-1 (Evidence of Adequate Access), which requires

that the project comply with the condition included in the Conditional Certificate of Compliance (CCC) issued by the City in 1999. The condition in the CCC reads as follows: "*Provide evidence, satisfactory to the City Engineer that the owner of the parcel described herein substantially possesses the required amount of legal access that formed the basis of the originally approved lot split.*" The CCC allows for the property to be legally sold, leased or financed; however, the condition of the CCC must be met prior to the issuance of any building permits on the property. Because the access to the subject parcel was not clearly and definitely established from a legal standpoint, the Initial Study concluded that the proposed use of the existing driveway easements has the potential to result in a significant access-related impact. The Initial Study also concluded that, with compliance with mitigation measure T-1 (Evidence of Adequate Access), the project's long-term access-related impact, and short-term construction equipment access impacts, would be less than significant.

In September of 2009, the Superior Court of the State of California determined that the subject parcel has legal access easements that vary in width from 7.5 feet to 15 feet, as shown on the 1958 Record of Survey (see sheet A.5 of the project plans). The Superior Court "Stipulated Access Order" states in part: *"All parties acknowledge that the access easement on the Franco Property is limited to 7.5 feet in width on the southern 7.14 feet of the Franco Property."* The Franco property has an address of 1835 El Camino de la Luz.

The existing access easements that would be used to provide access to the proposed residence were evaluated by the Fire Department and it was determined that potential fire hazard impacts would be reduced to a less than significant level with the implementation of proposed mitigation measure H-1 (provide automatic fire sprinklers); H-2 (provide monitored fire alarm system); H-3 (comply with high fire hazard area construction requirements); and H-4 (maintain sprinkler and alarm systems).

Transportation planning staff analyzed the width of the driveway available to access the subject property and states that the 7.5 foot wide access section, which spans a length of 7.14 feet, would provide less driveway access width than the City's practice of 10 feet. However, a majority of passenger vehicles could access the site. The owners would need to be aware that some larger passenger vehicles, construction trucks, recreational vehicles, campers, etc. require a greater width, and, without permission from adjacent owners, could not access the site. For reference purposes, the City's Parking Design Standards define a standard design vehicle width as 5 foot 10 inches wide. For comparison purposes, a wide passenger vehicle such as a 2010 H1 Hummer (though no longer in production) is 7 feet 1 inch wide.

Short-term construction vehicle access to the project site would be facilitated by using equipment appropriately sized to travel within the 7.5-foot driveway easement that provides access to the project site. The concrete would be pumped in from the street; therefore, large ready-mix trucks would not need to access the project to site. The project applicant has indicated that the following vehicles, or similar types of vehicles, would be used during project construction.

Vehicle Type	Model (typical)	Typical Uses	Maximum Width	Length
Pickup Truck	Ford F250	Hauling building materials, soil, etc.	6.58 ft.	18.83 ft.
Front End Loader	John Deere H130	Grading/foundation preparation	5.15 ft.	9.3 ft.
Drill Rig	R10 Man Portable	Drilling caisson holes	4.58 ft.	4.08 ft.

Based on the decision of the Superior Court described above, and the analysis of City staff, it has been determined that the property substantially possesses the required amount of legal access that formed the basis of the originally approved lot split, and that there is adequate access to serve the proposed project at the project site. Therefore, since the compliance with mitigation measure T-1 (Evidence of Adequate Access) has been satisfied, it is no longer included as a condition of approval.

Access to the Beach

The five neighboring properties that use the project site access driveway have beach access easements across the project site. The easements are limited to access and do not include the right to engage in recreational activities or beach viewing on the easement area.

There is no evidence of a public beach access easement across the project site.

Letter No. 1

STATE OF CALIFORNIA

GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH

STATE CLEARINGHOUSE AND PLANNING UNIT

EDMUND G. BROWN JR.
GOVERNOR

KEN ALEX
DIRECTOR

November 29, 2016

RECEIVED
DEC 05 2016
CITY OF SANTA BARBARA
PLANNING DIVISION

Kathleen Kennedy
City of Santa Barbara
630 Garden Street
Santa Barbara, CA 93101

Subject: 1837 1/2 El Camino de la Luz Residence
SCH#: 2005041031

Dear Kathleen Kennedy:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. The review period closed on November 28, 2016, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Scott Morgan
Director, State Clearinghouse

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report
State Clearinghouse Data Base

SCH# 2005041031
Project Title 1837 1/2 El Camino de la Luz Residence
Lead Agency Santa Barbara, City of

Type EIR Draft EIR

Description The proposed project involves construction of a 1,505 sf (net), two story single family residence with an attached 429 sf garage on a 23,885 sf vacant bluff-top lot. Grading quantities total approximately 288 cy of cut and 21 cy of fill. Access to the site would be provided by private easements extending south from the terminus of El Camino de la Luz.

Lead Agency Contact

Name Kathleen Kennedy
Agency City of Santa Barbara
Phone (805) 564-5470 x4560 **Fax**
email
Address 630 Garden Street
City Santa Barbara **State** CA **Zip** 93101

Project Location

County Santa Barbara
City Santa Barbara
Region
Lat / Long
Cross Streets Oliver Road / Cliff Drive / Meigs Road
Parcel No. 045-100-065
Township **Range** **Section** **Base**

Proximity to:

Highways Hwy 101
Airports Santa Barbara
Railways UPRR
Waterways Lighthouse Creek, Pacific Ocean
Schools Washington ES, Monroe ES
Land Use Vacant lot / E-3 Zone (Single Family Residential) and SD-3 (Coastal Overlay Zone) / Residential, 5 units per acre

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Project Issues Archaeologic-Historic; Coastal Zone; Cumulative Effects; Drainage/Absorption; Forest Land/Fire Hazard; Geologic/Seismic; Landuse; Noise; Public Services; Recreation/Parks; Schools/Universities; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Wildlife; Aesthetic/Visual; Biological Resources; Flood Plain/Flooding; Growth Inducing; Population/Housing Balance; Air Quality

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Reviewing Agencies Resources Agency; California Coastal Commission; Department of Fish and Wildlife, Region 5; Department of Parks and Recreation; Department of Water Resources; Caltrans, Division of Aeronautics; California Highway Patrol; Caltrans, District 5; Regional Water Quality Control Board, Region 3; Native American Heritage Commission; Public Utilities Commission

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Date Received 10/14/2016 **Start of Review** 10/14/2016 **End of Review** 11/28/2016

Note: Blanks in data fields result from insufficient information provided by lead agency.

RESPONSES TO COMMENT LETTERS AND CORRESPONDENCE

Comment Letter No. 1
Governor's Office of Planning and Research
Date: November 29, 2016

1-1. No response is required regarding the distribution of the Second Revised Draft EIR to various State agencies. The only comments regarding the Second Revised Draft EIR received from the Office of Planning and Research were from the California Coastal Commission (see Comment Letter No. 2)

CALIFORNIA COASTAL COMMISSION
SOUTH CENTRAL COAST AREA
89 SOUTH CALIFORNIA ST., SUITE 200
VENTURA, CA 93001
(805) 585-1800

December 1, 2016

City of Santa Barbara Planning Division
c/o Kathleen Kennedy, Project Planner
630 Garden Street
Santa Barbara, California 93101

Letter No. 2

RE: Second Revised Draft Environmental Impact Report for the 1837 ½ El Camino de la Luz Residence

Dear Ms. Kennedy,

Commission staff has reviewed the Second Revised Draft Environmental Impact Report (DEIR), released in October 2016, for the proposed residence at 1837 ½ El Camino de la Luz and would like to provide your staff with the following comments for your consideration.

As provided in the DEIR, the proposed residence at 1837 ½ El Camino de la Luz includes a 1,934 square foot (net) two-story single-family residence (25 foot maximum height) and a 429 square foot attached garage. Grading to construct the residence would require 288 cubic yards of cut under the building footprint and 21 cubic yards of fill under the proposed driveway. The proposed residence would be supported by a drilled caisson foundation system that would require seventeen holes to be drilled seven to eight feet deep within the proposed building footprint area to hold caissons constructed of reinforcing steel and concrete. Grade beams would then be utilized to span between caissons. 2-1

The project, as proposed, is located within the jurisdiction of the City of Santa Barbara Local Coastal Program (LCP). Due to the project's proposed siting between the first public road and the sea and within 300 feet of the seaward face of a coastal bluff, the project is also within the appealable jurisdiction of the California Coastal Commission. As such, the proposed project will require a coastal development permit from the City of Santa Barbara which would be appealable to the Coastal Commission.

Pursuant to the California Environmental Quality Act (CEQA), the City is required to ensure that any Environmental Impact Report generated for the project analyzes all of the projects potentially significant environmental effects, as well as the project's consistency with the City's certified LCP and the California Coastal Act, as incorporated by reference into the LCP through Policy 1.1. *See* 14 Cal. Code Regulations §§ 15121(a), 15161, 15143 and 15151. Policies 2.1, 2.4, 6.8, 6.10 and 9.1 of the City's LCP and Coastal Act policies 30212, 30230, 30231, 30250, 30251, 30252 and 30253 are of particular relevance to this project as they restrict bluff top development and require new development to minimize impacts to coastal resources and from coastal hazards. Collectively, these policies, in combination with CEQA, require development to be sited and designed to prevent impacts to coastal resources such that no less environmentally 2-2

damaging, feasible alternative exists for the project and measures to mitigate potential impacts from the proposed development are employed to the maximum degree possible. 2-2

The subject development of a residence at 1837 ½ El Camino de la Luz proposes to cantilever the residence over a canyon bluff that lies directly above Lighthouse Creek and therefore will have no setback from the top of the creek bank and the riparian corridor along the creek. As proposed, the footprint of the proposed residence will permanently displace a significant portion of the riparian habitat onsite. Furthermore, project grading and construction of the drainage system will significantly disturb the riparian vegetation, and potentially wildlife, along the canyon side of the subject parcel. The DEIR contains a plan for habitat restoration; however, it includes the removal of non-native invasive species with chemical herbicides which can cause deleterious impacts to coastal waters and riparian habitat. Additionally, the drainage system will discharge directly into Lighthouse Creek, which may cause additional significant adverse impacts to coastal waters given the immediate connectivity of Lighthouse Creek to the ocean at the subject site. 2-3 2-4 2-5 2-6

The subject development is proposed to be sited less than eight feet from the coastal bluff edge. Although the subject parcel represents a very constrained lot, and the subject coastal bluff has a low erosion rate, a setback of less than eight feet constitutes an insufficient setback in regard to siting of the project to avoid adverse visual impacts and the strong potential for geologic instability given the location's propensity for both historic and active landslides. 2-7

Additionally, the stairway on the coastal bluff face directly in front of the subject parcel has a history of public use. Commission staff is concerned that public prescriptive rights for the bluff stairway may exist, and the construction of the proposed residence will block public access entirely from use of the stairway. 2-8

In closing, the proposed project raises serious concerns regarding biological impacts to Lighthouse Creek and its riparian corridor, geologic stability of the proposed residence and the subject parcel, and public access impacts of the proposed residence. The project involves development and substantial alteration of a historically and presently unstable area, placement of a permanent structure within the riparian corridor of a coastal waterway, inadequate coastal bluff top setbacks, and has the potential to eliminate a public access way to the coast in contravention to Policies 2.1, 2.4, 6.8, 6.10 and 9.1 of the City's LCP and Coastal Act policies 30212, 30230, 30231, 30250, 30251, 30252 and 30253. Therefore, for these reasons, the project does not appear to be consistent with the policies and provisions of the City's certified LCP. 2-9

Thank you for the opportunity to review the DEIR at this time. Please contact me with any questions or comments regarding the abovementioned comments.

Sincerely,

Megan Sinkula

Megan Sinkula
Coastal Program Analyst

Comment Letter No. 2
California Coastal Commission
Date: December 1, 2016

2-1. This comment provides introductory statements and information that does not address the adequacy of the environmental review provided by the Second Revised Draft EIR. No response is required.

2-2. This comment identifies various City Local Coastal Plan and Coastal Act policies that are characterized as of particular relevance to the project. Several of the identified policies were not included in the Second Revised Draft EIR discussion and have been added to the Final EIR. Evaluations of the project's consistency with the additional polices added to the Final EIR is provided below.

California Coastal Act Section 30230. *Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.*

Potentially Consistent. As identified in the EIR Section 9.1.5 discussion, the proposed project would not involve development that would directly affect the marine environment or marine organisms. Potentially significant indirect effects to marine resources could result if the project were to result in substantial discharges of pollutants to the ocean, however the project's potential short- and long-term water quality impacts would be reduced to a less than significant level with the implementation of mitigation measures W-1 (Drainage and Water Quality) and GEO-1 (Storm Water Pollution Control, Drainage Systems Maintenance and Project Site Landscaping). Therefore, the proposed project is potentially consistent with this Coastal Act Section.

LCP Policy 2.4. *New development projects shall provide vertical access to the shoreline consistent with stipulations set forth in Section 30212 of the Coastal Act.*

California Coastal Act Section 30212. *Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where: (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources, (2) adequate access exists nearby, or, (3) agriculture would be adversely affected. Dedicated accessway shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway.*

Potentially Consistent. As discussed in EIR Section 4.2.1, a steep and narrow dirt path has been worn onto the project site bluff face. Wooden stairs near the southwestern

corner of the proposed residence development site lead to the path, which switches back across the south exposure of the bluff face and terminates at the beach below the adjacent property west of the project site. The location of the path is depicted on EIR Figure 3.3-1 (Site Plan). Due to its informal construction characteristics, it does not provide engineered drainage or safety (i.e., handrails) improvements.

Each of the five properties that use the project site access driveway has a recorded beach access easement over the project site. There is no evidence of a public beach access easement on the project site. The use of the path by the public would have the potential to result in significant erosion and/or safety impacts. The proposed project (a single-family residence) would not result in a substantial increase in the demand for coastal access in the project area by the public or result in a substantial increase in the use of the path by neighbors that have easement rights to use the path. Therefore, there would not be a sufficient nexus to require the proposed project to form a private association to accept responsibility for maintenance and liability of the accessway for the benefit of the public.

The LCP identifies two existing coastal access points located near the project site that provide public beach access: Mesa Lane Trail, approximately 3,000 feet west of the project site; and Oliver Road, approximately 1,500 feet west of the project site. Other public coastal access points are also located in the project site area.

Based on the potential safety and environmental impacts that could result from the use of the existing path by the public, the infeasibility to require the formation of a private association to maintain the path and accept liability, and the availability of other public access points within one-half mile of the project site, the project would not be required to provide a public access to the beach in accordance with the requirements of Coastal Act Section 30212.

California Coastal Act Section 30250. *(a) New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. In addition, land divisions, other than leases for agricultural uses, outside existing developed areas shall be permitted only where 50 percent of the usable parcels in the area have been developed and the created parcels would be no smaller than the average size of surrounding parcels.*

<u>Potentially Consistent.</u> As evaluated in EIR Section 4.2.3 the proposed single-family residence would be located contiguous with an existing residential neighborhood on a parcel that is zoned for residential development. Adequate fire, police, schools, utilities, water and sewer services are available to serve the proposed project. The proposed project does not include a request for a land division. Therefore, the proposed project is potentially consistent with this Coastal Act Section.

California Coastal Act Section 30252. *The location and amount of new development should maintain and enhance public access to the coast by (1) facilitating the provision or extension of transit service, (2) providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads, (3) providing non-automobile circulation within the development, (4) providing adequate parking facilities or providing substitute means of serving the development with public transportation, (5) assuring the potential for public transit for high intensity uses such as high-rise office buildings, and by (6) assuring that the recreational needs of new residents will not overload nearby coastal recreation areas by correlating the amount of development with local park acquisition and development plans with the provision of onsite recreational facilities to serve the new development.*

Potentially Consistent. As identified in the EIR analysis, the proposed project is limited to the development of one single-family residence. Due to the small size of the project, it would not result in additional population that would substantially increase the demand for transit services or commercial services, and would not adversely affect existing pedestrian or alternative transportation modes in the project area. The project would provide required on-site parking and would not substantially increase the demand for off-site parking; and would not substantially increase the use of recreation facilities in the project area. Therefore, the proposed project is potentially consistent with this Coastal Act Section.

2-3. This comment is correct in that the proposed residence would extend approximately 12-30 feet beyond (east) of the designated top of the Lighthouse Creek canyon slope/top of bank. However, the proposed residence would be located approximately 70-80 feet west of the riparian vegetation located along the Lighthouse Creek channel. Vegetation that would be directly impacted (removed) by the project is located on the upper portions of the canyon slope and is dominated by invasive ornamental species commonly found on disturbed sites.

2-4. Section 9.1.1 of the EIR (Impacts Found Not to be Significant: Biological Resources), states that the installation of the proposed storm water drainage system would have the potential to remove or disturb native vegetation, and to impact animals located on the project site. The EIR identifies eight (8) mitigation measures to reduce the potential project-related impacts to a less than significant level, including requirements to: restore disturbed areas (mitigation measure BIO-1); minimize impacts to sensitive habitat due to construction activities (mitigation measure BIO-8); and to obtain a Streambed Alteration Agreement from the California Department of Fish and Wildlife (mitigation measure BIO-5). In addition to the required mitigation measures, the project proposes to restore 8,000 square feet of the upper slopes of the Lighthouse Creek canyon slope by removing existing non-native vegetation and creating native vegetation habitat (EIR Figure 3.3-8, Landscape Plan). Therefore, the EIR concludes that the project's temporary and long-term impacts to biological resources would be reduced to a less than significant level.

2-5. Proposed mitigation measure BIO-1 (Habitat Restoration) states that non-native species shall be removed from the proposed habitat restoration site using hand and chemical methods. To further minimize the potential for water quality and habitat impacts that could result from the use of herbicides, proposed mitigation measure BIO-4 (Erosion Control/Water Quality Plan) has been amended to include the following requirement:

12. The use of herbicides for the removal of non-native plants in the proposed habitat restoration area shall be minimized to the extent practical. If herbicides must be used to ensure the removal of non-native plants, herbicide use shall be limited to the application of Glyphosate Aquamaster.™ Herbicide use on the project site shall occur only in the proposed habitat restoration area.

Proposed mitigation measure BIO-4 (Erosion Control/Water Quality Plan) also includes the following requirement, which would address the potential for water pollution due to the herbicides:

11. A qualified biologist shall periodically check maintenance of erosion control measures and hydromulch during construction and suggest remedies where necessary.

Glyphosate Aquamaster is often used for weed control at sites located near wetland and riparian habitat areas. Its use has been previously recommended by Coastal Commission staff for projects located in the project region, including: the southern California Gas Company Pipeline Maintenance and Vegetation Management Plan at La Goleta Facility in Goleta (E-11-031); and for maintenance activities conducted by the Santa Barbara County Flood Control District (Application No. 4-12-064).

2-6. The project's stormwater drainage system would discharge to Lighthouse Creek, as shown on Second Revised Draft EIR Figure 3.3-1 (Site Plan). Please see response 2-5 regarding potential water quality impacts that may result from the on-site use of herbicides. As indicated by the response, the implementation of proposed mitigation measures would reduce the potential for herbicide-related impacts to coastal waters to a less than significant level. In addition, project-related storm water discharges to the creek would not result in a significant erosion or erosion-related water quality impacts based on the project's proposal to discharge water in a non-erosive manner by using ungrouted rip rap at the discharge point. The design of the energy dissipater would be subject to review and approval by the California Department of Fish and Wildlife as part of the Streambed Alteration Agreement process required by mitigation measure BIO-5.

2-7. The EIR evaluated the potential for bluff retreat impacts at the project site using the methodology outlined in the Coastal Commission guidelines titled *Establishing Development Setbacks from Coastal Bluffs* (Johnsson, 2003). The guidelines describe four steps to be used in the evaluation of bluff retreat impacts. The EIR's bluff retreat

impact evaluation and description of how the analysis was conducted is presented in Section 5.2.3 (Geology, Impact Evaluation), and the conclusions of the analysis are summarized below.

The first evaluation step identified the location of the ocean bluff edge. EIR Figure 5.2-1 (Revised Top of Bluff Location) depicts the existing (2012) bluff edge and provides a description of how the location of the bluff edge was determined. The Coastal Commission Geologist (Johnsson, 2013) reviewed and concurred with the top of bluff location depicted by the Second Revised Draft EIR.

The second evaluation step determines whether the coastal bluff is stable. The EIR provides an extensive evaluation of the slope stability characteristics of the project site (EIR Section 5.2.3 and Appendix C) and concludes that the bluff slope is stable and would remain stable after the addition of the weight of the proposed residence. The Coastal Commission Geologist (Johnsson, 2013) reviewed and concurred with the slope stability analysis conducted for the project. As described by the 2003 Coastal Commission guidelines, if the slope is determined to be stable, a slope stability setback from the top of bluff location is not required.

The third evaluation step calculated the long-term rate of bluff retreat at the project site. The EIR provides a detailed description of the methodology used to calculate the bluff retreat rate at the project site (Section 5.2.3 and Appendix D). The analysis estimated that over a previous 59-year period, the project site bluff retreated at an average rate of approximately 1.02 inches per year. The Coastal Commission Geologist (Johnsson, 2013) reviewed and concurred with the bluff retreat analysis conducted for the project site.

The fourth evaluation step accounts for a level of uncertainty that may be associated with conducting slope stability and bluff retreat analyses. As described in the 2003 Coastal Commission guidelines, one method involves multiplying the estimated long-term bluff retreat rate by factors that generally range from 1.5 to 4.0. Another method involves adding a further buffer of ten feet. For the proposed project, the long-term bluff retreat rate estimate of 1.02 inches per year was increased by 20 percent to 1.22 inches per year. The 20 percent increase used for the project analysis accounts for bluff retreat uncertainty related to future changes in ocean conditions that may result from climate change, such as a rise in sea level and an increase in storm activity wave energy that may potentially affect the bluff erosion rate. Increasing the estimated rate of bluff retreat by 20 percent also accounts for the uncertainty associated with slope stability analysis. The use of the 20 percent safety factor for both bluff retreat analysis uncertainty (i.e., sea level rise) and slope stability evaluation uncertainty is consistent with the analysis methodology outlined by the 2003 Coastal Commission guidelines, which describe using a single combined (or "double duty") safety factor for slopes that were determined to be unstable and for bluff retreat analysis uncertainty. For the proposed project, it would be appropriate to use a single safety factor for both bluff retreat rate uncertainty and slope stability analysis

uncertainty because it has been demonstrated that a project site slope is stable and an additional slope instability setback is not required.

The 20 percent safety factor (i.e., a factor of 1.2) that was used for the proposed project analysis is somewhat lower than the low end of the suggested safety factor range (i.e., a factor of 1.5), but is considered appropriate given stable slope conditions determined to exist at the project site and the low bluff retreat rates determined to exist at the project site when compared to higher rates that generally exist in other areas of the City. [1]

In conclusion, the EIR's analysis of potential bluff retreat impacts was conducted consistent with the methodology described by the Coastal Commission *Establishing Development Setbacks from Coastal Bluffs* guidelines. The EIR concludes that after a 75-year analysis period the project site ocean bluff may be located very near the proposed residence, however, the structure would not be undermined. Therefore, potential slope stability/bluff retreat impacts are identified as a potentially significant impact that would be reduced to a less than significant level with the implementation of mitigation measures that would reduce the potential for project uses (e.g., landscaping, irrigation) that could potentially change or increase slope stability risk and bluff retreat rates (mitigation measure GEO-1, Storm Water Pollution Control, Drainage Systems Maintenance and Project Site Landscaping).

This comment states that "*a setback of less than eight feet constitutes an insufficient setback in regard to siting of the project to avoid adverse visual impacts and the strong potential for geologic instability given the location's propensity for both historic and active landslides.*" The site-specific slope stability evaluation prepared for the project (EIR Appendix C) determined that the project site slope is stable under static and earthquake conditions per State standards, and under conditions of increased groundwater levels at the project site. The EIR and slope stability analysis also describe and depict a small wedge-type historic landslide located at the southeast corner of the project site, however, no active landslides have been identified at the project site. Therefore, the project site does not have a "propensity" for instability as suggested by this comment.

The comment does not specify what type of adverse visual impacts could occur at the project site as a result of bluff retreat. The Revised Initial Study (EIR Appendix A) includes photosimulations prepared for the originally proposed project design. The original design was a two-story residence that would have had a structure height approximately 10 feet higher than the current project design that is depicted in Final EIR Figures 3.3-2 and 3.3-3. The previous project design simulations show that the residence would have been partially visible from selected viewpoints along the beach near the

[1] The City's 2013 Safety Element reports a wide range of bluff retreat rates in the City. One study (Griggs, 2012) reported average long-term retreat rates between six and 12 inches per year. Another study (Hapke and Reid, 2007) reported retreat rates ranging between four to 18 inches per year. The Safety Element acknowledges that site-specific conditions can result in a wide variation in retreat rates.

project site. The Second Revised Draft EIR concluded that, based on the photosimulations prepared for the previous project design, the current project design would not result in significant impacts to views from the beach because the original (taller) residence design would not have interfered with views of scenic resources such as the Santa Ynez Mountains; and the reduced height of the current project design would make the proposed residence less visible from the beach than what is depicted by the original residence design photosimulations.

The project is of limited scope and would be in-fill development of an existing lot designated for residential use within the context of an existing coastal residential neighborhood. Although the proposed residence would be visible from various viewpoints located along the beach, the project would not result in the loss of a substantial amount of open space or in grading or vegetation removal involving significant impacts to existing views from the adjacent beach. In addition, the proposed residence would have a size that is similar to or smaller than other ocean front homes in the project area. Also, the proposed design must be approved by the City's Single Family Design Board, which would ensure design consistency with other nearby residences that can be seen from the beach. Therefore, the proposed project would not result in significant impacts to views that are provided from the beach and those impacts would not be substantially increased by the landward retreat of the project site ocean bluff.

2-8. The five neighboring properties that use the project site access driveway have beach access easements across the project site. The easements are limited to access and do not include the right to engage in recreational activities or beach viewing on the easement area. There is no evidence that prescriptive rights have been accrued by the public. Also, as shown on EIR Figure 3.3-1 (Site Plan), the proposed project would not block or interfere with the existing three-foot wide pedestrian access easement located along the western perimeter of the project site.

2-9. This comment summarizes comments raised in comments 2-1 through 2-8 above. Please refer to the responses for those comments.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ventura Fish and Wildlife Office
2493 Portola Road, Suite B
Ventura, California 93003

Letter No. 3

IN REPLY REFER TO:
08EVEN00-2016-CPA-0149

December 6, 2016

RECEIVED
DEC 07 2016
CITY OF SANTA BARBARA
PLANNING DIVISION

Julie Rodriquez, Planning Commission Secretary
City of Santa Barbara
P.O. Box 1990
Santa Barbara, California 93102-1990

Subject: Proposed Coastal Development Permit at 1837 ½ El Camino de la Luz, Santa Barbara, California

Dear Ms. Rodriquez:

We have reviewed the application for the proposed residential development at 1837 ½ El Camino de la Luz, Santa Barbara, California. The City of Santa Barbara is proposing to grant a Coastal Development Permit to allow the development in the appealable jurisdiction of the City's Coastal Zone and Hillside Design District. The proposed project would consist of the construction of a new two-story residence with an attached garage on the coastal property in Santa Barbara. Grading of the site would be necessary as part of the construction.

The mission of the U.S. Fish and Wildlife Service (Service) is working with others to conserve, protect, and enhance fish, wildlife, plants, and their habitats for the continuing benefit of the American people. To assist in meeting this mandate, the Service provides comments on public notices issued for projects that may have an effect on those resources, especially federally-listed plants and wildlife. The Service's responsibilities also include administering the Endangered Species Act of 1973, as amended (Act). Section 9 of the Act prohibits the taking of any federally listed endangered or threatened wildlife species. "Take" is defined at Section 3(19) of the Act to mean "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." The Act provides for civil and criminal penalties for the unlawful taking of listed wildlife species. Such taking may be authorized by the Service in two ways: through interagency consultation for projects with Federal involvement pursuant to section 7, or through the issuance of an incidental take permit under section 10(a)(1)(B) of the Act. 3-1

Only listed species receive protection under the Act; however, sensitive species should be considered in the planning process in the event they become listed or proposed for listing prior to project completion. Our review of the proposed project indicates an area impacted by proposed project activities may support the monarch butterfly (*Danaus plexippus plexippus*). The Service was petitioned to list the monarch butterfly as endangered or threatened August 6, 2014, and is currently evaluating the status of the subspecies. Monarch butterflies are known to actively utilize an area approximately 400 feet north of the proposed development for overwintering. Because the proposed development may have habitat that is suitable for overwintering monarch 3-2

butterflies, we recommend that focused surveys for this subspecies be conducted in the fall and winter (November through mid-February), following acceptable protocols, if they have not already been completed. If this subspecies is detected or are known to be present in the project area, you should contact us to help determine what measures may be appropriate to conserve the subspecies and its habitat. 3-2

If you have any questions, please contact Lara Drizd of our staff at (805) 644-1766, extension 321, or by electronic mail at lara_drizd@fws.gov.

Sincerely,

Chris Dellith
Senior Biologist

Comment Letter No. 3
United States Department of the Interior, Fish and Wildlife Service
Date: December 6, 2016

3-1. This comment provides introductory remarks and does not address the impact evaluation provided by the EIR. No response is required.

3-2. Monarch butterfly aggregation habitat is primarily dominated by eucalyptus trees (Meade, 1999). The Revised Initial Study prepared for the project (Second Revised Draft EIR Appendix A) states that habitat for monarch butterflies consists primarily of eucalyptus windrows (roost sites), and grassland and scrub (foraging habitat). The Revised Initial Study also states that known roosts occur within one mile of the project site, with an autumnal roost located in La Mesa Park approximately 1,000 feet north and east of the project site. Meade (1999) identifies the roosting site as being located in eucalyptus trees in the northwest corner of the park. The Revised Initial Study concludes that there is no potential for monarch presence on the project site due to lack of suitable habitat. Vegetation that would be removed by the project would consist primarily of non-native and invasive plants, which would not have an adverse effect on any monarch population that may occur near the project site. Scrub habitat located on the middle portion of the Lighthouse Creek canyon slope and the south-facing ocean bluff, could potentially provide limited foraging habitat, but would not be removed by the project. Based on the absence of suitable monarch butterfly habitat on the portions of the project site that would be disturbed by construction activity, on-site surveys are not required and the project would not result in short- or long-term activities that would have the potential to impact off-site butterfly populations.

SANTA BARBARA URBAN CREEKS COUNCIL

P.O. Box 1467, Santa Barbara, CA 93102 (805) 962-8260 *sbucc@silcom.com*

http://www.sb-urbancreeks.org

November 17, 2016

City of Santa Barbara Planning Division
PO Box 1990
Santa Barbara, CA 93102-1990

Letter No. 4

Attn: Kathleen Kennedy
Associate Planner
kkennedy@santabarbaraca.gov
PCSecretary@SantaBarbaraCa.gov

Re: 2nd DEIR - 1837 1/2 El Camino de la Luz, MST2002-00214

Honorable Commissioners,

Santa Barbara Urban Creek Council, SBUCC, is a 501(c)(3) non-profit active since 1989 representing over 2,000 members in advocating protection and enhancement of urban streams and watersheds on the south coast of Santa Barbara County. Our comments on 2nd Draft EIR begin below.

Page 6-4 of the Draft EIR

LCP Policy 6.10. *The City shall require a setback buffer for native vegetation between the top of the bank and any proposed project. This setback will vary depending upon the conditions of the site and the environmental impact of the proposed project.*

Potentially Consistent. The eastern portion of the proposed residence would extend approximately 12 to 30 feet beyond (east) of the designated top of the Lighthouse Creek canyon slope, however, the residence would be approximately 70-80 feet west of the Lighthouse Creek channel. The vegetation on the Lighthouse Creek canyon slope that would be directly impacted (i.e., removed) by the project consists mostly of non- native species that provide little biological value. Native vegetation on the mid- and lower-portions of the Lighthouse Creek canyon slope and in the creek channel provides "moderately high" quality habitat for amphibians, reptiles, birds and small mammals. Wildlife expected to use on-site native habitat, however, would generally be species tolerant of nearby urban uses. The proposed residence would generally be located approximately 20 to 30 feet, at minimum, from the middle portions of the Lighthouse Creek canyon slope where native vegetation is located. This setback from the existing native vegetation would be adequate given the predominate use of the area by wildlife that is tolerant of urban uses and the low-intensity characteristics of the proposed single- family residence. Therefore, the proposed project is potentially consistent with this LCP policy. 4-1

LCP policy 6.10 *The City shall (shall meaning will), require a set back buffer for native vegetation between the top of the bank and any proposed project.*

*F**igure 5.2-3 of the 2nd Draft EIR, The Project Site Geology Cross-Section,** recommends a 10 foot Top of Slope building setback.*

SBUCC Comment: This project has no setback buffer. In fact, it goes in the opposite direction by 30 feet. It encroaches on the Creek. Not only is there no buffer, there is a minus buffer. The project's design takes away any buffer opportunity.

Urban Creeks Council and the City's Creeks Division recommend a 50 foot setback, as this is the minimum standard throughout Santa Barbara County. The 50 foot setback is important in order to maintain riparian habitat, improve water quality, and protect residence from losing creek-side property by erosion. The proposed development sits on an outside bend of the creek, the side most prone to erosion in heavy rains. Soils in this area are historically unstable. If this house is built as designed, when soils do move, the homeowners would then argue that additional concrete structures would need to be built in the Creek to protect their property. 4-1

***LCP Policy 6.8**. The riparian resources, biological productivity, and water quality of the City's coastal zone Creeks shall be maintained, preserved, enhanced and, where feasible, restored.*

SBUCC Comment: A 30 foot encroachment below Top of Bank cannot maintain, preserve, enhance, or restore a Creek. 4-2

Lighthouse Creek is a valuable community asset. In year 2020, the Santa Barbara City Creeks Division is planning restoration of Lighthouse Creek including re-vegetation and trails.

Please protect this section of Lighthouse Creek and require any development there to have an adequate buffer from the Creek. Creek setbacks are required on every creek in the City and County. The 2nd Draft EIR needs to address Creek setbacks when their proposed development is adjacent to a Creek. All recent Creek-side developments in Santa Barbara have been scrutinized regarding Top of Bank setback requirements for good reason.

This project would build into the Creek bank, setting a terrible precedent for other Creeks in Santa Barbara. 4-3

Thank you for your consideration,

Rick Frickmann, President
Santa Barbara Urban Creeks Council

Comment Letter No. 4
Santa Barbara Urban Creeks Council
Date: November 17, 2016

4-1. The City of Santa Barbara does not have a specified creek setback policy or ordinance provision applicable to the project. Local Coastal Plan Policy 6.10 provides for determination of an adequate creek setback that will vary in size based on site-specific conditions and environmental impacts, toward the purpose of protecting creek resources such as water quality and biological resources.

The 10-foot setback depicted on EIR Figures 5.2-2 and 5.2-3 was recommended by the Lighthouse Creek slope stability evaluation (Earth Systems Pacific, 2013; EIR Appendix E) if the proposed residence did not use a caisson-supported foundation system. As stated in EIR Section 3.3.3 (Grading) the project has proposed the use of a caisson-supported foundation system. Therefore, the 10-foot edge of canyon slope setback is not required and has not been proposed.

As stated by the EIR's evaluation of the project's consistency with LCP Policy 6.10, the proposed residence would be located approximately 70-80 feet from the Lighthouse Creek Channel, and approximately 20-30 feet from higher value native vegetation on the middle portion of the slope. Therefore, the project would provide a setback from sensitive habitat located on the project site.

Regarding the comment's reference to County minimum setback standard, the project is within City of Santa Barbara jurisdiction, not unincorporated County jurisdiction, and County standards are not applicable to the project. It is noted however, that the County ordinance governing development along watercourses does allow development within 50 feet of a watercourse when found consistent with the stated purposes of setbacks for prevention of undue flood damage and protecting the public health, safety and welfare. The County also has an environmental guideline used in their environmental review evaluations.

As described by the Revised Initial Study prepared for the project (Appendix A) and EIR Section 9.1.5 (Impacts Found Not to be Significant: Water Environment), the proposed project would not be damaged by flood waters in Lighthouse Creek; would not result in increased flooding impacts to downstream properties; would not result in significant flooding-related health, safety or welfare impacts; and with the implementation of mitigation measures identified by the Revised Initial Study would not result in significant water quality impacts. EIR Section 9.1.1 (Impacts Found Not to be Significant: Biological Resources) concluded that with the implementation of identified mitigation measures the project would not result in significant impacts to riparian habitat. In addition, EIR Section 5.2 (Geology) concluded that the Lighthouse Creek canyon slope does not exhibit evidence of recent erosion-related impacts, and that the project would

not result in significant impacts to the stability of the slope. Therefore, the project with development setbacks as proposed would not result in a significant impact or policy inconsistency.

The Lighthouse Creek slope stability evaluation (Earth Systems Pacific, 2013; Second Revised Draft EIR Appendix E) provided the following description of erosion conditions associated with Lighthouse Creek on the project site:

"Erosion along the creek appears to be confined within the thread of the creek. No defined eroded banks were observed within the bottom of the creek adjacent to the proposed building area. In addition, no significant erosion has occurred along the top edge of the canyon slope during the last 60 years."

In addition, the Lighthouse Creek slope stability evaluation concluded that the Monterey formation bedrock, colluvial soils on the lower half of the canyon slope and the bottom of the creek, and fill soils on the upper portion of the project site were all grossly stable. Potential stability impacts that could be associated with the fill soils on the upper portions of the canyon slope would be reduced to a less than significant level by the proposed use of a caisson supported foundation system.

4-2. The EIR and the Revised Initial Study prepared for the project concluded that the location, construction, and use of the proposed residence would not result in significant impacts to native vegetation located along Lighthouse Creek on the project site. The project is of limited scope involving a small area of disturbance. As proposed, the residence would be located a minimum of approximately 20-30 feet west of the coastal bluff scrub habitat that is located on the central portion of the project site slope that descends to Lighthouse Creek, and approximately 70-80 feet west of the riparian vegetation located along the Lighthouse Creek channel. Therefore, the project would provide substantial setbacks from the native vegetation on the project site that has higher habitat and biological value. The vegetation on the Lighthouse Creek canyon slope that would be directly impacted (i.e., removed) by the project consists mostly of non-native and invasive plant species that provide little biological value. In addition, the project would restore approximately 8,000 square feet of the upper slopes of the Lighthouse Creek canyon slope by removing existing non-native vegetation and creating native vegetation habitat (EIR Figure 3.3-8, Landscape Plan) thereby more than offsetting the effects of project disturbance.

4-3. Please see prior responses regarding proposed creek setback and EIR impact analysis. This comment expresses the opinion of the commenter and does not address the adequacy of the environmental impact analysis provided by the EIR. No additional response is required.

Letter No. 5

Venskus & Associates
A PROFESSIONAL CORPORATION

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November 30, 2016

VIA E-MAIL AND U.S. MAIL
Santa Barbara City Planning Commission
City of Santa Barbara
P.O. Box 1990
Santa Barbara, California 93102-1990
pcsecretary@santabarbaraca.gov

Re: Draft Environmental Impact Report Comments Regarding the Proposed Development Project at 1837.5 El Camino de la Luz, Santa Barbara, California (MST2002-00214)

Honorable Commission Members:

This firm has been retained by Greg and Judith Smith and Citizens to Protect and Preserve the Mesa's Coastal Bluffs, a citizens' group dedicated to protecting the Mesa's Bluffs and preserving Lighthouse Creek.

As explained herein, and in Sabrina Venskus' testimony at the November 17, 2016 hearing on the Draft Environmental Impact Report ("DEIR") for the Proposed Development Project MST2002-00214 ("Proposed Project" or "Project"), 1837.5 El Camino de la Luz (the "Property", "1837 ½", or "lot") cannot be lawfully developed. Even if it were lawful to develop the Property, adoption of the 2016 DEIR without significant changes would violate the California Environmental Quality Act ("CEQA").

I am writing, therefore, to request that you do not permit the Project to move forward. In the event that you continue to review the Project, I respectfully request that the DEIR be revised to include: (1) a proper evaluation and thorough analysis of the biological and geological impacts with re-evaluated conclusions and findings, (2) a proper analysis and evaluation of Proposed Project's consistency with the applicable Plans and Policies with re-evaluated conclusions and findings, and (3) a revised Alternatives analysis. 5-1

I. Project History and Background

1837.5 El Camino de la Luz is not a lawful lot. At the time the lot was created, it did not comply with the requirements of City Ordinance 2488, which provided certain access

requirements for public health and safety. (See Exhibit A; Exhibit B, p. 2; Exhibit C, p. 2.) The lot was also unlawful because it was not properly recorded with the City. (See Exhibit D, p. 7.) In 1999, the City issued a Conditional Certificate of Compliance, indicating that the lot was not lawful and that it could not be developed until the lot owner demonstrated that the lot "complied with the access requirements that formed the basis of the original lot split." (Exhibit E.)

The Applicant, Herbert Barthels ("Applicant"), who owns 1837.5 El Camino de la Luz, knows that he cannot develop the Property. He represented to the Santa Barbara Superior Court and the California Court of Appeal that the Property could not be developed. (See *Barthels v. Santa Barbara Title Co.* ["*SB Title Co.*"] (1994) 28 Cal.App.4th 674, attached as Exhibit G.) Both Courts found in the Applicant's favor and the title company paid the Applicant for the purchase price of the Property, the Applicant's expenses incurred to pursue development of the Property, and compensation for time the Applicant personally expended to pursue development of the Property. (*Id.* at 677, 678, 680.)

Now, though the Applicant has already been fairly compensated for his land, he wishes to develop the property in a manner that threatens the stability of the bluff, the safety of his neighbors' homes, and the viability of Lighthouse creek. This development process has also unnecessarily expended valuable public resources and City staff time.

II. The City Cannot Lawfully Issue a Development Permit for 1837.5.

5-1

A. The Applicant is judicially estopped from claiming he has a legal lot and may pursue a development permit.

Judicial estoppel is an equitable doctrine that precludes parties from taking inconsistent positions in judicial or administrative proceedings (*M. Perez Co. v. Base Camp Condominiums Ass'n No. Once* (2003) 111 Cal.App.4th 456, 463; see 2 Cal. Affirmative Def. § 34:18 (2d ed.)) "to prevent internal inconsistency, preclude litigants from playing 'fast and loose' with the courts, and prohibit 'parties from deliberately changing positions according to exigencies of the moment'" (*People ex rel. Sneddon v. Torch Energy Services, Inc.* (2002) 102 Cal.App.4th 181, 189, as modified (Oct. 4, 2002), citing *U.S. v. Ruiz* (9th Cir.1996) 73 F.3d 949, 953 and *U.S. v. McCaskey* (5th Cir.1993) 9 F.3d 368, 378). Judicial estoppel precludes an individual from asserting a position in an administrative proceeding that is inconsistent with a position taken in previous judicial proceedings. (California Practice Guide: Administrative Law Ch. 10-B; see *Hi-Desert Medical Center v. Douglas* (2015) 239 Cal.App.4th 717, 730, as modified (Sept. 15, 2015), reh'g denied (Sept. 15, 2015), review denied (Nov. 18, 2015).) A party is judicially estopped from asserting a contrary position when: "(1) the same party has taken two positions; (2) the positions were taken in judicial or quasi-judicial administrative proceedings; (3) the party was successful in asserting the first position; (4) the two positions are completely inconsistent; and (5) the first position was not taken as a result of ignorance, fraud, or mistake." (*County of Imperial v. Superior Court* (2007) 152 Cal.App.4th 13, 34.)

In this case, the Applicant is precluded from asserting that he has a legal lot and may obtain a development permit. First, the Applicant has taken two vastly different positions in judicial and quasi-judicial proceedings. In *SB Title Co.*, the Applicant testified that Property was worth "nothing without the easement" and that "the property had no economic value

because it lacked a sufficient easement for access." (*SB Title Co.*, *supra,* 28 Cal.App.4th at 678, 677.) The underlying premise for his position in this action was that, "[i]n June of 1989, during the permitting process, [the Applicant] learned that the access easement was only seven and a half feet wide, and not 15 feet as represented by the Title Company" and "the City refused to issue a building permit without a 15-foot wide easement," thus rendering the Property worthless. (*Id.* at 677.) The Applicant predicated his suit in *SB Title Co.* on the premise that he could not develop 1837.5 and that the Property was worthless. In the current development permit process, the Applicant is taking the position that he may develop 1837.5 by submitting a development application to the City of Santa Barbara ("City"), and has explicitly asserted that he has sufficient legal access required to develop the Property. (See Richard Monk, November 7, 2016 Correspondence to Kathleen Kennedy, Associate Planner, p. 3 ["Monk Correspondence"].) Thus, the first element of judicial estoppel has been met.

Second, the Applicant took and is currently taking these positions in judicial and quasi-judicial proceedings. The Applicant took his initial position in a judicial proceeding before the California Superior Court and Court of Appeal. (See *SB Title Co.*) The proceeding at hand is a quasi-judicial proceeding. The adjudication of a Coastal Development Permit is "adjudicatory or quasi-judicial." (*Patterson v. Central Coast Regional Com.* (1976) 58 Cal.App.3d 833, 841.) The present DEIR proceeding is part of the Coastal Development Permit Adjudication process: completion of environmental review under the California Environmental Quality Act is a necessary component of determining whether a Coastal Development Permit should issue. Thus, the second element of judicial estoppel has been met.

Third, the Applicant was successful in asserting this argument in *SB Title Co.* (See generally *SB Title Co.*) Fourth, the Applicant's position in *SB Title Co.* that he did not have the access required to develop his Property, and therefore could not obtain a development permit, is completely inconsistent with his current argument that he has sufficient access to the Property and therefore is entitled to a development permit. (Monk 2016 Correspondence, p. 3.) Thus, the third and fourth elements of judicial estoppel have been met. 5-1

No evidence indicates that the Applicant took this position as the result of ignorance, fraud, or mistake. Therefore, the Applicant is judicially estopped from pursuing a claim that the lot has sufficient access and that he is able to develop the lot.

B. The Applicant is judicially estopped from pursuing a takings claim against the City.

Should the Applicant's Proposed Project be denied such that he is unable to develop a single-family home on the Property, he would be judicially estopped from asserting a takings claim against the City. The Applicant's case in *SB Title Co.* was predicated on the premise that he could not obtain a development permit to build a single-family home on the Property. (*SB Title Co.*, *supra,* 28 Cal.App.4th.) The Applicant took the position that "the property had no economic value because it lacked a sufficient easement for access." (*Id.* at 678, 677.) The Applicant prevailed and was awarded the purchase price of the Property including inflation, the cost of the Applicant's expenses incurred in trying to develop the property before the defect was discovered, and the cost of time personally expended to pursue development the Property. (*Id.* at 677, 678, 680.)

The Applicant, therefore, cannot then successfully assert a position that, at the time he submitted a development application to the City, the Property could be developed, or that, if the City denied a development permit for the Property, it would constitute a taking.

C. The Subdivision Map Act precludes the City from issuing a development permit for the Property.

i. The Applicant must demonstrate that the Property complies with the City's 1999 Conditional Certificate of Compliance.

The California Subdivision Map Act ("SMA") and the terms of the City's Conditional Certificate of Compliance require that the Applicant provide evidence that the lot has sufficient access before he can develop the Property. (See Exhibit E; Gov. Code, §§ 66499.35(b), 66499.35(f)(1)(E).)

Under the Subdivision Map Act, when an agency issues a conditional certificate of compliance for a parcel of land, it certifies that the parcel does not comply with the SMA or local laws created pursuant to the SMA. (Gov. Code, § 66499.35(b); see Gov. Code, § 66499.35(a).) A conditional certificate must articulate measures that a parcel owner must take to bring the lot into compliance with the Subdivision Map Act and local ordinances promulgated under the Subdivision Map Act. (See Gov. Code, §§ 66499.35, 66499.35(f)(1)(E).) Until the owner of the property meets the condition provided by the conditional certificate of compliance, the local agency cannot approve development on the land. (See *ibid.*) The SMA explains: "the certificate shall serve as notice... that the fulfillment and implementation of these conditions shall be required prior to subsequent issuance of a permit or other grant of approval for development of the property." (Gov. Code, § 66499.35(b).)

In this case, the Conditional Certificate of Compliance issued in 1999 states that 1837.5 does not comply with the requirements of the SMA or any local ordinances promulgated under the SMA. (Exhibit E.) Under the Conditional Certificate of Compliance issued in this matter, the Applicant must "[p]rovide evidence... that the owner of the parcel described herein substantially possesses the required amount of legal access that formed the basis of the originally approved lot split" before the City may issue any development approval for the Property. (See Exhibit E; Gov. Code, § 66499.35(b).) Under the SMA, until he does so, the City may not issue a permit or other grant of approval for development of the property. (See Gov. Code, § 66499.35(b).) Furthermore, the City of Santa Barbara Municipal Code ("SBMC") provides: 5-1

> No board, commission, officer or employee of the City shall issue any certificate, permit or grant any approval necessary to develop any real property within the City which has been divided, or which resulted from a division, *in violation of the provisions of the Subdivision Map Act* or of this ordinance. Any such certificate, permit or grant issued in conflict with the provisions of this ordinance or the Subdivision Map Act *shall be null and void*." (SBMC, § 27.01.040(h).)

Therefore, the City of Santa Barbara cannot lawfully, under the SMA or the Municipal Code, issue a development permit for this parcel without first requiring that the Applicant provide evidence that the Property has access that is consistent with the access that the original lot split was predicated on.

ii. The Applicant has not provided sufficient evidence to demonstrate that the Property complies with the requirements imposed by the City's Conditional Certificate of Compliance because such evidence does not exist.

On November 10, 2016, the City of Santa Barbara Planning Commission Staff issued a report that concluded that the Applicant provided "evidence of the required access" sufficient to demonstrate that the "property substantially possesses the required amount of legal access that formed the basis of the originally approved lot split." (Exhibit D, p. 7.)

This conclusion was, in part, based on Mr. Monk's correspondence, which asserted that the Property has between 7.5 and 15 feet of access, and that this access "substantially conforms to the access approved in the 1958 Lot Split Map." (Monk Correspondence, p. 3.) The correspondence does not explain how a 7.5 foot wide easement complies with the basis for the original lot split.[1] (*Ibid.*) It does not articulate or identify any original documents to substantiate what "the required amount of legal access that formed the basis of the originally approved lot split" actually entailed, nor does it provide any evidence to demonstrate what the City required in order to approve the initial lot split. (See Exhibit D, p. 7; Monk Correspondence.) The Applicant's letter states that the existing access to the parcel "is in substantial conformity with the width of road access shown on the 1958 Lot Split Map" but it does not explain how the 1958 Lot Split Map is the definitive resource for determining what formed the basis of the originally approved lot split. (See Monk Correspondence, p. 3.)

The Applicant has not provided conclusive evidence that the Property "possesses the required amount of legal access that formed the basis of the originally approved lot split" because such evidence does not exist. The City's records indicate that the lot split was based on the Property owners' representation that the Property had a fifteen foot wide access easement. During adjudication of the lot split application, the Property owner represented to both the Planning Commission and the City Council that the Property possessed an easement for fifteen feet of vehicular access, and, that the accessway was, in some places, up to seventeen feet wide. (See Exhibit B, C.) The Planning Commission denied the lot split because the fifteen foot easement would be too narrow for public safety purposes and would violate the access requirements codified in Santa Barbara City Ordinance 2488. (See Exhibit A, §§ 1, 2; Exhibit B; Exhibit C, p. 2.) Though the Santa Barbara City Council ("Council") was concerned that the easement was too small, the Council nonetheless approved the lot split based on the Property owners' representation that the lot had a fifteen foot wide easement, which was in some locations close to seventeen feet wide, to connect the Property to the closest public street. (Exhibits C, p. 1, 2; see Exhibit F, p. 1.) 5-1

Since that time, the City has consistently taken the position that the lot must possess, at minimum, a fifteen foot wide access easement. According to City Attorney Steven Wiley's June 4, 1997 letter to the Applicant's counsel, "the City cannot process an application for the development of [the Property] until you and Dr. Barthels demonstrate that the 15 foot wide

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[1] Mr. Monk's letter references "evidence presented to the City of Santa Barbara by the Applicant[] over the past eleven years" but it does not reference with specificity this evidence or how this evidence might support a conclusion that the parcel meets the access requirements for the initial lot split. (Monk Correspondence, p. 3.)

easement access originally represented to the City Council as the necessary vehicular access to the parcel." (Exhibit H, p. 1.) In a June 27, 1989 correspondence from the Santa Barbara City Public Works Department to the Applicant, the Public Works Department required that the Applicant demonstrate that the Property have a paved sixteen foot wide access way to the Property before the City could process a development permit for the Property. (Exhibit I.)

By the Applicant's own admission in communications to the City and in the Court of Appeal decision, the Property does not possess fifteen feet of access. (See Monk Correspondence, p. 3; Exhibit G.) At its narrowest, the Property only possesses 7.5 feet of access, half the amount that formed the basis of the original lot split. (See Exhibits G, J.) The lot, therefore, cannot be said to substantially possesses the required amount of legal access that formed the basis of the originally approved lot split. 5-1

As described above, the Applicant cannot demonstrate that the Property complies with the Conditional Certificate of Compliance and the City cannot lawfully continue to process the Proposed Project's Development application.

III. Even if it were Proper to Move Forward with an Environmental Review of this Project, the Draft Environmental Impact Report is Deficient and Does Not Comply with CEQA.

A. The DEIR's biological impacts analysis is insufficient and its conclusions regarding significant impacts are not supported by substantial evidence.

The Revised Initial Study finds that long term impacts to biological resources are less than significant. (DEIR Appendix A, p. 10.) The Initial Study also concludes that "impacts to native vegetation and creek habitat are potentially significant, [sic] mitigatable." (DEIR Appendix A, p. 10.)

As more fully explained in the analysis supplied by biologist David Magney, attached as Exhibit K,[2] data in the record is insufficient to support these conclusions. The DEIR does not appear to include any rare plant survey protocols. (See generally DEIR.) The plant survey that was conducted spanned only two hours and was completed in August 2013 – a time, in late-summer, when most plant species are dormant and no longer identifiable. (See DEIR, p. 379; Exhibit K.) A full plant survey with rare plant survey protocols should be conducted when species are viable to make valid conclusions regarding biological impacts. (See Exhibit K.) In addition, though most creeks in Santa Barbara County contain Environmentally Sensitive Habitat Area ("ESHA"), and the SBMC requires specific ESHA setbacks analysis, the DEIR does not indicate that anyone associated with the Proposed Project determined whether Lighthouse Creek and the areas affected by the Proposed Project contained ESHA. (SBMC §§ 28.44.040(J), 28.75.045; Exhibit K, p. 2; see also Pub. Resources Code, § 30240.) The DEIR also does not include any assessment of how the Proposed Project would impact any of wetland functions performed by Lighthouse Creek. (See generally DEIR, Appendix A.) In addition, the Project is located in habitat for rare invertebrates, but none of the biological

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[2] Analysis conducted by Biologist David Magney, included as Exhibit K, Wilson Geosciences' analysis, included as Exhibit L, and analysis conducted by Geologist Brent Miyazaki, included as Exhibit M, are incorporated in this comment letter in full.

assessments surveyed the site for these species. (See generally DEIR, Appendix A; Exhibit K, p. 2.) Finally, most of the biological analyses was completed for a different Proposed Project – not the Project's current 2016 iteration. 5-6

In addition, the DEIR supports its conclusions with the assertion that the flora and fauna impacted by the Proposed Project has "little biological value," as most species affected by the Proposed Project are non-native. (DEIR 6-2, 6-3, 6-4.) This implicitly suggests that there are no sensitive species that would be disturbed by the Proposed Project. (See *ibid.*) The DEIR, however, states that Coastal Bluff Scrub and Coastal Sage Scrub, which are both sensitive species, exist in and around the Project site. (DEIR 9-3; Appendix D, p. 2.) Sensitive animals, such as the two-striped garter snake, are also likely to exist on the Project site. (DEIR Appendix D, p. 3; Exhibit K.) In fact, the DEIR's mitigation measures are based on the assumption that sensitive species exist at the site. Mitigation measure BIO-7 and BIO-8 requires a biologist to be present during grading and the placement of a construction fence to ensure wildlife and "sensitive habitat" are not harmed by the Project. (DEIR 9-4, 9-6.) Thus the DEIR itself refutes the conclusion that the Proposed Project would not result in significant biological impacts. 5-7

The DEIR explains that the Proposed Project would grade, install drainage devices, and discharge water into Lighthouse creek, (see DEIR 2-1, 5.2-360), but fails to analyze how discharge would impact biological resources associated with the creek (see DEIR 1-3, 1-8, 3-15 – 16, 5.2-31, 5.2-36, 9-8). The DEIR states "[t]he proposed project would not impact native habitat located on the project site ocean bluff and would minimize disturbance to native habitat on the Lighthouse Creek canyon slope" (*id.* at 6-1 – 2) and "would result in a small area of temporary disturbance on the lower and more biologically-sensitive slope of the Lighthouse Creek canyon" (*id.* at 6-3). It does not, however, provide any analysis of these potential impacts. Without a clear understanding of these impacts, one cannot properly analyze the necessity, impact, or effectiveness of proposed mitigation measures. 5-8

In addition, a significant portion of the Proposed Project would be built on the Lighthouse Creek bank, which would impact biological resources associated with the creek. The DEIR, however, does not fully explain how this location would vastly differ from creek setbacks required by the City or how the position of the Proposed Project on the creek bank would impact creek side vegetation and wildlife. 5-9 The City of Santa Barbara typically requires that all development be set at least 25 feet back from the top of a creek bank to protect riparian habitat and creek health. (See SBMC §§ 28.87.250(B),(C).)[3] 5-10 The Santa Barbara Urban Creeks Council suggests a 50 foot setback from the top of bank for all creeks to maintain creeks' biological resources and viability. 5-11 The DEIR does not identify a "top of bank" for Lighthouse Creek, but rather calls the top of the Lighthouse Creek bank "canyon top of slope." (Compare DEIR Figure 5.2-3 with Santa Barbara Municipal Code section 28.87.250(C).) The description of the feature called "canyon top of slope" by the DEIR, however, meets the criteria for "top of bank" under the Santa Barbara Municipal Code.[4] As 5-12

[3] The Ordinance states that no person may build within 25 feet of the top of bank. (See Santa Barbara Municipal Code 28.87.250(B), (C).) The City applies this standard to all creeks in Santa Barbara.

[4] In the November 17, 2016 Hearing regarding the Proposed Project, Planning Department staff stated on the record that they created the term "canyon top of slope" specifically for this

such, the Project must be set back from what the DEIR calls "canyon top of slope" the same distance that development must be set back from the top of bank – at least 25 feet. (See SBMC §§ 28.87.250(B), (C).) However, according to the DEIR, the Proposed Project would extend "over the top of the canyon slope" and the "residence would extend approximately 12-30 feet beyond (east) of the top of the Lighthouse Creek Canyon slope." (See DEIR 3-5, 3-15, Figures 3.3-2 – 3.3-7, 5.2-2.) As proposed, then, the Project would extend 12-30 feet beyond the top of bank, which is 37 to 55 feet past the top of bank setbacks typically required by the City of Santa Barbara and 72 to 80 feet beyond the setbacks suggested by the Urban Creeks Council. (See *ibid.*, SBMC §§ 28.87.250(B), (C).) This *per se* indicates that the Project will have significant long term biological impacts and will impact creek habitat. The DEIR, however, fails to directly address this issue and therefore fails to adequately inform decision makers. The DEIR should be revised so that it clearly evaluates and discloses this conflict with local environmental protection standards, and analyzes the true impacts of the Proposed Project on biological resources. Only when significant impacts are fully and completely analyzed can adequate mitigation measures and preferred alternatives be identified and adopted in compliance with CEQA.

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In addition, evidence in the record suggests that the Project would have significant long term impacts to creek habitat. The Project requires a Streambed Alteration Agreement from the California Department of Fish and Wildlife ("CDFW") due to the potential significant impacts to Lighthouse Creek. (DEIR 1-3.) According to the California Department of Fish and Wildlife, CDFW only "requires an LSA ["Lake or Streambed Alteration"] Agreement when it determines that the activity, as described in a complete LSA Notification, *may substantially adversely affect existing fish or wildlife resources.*" (See California Department of Fish and Wildlife, Lake and Streambed Alteration Program <https://www.wildlife.ca.gov/Conservation/LSA> last visited Nov. 22, 2016 ["CDFW Lake and Streambed Alteration Program"].)[5]

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B. The DEIR's geologic analysis is insufficient and its conclusions regarding significant impacts and mitigation measures are not supported by substantial evidence.

Project. (See DEIR, Public Comment Hearing before Santa Barbara City Planning Commission (Nov. 17, 2016).) Staff stated that, for all intents and purposes, the location that they designated "canyon top of slope" and "top of bank" as defined by Santa Barbara Municipal Code 28.87.250(C) were one and the same. (*Ibid.*) Figure 5.2-3 shows "canyon top of slope" as being located at "the intersection of the general plane of the sloping side of the watercourse with the general plane of the upper generally level ground along the watercourse." (Compare DEIR Figure 5.2-3 with Santa Barbara Municipal Code section 28.87.250(C).) As such, the "canyon top of slope" is, in reality, the "top of bank" as defined by the Santa Barbara Municipal Code. For ease of reference and clarity, I refer to this geomorphic feature as "top of bank."

[5] The Project would also require a permit/permit waiver for proposed storm water discharges to Lighthouse Creek from the Regional Water Quality Control Board, due to the Project's proposed discharges into the creek. (DEIR 1-3.)

As explained more fully in the Geotechnical Engineering Analysis conducted by Wilson Geosciences, attached as Exhibit L, and Geologist Brent Miyazaki's Analysis, attached as Exhibit M, the DEIR is strikingly deficient with respect to its geologic analysis.

i. The DEIR's bluff edge and bluff retreat findings are erroneous, and therefore, the DEIR's suggested bluff setbacks are incorrect and unlawful.

First, the DEIR's conclusion regarding the bluff edge's location is not supported by the evidence. Substantial evidence supports a conclusion that the bluff edge is significantly further inland than (or further north of) what is stated in the DEIR. (Exhibit L, p. 2-3; see DEIR I-2; DEIR Figures 3.3-1 and 5.2-1; DEIR Appendix D.) As explained by Wilson Geosciences, as a preliminary matter, the "ocean bluff top" identified by Earth Systems Pacific in its 2013 analysis, ("Earth Systems Pacific Study") is more appropriately called "bluff edge," as defined by Mark Johnsson of the California Coastal Commission. (See Exhibit L, p. 2.) The DEIR bases its bluff edge determination on the Earth Systems Pacific Study. (DEIR 5.2-4, Figures 5.2-1, 5.2-4.) The Earth Systems Pacific Study, in turn, bases its bluff edge determination (called "top of bluff" by Earth Systems Pacific), on 1953 aerial photographs and 2012 topographic contours. (See Exhibit L, p. 3; see also DEIR Appendix D.) However, the 2012 topographic contours provide no evidence of the 2012 bluff edge, and have no connection to the 1953 buried bluff edge. (*Ibid.*) Rather, using Johnsson's definition of bluff edge, the bluff edge on the Property is 8.2 feet further north (or inland) from the DEIR's bluff edge determination. (See Exhibit L, p. 3, Figures 1 and 3, and Figure A.) 5-17

Second, as more thoroughly described in pages 3-5 of Exhibit L, attached, the DEIR's conclusion regarding the bluff retreat rate is not supported by the evidence. (Exhibit L, p. 3-5; see DEIR 5.2-7.) The DEIR concludes that the bluff will retreat an average of 1.22 inches per year, (*id.* at 6-9), based on the Earth Systems Pacific Study that found that between 1953 and 2012, the bluff eroded an average of 1.02 inches per year, plus a standard increase, without site-specific analysis, for sea level rise and climate change. (See DEIR 6-8, Appendix D.) The Earth Systems Pacific Study, however, fails to take into account the impact of El Niño storms, long term climate variability (called Pacific Decadal Oscillation), and the impact of increased ocean swells and swell direction on bluff retreat. (Exhibit L, p. 4; see DEIR Appendix D, E.) In addition, the Earth Systems Pacific Study fails to take into account potential movement of the landslide mass on the Project site. (See *ibid.*) Based on an analysis of this additional data, as well as an independent review of the photographs utilized in the Earth Systems Pacific Study, Wilson Geosciences determined that an accurate and reasonable bluff retreat estimate is 5.5 to 8.2 inches per year. (Exhibit L, p. 5.) 5-18 5-19 5-20

Wilson Geoscience's determination is consistent with other analyses of bluff retreat at the site and general bluff retreat analyses for Santa Barbara. Several other experts concluded that the bluff would retreat between 4 and 8 inches per year. (DEIR 5.2-7; DEIR Appendix D, p. 5-6.) The Earth Systems Pacific Study does not explain why their determination is more reliable than these previous expert assessments. (DEIR Appendix D, p. 5-6; see Exhibit L, p. 3-5.) By way of comparison, a 2012 City of Santa Barbara study indicated that the average bluff retreat in Santa Barbara was 8 inches, and a study of Mesa bluff retreat concluded that Mesa bluffs are retreating between 4 to 18 inches each year. (General Plan Safety Element, p. 24.) 5-21

The City of Santa Barbara Local Coastal Plan ("LCP") identifies an average bluff retreat of 8 inches per year. (LCP, p. 127.) In addition, with sea level rise, and climate change, the City of Santa Barbara asserts that bluff retreat will increase to approximately 12-24 inches per year between 2012 and 2050. (General Plan Safety Element, pp. 24-25.) This demonstrates that Wilson Geoscience's Analysis is more reliable than Earth Systems Pacific Study, because Wilson Geoscience's Analysis is consistent with all other previous analyses that quantified bluff retreat rates. Earth Systems Pacific Study, on the other hand, is suspect: it was conducted on behalf of the Applicant, and draws conclusions that are inconsistent with all other data regarding bluff retreat rates. In addition, the Earth Systems Pacific Study's bluff retreat analysis does not take into account the potential for landslides, nor do the setbacks contemplate or incorporate the risk of landslides at the Project Site. (See DEIR 5.2-7, see generally DEIR, Appendix A.) This renders the Earth Systems Pacific's analysis deficient, as discussed by Wilson Geosciences in Exhibit L, Brent Miyazaki in Exhibit M, pages 3 and 4, and by Geotechnologies September 5, 2007 Report (see Exhibit L, p. 4). 5-22 5-23

ii. The DEIR fails to identify and evaluate all potential geologic hazards and impacts.

Without a complete analysis of all potential geologic hazards associated with the Proposed Project, the mitigation measures presented are insufficient. The mitigation measures will not mitigate the full range of environmental impacts imposed by the Proposed Project, nor will they provide sufficient detail and definition to ensure that potentially significant impacts are reduced to a less than significant level. This is more fully explained in Geologist Brent Miyazaki's Analysis, included as Exhibit M, attached hereto. 5-24

The 2006 Revised Initial Study ("Initial Study") Environmental Setting analysis asserts that the "project site is subject to low level hazards associated with seismic activity." (DEIR, Appendix A, p. 1.) This is not supported by the evidence or an analysis explaining why this area presents low level hazards associated with seismic activity. (See *ibid.*; DEIR; Exhibit M, p. 1-2.) The record and the Santa Barbara General Plan suggest that this area may be subject to landslides in the event of seismic activity, as two major landslides have occurred near the Proposed Project: El Camino de la Luz experienced a landslide that resulted in the loss of two homes in 1978, and a recent 2008 70-foot-long landslide at Shoreline Park. (See DEIR 5.2-37; General Plan Safety Element, p. 24; Exhibit M, p. 3.) The Initial Study also asserts that "future development... would be subject requirements of the Uniform Building Code, which includes provisions to ensure that proposed structures withstand the effects of ground shaking." (DEIR Exhibit A, p. 13; Exhibit M, p. 2.) The Uniform Building Code does not protect against substantial structural damage caused by potential severe ground shaking hazards from a large earthquake on a nearby fault. (See Exhibit M, p. 2.) The DEIR also does not provide an evaluation of potential motion that could occur at the site during the project life, or compare this potential ground motion to the design requirements in the Uniform Building Code. (*Id.*; see DEIR, Appendix A, p. 13.) Therefore, the DEIR does not adequately support a conclusion that future development would be subject to a less than significant impact with respect to seismic and ground shaking/liquefaction hazards. 5-25 5-26 5-27 5-28

iii. The DEIR's mitigation measures are not sufficiently detailed and do not provide monitoring mechanisms to ensure that they are carried out.

The Initial Study asserts "[p]otentially significant impacts to geophysical conditions would be reduced to a less than significant level with the incorporation of the identified mitigation measures." (DEIR Appendix A, p. 14). As more fully explained in Brent Miyazaki's Analysis, attached as Exhibit M, this insignificance conclusion is not supported by the evidence. Mitigation measures must "mitigate or avoid significant effects on the environment." (Pub. Resources Code, § 21081.6(a)(1).) "The reporting or monitoring program shall be designed to ensure compliance during project implementation." (Pub. Resources Code, § 21081.6(a)(1).)

The mitigation measures proposed in the DEIR do not provide sufficient detail and definition to ensure that potentially significant impacts are reduced to a less than significant level. (See DEIR 2-7, see DEIR Appendix A, p. 13.) Mitigation Measure GEO-1 requires the collection of surface drainage, but does not provide for periodic inspections and reporting. (See DEIR 2-7.) Drainage systems deteriorate with age, resulting in failures. (See Exhibit M, p. 3.) Inspection and maintenance is necessary. (See *ibid.*) Mitigation Measure GEO-1 should define the following: type of inspection, qualifications of the inspector, frequency of reporting, reporting and reviewing agency. (*Ibid.*) 5-29

Mitigation Measure GEO-2 provides "The location and design of structural foundations on the site shall be approved by a licensed Engineering Geologist or Geotechnical Engineer." (DEIR 2-7.) Mitigation Measure GEO-2 is deferred mitigation, wherein a project will undergo future design review and approval. (See Exhibit M, p. 7.) Adoption of a final EIR and project approval should be contingent upon a structural foundation design that can be verified as practical and feasible. (*Ibid.*) 5-30

C. The DEIR's Plans and Policies consistency findings are not supported by substantial evidence and the DEIR fails to disclose all relevant land use requirements.

i. The DEIR's analysis of the Proposed Project's compliance with zoning requirements is incomplete.

With respect to zoning requirements, the DEIR simply states:

> The project site is located in an area zoned "E-3" (One-Family Residence) with an SD-3 (Coastal Overlay) Zone, and is also located within the Hillside Design Overlay area. The project site conforms to the "E-3" zone minimum parcel size requirement of 7,500 square feet per lot; conforms to Zoning Ordinance requirements related to development standards; and would be consistent with the site's residential land use designation. (DEIR 6-1.)

5-31

The DEIR fails to articulate and discuss specific zoning requirements associated with these land use designations. (See *ibid.*) The DEIR does not discuss setback and yard requirements, and it is difficult to tell from Figures included in the Project whether the Project conforms to

the E-3 Zone requirements for front and interior setbacks. (SBMC §§ 28.15.060(A)(5), (B)(5); DEIR 6-1.) It is also unclear, given the DEIR's lack of analysis, whether the Project, as proposed, would comply with the Zoning Ordinances' requirement that any single family dwelling possesses "not less than sixty feet (60') of frontage on a public street." (See *Id.* at § 28.15.080; see DEIR 6-1.) Nor is there a discussion of whether the Proposed Project constitutes precluded development under Santa Barbara Municipal Code section 28.15.080(D) or what requirements are associated with the Hillside Design Overlay Area. (See DEIR 6-1.) As such, the DEIR's analysis with respect to compliance with applicable zoning regulations is incomplete and must be revised to fully disclose the foregoing. 5-31

ii. The DEIR's findings with respect to the Proposed Project's consistency with policies on water and marine environments in not supported by substantial evidence and omits General Plan, Municipal Code, and Coastal Act requirements.

The DEIR concludes, without basis in substantial evidence, that the Proposed Project is potentially consistent with LCP Policy 6.10. (DEIR 6-4.) LCP Policy 6.10 states "[t]he City shall require a setback buffer for native vegetation between the top of the bank and any proposed project." (*Ibid.*) As discussed above, the City typically requires a setback of 25 feet from the top of a creek bank. (See SBMC §§ 28.87.250(B), (C).) The DEIR and the discussion of LCP Policy 6.10 does not include an analysis of the top of bank setback typically required by the City. (See DEIR 6-4 – 6-5.) In fact, evidence contained in the DEIR indicates that the Proposed Project is not consistent with LCP Policy 6.10. (*Ibid.*) The Proposed Project "would extend approximately 12-30 feet" beyond the top of the Lighthouse Creek bank, which directly contravenes the City's typical setback of 25 feet from the top of a creek bank. (See DEIR 3-5, 3-15, Figures 3.3-2 – 3.3-7, 5.2-2.) 5-32

The DEIR's findings that the Proposed Project is potentially consistent with California Coastal Act section 30201, the LCP goal identified on 6-2, and LCP Policy 6.8, which provide for the protection and preservation of creeks, are not supported by substantial evidence. (DEIR 6-1 – 6-5.) California Coastal Act section 30201 provides "the biological productivity and quality of coastal... streams... shall be... maintained, and... restored." (*Id.* at 6-1.) The LCP Goal listed on page 6-2 states that projects should "enhance and preserve the City's critical ecological resources." (*Id.* at 6-2.) LCP Policy 6.8 provides: "[t]he riparian resources, biological productivity, and water quality of the City's coastal zone creeks shall be maintained, preserved, enhanced, and, where feasible, restored." (LCP Policy 6.8.) As discussed above and in David Magney's comment letter, attached as Exhibit K, the DEIR contains insufficient biological analysis of existing wildlife, vegetation, and watershed functions to conclude that the Proposed Project would have a less than significant impact on biological resources. (See Exhibit K, p. 3; see generally DEIR Appendix A.) The DEIR's conclusions regarding impacts on ecological and riparian resources as well as biological productivity in the stream and stream bank are based on this incomplete data. (See *ibid.*) As these impacts have not been adequately analyzed, the mitigation measures developed to address these impacts cannot be determined as sufficient to reduce the environmental impact of the Proposed Project on Lighthouse Creek. (See Exhibit K, p. 3; see generally DEIR.) 5-33

The evidence, in fact, suggests that the Proposed Project will harm the creek and watershed functions: the Proposed Project encroaches over the top of the Lighthouse Creek bank (DEIR 3-5, 3-15, Figures 3.3-2 – 3.3-7, 5.2-2; compare DEIR Figure 5.2-3 with Santa Barbara Municipal Code § 28.87.250(C)), and it poses such an adverse impact on Lighthouse Creek that it requires a Streambed Alteration Agreement with the California Department of Fish and Wildlife (See DEIR 1-3; CDFW Lake and Streambed Alteration Program). This evidence suggests that the Project, as proposed, would not maintain, preserve, enhance, or restore the riparian resources, biological productivity, and water quality of Lighthouse Creek (LCP Policy 6.8, Coastal Act 30201), nor would it enhance and preserve the City's critical ecological resources (LCP Policy 6.8). 5-34

Likewise, the DEIR's determination that the Proposed Project is "potentially consistent" with the LCP Policy which states "[t]he habitats of rare and endangered species shall be preserved" is not supported by substantial evidence. (DEIR 6-3.) As discussed above, the record does not indicate that biologists surveyed the site for sensitive invertebrates typically found in this area, the record contains no analysis of ESHA, nor does the record indicate that any rare plant surveys were conducted. (See generally DEIR, DEIR Appendix A; Exhibit K; See Pub. Resources Code, § 30240.) Without this data, the DEIR cannot conclusively determine that the Proposed Project is potentially consistent with this LCP Policy. 5-35

Finally, the DEIR does not address or analyze the Santa Barbara General Plan's Environmental Resources Element Policy 1, which provides "development adjacent to creeks shall not degrade the creeks or their riparian environments." In addition, the DEIR fails to analyze whether the Proposed Project is consistent with regulations and ordinances that protect Environmentally Sensitive Habitat Area ("ESHA"). (See Discussion in Section III.A. of this correspondence, above, and Exhibit K, p. 1, 2.) It does not analyze SBMC sections 28.44.440 and 28.75.045, which require a thorough analysis supporting a buffer or setback area from ESHA. Nor does the DEIR discuss the Coastal Acts section 30240's requirement that "[e]nvironmentally sensitive habitat areas shall be protected against any significant disruption of habitat values." (See Pub. Resources Code, § 30240.) 5-36

iii. The DEIR's conclusions regarding the Proposed Project's consistency with policies regarding geologic hazards is not supported by substantial evidence and omits relevant policies.

The DEIR's conclusion that the Proposed Project is potentially consistent with California Coastal Act section 30253, LCP Policy, and LCP Implementation strategies discussed in DEIR 6-5, is not supported by substantial evidence. California Coastal Act 30253 provides that "new development shall minimize risk to life and property in areas of high geologic... hazard [and] assure stability and structural integrity and neither create nor contribute significantly to... geologic instability." The DEIR supports these consistency conclusions with faulty projected bluff retreat and bluff edge findings. As discussed in Section III. B. of this correspondence, above, and in further detail in the Wilson Geosciences Report, attached to this letter as Exhibit L, and Geologist Brent Miyazaki's letter, attached as Exhibit M, the DEIR's findings regarding bluff retreat and bluff edge are contradicted by the evidence. 5-37

In addition, as discussed in Exhibit L, page 4, and Exhibit M, pages 2, 3, 5-7, the DEIR does 5-38

not adequately analyze the geologic safety of the Proposed Project because it fails to consider and disclose slope stability or the likelihood for landslides at the Project site. Without this data, the DEIR cannot demonstrate that the Proposed Project is consistent with California Coastal Act section 30253, LCP Policy, and LCP Implementation strategies discussed in DEIR 6-5. 5-38

Likewise, the DEIR's conclusion that the Proposed Project is potentially consistent with the LCP Policy on 6-9, which requires appropriate drainage to avoid undermining cliff stability, is not supported by substantial evidence. As discussed above, Mitigation Measure GEO-1 regarding the collection of surface drainage, does not provide sufficient standards for drainage maintenance and reporting. (See DEIR 2-7, Exhibit M, p. 3, 7.) Without these systems in place, the DEIR cannot conclude that the Proposed Project would not "direct any uncontrolled runoff water over the bluff face," and therefore the DEIR cannot conclusively find that the Project would not undermine cliff stability. (DEIR 6-10.) 5-39

In addition, the DEIR states that landslides occurred on the project site in the 1970s (DEIR 5.2-12), yet the hazards analysis does not discuss the LCP requirement that "[a]ny grading operations undertaken in areas of active and inactive landslides shall be designed and supervised by a qualified soils engineer." (LCP, p. 126.) 5-40

iv. The DEIR's findings that the Proposed Project is potentially consistent with visual quality policies are not supported by substantial evidence.

The DEIR's finding that the Project is potentially consistent with the California Coastal Act, section 30251, and LCP Policies and Goals related to visual resources, including LCP Policy 9.1, is not supported by substantial evidence. (DEIR 6-5 - 6-7.) The DEIR posits that the visual impacts of this Project will be mitigated by using earth toned colors or including trees and vegetation to screen the Proposed Project from the view corridor. (DEIR 6-5, 6-6, 6-7, Figure 3.3-8.) But the figures in the DEIR and the mitigation measures analysis, included in 5.1.3, indicate that the project, as proposed, would obstruct public views of the ocean from both La Mesa Park and the bridge between the park and El Camino de la Luz. (See DEIR 5.1-2 – 5.1-7.) The photographs demonstrate that the color of the building's paint and vegetation will not mitigate the visual impacts of the Proposed Project. (DEIR Figures 8.2-5-8.2-7.) 5-41

The evidence does not support a conclusion that the Project is potentially consistent with the LCP Goal, included on page 6-6 of the DEIR, which states "[r]estore where feasible, maintain, enhance and manage the creek side environments within the City as visual amenities, where consistent with sound flood control management and soil conservation techniques." (DEIR 6-6.) The DEIR discusses flood and soil concerns, but does not directly address how the Proposed Project will "[r]estore where feasible, maintain, enhance and manage the creek side environments within the City as visual amenities." (*Ibid.*; see also *Id.* at 5.1-14 – 5.1-27.) In fact, the evidence in the record supports a conclusion that the Project will not enhance creek side environments... as visual amenities." (See 5.1-5.) The Project, as proposed, will extend 12-30 feet into the creek bank and will cover a majority of the creek bank visible from La Mesa Park. (*Id.* at 6-4, 6-5, 5.1-5, 5.1-7.) Therefore, instead of enhancing the creek side environment, the Proposed Project will detrimentally impact the creek as a visual amenity. 5-42

In addition, the DEIR's finding that the Proposed Project is potentially consistent with LCP Policy 9.1, which states "[t]he existing views to, from, and along the ocean and scenic coastal areas shall be protected, preserved, and enhanced," is not supported by the evidence. (DEIR 6-7.) The DEIR concludes that this Project, in its current 2016 form, "would not adversely affect views available to persons on the beach looking towards the project site." (See *ibid.*) The DEIR states: 5-43

> From the beach south of and adjacent to the project property, views towards the project site are primarily of the steep ocean bluff. (DEIR 5.1-12.)

However, neither the DEIR nor the record provides current photographic simulations or any other evidence to support this conclusion with respect to the current iteration of the Proposed Project, as set forth in the 2016 DEIR. (See generally DEIR.)

In addition, the DEIR fails to analyze how the Proposed Project would impact views from the beach over time, given the certainty of bluff erosion and sea level rise. (*Ibid.*) 5-44

v. The DEIR's finding that the Proposed Project is potentially consistent with the LCP's shoreline access policy is not supported by substantial evidence.

LCP Policy 2.1 provides "public access in the coastal bluff areas of the City shall be maximized consistent with the protection of natural resources, public safety, and private property rights." (DEIR 6-12.) The DEIR states that the project site has an informal three-foot wide public access path to the beach, and asserts that the Proposed Project would not encroach on this access easement. (*Ibid.*) The DEIR, however, does not provide any evidence to support the assertion that the access way is only three-feet wide, nor does it provide evidence supporting its assertion that the Proposed Project "would not make any alterations to the existing beach access pathway or impede use of the existing access easement." (*Ibid*, see generally DEIR.) 5-45

D. Access requirements for the lot are improperly characterized as mitigation measures, and the City's finding that the Applicant has provided evidence to address mitigation measure T-1 is not supported by substantial evidence.

The DEIR requires the following mitigation measure:

> T-1 Evidence of Adequate Access. Provide evidence... that the owner of the subject parcel substantially possesses the required amount of legal access that formed the basis of the original lot split. (DEIR, p. 2-11.)

This language is originally from the Conditional Certificate of Compliance. (See Exhibit E.) This is more than just a "mitigation measure." It is a condition of compliance with the Subdivision Map Act, and a prerequisite to possessing a legal lot that may be developed. (See Discussion II. C., above.) Characterizing this condition as a mitigation measure does not appropriately recognize this issue as a prerequisite to development. 5-46

Even if the access issue could properly be characterized as a mitigation measure, substantial evidence does not support a determination that the "property substantially possesses the required amount of legal access that formed the basis of the original lot split." (See Exhibit D, p. 5; see DEIR Table 2.3-1.) According to the November 2016 Staff Report, "based on the decision of the Superior Court [from 2009], and the analysis by City Staff it has

been determined that the property substantially possesses the required amount of legal access that formed the basis of the originally approved lot split, and that there is adequate access to serve the proposed project at the project site." (Exhibit D, p. 7.)

The November 2016 Staff Report, however, does not contain the City staff's analysis that supports its conclusion regarding access adequacy. (See Exhibit D.) It does not explain what "the required amount of legal access that formed the basis of the original lot split" actually is, nor does it explain what evidence the Applicant supplied, nor how the evidence fulfills the requirements for access. (*Ibid.*) As discussed above, the Applicant's evidence does not establish what formed the basis of the original lot split, nor does it establish that the Property currently possesses sufficient access. (See generally Monk Correspondence.)

Substantial evidence also does not support a finding that "there is adequate access to serve the proposed project at the project site." (See Exhibit D, p. 5; see DEIR Table 2.3-1.) In fact, substantial evidence in the record, dating back to 1958, suggests that there is not adequate access to serve the Proposed Project. The City simply concludes that the City's standard driveway practice is to provide 10 feet of width for driveways, and mentions that several types of vehicles, including construction trucks, will not be able to access the site with the existing easement. (See Exhibit D, p. 7.) The November 2016 Staff Report does not cite any authority to support the conclusion that the City's standard practice is to require 10 feet of width of driveways. (*Ibid.*) It does not explore the feasibility of constructing a single-family home without access for construction trucks. (See *ibid.*) Likewise, the November 2016 Staff Report does not discuss the safety implications of this diminished easement. (*Ibid.*) It simply states that the "Fire Department reviewed the existing access" and references mitigation measures H-1 through H-4. (*Ibid.*) It does not thoroughly discuss what the Fire Department analyzed to reach a determination or whether it determined that the existing driveway posed a fire hazard. (*Ibid.*) Nor does the November 2016 Staff Report nor the DEIR articulate the fire risks associated with the insufficient access or how mitigation measures H-1 through H-4 will specifically address the issues presented by the reduced access way. (See generally *id.*; DEIR 2-10, 9-7.) 5-46

In fact, the evidence demonstrates that the Proposed Project's accessway cannot comply with Santa Barbara Fire Department Standards. The DEIR finds that "the project would have the potential to result in significant fire protection hazard due to its location adjacent to native vegetation in Lighthouse Creek and the narrow width of the access driveway" and outlines several high fire hazard mitigation measures. (*Id.* at 9-7, 2-10.) It thus implicitly finds that the Proposed Project is located in a High Fire Hazard Coastal Zone. (*Ibid.*) All projects in such zones must comply with the High Fire Hazard Area Coastal Zone Defensible Space Requirements. (See Santa Barbara City Fire Department High Fire Hazard Area Coastal Zone Defensible Space Requirements, available at https://www.santabarbaraca.gov/civicax/filebank/blobdload.aspx?BlobID=16479.) The High Fire Hazard Area Coastal Zone Defensible Space Requirements impose "vegetation clearance requirements of 10' on both sides of the driveway and a 13.5' clearance horizontally." (*Ibid.*) The Proposed Project cannot comply with this requirement, as the accessway to the Property is only 7.5 feet wide at its narrowest. (Exhibit I.) 5-47

E. The DEIR does not present a reasonable range of alternatives, in violation of CEQA.

CEQA provides a "*substantive mandate* that public agencies refrain from approving projects for which there are feasible alternatives or mitigation measures" that can lessen the environmental impact of proposed projects. (*Mountain Lion Foundation v. Fish & Game Com.* (1997) 16 Cal.4th 105, 134, citing Pub. Resources Code, § 21081 emphasis added.) It "compels government... to mitigate... adverse effects through... the selection of feasible alternatives." (*Sierra Club v. State Board of Forestry* (1994) 7 Cal.4th 1215, 1233, see also Pub. Resources Code, § 21002.) Under the CEQA Guidelines, lead agencies may not approve a project if there are feasible alternatives that would substantially lessen the project's significant environmental impacts. (Cal. Code Regs., tit. 14, § 15091 ["CEQA Guidelines"].) 5-48

In order to properly analyze and review proposed alternatives, an EIR must provide a reasonable range of alternatives that could "feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project." (CEQA Guidelines, § 15126.6(a).) These alternatives must be substantive in nature, not just cursory, and must "avoid or substantially lessen any of the significant effects of the project." (*Id.* at 15126.6(f).) The agency must articulate its analysis and how it reached its determination. (*See Cal. Clean Energy Comm. v. City of Woodland* (2014) 225 Cal.App. 4th 173, 203.)

Here, the DEIR presents only one alternative: a substantially similar structure that does not avoid or substantially lessen any of the significant effects of the project. (DEIR 1-4, 1-5.) The proposed alternative would have slightly less total square footage (1,204 square feet, versus 1614 square feet), but would be taller in many areas than the existing project (28 feet in height, as opposed to 25 feet in height on the eastern edge of the roof), and would require a greater amount of excavation (excavation of 500 cubic yards of soil as opposed to 288 cubic yards of soil). (DEIR 8-7.) In addition, the proposed project and the alternative presented would have substantially similar inappropriate bluff and creek setbacks, and would be built in the same area of the lot. (DEIR 8-7.) 5-49

As such, according to the DEIR, the view degradation and vegetation removal impacts of the alternative would be substantially similar to the impacts of the proposed project. (DEIR 8-8, 8-9.) In addition, according to the DEIR, the alternative project would result in similar impacts to the Proposed Project with respect to landslides and bluff retreat. (DEIR 8-18-19.) It would also result in similar impacts to the Lighthouse Canyon slope and creek habitat degradation. (DEIR 8-20.) The DEIR posits that the Project Alternative would be slightly shorter and thus would result in slightly less of a view degradation from the benches and southern lawn area in La Mesa Park and Lighthouse creek footbridge, but this assertion is not supported by substantial evidence. (DEIR 8-9-8-17.) The alternative would reach 28 feet in height on the eastern end of the structure, as opposed to 25 feet in height for the Proposed Project. 5-50

As presented, the current Proposed Alternative is not a true alternate option that substantively reduces environmental impacts of the Proposed Project. The DEIR analysis, therefore, is deficient.

If development could lawfully proceed on this parcel, there are alternative uses that could allow the Applicant to enjoy his Property without causing the environmental impacts associated with the current Proposed Project or Project Alternative. By way of example, the Applicant could meet the objective of building a single-family home through the construction of a small cabin. Alternatively, the Applicant could partner with land conservation 5-51

organizations, such as the Trust for Public Land or the Land Trust for Santa Barbara County, to convert the Project site to dedicated open space and thereby obtain tax credits or other financial benefits. Alternatively, the Applicant could erect a small shed with a deck and bench area that he could enjoy with his family. A reasonable range of alternatives such as these must be addressed and analyzed in the EIR. 5-52

IV. Conclusion

As discussed herein, the Property may not be lawfully developed with a single-family home. Even if it could, given the considerations outlined above, the DEIR is incomplete, and the record suggests that the Proposed Project poses a threat to the safety and stability of the local bluffs and the surrounding community. It also would potentially significantly impact biological and visual resources. As such, if you elect to continue the application review process, I encourage you to require that the Proposed Project undergo additional review of the biological and geologic impacts, and update the policy and alternatives analyses to comply with CEQA. 5-53

Thank you for your time, consideration, and diligence with respect to this matter. I appreciate your efforts to keep our community and the Mesa's bluffs safe.

Sincerely,

E Cossart-Daly

Elise Cossart-Daly
Attorney

EXHIBIT A

ORDINANCE NO. 2488

CREATION OF PUBLIC STREETS

AN ORDINANCE CONTROLLING THE GROWTH OF PRIVATE LANES, ALLEYS, AND DRIVEWAYS; ALLOWING THE CONNECTION THEREOF TO THE STREET SYSTEM OF THIS CITY UPON CERTAIN CONDITIONS; REQUIRING THE DEVELOPMENT OF STANDARD STREETS WHICH SERVE MORE THAN TWO PARCELS; RESTRICTING THE ISSUANCE OF BUILDING PERMITS ALONG SUB-STANDARD ROADWAYS UNDER CERTAIN CONDITIONS, AND PROHIBITING REPAIR AND MAINTENANCE BY THIS CITY UPON THOROUGHFARES OTHER THAN OFFICIAL STREETS.

WHEREAS, the Council of the City of Santa Barbara has adopted a map and resolution identifying and describing an official street system of the City of Santa Barbara; and

WHEREAS, many undeveloped roads, ways, thoroughfares and miscellaneous sub-standard passages have in the past through real estate development along the routes thereof, by implied offer and acceptance, become dedicated streets of this City, thus imposing a construction and maintenance burden upon the City; and

WHEREAS, the City of Santa Barbara, in issuing Building Permits, or in granting lot splits, grants a privilege to developers of land, which privilege it may withhold to serve the best interests of the community; and

WHEREAS, the City is desirous of preventing the connection of sub-standard roads to the official street system and of preventing the possibility of implied acceptance thereof as city streets:

THE COUNCIL OF THE CITY OF SANTA BARBARA DO ORDAIN AS FOLLOWS:

SECTION 1. No lot split application nor Building Permit shall be granted except upon the following terms and conditions which shall be administered, as the case may be, for Building Permits by the Department of Public Works, and for lot split permits by the

Planning Commission.

SECTION 2. All new lots or parcels to be created by any proposed lot split which do not front upon an official street of this City, as designated upon the Official Street Map of the City of Santa Barbara now on file in the Office of the Public Works Director, shall be improved and served with a public street constructed according to the specifications for streets set by the Council of the City of Santa Barbara now on file in the Public Works Department; providing that if the maximum available area for building construction under applicant's ownership to be served by a proposed road, lane, way, or driveway, is limited to two parcels, no such street shall be required.

SECTION 3. No Building Permit shall be granted if proposed building construction thereunder and the ultimate use thereof will require more than two parcels or lots to be served by any street, lane, alley, way, road, right of way, driveway, passage or thoroughfare not an official street of the City of Santa Barbara as designated upon said Official Street Map.

SECTION 4. No street, lane, alley, way, road, right of way, passage or thoroughfare shall be connected with the Official Street System of the City of Santa Barbara without a written permit therefore issued by the Public Works Department. The word "street" as used in Section 4 of this Ordinance shall be defined as any lane, alley, way, road, right of way, passage or thoroughfare serving more than two separate lots or parcels.

SECTION 5. No officer, agent or employee of this City shall perform any repair, maintenance, upkeep, nor take any remedial or corrective action, nor exert any dominion, control or jurisdiction, nor do any act upon or in connection with any street, lane, alley, way, road, right of way, driveway, passage or thoroughfare in this City which is not an official street of the City of Santa Barbara as designated upon the said Official Street Map of the City

of Santa Barbara. This shall not be construed to prevent the Water Department from carrying on its service functions pursuant to the rules and regulations of the Water Department, or from installing mains and incidental facilities in any such street, lane, alley, way, road, right of way, driveway, passage or thoroughfare within specially granted easements for use of the sub-surface thereof.

SECTION 6. All Ordinances or parts of Ordinances of the City of Santa Barbara, inconsistent herewith, to the extent of such inconsistency and no further are hereby repealed.

SECTION 7. Any violation of any of the provisions of this Ordinance is declared to be a misdemeanor and shall be punishable by a fine of Three Hundred Dollars ($300.00) or imprisonment in the City Jail of the City of Santa Barbara for a period of six (6) months, or both.

EXHIBIT B

PRESENT: Col. R. Bourbon, J. T. Brady, Mrs. Fred Glahr
Dr. J. F. Halterman, R. L. Korf, Dr. L. C. Mc
R. V. A. Stoltze, Charles W. Washburn, Planni
Director, Wallace Wills, Public Works Departm

ABSENT: E. P. Bradbury, E. M. Nash.

In the absence of Chairman Bradbury, the meet was called to order by Vice-Chairman Halterman.

Dr. Halterman called the attention of the Com to the fact that since the last meeting Mr. Horace Hoefer, Chairman of the Commission, had passed away. He said that felt the community had lost a very dear friend, one who ha worked diligently for the advancement of the city, and tha felt the Commission should stand for a moment of silence i of his services. This was done.

The minutes of the regular meeting of April 1 were approved on the motion of Col. Bourbon, seconded by M Next, Resolutions No. 8, 17, 18 and 19 were approved on th motion of Col. Bourbon, seconded by Mr. Korf.

The first item for consideration was the appl of Guy H. Gordon for modifications of the setbacks require under City Zoning Ordinance No. 2585, in order to construc one family dwelling on Lot 5, Block C, Santa Barbara Fello Tract, located at the intersection of Litchfield Lane and Litchfield Place, in an E-2 residence zone. Said modifica were for 10 ft. from the required 25 ft. front yard setbac Litchfield Lane, and 10 ft. from the required 25 ft. side setback on Litchfield Place.

Mr. Washburn clarified the actual location of property, and said that Mr. Gordon does not actually own t lot at the present time, but that he had presented an affi signed by Helen B. Sweeney and William H. Akers, the owner stating that they approve of this application and had appo Mr. Gordon to act in their place in negotiating with the c for this approval. He explained that Mr. Gordon wants thi modification in order to construct a building of adequate dimensions to suit his family's needs on this triangular-s lot; and that although this lot fronts on one street and h

Mr. Washburn read Mr. Valpey's letter of application, and explained that this property is at the end of Cedar Lane. He then read a letter from Mrs. Grace Piper, who lives at the west of the subject property, the side on which the modification is requested, in which she did not object to having the garage itself moved closer, but she did object to having the entire house moved closer.

Mr. Brady commented that he did not see why a house could not be designed to fit onto this lot to conform to the ordinance. Mr. Washburn added that no hardship had been indicated by Mr. Valpey, except that the lot is narrow at the rear end.

Dr. Halterman inquired when the lot was split to create this particular lot as he recalled that it was Mr. Valpey who had split it. Mr. Washburn replied that it was probably several years ago.

Mrs. H. P. Goss, of 135 Cedar Lane, then spoke from the audience and said that just as she had heard members of the Commission remark, she couldn't see any particular hardship in this request, and she felt it would be a detriment to the other property owners in the neighborhood, as well as not good city planning, if this request were granted, in this very nice neighborhood. Mrs. L. S. Lauvou, of 142 Cedar Lane, who was also present, said that she lives across the street from Mr. Valepy, and had talked to some of the other neighbors who had not received notice of this request, and that they are all against it, for the same reasons that Mrs. Piper gave in her letter. She also said that she couldn't see why a zoning ordinance should be enacted and then be set aside.

Mr. Brady moved that the request be denied on the grounds that it does not conform with Section 7.00 of the zoning ordinance, and that no hardship has been shown.

Mr. Korf seconded the motion, and the motion carried.

IT After a ten minute recess, the Commission considered the request of Mrs. Fred D. Eaton, Sr., to divide into two parcels Lots 7T and 11 H, City Engineer Map 10, located at 1837 El Camino de la Luz, in a R-1 zone. Mr. Washburn reminded the Commission that this had been held over from the last meeting because of the question of the number of properties served off of the easements. He noted that there are two easements off the end of the street, one 20 ft. wide which serves three garages, and the subject easement which is 15 ft. wide and serves four garages; that the lot split proposed would create a new lot which would of the easement to city street standards and because the property does not have frontage on a dedicated city street. He noted that since the last meeting, letters had been received from Mrs. Carol M. Gunn, 1833 El Camino de la Luz, and Mrs. Sara Wardell, who owns the properties at 1843 and 1839 El Camino de la Luz, both of whom are in favor of granting this lot split. He also pointed out that technically, Mrs. Eaton could apply to the Commission for a special use permit to build a second dwelling on this lot, because it meets the area requirements, even though it does not meet the requirements for access.

Mr. Korf commented that he wondered if this would not put the Commission in a bad position as far as any future requests with this same problem might be concerned. Mr. Washburn said, however, that the Commission might also be put in the position, if this request were denied, of depriving a property owner of the full use of his property because of conditions over which he has no control. Mr. Korf countered that, on the other hand, the Commission should consider what might happen if an emergency condition should develop, and that one road were blocked. Mr. Wills said that if this request were granted, the additional parcel would be below the grade line of the sanitary sewer and that a pump would be necessary at all times.

Mr. Korf suggested that these two rights-of-way might be connected and each made a one-way road, and Mr. Stoltze agreed that this would certainly be an improvement over the existing condition.

Mr. Korf moved that this request of Mrs. Fred D. Eaton, Sr. be denied, in that there are now four existing dwellings served by a 15 ft. easement; that in the event that this is granted, there would be a possible fifth or even sixth dwelling served by that same easement; and that the hazard of serving this many residences by the narrow easement is too great. Mr. Brady seconded the motion and the motion carried.

LOT SPLIT REINESTO Next considered was the request of Mrs. Henry Reinesto to divide into two parcels Lot 9, City Block 357, located at 1022 East Indio Muerto Street, in a R-3-T zone. Mr. Washburn explained that this had been held over from the last meeting for a revised map, which had not been received.

He said further, that this is the second of two lot splits for which the Building Director had made recommendations that might be considered a bit stiff. He said the Public Works Director had recommended approval, subject to the conditions as set forth in the Building Director's report, and subject to water main extension charge, recommending that curb and gutter requirements be waived. However, the Building Director had recommended approval, subject to a condition that the shed on Parcel 2 be relocated a minimum of 5 ft. By telephone today, he said, Mr. Phillips of the Building Department had indicated that the Building Code required a 3 ft. separation or fireproofing on that side. Mr. Brady asked if this were true even in the case of a nonconforming building like this, and Mr. Washburn replied that apparently there is a change in policy, to require nonconforming buildings to be brought into conformance, and that a further recommendation of the Building Director called for a relocation of the garage, a minimum distance of 10 ft. He said that the waiving of curb and gutter requirements was in conformance with City Council policy. Mr. Brady said he thought Council should furnish the

EXHIBIT C

Councilman Callahan moved seconded by Councilman Clemens that the Council find that there is good and sufficient reason connected with the health, safety and welfare of the area to continue this request until the next meeting of the Council and suggest that every Councilman inspect this property to determine what is being requested and report on same. Roll Call: Affirmative Council All.

Councilman Callahan was excused from the Council Chambers at this time. CALLAHAN LEAVES

Recommendation from the City Planning Commission was presented as follows: RELOCATION OF PEDESTRIAN EASEMENT IN ISLAND VIEW HTS SUBDIV - RESO. 3471 ABANDONING PREVIOUS EASEMENT & RESO. 3472 ACCEPTING NEW EASEMENT

"Subject: Recommendation for relocation of pedestrian easement in Island View Heights Subdivision.

Recommendation: Approval of relocation of pedestrian easement as shown on map attached, to be located along the boundary line dividing new lots 35 and 37.

Discussion: Thomas J. Pleman, developer of Island View Heights Subdivision, appeared before the City Planning Commission on May 20, 1958, with a request that lot 36 thereof be split, dividing the area equally between adjoining lots 35 and 37. This request was brought about by a change in location of the top of the slope behind lots 35, 36 and 37, so that the crest of the slope is 15 ft. closer to Island View Drive than anticipated, making the building pads for these lots 15 ft. narrower. It was stated that this was a result of City Council disapproval of a proposed encroachment of the toe of the slope onto the Meige Road right-of-way.

Because this voluntary elimination of one lot (lot 36), will permit the creation and development of two improved building sites, for which new building plans must be developed, the Planning Commission voted to approve this request. This was done on the Commission's authority to approve reasonable adjustments of lot lines without going through the procedures outlined in City Zoning Ordinance No. 2585, and on the specific opinion of the City Attorney that this procedure was applicable in this particular instance because of the resulting improvement in lot development, and the fact that no new lot would be created.

However, because of this elimination of lot 36, it is necessary to relocate the existing approved 10 ft. pedestrian easement, formerly located between lots 36 and 37. Accordingly, the Commission hereby recommends to City Council that this easement now be relocated along the new boundary line between lots 35 and 37, as shown on the attached map.

Councilman Clemens inquired how this could be done. The Chief Administrative Officer explained that since the final map of Island View Heights has been filed, he thought it would be necessary to abandon the first easement, and then accept the deed for the relocation of the pedestrian easement.

The City Attorney stated that the subdivider handed to him a deed for the substitute easement, as well as a Resolution abandoning the former easement.

"RESOLUTION NO. 3471

RESOLUTION ABANDONING 10 FOOT PEDESTRIAN EASEMENT LYING BETWEEN LOTS 36 AND 37 OF ISLAND VIEW HEIGHTS NO. 2."

was presented and read in full. Councilman Clemens moved seconded by Councilman DeLoreto that the Council adopt Resolution No. 3471. Roll Call: Affirmative Council All.

Deed for a pedestrian walkway along the revised boundary line dividing lots 35 and 37 in Island View Heights Subdivision and signed by Thomas J. Pleman and Joseph DuBrow, partners in Island View Heights, was presented and ordered accepted by adoption of Resolution No. 3472 on motion of Councilman DeLoreto seconded by Councilman Clemens. Roll Call: Affirmative Council All.

Councilman Callahan returned to the Council Chambers at this time. CALLAHAN RETURNS

Recommendation from the City Planning Commission was presented as follows: GRANT LOT SPLIT REQ OF MRS. FRED EATON AT 1837 EL CAMINO DE LA LUZ

"Subject: Request of Mrs. Fred D. Eaton, Sr., to divide into two parcels lots 7T and 11H, City Engineer Map 10, located at 1837 El Camino de la Luz, in a R-1 zone.

Recommendation: Denial.

Reasons: Creation of an additional parcel would be in violation of City Ordinance No. 2468. The existing 15 ft. driveway easement which now serves this dwelling also provides access to three additional adjoining parcels. See attached plot plan showing dwellings served off El Camino de la Luz cul-de-sac.

Discussion: As seen on attached plot plan, two private easements enter El Camino de la Luz from the cul-de-sac; a 20 ft. easement which serves three parcels and a possible fourth, and a 15 ft. easement which serves four parcels and a possible fifth parcel, as indicated by small arrows on plot plan. Because of the closeness of the Eaton house and the dwelling opposite it to this easement, it is not possible to widen the subject easement.

A possible solution to this situation would be to join the ends of the two private easements and provide one-way traffic serving all these parcels. This would not meet city street standards, but might be considered as a reasonable solution under the present impossibility of providing full city street standards."

Mrs. Fred Eaton was present and explained that according to actual measurement the easement is 17 feet, and in the past year a number of lots have been split in the neighborhood and they have all been served by an average 15 foot driveway.

The City Planning Director explained that the small map showed the number of parcels to be served by this easement, and reported that because of the location of the Eaton house it is not possible to widen the easement. He suggested that a possible solution might be to tie the two easements together and allow one way traffic on same, but added that this would not meet ordinance requirements, but it would be less hazardous than the proposal as submitted.

Mrs. Eaton explained that tying the two easements together would mean that the driveway would come within five feet of the Wardell front door, which would not comply with any City Ordinance.

The Planning Director pointed out that City standards require a 50 foot right of way.

Mrs. Eaton explained that there are six and seven cars parked in the driveway easement for the lot splits granted to the west of her property.

In response to a question the City Planning Director stated that if this property were located in a multiple family zone, a 15 foot driveway could serve an unlimited number of families.

Acting Mayor Crowell inquired whether the Council used this ordinance to block developments of this kind in other areas. The City Planning Director stated it has been done, except that it is not too frequently used when there is only a possibility for one more lot split. He explained that Ordinance No. 2488 covers not the number of units involved but the number of parcels served by a private driveway.

Councilman Clemens suggested returning this request to the Planning Commission with a request that the provisions of the ordinance be studied.

Acting Mayor Crowell stated that you can't do this except to request a recommendation for the revision of the ordinance.

The City Planning Director stated that several of the neighbors wrote letters to the Planning Commission urging approval of the requested division of property, and the granting of a variance in this case.

Councilman Wilson moved seconded by Councilman Clemens that the Council approve the request of Mrs. Fred D. Eaton, Sr., to divide into two parcels lot 7T and 11H, located at 1837 El Camino de la Luz, as submitted by the applicant.

The Planning Director stated that the Planning Commission feels that its authority does not extend to this particular ordinance.

Mrs. Eaton explained that Mr. and Mrs. Skafield have no objection to granting the request and that in her discussion with other neighbors in the area she has not heard any objections voiced.

Roll Call: Affirmative Council All.

GRANT DEEDS FOR AIRPORT PRPT FOR CLEAR ZONE FROM ANTONIO MONTECARLO BY RESO.3464 - FROM JUSTO L. MARTINEZ BY RESO.3465

Grant Deed from Antonio and Serafina Montecarlo for lots 18 and 19, Block E of La Goleta Rancho, also known as Fairfield was presented in connection with acquisition of a clear zone for the Municipal Airport.

Councilman DeLoreto moved seconded by Councilman Wilson that the Council accept this grant deed by the adoption of Resolution No. 3464. Roll Call: Affirmative Council All.

Grant Deed from Justo L. and Inocencia Martinez for Lot 18, Block F of La Goleta Rancho, also known as Fairfield, was presented in connection with the acquisition of a clear zone for the Municipal Airport.

Councilman DeLoreto moved seconded by Councilman Wilson that the Council accept this grant deed by the adoption of Resolution No. 3465. Roll Call: Affirmative Council All.

CLEMENS LEAVES

Councilman Clemens was excused from the Council Chambers at this time.

EXHIBIT D

III.

City of Santa Barbara
California

PLANNING COMMISSION
STAFF REPORT

REPORT DATE: November 10, 2016
AGENDA DATE: November 17, 2016
PROJECT ADDRESS: 1837½ El Camino de la Luz (MST 2002-00214)

TO: Planning Commission
FROM: Planning Division, (805) 564-5470, extension 4560
Beatriz Gularte, Senior Planner BEG
Kathleen Kennedy, Associate Planner KAK

I. SUBJECT

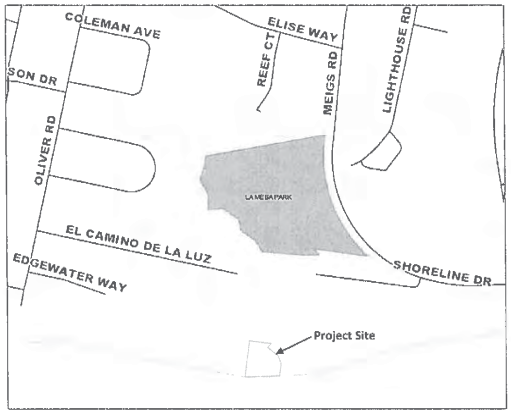
The purpose of the environmental hearing is to receive comments from the public, interested agencies, and Planning Commission on the adequacy and completeness of the Second Revised Draft Environmental Impact Report (EIR) that evaluates environmental effects of the proposed project to construct a new residence at 1837 ½ El Camino de la Luz.

The Second Revised Draft EIR concludes that potentially significant project impacts in the areas of visual aesthetics and geology would be reduced to less than significant levels with identified mitigation measures.

This hearing is only for comment on the Second Revised Draft EIR. No action will be taken at this hearing on either the environmental document or the Coastal Development Permit application for the proposed residence. Public comments received at the hearing, along with written comments received through the end of the draft document public review period (November 30, 2016) will be considered in the preparation of a proposed Final EIR. Written responses to comments will be provided as part of the FEIR. The proposed Final EIR along with the requested Coastal Development Permit application will be brought to the Planning Commission for consideration of approval actions at a subsequent noticed public hearing.

II. PROJECT DESCRIPTION

The proposed project consists of a 1,505 square foot (net), two-story single family residence with an attached 429 square foot garage on a 23,885 square foot vacant bluff-top lot. Grading quantities total approximately 288 cubic yards of cut and 21 cubic yards of fill. Access to the site would be provided by private easements extending south from the terminus of El Camino de la Luz.



Vicinity Map

III. REQUIRED APPLICATION

The discretionary permit application for this project is a Coastal Development Permit (CDP2002-00008) to allow the proposed development in the Appealable Jurisdiction of the City's Coastal Zone (SBMC§28.44.060).

IV. BACKGROUND

The proposed project application was submitted in 2002. It was deemed complete in 2004, and an Initial Study (April 4, 2005) was prepared by staff to analyze the potential environmental impacts of the proposed project pursuant to the California Environmental Quality Act (CEQA). A Draft Mitigated Negative Declaration (MND) was prepared, and two environmental hearings on the Draft MND were held by the Planning Commission in 2005. At that time, it was determined that the preparation of an Environmental Impact Report (EIR) was required to fully evaluate the significance of the project impacts on public views of the ocean from La Mesa Park and surrounding areas. A revised Initial Study (August 31, 2005) was prepared to reflect the need for an EIR, and subsequently the Planning Commission held an environmental scoping hearing for the EIR on September 22, 2005. Based on comments received, another revised Initial Study (October 16, 2006) was prepared that included an updated Biological Assessment Report. A Draft EIR (November 2006) was prepared and an environmental hearing on the Draft EIR was held on January 11, 2007.

Subsequently, a proposed Final EIR (May 2007) was prepared, including responses to comments received, and was reviewed by the Planning Commission on May 22, 2008. At the hearing, the Planning Commission requested that additional geological investigations be conducted consistent with the requirements of a mitigation measure (GEO-3a) that was included in the proposed Final EIR. The Planning Commission did not certify the Final EIR or take action on the Coastal Development Permit.

The geologic investigation mitigation measure (GEO-3a) required additional study of the project site to determine if a previously reported bedding plane fracture actually existed on the site. Additional studies of the project site were recommended by the EIR because a bedding plane fracture, if it existed, could have the potential to result in a slope instability impact.

In response to the request by the Planning Commission that additional study of the geologic conditions of the project site be conducted prior to taking an action on the proposed project, the required geological investigation was completed in 2009, and an additional slope stability analysis was completed in 2011. The 2009 investigation determined that the previously reported bedding plane fracture did not exist on the project site. The 2011 slope stability analysis report concluded that that the proposed project would not result in a significant slope stability impact. As a result of the geological investigation, the First Revised Draft EIR was amended to omit the previously proposed mitigation measure (former measure GEO-3a) because the requirements of that mitigation measure were completed.

The First Revised Draft EIR was circulated for public review in March 2012, and a public hearing to consider the adequacy of the EIR was conducted by the Planning Commission on April 5, 2012. A Final EIR was not prepared pending further analysis of issues raised in public comment.

V. SECOND REVISED DRAFT EIR

A. Additional Analysis

Public comments on the First Revised Draft EIR focused on several issues, including the location of the top of the ocean bluff on the project site, the location of the top of the canyon slope for Lighthouse Creek on the project site, and the stability of the Lighthouse Creek channel slope located on the eastern portion of the project site. In response, two additional geologic evaluations of the project site and the proposed project were conducted in 2013.

In summary, the Second Revised Draft EIR provides the following new or revised information:

2013 Geologic Evaluation:

- A revised "top of bluff" location further landward that generally follows the existing curb and is consistent with the top of bluff location expressed in public comments and supported by City and Coastal Commission staff.
- Updated information regarding the rate of bluff retreat using an updated, more accurate methodology resulting in 1.02 inches per year rather than four inches per year discussed in the 2012 EIR.
- A "top of canyon slope" that is located east of and adjacent to the existing curb rather than the top of bank of Lighthouse Creek previously identified approximately 50 feet east of the proposed building site.
- A slope stability analysis for the western slope of Lighthouse Creek that concludes that the bedrock and soil comprising the slope are stable under both static and earthquake conditions.

Revised Project Description:

- Updates to the project description to reflect changes made to the design of the proposed residence. The current proposed building heights are approximately six to ten feet lower, respectively, than the maximum heights of the previously proposed residence design. The western elevation of the currently proposed residence would have a maximum height of 15 feet above grade and the eastern elevation would have a maximum height of 25 feet above grade.

Environmental Impact Analysis:

- Updated aesthetics analysis of the project based on the changes to the design of the residence.
- Updated analysis of the project's consistency with applicable plans and policies.
- Updated alternatives to the proposed project to reflect new information regarding the revised project design and new information regarding the geologic conditions of the project site.
- Updated biological resources analysis and mitigations.
- A new section that describes the environmental impacts of the proposed project that have been determined to be less than significant. The Impacts Found Not to be Significant section summarizes analysis provided by the Revised Initial Study prepared for the project, and where necessary, updates that information to reflect changes made to the design of the project and changes to environmental conditions at the project site.

B. Summary of Impacts

The Second Revised Draft EIR concludes that there are no significant, unavoidable impacts, and that all potentially significant impacts would be reduced to less than significant levels with the implementation of identified mitigation measures.

Significant, Unavoidable Impacts *(Class I impacts are unavoidable significant effects for which no feasible mitigation is identified)*

The Second Revised Draft EIR does not identify any significant, unavoidable impacts.

Significant, But Mitigable Impacts *(Class II impacts are potentially significant impacts that can be avoided or reduced to less than significant levels with identified mitigation measures)*

Class II impacts were identified in the Second Revised DEIR in the areas of Visual Aesthetics and Geologic Hazards. Additional impacts identified as Class II in the Initial Study are Biological Resources, Hazards (fire), Transportation (access), and Water Resources (drainage, water quality).

Visual Aesthetics: The Draft EIR (2007) and the First Revised Draft EIR (2012) prepared for the project evaluated the potential for the original project design to result in significant visual aesthetic impacts and concluded that the project's original design would result in significant impacts to important public scenic ocean views from areas in and around La Mesa Park. The previous Draft EIRs also concluded that the impacts could be reduced to a less than significant level with the implementation of mitigation measures that identified changes to the design of the project. Design changes similar to those recommended by the previous Draft EIRs have been incorporated into the design of the currently proposed project. The design of the proposed residence has been revised so that it has a maximum height of 25 feet above existing grade, which is approximately ten feet lower than the maximum height of the previously

proposed residence design. The potential for the project's current design to result in significant visual aesthetic impacts is evaluated in the Second Revised Draft EIR.

The Second Revised Draft EIR concludes that potentially significant impacts to important public scenic ocean views from areas in and around La Mesa Park would be reduced to a less than significant level with the implementation of identified mitigation measures AES- 1 (require neutral colors) and AES-2 (install landscaping that will not exceed the height of the residence).

Geologic Hazards: The Second Revised Draft EIR concludes that potentially significant geologic impacts (slope stability, subsidence, and expansive soils) would be reduced to a less than significant level with the implementation of proposed mitigation measures GEO-1 (project to implement a storm water drainage system that will not result in a significant slope stability impact) and GEO-2 (foundation system shall be approved by a licensed Engineering Geologist or Geotechnical Engineer).

Biological Resources: The evaluation of project-related impacts to biological resources provided by the Revised Initial Study was based on information provided by the biological assessment report prepared in 2006 and focused on the potential for the proposed project to adversely affect native plant habitat and wildlife species located on the lower portion of the Lighthouse Creek canyon slope. The Revised Initial Study concludes that potentially significant adverse impacts to biological resources (habitat, water quality) would be reduced to less than significant levels with the implementation of proposed mitigation measure BIO-1 (require habitat restoration plan); BIO-2 (install appropriate landscaping plants); BIO-3 (use appropriate irrigation system); BIO-4.1 through 4.8 (implement appropriate water quality protection measures during construction); and BIO-5 (require Streambed Alteration Agreement from California Department of Fish and Wildlife).

An updated evaluation of existing biological conditions and potential project-related impacts to biological resources was prepared in 2013 (Hunt). The report identifies three additional measures, BIO-4.9, 4.10 and 4.11, (BMPs to prevent soil erosion; grading during dry season and hydromulch disturbed soils; and biologist monitoring of these measures during construction) that would further reduce the potential for project-related water quality impacts to Lighthouse Creek habitat and species. The report also indicates that project-related construction activity would have the potential to result in a significant impact if construction were to occur near an occupied nest. This potentially significant impact can be reduced to a less than significant level by a mitigation measure BIO-6 (protect nesting birds). In addition, the report identifies additional measures to further minimize impacts to native habitat and impacts to wildlife species with mitigation measure BIO-7 (protect wildlife through salvage or relocation) and BIO-8 (protect sensitive habitat with construction fencing).

Hazards (fire): A potential impact pertaining to fire hazard was identified due to the project location adjacent to native vegetation in Lighthouse Creek and the narrow width of the access driveway. This potential impact would be reduced to a less than significant level with the implementation of proposed mitigation measure H-1 (provide automatic fire sprinklers); H-2 (provide monitored fire alarm system); H-3 (comply with high fire hazard area construction requirements); and H-4 (maintain sprinkler and alarm systems).

Transportation (access): The proposed project was identified for a potential to result in a vehicle access-related impact because the legal adequacy of the driveway providing access to the project site has been disputed. This impact would be reduced to a less than significant level with the implementation of proposed mitigation measure T-1 (owner to provide the City with satisfactory evidence that the required

amount of legal access that formed the basis for the original lot split is available to serve the project). (See further discussion in Section D. below.)

Water Resources (drainage, water quality): The proposed construction activities would have the potential to result in short-term water quality impacts to Lighthouse Creek during project construction. This potential impact would be reduced to a less than significant level with the implementation of proposed mitigation measure W-1 (City approval of proposed grading, drainage, storm water and project development plans).

Less Than Significant Impacts *(Class III impacts are impacts that are not substantial or significant)*

Less than significant impacts were identified in the following areas: aesthetics (lighting), air quality, cultural resources, noise, population and housing, public services, recreation, greenhouse gas emissions, and agriculture and forestry resources. These issue areas are evaluated in the Revised Initial Study and the following Recommended Measures have been identified to further reduce less than significant impacts.

Air Quality (construction): RM AQ-1 through AQ-5 (standard dust control measures shall be required) and AQ-6 (monitoring reports shall be submitted to City).

Cultural Resources: RM CR-1 (standard unanticipated discovery measures shall be implemented if previously undetected cultural resources are uncovered during the construction).

Noise (construction): RM N-1 (neighborhood notification), N-2 (limit construction hours), and N-3 (sound control on equipment).

Public Services (recycling): RM PS-1 (construction waste shall be recycled).

Transportation (construction traffic, parking): T-2 (haul routes for construction traffic shall be approved by City, truck trips to be during non-peak hours), T-3 (construction parking and storage shall be approved by City).

Water Resources (drainage): RM W-2 (maintenance of storm water drainage system) (same as mitigation measure GEO-1).

C. Alternatives Analysis.

The Second Revised Draft EIR includes an analysis of alternatives to the proposed project and focuses on alternatives capable of eliminating or reducing significant adverse environmental effects of the project while feasibly attaining most of the objectives of the project. The alternatives to the proposed project evaluated in the EIR include:

No Project Alternative. This alternative assumes that the project site would remain in its present condition and the proposed residence would not be developed.

Smaller Project Alternative. This alternative evaluates the impacts of developing a residence on the project site that has 484 fewer square feet of total floor area than the proposed project. The location of the smaller residence on the project would be similar to the location of the proposed residence. Depending on the final design of this alternative, the structure height could be similar to that of the proposed project or portions of the structure could be taller or shorter. This alternative would result in a slight increase in on-site earthwork for site preparation due to deeper excavation (15 feet rather than 8 feet).

The Second Revised Draft EIR concludes that the Smaller Project Alternative would result in a slight reduction in aesthetic impacts (impacts to ocean views) and would therefore be considered the environmentally superior alternative. However, the reduction in aesthetic impacts provided by the alternative would be very minor compared to the revised project, and is not required to reduce any aesthetic impacts of the proposed project to a less than significant level.

D. Access

The subject property was originally proposed in its current configuration as part of a lot split conditionally approved by City Council on May 29, 1958, which included the adjacent parcel to the north (1837 El Camino de la Luz). At the time of the lot split approval, the City required recordation of a written instrument to validate the subdivision within one year of approval. Because an instrument was not recorded within one year of the City Council approval, the lot split was invalidated. However, in 1963, a grant deed conveyed the subject parcel to a separate property owner. The City determined that the conveyance of the land was in violation of the Subdivision Map Act. In 1999, the City issued a Conditional Certificate of Compliance for the subject parcel, as required by the Subdivision Map Act, to allow the property to be legally sold, leased, or financed. The condition on the Conditional Certificate of Compliance reads as follows:

> *Provide evidence, satisfactory to the City Engineer that the owner of the parcel described herein substantially possesses the required amount of legal access that formed the basis of the originally approved lot split.*

In September of 2009, the Superior Court of the State of California determined that the subject parcel has legal access easements that vary in width from 7.5 feet to 15 feet, as shown on the 1958 Record of Survey (see sheet A.5 of the project plans). The Superior Court "Stipulated Access Order" states in part:

> *"All parties acknowledge that the access easement on the Franco Property is limited to 7.5 feet in width on the southern 7.14 feet of the Franco Property."*

Transportation planning staff analyzed the width of the driveway available to access the subject property and states that the 7.5 foot wide access section, which spans a length of 7.14 feet, would provide less driveway access width than the City's practice of 10 feet. However, a majority of passenger vehicles could access the site. The owners would need to be aware that some larger passenger vehicles, construction trucks, recreational vehicles, campers, etc. require a greater width, and, without permission from adjacent owners, could not access the site. For reference purposes, the City's Parking Design Standards define a standard design vehicle width as 5 foot 10 inches wide. For comparison purposes, a wide passenger vehicle such as a 2010 H1 Hummer (though no longer in production) is 7 feet 1 inch wide.

Fire Department staff also reviewed the existing access driveway to the subject property. Due to the narrow width of the driveway, mitigation measures H-1 through H-4 described above, are required to reduce the potential for a significant fire protection hazard.

As required by mitigation measure T-1 discussed previously, the applicant has provided evidence of the required access in the November 7, 2016 letter (see attachment to staff report). Based on the decision of the Superior Court, and the analysis by City staff it has been determined that the property substantially possesses the required amount of legal access that formed the basis of the originally approved lot split, and that there is adequate access to serve the proposed project at the project site.

VI. DRAFT EIR PUBLIC REVIEW PERIOD

Notification. A notice of the Second Revised Draft EIR document availability, 45-day comment period (October 17 – November 30, 2016), and public hearing date was mailed to surrounding property owners, interested parties, organizations, and agencies, and was also provided via newspaper notice. The Second Revised Draft EIR was also submitted to the State Clearinghouse for review by State agencies (e.g., Coastal Commission).

Draft Document Availability. The Second Revised Draft EIR is available for public review at the City Planning Division offices (630 Garden Street), the Downtown Branch of the public library (40 East Anapamu Street), and on the City web site at www.santabarbaraca.gov/eir.

Public Comment Period. Written comments on the Second Revised Draft EIR for the 1837 ½ El Camino de la Luz project will be accepted through the end of the public review period on Wednesday, November 30, 2016, 4:30 p.m. Please submit mailed comments to the attention of the Planning Commission Secretary, City of Santa Barbara Planning Division, P. O. Box 1990, Santa Barbara, CA 93102. Comments may also be submitted electronically to PCSecretary@santabarbaraca.gov, or delivered to the Planning Division office at 630 Garden Street.

Attachment: Letter from Applicant (Hollister & Brace, November 7, 2016)

Richard C. Monk
Steven Evans Kirby
Bradford F. Ginder
Paul A. Roberts
Peter Susi
John G. Busby
Susan H. McCollum
Marcus S. Bird
Peter L. Candy
Michael P. Denver
Kevin R. Nimmons
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November 7, 2016

Via e-mail: kkennedy@santabarbaraca.gov

Ms. Kathleen Kennedy, Associate Planner
City of Santa Barbara
630 Garden Street
Santa Barbara, CA 93101

Re: **Barthels Residence, Access Easement**
1837 ½ Camino de la Luz, Santa Barbara, California

Dear Kathleen:

Hollister & Brace, in conjunction with RRM Design Group, have been retained by Dr. Herbert E. Barthels, Trustee of the Herbert E. Barthels Trust dated December 9, 1985 (the "Applicant") in connection with the 1837 ½ El Camino de la Luz residential project (the "Project").

This letter will provide some early comments on the Project's Second Revised Draft Environmental Impact Report ("DEIR") as well as provide the additional information you requested regarding the legal status of the easements that provide access to the Applicant's property at the above referenced address.

The DEIR states as follows regarding Transportation/Circulation:

> "The proposed project would have the potential to result in a significant vehicle access-related impact because the legal adequacy of the driveway providing access to the project site has been disputed. To resolve this issue and reduce potential access-related impacts to a less than significant level, Revised Initial Study mitigation measure T-1 requires the project parcel owner to provide the City with satisfactory evidence that 'the required amount of legal access that formed the basis for the original lot split' is available to serve the project." DEIR, Section 9.1.4, p. 9-8.

ATTACHMENT

And, Table 2.3-1 proposes the following Mitigation Measure:

> "T-1 **Evidence of Adequate Access.** Provide evidence, satisfactory to the City Engineer and City Attorney, that the owner of the subject parcel substantially possesses the required amount of legal access that formed the basis of the original lot split." DEIR, p. 2-11.

There is no evidence to support the DEIR's conclusion that "the legal adequacy of the driveway provided to the project site has been disputed" nor that the "proposed project would have, the potential to result in a significant vehicle access-related impact." In fact, as appears more fully below, the evidence proves the contrary.

In 2007 and 2008 Rafael Franco and some of the other residents of the subject stretch of El Camino de la Luz denied the City's retained geologist, Dr. Anikouchine, access to the Barthels property for the purpose of performing certain geological investigations which Mr. Franco and said other residents had demanded be performed. As a result, Dr. Barthels' attorneys, Hollister & Brace, filed a legal action on Dr. Barthels' behalf against Mr. Franco and said other residents of El Camino de la Luz, being Santa Barbara Superior Case No. 1268293, in order to perfect Dr. Barthels' legal easement rights. As the City's Staff Report of September 8, 2009 correctly stated, the Santa Barbara Superior Court entered its Judgment on September 8, 2009 in said Case that Dr. Barthels has access easements varying in width from 7.5 feet to 15 feet in width along the subject stretch of El Camino de la Luz.

The Superior Court's stipulated access order of September 9, 2009 entered in said Case provides that Mr. Franco and the other named defendants in the lawsuit:

> "(a) Shall not block, impede or limit access to the Benefitted Property over the Bound Properties to the full width of the Access Easement as described in Exhibits "A" and "B."
>
> (b) Shall sign any paperwork required by government agencies relating to or confirming access rights, as long as the paperwork accurately describes all easement terms.
>
> (c) Shall provide access to City staff or other authorized persons who need access to address or handle a pending application of Benefitted Owner."

and also provides as follows:

> "7. NOTICE TO ANY PEACE OFFICER: You may accept a copy of this Order, and are instructed to implement it if so requested by any party, on the conditions stated. You are authorized to order Bound

Party to comply with the Order, to tow any blocking vehicles or item blocking access, or to otherwise enforce this Order, subject to further instructions of the Court.

"8. NOTICE TO BOUND PARTIES: Failure to comply with this Order shall subject you to further Orders of the Court, and the costs of any proceeding to enforce this Order."

The Superior Court's Judgment is final and binding and no appeal therefrom is possible.

The Conditional Certificate of Compliance issued by the City of Santa Barbara for the subject legal parcel and recorded December 8, 1999 as Instrument No. 99-0095608 provides that the owner of said parcel must:

> "Provide evidence satisfactory to the City Engineer that the owner of the parcel described herein substantially possesses the required amount of legal access that formed the basis of the originally approved lot split."

Evidence presented to the City of Santa Barbara by the Applicant's surveyors, land use agents, and attorneys over the past eleven years demonstrates that the existing width of the road accessway to the subject parcel, which generally ranges from 9 feet to 15 feet (except for the 7.5 pinch point) is in substantial conformity with the width of the road access shown on the 1958 Lot Split Map. Moreover, City Fire Department representatives have consistently opined over the past eleven years that the width of the road access way is sufficient to provide adequate and safe access, including fire protection access to the parcel.

Based upon all of the foregoing, the subject parcel has legal access and such access substantially conforms to the access approved on the 1958 Lot Split Map. And, there is no necessity for proposed Mitigation Measure T-1. Further, there is no evidence whatsoever that the "proposed project would have the potential to result in a significant vehicle access-related impact" because the Applicant's legal access easements over the subject stretch of El Camino de la Luz have been conclusively judicially determined to exist and are legally enforceable. Hence, no land use nor CEQA issue is presented which requires mitigation.

We are providing the following exhibits below, for your reference:

A. Aerial view showing location of the easement
B. Parcel Map
C. Legal Access Exhibit per Title Report
D. Larger Scale Map Legal Access Exhibit per Title Report
E. Establishment of Legal Access (narrative)

We trust that this information provides you with the documentation needed to show that the Applicant has a legally established easement that provides adequate access to his property for the purpose of developing the proposed residence.

Please let us know if we can be of further assistance.

Very truly yours,

HOLLISTER & BRACE

By: Richard C. Monk

Richard C. Monk

RRM DESIGN GROUP

By:

Detlev Peikert, AIA, LEED
AP BD+C
Principal
CA License No. C15008

RCM:crr
Enclosures: Exhibits A-E

cc: Dr. Herb Barthels
N. Scott Vincent, Deputy City Attorney

EXHIBIT A

Aerial photo

Taken from the north

EXHIBIT B

Parcel Map

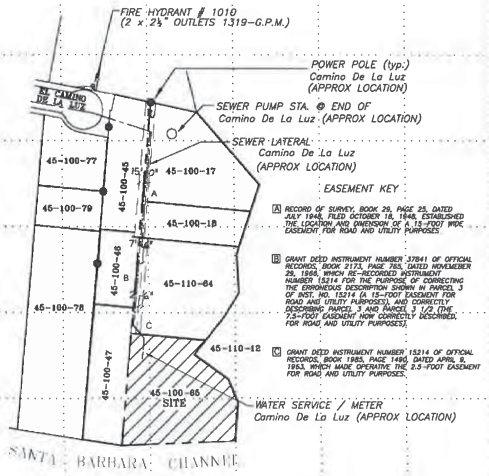

EXHIBIT C

Legal Access Exhibit Map Per Title Report

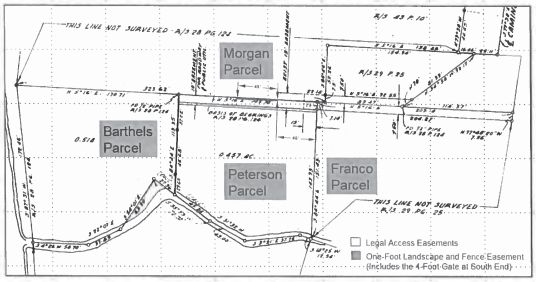

EXHIBIT D

Legal Access Exhibit Map Per Title Report

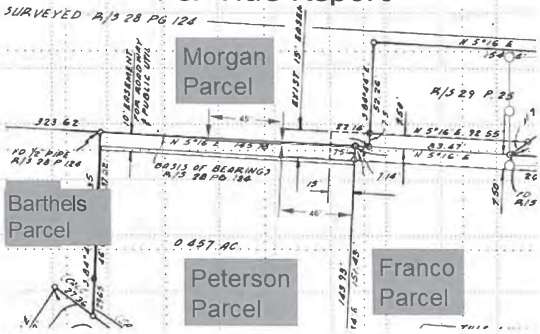

EXHIBIT E

Establishment of Legal Access to Parcel

NOVEMBER 17, 1995 EASEMENT DEED -

►On November 17, 1995, Dr. Barthels executed an Easement Deed in favor of Joanna K. Morgan granting to Morgan the following one-foot wide easement within the aforesaid combined 10-foot easements:

"An easement , of a prescriptive nature, for fence and landscaping purposes only, and expressly limited to those present and current exact uses only, on and over a strip of land one foot in width, located within a non-exclusive right of way easement presently owned by Herbert E. Barthels, said one foot wide strip being located immediately to the east of and contiguous with and adjacent to the easterly property line of said 'MORGAN PROPERTY'," **Instrument No 95-066680, recorded November 30, 1995, Official Records, Santa Barbara County.**

NOVEMBER 17, 1995 AGREEMENT -

►The aforesaid one-foot easement was further referenced in a written agreement entered into between Dr. Barthels and Joanna K. Morgan dated November 17, 1995 ("the November 17, 1995 Agreement"), wherein the parties confirmed that Dr. Barthels has combined record access easements of 10 feet in width:

"The 10 feet (being the 7 ½ foot of driveway easement plus the 2 ½ foot other easement) on the PETERSON side of the centerline is valid and still existing." **November 17, 1995 Agreement, p.3.**

►The November 17, 1995 Agreement further confirms that the one-foot easement strip granted by Dr. Barthels to Joanna K. Morgan pursuant to the Easement Deed is concurrent with the aforesaid combined 10-foot wide access easement:

"That said one foot easement strip was and is concurrent with the easement rights held by BARTHELS as to the 10 foot driveway easement on the PETERSON property held by BARTHELS." **November 17, 1995 Agreement, p.3.**

COURT OF APPEAL OPINION -

►Court of Appeal acknowledged that the Property still has access, albeit not 15 feet in width:

"Barthels, a local dentist, planned to build his residence on the parcel. In June of 1989, during the permitting process, he learned that the access easement was only 7½ feet wide, and not 15 feet as represented by the title company." **Barthels v. Santa Barbara Title Co. (1994) 28 Cal.App.4th 674 at 677.**

►Joanna K. Morgan confirmed in the November 17, 1995 Agreement that the subject Property has a valid and existing access easement:

"The 10 feet (being the 7 ½ foot of driveway easement plus the 2 ½ foot other easement) on the PETERSON side of the centerline is valid and still existing." **November 17, 1995 Agreement, p.3.**

SUBJECT PROPERTY HAS LEGAL ACCESS IN SUBSTANTIAL CONFORMITY TO 1958 LOT SPLIT MAP –

►The Conditional Certificate of Compliance recorded December 8, 1999 as Instrument No. 99-0095608 provides that the subject Property is required to comply with the following specific condition:

"Provide evidence satisfactory to the City Engineer that the owner of the parcel described herein substantially possesses the required amount of legal access that formed the basis of the originally approved lot split."

EXHIBIT E

RECORDING REQUESTED BY AND WHEN)
RECORDED, PLEASE RETURN TO:)
)
City Engineer)
City of Santa Barbara)
P.O. Box 1990)
Santa Barbara, CA 93102-1990)
)

APN 045-100-065

Recorders Office
County Of
SANTA BARBARA
KENNETH A. PETTIT
Recorder
LARRY G. HERRERA
Assistant

1999-0095608
REC FEE 13.00
TOTAL 13.00
GOVT CHARGE 13.00-
TOTAL TENDERED 13.00-
CHANGE .00

03:37PM 08-Dec-1999 199912080000369
FNM D6143

CONDITIONAL
CERTIFICATE OF COMPLIANCE

Pursuant to California Government Code Section 66499.35, in response to written application and request by the owner of the real property described herein, or in response to request by a vendee of the owner of the real property pursuant to a written contract of sale, this Conditional Certificate of Compliance is issued by the City Engineer of the City of Santa Barbara, and recorded in the Official Records, in the Office of the County Recorder, County of Santa Barbara, State of California.

This Conditional Certificate of Compliance is issued for that certain real property in the City of Santa Barbara, County of Santa Barbara, State of California, being more particularly described as follows:

THAT PORTION OF THE OUTSIDE PUEBLO LANDS OF THE CITY OF SANTA BARBARA ON THE MESA, SO-CALLED, IN THE CITY OF SANTA BARBARA, COUNTY OF SANTA BARBARA, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

BEGINNING AT A 1/2 INCH IRON SURVEY PIPE SET ON THE NORTHERLY LINE OF EL CAMINO DE LA LUZ AT THE EXTREME EASTERLY END THEREOF, AS SAID EL CAMINO DE LA LUZ IS SHOWN ON A MAP OF SURVEY OF THE BLANCO E. FRYER TRACT FILED IN BOOK 28 AT PAGE 124 OF RECORD OF SURVEYS; THENCE ALONG THE SOUTHERLY PROLONGATION OF THE EASTERLY LINE OF SAID EL CAMINO DE LA LUZ AS SHOWN ON SAID MAP, SOUTH 5°16' WEST 350.95 FEET TO THE TRUE POINT OF BEGINNING; THENCE SOUTH 5°16' WEST 170.72 FEET, TO THE LINE OF MEAN HIGH TIDE OF THE PACIFIC OCEAN; THENCE NORTH 87°31' EAST 172.46 FEET TO A POINT; THENCE NORTH 4°26' EAST 58.70 FEET TO A 1/2 INCH SURVEY PIPE; THENCE NORTH 22°07' WEST 37.85 FEET TO A 1/2 INCH SURVEY PIPE

RECEIVED
AUG 27 2002
CITY OF SANTA BARBARA
PLANNING DIVISION

NORTH 54°01' WES[illegible] 30 FEET TO A 1/2 INCH S[illegible] PIPE; THENCE NORTH 38°33' EAST 27.36 FEET TO A 1/2 INCH SURVEY PIPE; THENCE NORTH 87°44' WEST 113.35 FEET TO THE TRUE POINT OF BEGINNING.

EXCEPTING THEREFROM ANY PORTION OF SAID LAND, WHICH AT ANY TIME WAS TIDE LAND, WHICH WAS NOT FORMED BY THE DEPOSIT OF ALLUVION FROM NATURAL CAUSES AND BY IMPERCEPTIBLE DEGREES.

In order to provide compliance with California Government Code §66410 *et seq.*, the Subdivision Map Act, pertaining to the division of real property, and with local ordinances adopted pursuant to the Subdivision Map Act, development of the real property pursuant to this Conditional Certificate of Compliance shall be subject to complete compliance with the condition imposed herein.

Upon compliance with the condition of this certificate the real property described herein shall comprise one (1) legal parcel. This certificate relates only to issues of compliance or noncompliance with the Subdivision Map Act and local ordinances enacted pursuant thereto. Upon compliance the parcel described herein may be sold, leased, or financed without further compliance with the Subdivision Map Act or any local ordinance enacted thereto. Development of the parcel may require issuance of a permit or permits, or other grant or grants of approval.

The real property described herein is required to comply with the following specific condition:

Provide evidence, satisfactory to the City Engineer that the owner of the parcel described herein substantially possesses the required amount of legal access that formed the basis of the originally approved lot split.

All permits of the City of Santa Barbara needed by the owner of the real property described herein for the development of improvements, including any development of improvements to implement the above condition, and permits and other grants of approval for the development of the real property in the future shall be subject to the condition listed above.

This Conditional Certificate of Compliance shall be recorded in the Official Records of the County of Santa Barbara to run with the land and to serve constructive notice to the property owner, and to any subsequent vendees, grantees, heirs, transferees or assignees of the real property, that the fulfillment and implementation of the condition set forth herein shall be required prior to any subsequent

issuance of City permits or other grants of approval for development of the real property.

Compliance with the foregoing condition by the owner of the real property described herein shall not be required until such time as a permit or other grant of approval for development of the real property is issued by the City of Santa Barbara.

REGISTERED PROFESSIONAL ENGINEER
R. PATRICK KELLY
No. 27,077
Exp. 3/31/01
CIVIL
STATE OF CALIFORNIA

[Seal]

CITY OF SANTA BARBARA

By: R. Patrick Kelly
R. Patrick Kelly, City Engineer

RCE No. 27077 Exp. 3/31/01

Assessed Owner: Herbert E. Barthels, Trustee
Herbert E. Barthels Trust dated December 9, 1985

Mailing Address: 1809 Cliff Drive, Suite C
Santa Barbara, CA 93109

ACKNOWLEDGMENT

STATE OF CALIFORNIA)
COUNTY OF SANTA BARBARA)

On DECEMBER 8, 1999, before me, DONALD G. IRELAN, NOTARY PUBLIC personally appeared R. PATRICK KELLY, personally known to me (~~or proved to me on the basis of satisfactory evidence~~) to be the person (~~s~~) whose name (~~s~~) is/~~are~~ subscribed to the within instrument, and acknowledged to me that he/~~she/they~~ executed the same in his/~~her/their~~ authorized capacity(~~ies~~), and that by his/~~her/their~~ signature (~~s~~) on the instrument the person (~~s~~), or the entity on behalf of which the person (~~s~~) acted, executed the instrument.

Witness my hand and official seal.

Signature Donald G. Irelan

DONALD G. IRELAN
Commission # 1181459
Notary Public - California
Santa Barbara County
My Comm. Expires Apr 27, 2002

[Seal]

EXHIBIT F

45-10

CITY PLANNING OFFICE
May 26, 1958

TO: MAYOR AND CITY COUNCIL

FROM: City Planning Commission

SUBJECT: Request of Mrs. Fred D. Eaton, Sr., to divide into two parcels Lots 7T and 11H, City Engineer Map 10, located at 1837 El Camino de la Luz, in a R-1 zone.

Recommendation: Denial.

Reasons: Creation of an additional parcel would be in violation of City Ordinance No. 2488. The existing 15 ft. driveway easement which now serves this dwelling also provides access to three additional adjoining parcels. See attached plot plan showing dwellings served off El Camino de la Luz cul-de-sac.

Discussion: As seen on attached plot plan, two private easements enter El Camino de la Luz from the cul-de-sac; a 20 ft. easement which serves three parcels and a possible fourth, and a 15 ft. easement which serves four parcels and a possible fifth parcel, as indicated by small arrows on plot plan. Because of the closeness of the Eaton house and the dwelling opposite it to this easement, it is not possible to widen the subject easement.

A possible solution to this situation would be to join the ends of the two private easements and provide one-way traffic serving all these parcels. This would not meet city street standards, but might be considered as a reasonable solution under the present impossibility of providing full city street standards.

CITY PLANNING COMMISSION
SANTA BARBARA, CALIFORNIA

C.W. Washburn

Charles W. Washburn
Planning Director

CWW/k
Attachment: PND Report

C. Recommended for denial:

Request of Mrs. Fred D. Eaton, Sr., to divide into two parcels Lots 7T and 11H, City Engineer Map 10, located at 1837 El Camino de la Luz, in a R-1 zone.

5/29/58

EXHIBIT G

28 Cal.App.4th 674
Court of Appeal, Second
District, Division 6, California.

Herbert E. BARTHELS, Plaintiff and Appellant,
v.
SANTA BARBARA TITLE COMPANY,
et al., Defendants and Respondents.

No. B076806.
|
Aug. 24, 1994.
|
Rehearing Denied Sept. 19, 1994.
|
Review Denied Nov. 2, 1994.

Property owner brought negligence action against title abstractor for determining that owner had 15–foot access easement when in fact only seven-foot easement existed. The Superior Court, Santa Barbara County, No. 182179, Patrick L. McMahon, J., awarded damages to owner, and owner appealed. The Court of Appeal, Gilbert, J., held that: (1) owner was not entitled to damages for loss of economic value as such loss was not caused by abstractor; (2) purchase price plus inflation factor was proper measure of damages; (3) owner was entitled to damages for out-of-pocket expenses up to time defect was discovered; (4) owner was not entitled to compensation for time spent at hourly rate owner received in practice as dentist; and (5) owner was not entitled to attorney's fees.

Affirmed.

West Headnotes (8)

[1] **Abstracts of Title**
Rights, Duties, and Liabilities of Examiners of Title

Property owner was not entitled to loss of economic value of his property as damages from title abstractor that negligently determined that owner had 15–foot access easement when in fact only seven-foot easement existed, even if property was valueless with only seven-foot easement; abstractor's negligence did not cause property to lose value since 15–foot easement never existed. West's Ann.Cal.Civ.Code § 3333.

Cases that cite this headnote

[2] **Abstracts of Title**
Rights, Duties, and Liabilities of Examiners of Title

Property owner was entitled to purchase price of property plus inflation factor, which was substitute for interest, as damages for title abstractor's negligence in determining that owner had 15–foot access easement when in fact only seven-foot easement existed. West's Ann.Cal.Civ.Code § 3333.

Cases that cite this headnote

[3] **Abstracts of Title**
Rights, Duties, and Liabilities of Examiners of Title

Out-of-pocket expenses toward improving property were properly awarded as damages to property owner, in negligence action against title abstractor for determining that owner had 15–foot access easement when in fact only seven-foot easement existed, but only to point in time that owner discovered defect in title.

Cases that cite this headnote

[4] **Abstracts of Title**
Rights, Duties, and Liabilities of Examiners of Title

Trial court did not err in failing to award property owner damages for all time owner allegedly spent on development of property, in negligence action against title abstractor for determining that owner had 15–foot access easement when in fact only seven-foot easement existed and property was valueless; owner failed to sufficiently establish that all claimed time was reasonably necessary to development.

Cases that cite this headnote

[5] **Appeal and Error**
Findings of Court or Referee

Appellate court must treat all evidence unfavorable to judgment as not having sufficient verity to be accepted by trier of fact.

1 Cases that cite this headnote

[6] **Appeal and Error**
Province of Trial Court
Appeal and Error
Province of Trial Court

Appellate court has no power on appeal to consider credibility of witness or to weigh evidence.

Cases that cite this headnote

[7] **Abstracts of Title**
Rights, Duties, and Liabilities of Examiners of Title

Damages awarded to property owner for time spent in developing property, in negligence action against title abstractor for determining that owner had 15–foot access easement when in fact only seven-foot easement existed, did not have to be calculated at $200 hourly fee charged by owner in his occupation as dentist; rather, $66.66 per hour was appropriate measure as reasonable hourly rate for person doing type of work that owner performed in developing property.

Cases that cite this headnote

[8] **Abstracts of Title**
Rights, Duties, and Liabilities of Examiners of Title

Property owner was not entitled to attorney's fees in action against title abstractor that negligently determined that owner had 15–foot access easement when in fact only seven-foot easement existed, absent statute or agreement providing for such fees. West's Ann.Cal.C.C.P. § 1021.

1 Cases that cite this headnote

Attorneys and Law Firms

***676** ****580** James T. Lindsey, Santa Barbara, for plaintiff and appellant.

Gibbs, Giden, Locher, Fleming & Acret, Joseph M. Giden, Lawrence B. Parker and Michael I. Giden, Los Angeles, for defendants and respondents.

Opinion

***677** GILBERT, Associate Justice.

In this action for title abstractor's negligence, we hold that the negligence of the abstractor did not cause the property to lose value. Therefore, the property owner is not entitled to damages measured by the loss in value of the property. We also hold the trial court correctly determined other aspects of the award of damages. We affirm.

FACTS

In 1976, Herbert Barthels purchased the last beach front parcel of property in the City of Santa Barbara (the City). He paid $24,500 for the unimproved lot. Escrow was through the Santa Barbara Title Company (Title Company) which also issued a policy of title insurance. The policy insured title to the lot and an appurtenant easement for access 15 feet wide.

Barthels, a local dentist, planned to build his residence on the parcel. In June of 1989, during the permitting process, he learned that the access easement was only seven and a half feet wide, and not 15 feet as represented by the Title Company. The City refused to issue a building permit without a 15-foot wide easement. The Title Company tendered $42,875, representing the purchase price as increased by the title insurance policy inflation endorsement.

Barthels sued the Title Company alleging abstractor's negligence in determining that Barthels had a 15 foot wide easement. Barthels prayed for damages for loss of value of his property, money spent on construction plans and expenses incidental to processing permit applications. The

Title Company did not deny it was negligent. The only question, therefore, was the amount of damages.

At trial Barthels testified that in 1989 when he learned of the defect in title, the property was worth $800,000 with the 15 foot easement and nothing without the easement. Barthels claimed that through 1992 he had out of pocket expenses for such items as property taxes and architectural and engineering fees in the amount of $27,381.25. The Title Company agreed that Barthels expenses were $21,524.40 through 1989, the year Barthels discovered the defect in title.

Barthels also claimed $280,000 as compensation for his own time devoted to development of the parcel. He testified he spent 1400 hours and was claiming $200 per hour as the value of his time.

The trial court found that the measure of damages for the Title Company's negligence was not the $800,000 loss in economic value of the property, but ***678** the $42,875 offered by the Title Company. The court told Barthels he could cash the Title Company's previously tendered check in that amount.

The trial court also awarded Barthels $21,524.40 for out of pocket costs expended until the defect in title was discovered. As to compensation for Barthels' time, the court found 150 hours represented the time Barthels expended that avoided the need to hire others. The court stated Barthels was not entitled to compensation at his billable rate as a dentist. Although he rescheduled patients, he did not lose any. The trial court found that a fair rate would be $66.66 per hour. It awarded Barthels $10,000 as compensation for his time. The trial court found no basis for awarding Barthels attorney's fees for prosecuting the negligence action. It therefore awarded a total of $31,524.40 in addition to the amount already tendered by the Title Company.

DISCUSSION

I

Barthels contends the trial court erred in failing to award him $800,000 for loss of economic value of his property. We disagree.

****581** **[1]** The measure of damages for negligence is "... the amount which will compensate for all the detriment proximately caused thereby...." (Civ.Code, § 3333.) The question here is whether the negligence of the Title Company caused the property to lose economic value. Barthels testified the property had no economic value because it lacked a sufficient easement for access. Nothing the Title Company did or did not do caused the property to lack a sufficient access easement. A sufficient easement simply never existed. Thus, the Title Company cannot be liable for any loss of economic value of the property caused by the lack of the easement.

Garton v. Title Ins. Trust Co. (1980) 106 Cal.App.3d 365, 165 Cal.Rptr. 449 illustrates the role of causation in assessing damages for abstractor's negligence. There the abstractor failed to disclose that the plaintiffs' parcel was subject to a mineral interest in a third party. Plaintiffs sought an order requiring the abstractor to obtain a release of the mineral interest. In upholding the sustaining of a demurrer the court stated: "The first element of proximate cause is *cause in fact.* [Citations.] Nothing defendants did or did not do in any way caused the land to be subject to the Archibalds' mineral interest.... Since the acts or omissions of the defendants did not cause the land to be subject to the Archibalds' interest the cost of removing that interest is not a proper measure of plaintiffs' damages, nor are plaintiffs ***679** entitled to an order requiring the defendants to obtain a release of that interest." (*Id.* at pp. 382–383, 165 Cal.Rptr. 449.)

[2] Here the Title Company's negligence caused Barthels to spend $24,500 on a valueless parcel of property. Damages in the amount of $24,500 plus interest are adequate to compensate Barthels for the loss of that money. The trial court apparently believed Barthels was adequately compensated for the loss of his purchase money by payment of the $42,875 policy limits. That amount represents the purchase price plus an inflation factor specified in the policy. Although interest and not a title policy inflation factor is ordinarily used to measure damages in tort (see 6 Witkin, Summary of Cal.Law (9th ed. 1988) Torts, § 1397, p. 868), Barthels does not complain on appeal that the trial court erred in substituting the inflation factor for interest.

Barthels' reliance on *Overholtzer v. Northern Counties Title Ins. Company* (1953) 116 Cal.App.2d 113, 253 P.2d 116 is misplaced. There, in discussing liability under

a policy of title insurance the court stated, "It seems quite apparent to us that liability should be measured by diminution in the value of the property caused by the defect in title as of the date of the discovery of the defect, measured by the use to which the property is then being devoted." (*Id.* at p. 130, 253 P.2d 116.)

But liability under a policy of title insurance, as discussed in *Overholtzer,* is determined according to the provisions of the insurance contract. The Overholtzer's action was brought on the contract of title insurance. Here, the measure of a title insurer's liability under contract is not relevant. Instead, the instant case is based on negligence. Under the circumstances presented here, holding the Title Company liable for loss of value on a theory of negligence would violate Civil Code 3333. That section limits damages for negligence to the detriment proximately caused by the Title Company's act or omission.

II

Barthels also contends the trial court erred in awarding other damages.

[3] Barthels argues that the trial court should not have stopped at the end of 1989 in calculating damages for his out of pocket expenses. But 1989 is the year Barthels discovered the defect in title. The City refused to issue a building permit, and he knew the land had no value. The trial court did not err in refusing to award damages for expenses made on land after Barthels learned it was worthless.

Barthels argues he should have been awarded damages for loss of income. But the trial court found no credible evidence Barthels lost any ***680** income. The trial court did award Barthels $10,000 for the time he spent that avoided the need to hire someone else.

[4] **[5]** **[6]** Barthels complains the trial court awarded damages for some of the time he spent, but not all. The trial court was not convinced that all the time Barthels said he ****582** spent was reasonably necessary for the development of the parcel. The trial court committed no error. Barthels simply failed to carry his burden of proof. We must treat all evidence unfavorable to the judgment as not having sufficient verity to be accepted by the trier of fact. (*GHK Associates v. Mayer Group, Inc.* (1990) 224 Cal.App.3d 856, 872, 274 Cal.Rptr. 168.) We have no power on appeal to consider the credibility of a witness or to weigh the evidence. (*Kimble v. Board of Education* (1987) 192 Cal.App.3d 1423, 1427, 238 Cal.Rptr. 160.)

[7] Barthels also complains that the amount awarded was calculated at $66.66 per hour, rather than the $200 hourly fee of a dentist. But in developing his property, Barthels was not performing the work of a dentist. Instead of compensating Barthels at the hourly rate of a dentist, the trial court properly measured compensation by the reasonable hourly rate for a person doing the type of work Barthels performed in developing his property. There was no credible evidence of the reasonable hourly rate for such work. But because Barthels had the burden of proof, if the trial court erred at all, it erred in awarding Barthels anything for his work. Thus there was no prejudice to Barthels in measuring compensation by $66.66. No reversal is warranted. (See *People v. Watson* (1956) 46 Cal.2d 818, 836, 299 P.2d 243.)

[8] Finally, Barthels claims the court erred in failing to award attorney's fees. Code of Civil Procedure section 1021 provides in part, "Except as attorney's fees are specifically provided for by statute, the measure and mode of compensation of attorneys and counselors at law is left to the agreement, express or implied, of the parties...." There being no statute or agreement providing for attorney's fees in this matter, the trial court was correct in refusing to award them.

The judgment is affirmed. Costs are awarded to respondents.

STEVEN J. STONE, P.J., and YEGAN, J., concur.

All Citations

28 Cal.App.4th 674, 33 Cal.Rptr.2d 579

End of Document

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EXHIBIT H

CITY OF SANTA BARBARA

OFFICE OF THE CITY ATTORNEY
DANIEL J. WALLACE
CITY ATTORNEY

740 STATE STREET, SUITE 501
POST OFFICE BOX 1990
SANTA BARBARA, CA 93102-1990

TELEPHONE (805) 564-5326
FAX (805) 897-2532

June 4, 1997

RECEIVED
JUN 05 1997
CITY OF SANTA BARBARA
PLANNING DIVISION

James T. Lindsey
Attorney at Law
Granada Building, Suite 402
1216 State Street
Santa Barbara, California 93101-2613

Re: 1837½ El Camino De La Luz (APN 45-100-63)

Dear Mr. Lindsey:

This letter is in response to the packages of materials you submitted to the City during our meeting of May 12, 1997 with your client, Dr. Herbert Barthels, and City Associate Planner, Susie Reardon, concerning the above-referenced parcel and Dr. Barthels's desire to file a development application for the parcel.

After reviewing all the materials submitted as well as all the materials contained within City records, including particularly the minutes of the May 1958 City Council approval of the lot split which created the parcel at 1837 1/2 Camino De La Luz, it is our conclusion that the required legal access to the parcel is not clearly and definitively established from a legal standpoint. As a result, the City cannot process an application for the development of that parcel with a single family home until you and Dr. Barthels demonstrate that the 15 foot wide easement access originally represented to the City Council as the necessary vehicular access to the parcel does in fact exist and can legally be utilized in perpetuity.

During our meeting, I understood you to represent that the agreement between Dr. Barthels and Joanna Morgan dated November 17, 1995 provided that Morgan acknowledged Barthels's right to use the westerly 7½ feet of the 15 foot wide easement which affects the Morgan property. However, in my review of the 1995 agreement, it appears to have very little to do with the 15 foot wide access easement and is mostly about the pedestrian trail bench access easement over the Barthels property which was otherwise in dispute between Morgan and Barthels. As a result, it still appears to us that the status of the 15 foot wide easement is unchanged from the stipulation filed in Morgan v. Barthels, et al. (Santa Barbara Superior Court Case No. 186256) wherein Dr. Barthels stipulated that he would "not now and will at no time in the future claim an easement over or across THE WESTERLY 7 1/2 FEET," which stipulation was signed by the parties to the litigation and executed by Judge Stevens as an order. In fact, we presume that

it was this stipulation/order which brought about Dr. Barthels prevailing in his Superior Court Case No. 182179 wherein he recovered damages from Santa Barbara Title.

Consequently, the question remains whether this parcel has the required legal access and the access which formed the basis of the City approving the original lot split in 1958. Based on my review of the "History" dated November 26, 1996 which you submitted, I am assuming that Dr. Barthels is now claiming either a prescriptive right to the 15 foot wide easement or that he has access rights by legal "necessity." While this may be the case, the City cannot assume it to be the case in the absence of any sort of final legal determination to that effect. This is particularly true where, as here, the record clearly indicates that the existence of the 15 foot easement vis-a-vis the Morgan property has been extensively litigated and, on its face, a claim of prescriptive right would otherwise seem to be barred by the legal doctrine of res judicata.

In conclusion, the City does not believe it is appropriate to process an application to develop a parcel where the parcel does not appear to satisfy a fundamental condition of its original creation, the existence of the 15 foot wide access easement for the full length necessary for vehicular access from the public street to the parcel.

Please do not hesitate to contact me should you or your client have further questions or need further assistance in this matter.

Very truly yours,

Stephen P. Wiley
Assistant City Attorney

cc: Don Olson, Asst. Community Development Director
Susie Reardon, Associate Planner

EXHIBIT I

CITY OF SANTA BARBARA

PUBLIC WORKS DEPARTMENT
630 GARDEN STREET
P.O. DRAWER P-P
SANTA BARBARA, CA 93102
TELEPHONE: (805) 564-5377

WATER
WASTEWATER
WATER SUPPLY DEVELOPMENT
TRANSPORTATION & PARKING
ENGINEERING
STREETS
SHOPS

June 27, 1989

409

Mr. H. Barthels
1809 Cliff Drive, Suite C
Santa Barbara, CA 93109

SUBJECT: 1837 1/2 EL CAMINO DE LA LUZ - COASTAL DEVELOPMENT

Dear Mr. Barthels:

To summarize your meeting on May 16, 1989 with Alex Ameri regarding the subject development, I have outlined the discussion. Included are the necessary items to complete your application for development for the Public Works Department and a partial list of the Public Works improvements.

1) Revised Access Drive Conditions drawing to reflect:

- A 16' (minimum) paved access way (excluding removal of the house on A.P.N. #45-100-46)
- Provide legend of markings on drawing
- Identify utility poles in easement
- Identify easement and centerline of access
- Identify encroachments to be removed

2) Public Works Improvements - (Partial list which is not limited to the following):

- Smoother transition driveway from El Camino De La Luz to access drive.
- Undergrounding of utilities to new development
- Repair of damage to public improvements (curb, gutter, and sidewalk, etc.)
- Improvements to access drive as necessary for safe and adequate access.

Thank you for your time, effort and cooperation.

If you have any questions please call Marti Schultz, Assistant Civil Engineer at 564-5376.

Sincerely,

Kevin J. Connors
Associate Civil Engineer

MS/ts

[D:ENGR:AABARTH.LTR]

EXHIBIT J

FILED
SANTA BARBARA
SUPERIOR COURT

SEP - 8 2009

GARY M. BLAIR, EXEC. OFFICER
By _____
ROSA REYES, Deputy Clerk

SUPERIOR COURT OF THE STATE OF CALIFORNIA

FOR THE COUNTY OF SANTA BARBARA

ANACAPA DIVISION

HERBERT E. BARTHELS, Trustee of the Herbert E. Barthels Trust dated December 9, 1985, Plaintiff, vs. RAFAEL FRANCO, as an individual and as trustee of the Franco Revocable Trust No. 1, established June 30, 1999; LINDA FRANCO, as an individual and as trustee of the Franco Revocable Trust No. 1, established June 30, 1999; BRUCE PETERSON, an individual and as trustee for the Bruce F. Peterson Revocable Living Trust, U/D/T dated April 21, 2003; HORACE L. WRIGHT, as an individual and as trustee of the Horace L. & Jerry Lu Living Trust, UTD, February 18, 1999; JERRY LU WRIGHT, as an individual and as trustee of the Horace L. & Jerry Lu Living Trust, UTD, February 18, 1999; THOMAS SLOAN, an individual; TINE F. SLOAN, an individual; and DOES 1 through 50, inclusive, Defendants.	CASE NO.: 1268293 ~~[PROPOSED]~~ STIPULATED JUDGMENT Assigned to the Hon. Thomas P. Anderele

In the above entitled case, Plaintiff is Herbert E. Barthels, Trustee of the Herbert E. Barthels Trust dated December 9, 1985, (hereinafter referred to as "Plaintiff"). Defendants and their respective properties are:

1. Rafael Franco, as an individual and as trustee of the Franco Revocable Trust No. 1, established June 30, 1999; Linda Franco, as an individual and as trustee of the Franco Revocable Trust No. 1, established June 30, 1999, owner of APN 45-100-18 ("the Franco Parcel"), whose legal description is more fully provided in Exhibit "A";

2. Bruce Peterson, an individual and as trustee for the Bruce F. Peterson Revocable Living Trust, U/D/T dated April 21, 2003 owner of APN 45-100-64 ("the Peterson Parcel"), whose legal description is more fully provided in Exhibit "B";

3. Horace L. Wright, as an individual and as trustee of the Horace L. & Jerry Lu Living Trust, UTD, February 18, 1999; Jerry Lu Wright, as an individual and as trustee of the Horace L. & Jerry Lu Living Trust, UTD, February 18, 1999 owner of APN 45-100-17 ("the Wright Parcel"), whose legal description is more fully provided in Exhibit "C";

4. Thomas Sloan, an individual and Tine F. Sloan, an individual, and each of them, owners of APN 45-100-45 ("the Sloan Parcel"), whose legal description is more fully provided in Exhibit "D."

Plaintiff and Defendants have stipulated that judgment be entered granting Plaintiff, the owner of the real property commonly known as APN 45-100-65 and more particularly described in the legal description attached hereto as Exhibit "E" (the "Dominant Tenement") easements and rights of way for road and public utility purposes ("the Easement") to be used in common with others over El Camino de la Luz Street in the City of Santa Barbara, California, and over portions of the Blanco E. Fryer Tract including Defendants' real properties. The Easement being more particularly described in the legal description attached hereto as Exhibit "F" and in the Exhibit map attached hereto as Exhibit "G". These easements are appurtenant and run with the land. They may not be transferred separately from their respective properties.

///

///

The portion of the road and utility easements that passes over each of these properties is:

(a) No wider than 7.5 feet on the Wright Property, and no wider than 7.5 feet on the Sloan Property, which when these two properties border each other the combined width does not exceed 15 feet, except for the area shown as Camino De Luz on the Record of Survey filed in Book 28, Page 124 of Record of Surveys, where the easement width shall include said Camino De Luz;

(b) No wider than 7.5 feet on the Franco Property, and no wider than 7.5 feet on the Sloan property, which when those two properties border each other the combined width does not exceed 15 feet, except that on the southern 7.14 feet of the Franco Property, the total road width does not exceed 7.5 feet.

(c) No wider than 10 feet on the Peterson Property.

(d) Any other access rights in favor of Barthels over Defendants' parcels are deemed abandoned.

There currently exists in the Easement over Defendants' parcels certain minor encroachments, which are permitted, and may not be further improved or enlarged. These encroachments are: (1) a portion of a wall on the Franco Property; (2) a planter on the Wright Property; and (3) a planter and landscaping on the Sloan Property.

IT IS HEREBY ADJUDGED, ORDERED AND DECREED that judgment be entered granting Plaintiff, Herbert E. Barthels, Trustee of the Herbert E. Barthels Trust dated December 9, 1985, the owner of the property commonly known as APN 45-100-65, easements and rights of way for road and public utility purposes to be used in common with others over El Camino de la Luz Street in the City of Santa Barbara, California, and over portions of the Blanco E. Fryer Tract including Defendants' real properties. The Easement is more particularly described in the legal description attached hereto as Exhibit "F" and in the Exhibit map attached hereto as Exhibit "G". The Easement shall run with the land.

Dated: September 4, 2009

THOMAS P. ANDERLE

The Hon. Thomas P. Anderle
JUDGE OF THE SUPERIOR COURT

Counsel for Plaintiff and cross-defendant, counsel for Defendants and cross-complainants stipulate to the foregoing judgment.

Dated: September 3, 2009

HOLLISTER & BRACE

By Marcus Bird,
Counsel for Plaintiff and Cross-Defendant.

Dated: September 3, 2009

HAWS, RECORD & MAGNUSSON, LLP

David W. Magnusson,
Counsel for Defendants and Cross-Complainants.

RECORDING REQUESTED BY:

Law Offices of Robert M. Triplett
223 E. Thousand Oaks Blvd., Suite 320
Thousand Oaks, California 91360

AND WHEN RECORDED MAIL TO:

Law Offices of Robert M. Triplett
223 E. Thousand Oaks Blvd., Suite 320
Thousand Oaks, California 91360

3

1999-0069104

Recorded
Official Records
County Of
SANTA BARBARA
KENNETH A. PETITI
Recorder
LARRY E. NEWBERG
Assistant
08:02PM 01-Sep-1999

REC FEE 13.00
REC
Page 1 of 3

APN: 45-100-13

TRUST TRANSFER DEED

The undersigned grantor(s) declare(s):
Documentary transfer tax is $ None - Rev & Tax Code Sec. 11911 (Transfer to Revocable trust)
( ) computed on full value of property conveyed, or
( ) computed on full value less value of liens and encumbrances remaining at time of sale.
( ) Unincorporated area: ( ) City of _____, and

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged

RAFAEL FRANCO and LINDA LLOYD FRANCO, husband and wife,

hereby GRANT(S) to

RAFAEL FRANCO and LINDA L. FRANCO, Trustees of the FRANCO REVOCABLE TRUST NO. 1 established June 30, 1999,

the following described real property in the City of Santa Barbara, County of Santa Barbara, State of California:

LEGAL DESCRIPTION ATTACHED HERETO ON EXHIBIT "A" AND MADE A PART HEREOF.

Also commonly known as 1825 El Camino de la Luz, Santa Barbara, CA 93109

Dated: June 30, 1999

RAFAEL FRANCO

Dated: June 30, 1999

LINDA LLOYD FRANCO

STATE OF CALIFORNIA
COUNTY OF VENTURA

On June 30, 1999, CHERYL M. HALL, a Notary Public, personally appeared RAFAEL FRANCO and LINDA LLOYD FRANCO, personally known to me (or proved to me on the basis of satisfactory evidence) to be the persons whose names are subscribed to the within instrument and acknowledged to me that they executed the same in their authorized capacities), and that by their signatures on the instrument the persons, or the entity upon behalf of which the persons acted, executed the instrument.

WITNESS my hand and official seal.

Signature _____

MAIL TAX STATEMENTS TO:
Mr. and Mrs. Rafael Franco
1825 El Camino de la Luz
Santa Barbara, CA 93109

CHERYL M. HALL
Commission # 1107774
Notary Public - California
Ventura County
My Comm. Expires Aug 8, 2000

CHERYL M. HALL
Commission # 1107774
Notary Public - California
Ventura County
My Comm. Expires Aug 8, 2000

EXHIBIT A

EXHIBIT "A"

F Franco

All that certain land situated in the City of Santa Barbara, County of Santa Barbara, State of California, described as follows:

PARCEL ONE:

That portion of the Outside Pueblo Lands of the City of Santa Barbara, on La Mesa (so-called) in the City of Santa Barbara, County of Santa Barbara, State of California, described as follows:

Beginning at a 3/4 inch survey pipe set at the most Northwesterly corner of the tract of land described in the Deed from Carina Fryer, et al., to C.L. Vivian, dated September 7, 1944, and recorded in Book 619, Page 141 of Official Records, records of said County; thence South 5°16' West along the Westerly line of said C.L. Vivian Tract of Land 175.74 feet to its intersection with the center line of a fifty foot road; thence along the center line of said fifty foot road, South 79°38' East, 562.23 feet to a point; thence at right angles South 10°22' West 25.00 feet to a 3/4 inch survey pipe set on the Southerly line of said fifty foot road; thence along the Southerly line of said road South 34°38' East 93.17 feet to a 3/4 inch survey pipe set on the center line of a 15 foot road Easement; thence along the center line of said 15 foot road Easement South 5°16' West 35.61 feet to a 3/4 inch survey pipe and the true point of beginning of the tract of land herein described; thence continuing along the center line of said 15 foot road Easement South 5°16' West 55.00 feet to a 3/4 inch survey pipe; thence at right angles and leaving the center line of said last mentioned road Easement South 84°44' East 151.43 feet to a 3/4 inch survey pipe in a ravine, being a point in the Easterly line of the tract of land described in Deed to C.L. Vivian, above mentioned, from which 3/4 inch survey pipe set at an angle point in said Easterly line of said C.L. Vivian Tract bears South 18°25' West 12.54 feet distant; thence up said ravine along the Easterly line of said last mentioned tract of land North 18°25' East 56.48 feet to a 3/4 inch survey pipe; thence leaving said ravine, North 84°44' West 164.28 feet to the true point of beginning.

PARCEL TWO:

A right of way for road purposes and for the installation, maintenance and repair of public utilities over, under, upon or through a strip of land described as follows:

Beginning at the Northwest corner of Parcel One above described and running thence along the Westerly line of said Parcel One, and the center line of the 15 foot Easement mentioned in said Parcel One above, South 5°16' West 55.0 feet to a 3/4 inch survey pipe; thence at right angles South 84°44' East 7.50 feet to a 3/4 inch survey pipe set on the Easterly line of said 15 foot Easement above mentioned; thence at right angles and along the Easterly line of said 15 foot Easement South 5°16' West 15.00 feet to a point; thence at right angles North 84°44'West 15.00 feet to a point on the Westerly line of said Easement; thence at right angles and along the Westerly line of said Easement North 5°16' East 114.69 feet to a point; thence North 34°38' West 93.17 feet to a 3/4 inch survey pipe set on the Southerly line of the 50 foot road first above mentioned in Parcel One; thence North 10°22' East 25.00 feet to a point on the center line of said 50 foot road; thence North 11°18'50" East 25.00 feet to a 3/4 inch survey pipe set on the Northerly line of said 50 foot road; thence along said Northerly line of said road South 77°48'20" East 62.90 feet to a point; thence South 5°16' West 149.23 feet to a 3/4 inch survey pipe set on the Northerly line of Parcel One above described; thence at right angles and along the Northerly line of said Parcel One North 84°44'West 7.50 feet to the point of beginning.

EXHIBIT "A"

(continued)

PARCEL THREE:

A right of way for road purposes and for the installation, maintenance and repair of public utilities over, under, upon or through a strip of land 50 feet in width lying 25 feet on each side of the following described line:

Beginning at the Northerly end of the course described in Parcel Two above as North 10°22' East 25.00 feet; being a point in the center line of the 50 foot road above referred to; thence North 79°38' West along the center line of said 50 foot road, 562.23 feet to a point on the Westerly line of the tract of land described in Deed to C.L. Vivian above mentioned, from which the Northwesterly corner thereof bears North 5°16 East 175.74 feet distant; thence North 79°38' West continuing along the center line of said 50 foot road above mentioned 446.83 feet to a point on the Easterly line of Oliver Road.

The property herein described is shown together with other property on a Map of Survey filed in the office of the County Recorder of said County on October 18, 1948 as Instrument No. 14628 in Book 29, Page 25.

RECORDING REQUESTED BY

Bruce F. Peterson

WHEN RECORDED MAIL THIS DEED
AND TAX STATEMENTS TO:

Bruce F. Peterson
1837 El Camino De La Luz
Santa Barbara, CA 93109

2

2003-0052232

Recorded
Official Records
County Of
SANTA BARBARA
JOSEPH E. HOLLAND
Recorder

REC FEE 10.00

03:26PM 24-Apr-2003

FNM
Page 1 of 2

APN 045-100-64

GRANT DEED

THE UNDERSIGNED GRANTOR(s) DECLARE(s)
DOCUMENTARY TRANSFER TAX IS $-0- Conveyance into Trust for benefit of Grantor
☐ Computed on full value of property conveyed, or
☐ Computed on full value less liens or encumbrances remaining at time of sale
☐ Unincorporated area ☐ City of Santa Barbara

FOR VALUABLE CONSIDERATION, receipt of which is hereby acknowledged

Bruce F. Peterson, a married man, dealing with his sole and separate property

hereby GRANT(S) to

Bruce F. Peterson, Trustee of the Bruce F. Peterson Revocable Living Trust U/D/T dated April 21, 2003

the following described real property in the City of Santa Barbara, County of Santa Barbara, State of California:

LEGAL DESCRIPTION ATTACHED HERETO AND MADE A PART HEREOF AS EXHIBIT "A".

Dated: April 21, 2003

Bruce F. Peterson

STATE OF CALIFORNIA)
) SS.
COUNTY OF SANTA BARBARA)

On this 21st day of April, 2003, before me, the undersigned, a Notary in and for said County and State, personally appeared Bruce F. Peterson, personally known to me or ☒ proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to this instrument and acknowledged that he executed the same in his authorized capacity and that by his signature on the instrument the person or the entity on behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Ellen Quinn

ELLEN QUINN
Commission # 1488389
Notary Public - California
Santa Barbara County
My Comm. Expires Feb 28, 2007

America's Documents LDA #0013, Santa Barbara County

EXHIBIT B

EXHIBIT "A"

Peterson

DESCRIPTION:

PARCEL ONE:

That portion of the land in the City of Santa Barbara, County of Santa Barbara, State of California discribed in Quitclaim Deed to Gertrude E. Eaton, recorded July 17, 1962 as Instrument No. 29640 in Book 1941, Page 1400 of Official Records of said County, described as follows:

Beginning at a point in the Westerly line of said Eaton Tract distant thereon South 05°16'00" West 145.77 feet from the Northwest corner thereof, being the Northwest corner of the land described in Parcel One in deed to Ed R. Brewer, et ux., recorded November 29, 1966 as Instrument No. 37841 in Book 2173, Page 765 of Official Records of said County; thence along the Westerly line of said Eaton Tract North 05°16'00" East 145.77 feet to the Northwest corner thereof; thence along the boundary of said Eaton Tract the following courses and distances: South 84°44'00" East 151.43 feet; South 18°25' West 12.54 feet; South 83°21' East 57.76 feet; South 31°32' West 43.00 feet; and South 38°33' West 45.34 feet to the Northeast corner of the hereinabove mentioned Brewer Tract; thence along the Northerly line of said Brewer Tract North 84°44' West 113.35 feet to the point of beginning.

Said land is shown with other land on Map recorded in Book 43, Page 84 of Records of Surveys of said County.

PARCEL TWO:

An easement and right of way for road and public utility purposes to be used in common with others, over El Camino de Luz as shown on a Map of Survey of the Blanco F. Fryer Tract, filed in Book 28, Page 124 of Record of Surveys, in the office of the County Recorder of Santa Barbara County.

EXCEPTING therefrom that portion described in the deed to the City of Santa Barbara, recorded September 13, 1954 as Instrument No. 15709 in Book 1267, Page 156 of Official Records of Santa Barbara County.

PARCEL THREE:

An easement and right of way for road and utility purposes over a strip of land 15.00 feet in width, the center line being described as follows:

Beginning at the Northwest corner of the hereinabove described Parcel One; thence North 05°16' East 205.18 feet to a 1/2 inch survey pipe set at the extreme Easterly end of the Northerly line of said El Camino de Luz as shown on a Map of Survey of the Blanco F. Fryer Tract, filed in Book 28, Page 124 of Record of Surveys, in the office of the County Recorder of Santa Barbara County.

EXCEPTING therefrom any portion included within the lines of Parcel Two hereinabove described.

PARCEL FOUR:

An easement for walk, walkway and path for the purposes of access to and from beach below, over the Westerly 3 feet of the land described as Parcel One in the deed to Ed R. Brewer, et ux., recorded November 29, 1966 as Instrument No. 37841 in Book 2173, Page 765 of Official Records of Santa Barbara County.

3' Westerly

99-040426 | Rec Fee 11.00
Recorded | AU2 2.00
Official Records | Check 13.00
Co Santa Barbara |
Kenneth A Pettit |
Recorder |
Larry Herrera |
Assistant |
3:56pm 18-May-99 | PUBL KM 3

Recording requested by:
We The People

When recorded return to:
Horace L. Wright & Jerry Lu Wright
1833 El Camino De La Luz
Santa Barbara, CA 93109

APN: 045-100-017
Documentary transfer tax $0, not subject to tax

Correcting Quitclaim Deed

This document is to correct the quitclaim deed recorded on February 25, 1999, as Instrument No. 99-015326.

The following is the correct information:

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, Horace L. Wright and Jerry Lu Wright, husband and wife, as community property,

hereby grant to the Horace L. Wright and Jerry Lu Wright Living Trust, UTD, February 18, 1999, Horace L. Wright and Jerry Lu Wright, Trustees,

the real property in the County of Santa Barbara, State of California, described as:

LEGAL DESCRIPTION PER EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF
With all appurtenances, subject to covenants, easements and restrictions of record.

Commonly known as: 1833 El Camino De La Luz, Santa Barbara, CA 93109

DATED: May 18, 1999 Horace L. Wright
Horace L. Wright

DATED: May 18, 1999 Jerry Lu Wright
Jerry Lu Wright

Mail tax statement as shown above

EXHIBIT C

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California

County of Santa Barbara } ss.

On 5/18/99 before me, JANE DAVENPORT, NOTARY PUBLIC
(Date) (Name and Title of Officer (e.g., "Jane Doe, Notary Public"))

personally appeared Horace L. Wright, Sherry L. Wright
(Name(s) of Signer(s))

☐ personally known to me

☒ proved to me on the basis of satisfactory evidence

to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

JANE DAVENPORT
COMM # 1112435
NOTARY PUBLIC - CALIFORNIA
SANTA BARBARA COUNTY
My Comm. Exp. JAN 20, 2001

WITNESS my hand and official seal.

(Place Notary Seal Above)

Jane Davenport
(Signature of Notary Public)

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document: Correcting Quitclaim Deed

Document Date: 5/18/99 Number of Pages: 2

Signer(s) Other Than Named Above: None

Capacity(ies) Claimed by Signer

Signer's Name: _____

☐ Individual

☐ Corporate Officer — Title(s): _____

☐ Partner — ☐ Limited ☐ General

☐ Attorney In Fact

☐ Trustee

☐ Guardian or Conservator

☐ Other: _____

Signer Is Representing: _____

Top of thumb here

© 1997 National Notary Association • 9350 De Soto Ave., P.O. Box 2402 • Chatsworth, CA 91313-2402 Prod. No. 5907 Reorder: Call Toll-Free 1-800-876-6827

EXHIBIT A

THOSE PORTIONS OF THE OUTSIDE PUEBLO LANDS OF THE CITY OF SANTA BARBARA ON THE MESA, SO-CALLED, IN THE CITY OF SANTA BARBARA, COUNTY OF SANTA BARBARA, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

PARCEL ONE:

BEGINNING AT A 3/4 INCH SURVEY PIPE SET AT THE MOST NORTHWESTERLY CORNER OF THE TRACT OF LAND DESCRIBED IN THE DEED TO C. L. VIVIAN FROM CARLEN FRYER AND ROBERT E. EMMERT, DATED SEPTEMBER 2, 1944, AND RECORDED IN BOOK 615 AT PAGE 141 OF OFFICIAL RECORDS; THENCE SOUTH 5°16' WEST ALONG THE WESTERLY LINE OF THE SAID C. L. VIVIAN PROPERTY 150.63 FEET TO A 3/4 INCH SURVEY PIPE SET ON THE NORTHERLY SIDE OF A 50 FOOT ROAD EASEMENT, KNOWN AS EL CAMINO DE LUZ; THENCE SOUTH 78°38' EAST ALONG THE NORTHERLY LINE OF SAID EL CAMINO DE LUZ 564.86 FEET TO A 3/4 INCH SURVEY PIPE SET AT AN ANGLE POINT; THENCE SOUTH 77°48'20" EAST CONTINUING ALONG THE NORTHERLY LINE OF SAID EL CAMINO DE LUZ 55.34 FEET TO A 3/4 INCH SURVEY PIPE SET AT THE MOST NORTHEASTERLY CORNER OF THE SAID 50 FOOT ROAD EASEMENT AND THE TRUE POINT OF BEGINNING OF THE TRACT OF LAND HEREIN DESCRIBED, BEING NORTHEAST CORNER OF THE TRACT OF LAND DESCRIBED IN DEED TO A. L. KIEWELE, ET UX., RECORDED DECEMBER 10, 1947 IN BOOK 762 AT PAGE 304 OF OFFICIAL RECORDS; THENCE 1ST, SOUTH 77°48'20" EAST ALONG THE NORTHERLY LINE OF SAID EL CAMINO DE LUZ PRODUCED EASTERLY 70.94 FEET, MORE OR LESS, TO A 3/4 INCH SURVEY PIPE SET IN A RAVINE, BEING A POINT ON THE EASTERLY LINE OF THE TRACT OF LAND DESCRIBED IN DEED TO C. L. VIVIAN ABOVE MENTIONED; THENCE 2ND, SOUTH 40°45' EAST DOWN GENERAL COURSE OF SAID RAVINE, ALONG THE EASTERLY LINE OF SAID VIVIAN TRACT OF LAND, 73.01 FEET TO A 1/2 INCH SURVEY PIPE; THENCE 3RD SOUTH 39°38' EAST DOWN SAID RAVINE, ALONG THE EASTERLY LINE OF SAID VIVIAN TRACT OF LAND, 71.92 FEET TO A 1/2 INCH SURVEY PIPE; THENCE 4TH, SOUTH 18°55' WEST DOWN SAID RAVINE, ALONG THE EASTERLY LINE OF SAID VIVIAN TRACT OF LAND 40.91 FEET TO A 1/2 INCH SURVEY PIPE, SET AT THE MOST NORTHEASTERLY CORNER OF THE TRACT OF LAND DESCRIBED IN DEED TO A. L. KIEWELE, ET UX., RECORDED JULY 31, 1948, IN BOOK 795 AT PAGE 46 OF OFFICIAL RECORDS; THENCE 5TH, NORTH 84°44' WEST LEAVING SAID RAVINE AND FOLLOWING ALONG THE NORTHERLY LINE OF SAID KIEWELE TRACT OF LAND 164.28 FEET TO A POINT ON THE CENTER LINE OF A 15 FOOT PRIVATE ROAD EASEMENT FROM WHICH A 1/2 INCH SURVEY PIPE SET ON THE EASTERLY SIDE OF SAID EASEMENT BEARS SOUTH 84°44' EAST 7.50 FEET DISTANT, ALSO BEING THE EASTERLY LINE OF SAID TRACT OF LAND DESCRIBED IN SAID DEED TO A. L. KIEWELE, ET UX., RECORDED DECEMBER 10, 1947, IN BOOK 762 AT PAGE 304 OF OFFICIAL RECORDS; THENCE 6TH, NORTH 5°16' EAST AT RIGHT ANGLES FOLLOWING ALONG THE CENTERLINE OF SAID ROAD EASEMENT AND THE EASTERLY LINE OF SAID LAST MENTIONED TRACT OF LAND 150.18 FEET TO THE TRUE POINT OF BEGINNING.

PARCEL TWO:

AN EASEMENT FOR INGRESS AND EGRESS AND THE INSTALLATION, MAINTENANCE, AND REPAIR OF PUBLIC UTILITIES IN, ON, OVER, UNDER, OR UPON EL CAMINO DE LUZ, AS SHOWN ON MAP OF THE BLANCO E. FRYER TRACT FILED IN BOOK 28 AT PAGE 126 OF RECORD OF SURVEYS.

RECORDING REQUESTED BY
FIRST AMERICAN TITLE

Order No.
Escrow No. 1401638-RCR
Loan No.

WHEN RECORDED MAIL TO:

Thomas C. Sloan
1841 El Camino De La Luz
Santa Barbara, CA 93109

93-087145 : Rec Fee 17.00
: FCO 20.00
Recorded : Total 37.00
Official Records :
County of :
Santa Barbara :
Kenneth A Pettit :
Recorder :
8:00am 3-Nov-93 : F4TC BC 5

MAIL TAX STATEMENTS TO:

SAME AS ABOVE

Parcel No.: 045-100-45

DOCUMENTARY TRANSFER TAX $ -0- Consideration Less Than $100.00
— Computed on the consideration or value of property conveyed; OR
— Computed on the consideration or value less liens or encumbrances remaining at time of sale.
Signature of Declarant or Agent determining tax — Firm Name

FOR VESTING PURPOSES ONLY

QUITCLAIM DEED

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged. Thomas C. Sloan and Tine F. Sloan, husband and wife, as community property, as to an undivided 50% interest and Esther F. Sloan, an unmarried woman, as to an undivided 50% interest, all as tenants-in-common

do hereby REMISE, RELEASE AND FOREVER QUITCLAIM to

THOMAS C. SLOAN and TINE F. SLOAN, husband and wife, as community property

the real property in the City of Santa Barbara
County of Santa Barbara, State of California, described as

SEE LEGAL DESCRIPTION ATTACHED HERETO AND MADE A PART HEREOF AS EXHIBIT "A"

Dated October 8, 1993

Thomas C. Sloan
Thomas C. Sloan
Esther F. Sloan
Esther F. Sloan
Tine F. Sloan
Tine F. Sloan

STATE OF CALIFORNIA
COUNTY OF Santa Barbara } ss

On October 8, 1993 before me,
Catherine Ann Nevarez
personally appeared **Thomas C. Sloan**

personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.
Signature
CATHERINE ANN NEVAREZ

Catherine Ann Nevarez
Comm. #1000843
NOTARY PUBLIC - CALIFORNIA
Santa Barbara County
Expires June 10, 1995

(This area for official notarial seal)

MAIL TAX STATEMENTS AS DIRECTED ABOVE

1083 (1/91)

EXHIBIT D

Sloan

DESCRIPTION:

All that certain land situated in the City of Santa Barbara, County of Santa Barbara, State of California, described as follows:

PARCEL ONE:

That portion of the Outside Pueblo Lands of the City of Santa Barbara, on La Mesa so-called in the City of Santa Barbara, County of Santa Barbara, State of California, described as follows:

Beginning at a 3/4 inch survey pipe set at the Northwesterly corner of the tract of land described in Deed to C.L. Vivian from Carina Fryer and Robert S. Emmert, dated September 2, 1944, and recorded in Book 619 at Page 141 of Official Records of said County, thence South 5°16' West along the Westerly line of said C.L. Vivian property 175.74 feet to a point on the center line of a 50 foot road, thence South 79°38' East along the center line of said 50 foot road 560.00 feet to the true point of beginning of the tract of land herein described said corner being the Northeast corner of Parcel One described in Deed to Whitford G. Kelley et ux., dated August 5, 1946 and recorded in Book 698, at Page 426 of Official Records of said County from which a 3/4 inch survey pipe set on the Southerly side of said 50 foot road bears South 5°16' West 25.11 feet distant thence South 5°16' West along the Easterly line of said Kelley Tract of land 180 feet, thence at right angles East 59.76 feet to the Easterly line of the Tract of land described in deed to A.L. Kienzle et ux., recorded December 10, 1947 in Book 767 at Page 304 of Official Records, records of said County thence North 5°16' East parallel with the Easterly line of said Kelley Tract and distant 59.76 feet Easterly therefrom and along the Easterly line of said Kienzle Tract to the Northeast corner thereof being a point on the Southerly line of the Tract of land described as Parcel One deed to A.L. Kienzle et ux., recorded in Book 732 at Page 416 of Official Records, records of said County, thence North 77°48'20" West, along the Southerly line of said last mentioned Kienzle Tract 54.94 feet thence South 12°11'40" West, continuing along the line of said last mentioned Kienzle Tract 25.00 feet to the center line of a 50 foot road, thence North 79°38' West along the center line of said 50 foot 2.23 feet to the true point of beginning.

PARCEL TWO:

A right of way for road purposes and for the installation, maintenance and repair of public utilities over, under, upon the or through a strip of land 50 feet in width, lying 25 feet on each side of the following described line:

Continued...

Beginning at the Easterly end of the last course of Parcel One above described on the center line of the said 30 foot road, thence North 79°38' West 362.23 feet to a point on the Westerly line of said tract of land described in Deed to C.L. Vivian above referred to from which the most Northwesterly corner of same bears North 5°16' East 175.74 feet distant thence North 79°38' West, continuing along the center line of said road 446.83 feet to the Easterly line of Oliver Road.

PARCEL THREE:

A right of way for road purposes for the installation, maintenance and repair of public utilities as granted by deed recorded December 10, 1947 as Instrument No. 16515 in Book 762, Page 304 of Official Records over, under, upon or through a strip of land 7.50 feet in width lying parallel with adjacent to and Easterly of the following described line:

Beginning at the Northeast corner of the tract of land described in Deed to A.L. Kienzle et ux., filed for record December 10, 1947, in Book 762, at Page 304 of Official Records in the office of the County Recorder of said County thence South 5°16' West along the Easterly line of said Kienzle Tract 205.18 feet.

PARCEL FOUR:

A non-exclusive easement for pedestrian ingress and egress, on and under over a strip of land 3 feet in width along the Westerly property line of that certain parcel of land described as follows:

That portion of the land in the County of Santa Barbara, State of California, described in Quitclaim Deed to Gertrude E. Eaton, recorded July 17, 1962, as Instrument No. 29640 in Book 1941, Page 1400 of Official Records of said County, described as follows:

Beginning at a point in the Westerly line of said Eaton Tract distant thereon South 05°16'00" West 145.77 feet from the Northwest corner thereof, being the Northwest corner of the land described in Parcel 1 in deed to Ed R. Brewer, et ux., recorded November 29, 1956, as Instrument No. 37841, in Book 2173, Page 763, of Official Records of said County; thence along the Westerly line of said Eaton Tract North 05°16'00" East 145.77 feet to the Northwest corner thereof; thence along the boundary of said Eaton Tract the following courses and distances; South 84°44'00" East 151.43 feet; South 18°25' West 12.54 feet; South 03°21' East 57.78 feet; South 31°32' West 43.00 feet; and South 38°33' West 45.34 feet to the Northeast corner of the hereinabove mentioned Brewer Tract North 84°44' West 113.35 feet to the point of beginning.

STATE OF OREGON,
County of Lane } ss.

FORM NO. 23 — ACKNOWLEDGMENT

BE IT REMEMBERED, That on this 18th day of October, 1993 before me, the undersigned, a Notary Public in and for said County and State, personally appeared the within named Esther F. Sloan

known to me to be the identical individual described in and who executed the within instrument and acknowledged to me that she executed the same freely and voluntarily.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my official seal the day and year last above written.

OFFICIAL SEAL
N L HOLEMAN
NOTARY PUBLIC - OREGON
COMMISSION NO 021882
MY COMMISSION EXPIRES FEB 02, 1997

N L Holeman
Notary Public for Oregon.
My Commission expires 2-2-97

STATE OF CALIFORNIA
COUNTY OF Santa Barbara

On 10-22-93 before me, Catherine Ann Nevarez

personally appeared **Tine F. Sloan****

_____ personally known to me (or proved

to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature _____

CATHERINE ANN NEVAREZ

Catherine Ann Nevarez
Comm. #990882
NOTARY PUBLIC - CALIFORNIA
Santa Barbara County
Comm. Expires Jun 15, 1997

(This area for official notarial seal)

RECORDING REQUESTED BY

KENNETH A. PETTIT
CLERK-RECORDER
SANTA BARBARA CO. CA
1987-085611
1987 NOV 17 AM 10 36

AND WHEN RECORDED MAIL TO

Name
Street Address
City & State

Herbert E. Barthels, DDS
1851 Cliff Drive
Santa Barbara, CA 93109

1 11/17/87 [illegible] RE
2 11/17/87 1.00 RE
2 11/17/87 2.00 AU

MAIL TAX STATEMENTS TO

Name
Street Address
City & State

Herbert E. Barthels, DDS
1851 Cliff Drive
Santa Barbara, CA 93109

2

SPACE ABOVE THIS LINE FOR RECORDER'S USE

Trust Transfer Deed

TTD #16 HF — THIS FORM FURNISHED BY TRUSTORS SECURITY SERVICE — 161874

Grant Deed (Excluded from Reappraisal Under Proposition 13, i.e., Calif. Const. Art 13A§1 et. seq.)

The undersigned Grantor(s) declare(s) under penalty of perjury that the following is true and correct:
THERE IS NO CONSIDERATION FOR THIS TRANSFER.

Documentary transfer tax is $ -0-
☐ Computed on full value of property conveyed, or ☐ Computed on full value less value of liens and encumbrances remaining at time of sale or transfer.
☐ There is no Documentary transfer tax due (state reason and give Code § or Ordinance number) _____

☐ Unincorporated area: ☐ City of _____ and
This is a Trust Transfer under §62 of the Revenue and Taxation Code and Grantor(s) has (have) checked the applicable exclusion:
☒ Transfer to a revocable trust;
☐ Transfer to a short-term trust not exceeding 12 years with trustor holding the reversion;
☐ Transfer to a trust where the trustor or the trustor's spouse is the sole beneficiary;
☐ Change of trustee holding title;
☐ Transfer from trust to trustor or trustor's spouse where prior transfer to trust was excluded from reappraisal and for a valuable consideration, receipt of which is acknowledged.
☐ Other: _____

Assessor Identification Number: MAP BOOK 75 PAGE 100 PARCEL 65

GRANTOR(S): HERBERT E. BARTHELS, an unmarried man
hereby GRANT(S) to HERBERT E. BARTHELS, as Trustee of the HERBERT E. BARTHELS TRUST dated December 3, 1985.

the following described real property in the unincorporated
County of Santa Barbara, State of California:

Per legal description attached hereto and made a part hereof.

Dated 10/17/87
11/4/87

Herbert E. Barthels
Herbert E. Barthels
Grantor - Transferor(s)

State of California
County of Santa Barbara
On this the 4th day of November 1987,
before me, Cheryl A. Reynolds
the undersigned Notary Public, personally appeared
Herbert E. Barthels
☐ personally known to me
☒ proved to me on the basis of satisfactory evidence
to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged that he/she/they executed it.
WITNESS my hand and official seal.

Cheryl A. Reynolds
Notary Signature

OFFICIAL SEAL
CHERYL A. REYNOLDS
NOTARY PUBLIC - CALIFORNIA
SANTA BARBARA COUNTY
My comm. expires MAY 18, 1990

(This area for official notarial seal)

Title Order No. _____ Escrow, Loan or Attorney File No. _____

MAIL TAX STATEMENTS AS DIRECTED ABOVE

EXHIBIT E

LEGAL DESCRIPTION

THAT PORTION OF THE OUTSIDE PUEBLO LANDS OF THE CITY OF SANTA BARBARA ON THE MESA, SO-CALLED, IN THE CITY OF SANTA BARBARA, COUNTY OF SANTA BARBARA, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

PARCEL ONE:

BEGINNING AT A 1/2 INCH IRON SURVEY PIPE SET ON THE NORTHERLY LINE OF EL CAMINO DE LA LUZ AT THE EXTREME EASTERLY END THEREOF, AS SAID EL CAMINO DE LA LUZ IS SHOWN ON A MAP OF SURVEY OF THE BLANCO E. FRYER TRACT FILED IN BOOK 28 AT PAGE 124 OF RECORD OF SURVEYS; THENCE ALONG THE SOUTHERLY PROLONGATION OF THE EASTERLY LINE OF SAID EL CAMINO DE LA LUZ AS SHOWN ON SAID MAP, SOUTH 5°16' WEST 358.95 FEET TO THE TRUE POINT OF BEGINNING; THENCE SOUTH 5°16' WEST 170.77 FEET, TO THE LINE OF MEAN HIGH TIDE OF THE PACIFIC OCEAN; THENCE NORTH 87°31' EAST 172.46 FEET TO A POINT; THENCE NORTH 4°26' EAST 38.70 FEET TO A 1/2 INCH SURVEY PIPE; THENCE NORTH 22°02' WEST 37.85 FEET TO A 1/2 INCH SURVEY PIPE; THENCE NORTH 54°01' WEST 63.70 FEET TO A 1/2 INCH SURVEY PIPE; THENCE NORTH 38°33' EAST 27.36 FEET TO A 1/2 INCH SURVEY PIPE; THENCE NORTH 87°44' WEST 133.35 FEET TO THE TRUE POINT OF BEGINNING.

EXCEPTING THEREFROM ANY PORTION OF SAID LAND, WHICH AT ANY TIME WAS TIDE LAND, WHICH WAS NOT FORMED BY THE DEPOSIT OF ALLUVION FROM NATURAL CAUSES AND BY IMPERCEPTIBLE DEGREES.

PARCEL TWO:

AN EASEMENT AND RIGHT OF WAY FOR ROAD AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS, OVER SAID EL CAMINO DE LA LUZ AS SHOWN ON SAID MAP OF THE BLANCO E. FRYER TRACT, ABOVE REFERRED TO.

PARCEL THREE:

AN EASEMENT AND RIGHT OF WAY FOR ROAD AND PUBLIC UTILITY PURPOSES OVER A STRIP OF LAND 15 FEET IN WIDTH, THE CENTER LINE OF WHICH IS DESCRIBED AS FOLLOWS:

BEGINNING AT THE TRUE POINT OF BEGINNING OF THE PARCEL ONE HEREINABOVE DESCRIBED; THENCE NORTH 5°16' EAST 359.97 FEET TO SAID 1/2 INCH SURVEY PIPE SET AT THE EXTREME EASTERLY END OF THE NORTHERLY LINE OF SAID EL CAMINO DE LA LUZ AS SHOWN ON SAID MAP.

PARCEL FOUR:

AN EASEMENT AND RIGHT OF WAY FOR ROAD AND PUBLIC UTILITY PURPOSES OVER A STRIP OF LAND 2 1/2 FEET IN WIDTH, THE EASTERLY LINE OF SAID 2 1/2 FOOT STRIP BEING A PARALLEL TO AND 2 1/2 FEET EASTERLY

CONTINUED . . . . .

OF THE EASTERLY LINE OF THE EASEMENT AND RIGHT OF WAY DESCRIBED AS PARCEL THREE ABOVE; THE SOUTHERLY TERMINUS OF SAID 2 1/2 FOOT STRIP BEING THE NORTHERLY LINE OF PARCEL ONE HEREINABOVE DESCRIBED, AND THE NORTHERLY TERMINUS OF SAID 2 1/2 FOOT STRIP BEING THE NORTHERLY LINE OF PARCEL ONE AS DESCRIBED IN DEED TO GERTRUDE E. EATON RECORDED MARCH 17, 1961 AS DOCUMENT NO. 9053 IN BOOK 1834, PAGE 752, OFFICIAL RECORDS, OF SANTA BARBARA COUNTY.

THE LAND ABOVE DESCRIBED IS SHOWN TOGETHER WITH OTHER PROPERTY ON A MAP OF A SURVEY FILED DECEMBER 15, 1947 IN BOOK 28 AT PAGE 124 OF RECORD OF SURVEYS, RECORDS OF SAID COUNTY.

ARCORDER'S MEMO: Legibility of writing, typing or printing UNSATISFACTORY in this document when received.

EXHIBIT

Legal Description
(Barthel Access)

Parcel One:

An easement and right of way for road and public utility purposes to be used in common with others, over El Camino de la Luz, as shown on the map of the Blanco E. Fryer Tract, in the City of Santa Barbara, County of Santa Barbara, State of California, filed in Book 28, Page 124 of Record of Surveys, in the Office of the County Recorder of said County.

Parcel Two:

An easement and right of way for road and public utility purposes over that portion of the Blanco E. Fryer Tract, in the City of Santa Barbara, County of Santa Barbara, State of California as shown on the map thereof filed in Book 28, Page 124 of Record of Surveys, in the Office of the County Recorder of said County, described as follows:

Beginning at the northeast corner of El Camino de Luz, now know as El Camino de la Luz, as shown on said map:

Thence South 84°44' East, perpendicular to the easterly line of said El Camino de Luz, 7.50 feet to a line parallel with and 7.50 feet easterly of said easterly line and the northeasterly corner of the land described as Parcel Three and One/Half in a deed granted to Ed R. Brewer, et ux. recorded November 29, 1966 in Book 2173, Page 765 of Official Records;

Thence South 05°16' West, along said parallel line and its southerly extension 204.27 feet to its intersection with the northerly line of the land described as Parcel One, in a deed granted to Fred A. Eaton, et ux. recorded November 10, 1949 in Book 883, Page 328 of Official Records;

Thence South 84°44' East, along the northerly line of said Parcel One granted to Fred A. Eaton, et ux., 2.50 feet to the northeasterly corner of Parcel Four described in said deed granted to Ed R. Brewer, et ux.;

Thence South 05°16' West, along the easterly line of said Parcel Four, 145.78 feet to the northerly line of the land described as Parcel One in said deed granted to Ed R. Brewer, et ux.;

Thence North 84°44' West, along the northerly line of said last mentioned Parcel One, 10.00 feet to the northwesterly corner of said last mentioned Parcel One and a point on the westerly line of said Parcel One granted to Fred A. Eaton, et ux.;

PROFESSIONAL LAND SURVEYOR
DONALD R. POPPE
No. 7452
EXPIRES 12-31-09
5-22-09
STATE OF CALIFORNIA

EXHIBIT F

Thence North 5°16' East, along said last mentioned westerly line, 145.77 feet to the northwest corner of said Parcel One granted to Fred A. Eaton;

Thence North 5°16' East, along the easterly line of the land described as Parcel One in a deed granted to Joanna K. Morgan, recorded April 1, 1988 as Instrument No. 88-019204 of Official Records, 7.14 feet to the northeast corner of said last mentioned Parcel One;

Thence North 84°44' West, along the northerly line of said last mentioned Parcel One, 7.50 feet to a line parallel with and 7.50 feet easterly of the easterly line of said Camino de Luz;

Thence North 5°16' East, along said last mentioned parallel, 92.55 feet, more or less, to its intersection with the southerly line of said Camino de Luz;

Thence South 34°38' East, along the southerly line of said Camino de Luz, 11.78 feet to the southeast corner of said Camino de Luz;

Thence North 5°16' East, along the easterly line of said Camino de Luz, 114.57 feet to the point of beginning.

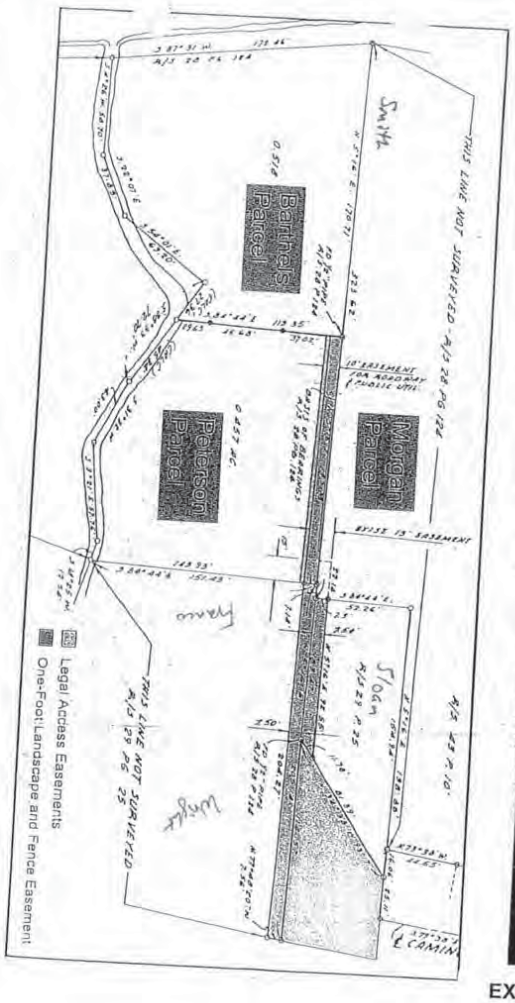


EXHIBIT G

EXHIBIT K

David Magney Environmental Consulting
P.O. Box 1539, Cedar Ridge, California 95924-1539 * E-mail: david@magney.org
530/273-1799 Voice * www.magney.org

27 November 2016

Elise Cossart-Daly, Esq.
Venskus & Associates
603 W. Ojai Avenue
Ojai, CA 93023

Subject: Review of Biological Resource issues for 1837½ El Camino de la Luz Residence (SCH No. 2005041031)

Dear Ms. Cossart-Daly,

Per your request, David Magney Environmental Consulting (DMEC) has reviewed the biological resources section of the DEIRs (original, revised, and second) for the proposed single-family residence at 1837½ El Camino de la Luz in the City of Santa Barbara.

David Magney is a Certified Consulting Botanist #001, an ISA Certified Arborist #WE-7674, and an approved biologist by the County of Santa Barbara, County of Ventura, County of Los Angeles, County of San Luis Obispo (and other jurisdictions), and a member of the Los Angeles County Environmental Review Board. Mr. Magney has been an environmental consultant working in the Santa Barbara region since 1986.

The Second Revised Draft Environmental Impact Report (2DEIR) provides a basic description of the biological resources present at the project site. The project site is on an ocean bluff next to Lighthouse Creek.

The 2DEIR states that the biological resources of the project site contain sensitive habitats and species (page 2-2). It identifies approximately three[1] significant but mitigable (Class II) impacts to biological resources and offers eight recommended mitigation measures to reduce those impacts to less-than-significant levels. Identified impacts include: degradation of water quality and impacts to wildlife and wildlife habitat.

Local Coastal Plan (LCP) policies in compliance with the California Coastal Act were adopted by the City to protect sensitive biological resources within the City. The Coastal Act requires the identification of Environmentally Sensitive Habitat Areas (ESHA) and goals and policies to protect them from degradation. The 2DEIR never mentions ESHA but does identify Lighthouse Creek as sensitive habitat. Generally, riparian habitats, and all wetlands, are typically considered ESHA by the California Coastal Commission.

ESHA is defined in the Santa Barbara Municipal Code (SBMC), Title 28, The Zoning Ordinance, Section 28.44.040.J. "ENVIRONMENTALLY SENSITIVE AREA. Any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments."

[1] The 2DEIR fails to clearly identify what potentially significant impacts to biological resources the project would have, primarily the result of not numbering or bulleting the project-related impacts.

By this definition, the habitats onsite, excluding formally landscaped areas, qualify as Environmentally Sensitive [Area] since they provide habitat to a range of native species of wildlife and for a variety of functions. This includes bluff scrub and riparian habitats along Lighthouse Creek.

Section 28.75.045 – Project Development Standards, of the SBMC, Subsection A, states that "A buffer adequate to protect the public health and safety and environmentally sensitive areas shall be established. The size and location of the buffer shall be based upon a **thorough assessment** [emphasis added] of the risk to human health and the environment."

The 2DEIR suggests, based on the Hunt (2013) report, that a 25-foot-wide buffer between the proposed house and environmentally sensitive area is sufficient; however, there is no evidence of any kind that a "thorough assessment" was ever conducted; rather, it is based on the opinion of the biologist. Many coastal jurisdictions apply a 100-foot buffer zone between ESHA and development (e.g. County of Ventura, City of Malibu, County of Los Angeles).

Page 6-2 of the 2DEIR states, "The vegetation on the Lighthouse Creek canyon slope that would be directly impacted (i.e., removed) by the project consists mostly of non-native species that provide little biological value." This statement presumes that non-native species have little value; however, this claim is not supported by any evidence; rather, it is the opinion of the biological consultant stated as fact. This presumption needs to be supported by substantial evidence since it is the basis of the determination that the biological resources to be impacted are not sensitive and therefore no mitigation is warranted.

The fact that native shrub species typically found in Coastal Bluff Scrub and Coastal Sage Scrub, both sensitive habitat types[1], were documented as occurring within the development envelope contradicts the claim that the vegetation is of "little biological value" and needs to be re-evaluated.

Sensitive wildlife species, such as the Two-striped Garter Snake, have high potential to occur onsite and a mitigation measure (BIO-7) developed to relocate any animals that may be displaced (Page 9-6).

Lawrence Hunt's letter report of 23 August 2013 describes his assessment of the project site and summarizes the results of previous studies of the biological resources of the site. However, neither Hunt nor previous biologists surveyed for sensitive invertebrate species, except for the mention of the Monarch Butterfly. The project site is habitat for at least three rare terrestrial mollusk species, *Haplotrema caelatum*, *Helminthoglypta phlyctaena*, and *H. traskii*, which have been recorded from the Santa Barbara County (Magney 2009[2]). Distribution maps of each of these species are attached. Surveys for rare terrestrial mollusks, and other invertebrates, need to be conducted to adequately characterize the biological resources of the site. *H. traskii traskii* is tracked by the CNDDB as a sensitive species, with a rarity ranking of S1.

The City's General Plan includes goals, policies, and implementation strategies related to Environmentally Sensitive Areas, typically referred to as ESHA under the Coastal Act. Creek Environments is one of three general ESHA types identified in the General Plan. The goal for Creek Environments is:

[1] California Natural Diversity Database. 2010. Natural Communities List. California Department of Fish and Game, Sacramento, California. Lists *Encelia californica, Rhus integrifolia, Rubus ursinus*, and *Salix lasiolepis* Alliances as sensitive communities with a state rarity ranking of S3 or lower. The first two are typical dominants of Coastal Bluff Scrub and Coastal Sage Scrub plant communities and *Rubus ursinus* and *Salix lasiolepis* as sensitive riparian communities.

[2] Magney, David L. 2009. Atlas of Native California Terrestrial Snails in Santa Barbara County. 4 November 2009. David Magney Environmental Consulting, Ojai, California. Prepared for Sespe Institute, Inc., Ojai, California.

> "Enhance and preserve the City's critical ecological resources in order to provide a high quality environment necessary to sustain the City's ecosystem". (page 90 of the Local Coastal Plan, City of Santa Barbara 2004).

The first Implementation Strategy states that the City shall "develop criteria to evaluate and assess the ecological significance of biotic communities...". There is no evidence that the City has yet completed this task of developing evaluation criteria. The lack of progress on this implementation strategy does not relieve the City from requiring an objective (rather than subjective) assessment of a project's impacts on critical ecological resources. Regarding creek environments, existing wetland function assessment models have been developed to identify and assess wetland functions for the Santa Barbara South Coast riparian habitats (Lee et al. 2001[1]).

The 2DEIR identified Lighthouse Creek as an Environmentally Sensitive Area and is recommending mitigation measures to protect aspects of the creek; however, no objective assessment was ever conducted to determine how the proposed project would impact any of the 14 riverine wetland functions creeks such as Lighthouse Creek perform. DMEC has used the Santa Barbara South Coast model numerous times to determine how a project would impact wetland functions, if at all, to satisfy CEQA and NEPA assessment requirements (DMEC 2001[2], 2006a[3], 2006b[4], 2009[5]), which has been accepted by the regulatory and permitting agencies. Without such an objective holistic assessment of the proposed project, actual changes in wetland functions cannot be fairly identified nor can the significance of those changes be determined.

It is not clear whether rare plant survey protocols (CDFG[6], CNPS[7]) were followed, which require field surveys be conducted during seasons when the plants are identifiable. The Hunt 2013 field survey was conducted on 17 August 2013 for 2 hours, in mid-summer when most spring-flowering annuals and short-lived perennial species are no longer identifiable.

[1] Lee, L.C., P.L. Fiedler, S.R. Stewart, R.R. Curry, D.J. Partridge, J.A. Mason, I.M. Inlander, R.B. Almay, D.L. Aston, and M.E. Spencer. 2001. *Draft Guidebook for Reference Based Assessment of the Functions of Riverine Waters/Wetlands Ecosystems in the South Coast Region of Santa Barbara County, California*. Santa Barbara County Water Agency, Santa Barbara, California.

[2] David Magney Environmental Consulting. 2001. Wetland Functional Assessment of the Odyssey Program Middle School Project, Malibu, California. December 2001. (PN 00-0301.) Ojai, California. Prepared for Odyssey Program, Malibu, California.

[3] David Magney Environmental Consulting. 2006a. Baseline HGM Assessment for Mountains Restoration Trust, Dry Canyon Creek, Calabasas, California. (Corps File No. 200601215-JWM). August 2006. (PN 05-0262-1). Ojai, California. Prepared for Mountains Restoration Trust, Calabasas, California; City of Calabasas, Calabasas, California; U.S. Army Corps of Engineers, Ventura, California; and California Department of Fish and Game, San Diego, California.

[4] David Magney Environmental Consulting. 2006b. Wetland Functional Assessment of the Gramckow Property Project, Rancho Matilija, California. 15 June 2006. (PN 06-0041.) Ojai, California. Prepared for Ventura County Planning Division, Ventura, California, on behalf of Martin Gramckow, Ojai, California.

[5] David Magney Environmental Consulting. 2009. Wetland Functional Assessment of the Lyons Property Mitigation Bank Project, Santa Paula Canyon, California. 10 March 2009. (PN 08-0152.) Ojai, California. Prepared for BioResource Consultants, Ojai, California, on behalf of Richard Lyons & Laurie Prange Lyons, Ojai, California.

[6] California Department of Fish and Game (CDFG). 2009. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities. 24 November 2009. The Resource Agency, Sacramento, California. CDFG is now referred to as the California Department of Fish and Wildlife.

[7] California Native Plant Society (CNPS). 2001. Botanical Survey Guidelines. Board of Directors, Sacramento, California. See www.cnps.org for complete text of guidelines.

Field surveys for plants need to be conducted during seasons when all the plants can be identified to determine if any special-status species are present. This does not appear to have been done for this project.

The Coastal Bluff Scrub, dominated by *Encelia californica* and/or *Rhus integrifolia*, is considered a sensitive habitat and should be classified and mapped as an Environmentally Sensitive Area. The same is true of the riparian habitats along Lighthouse Creek where *Salix lasiolepis* and *Rubus ursinus* are present.

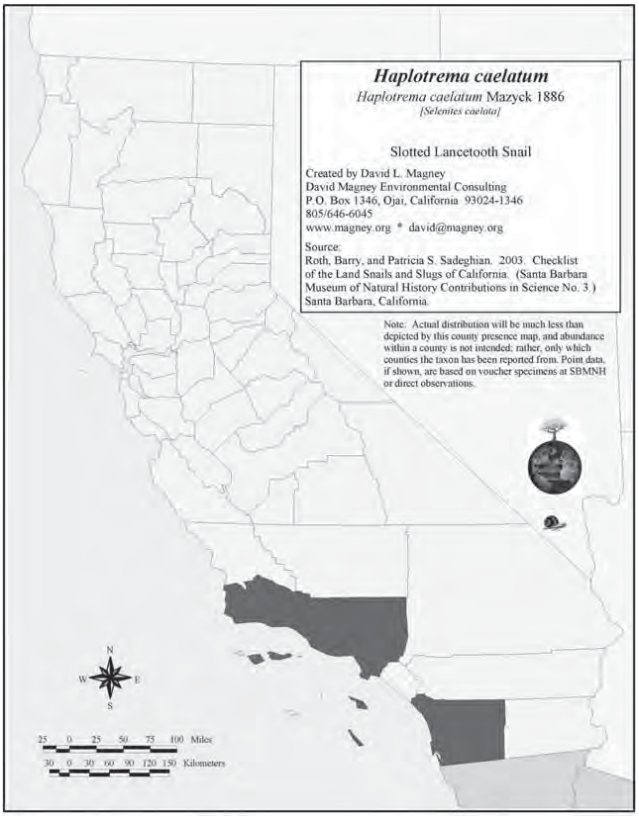
The proposed project should be objectively assessed using the South Coast Santa Barbara HGM riverine assessment model to determine if any of the 14 wetland functions of the creek would be negatively affected.

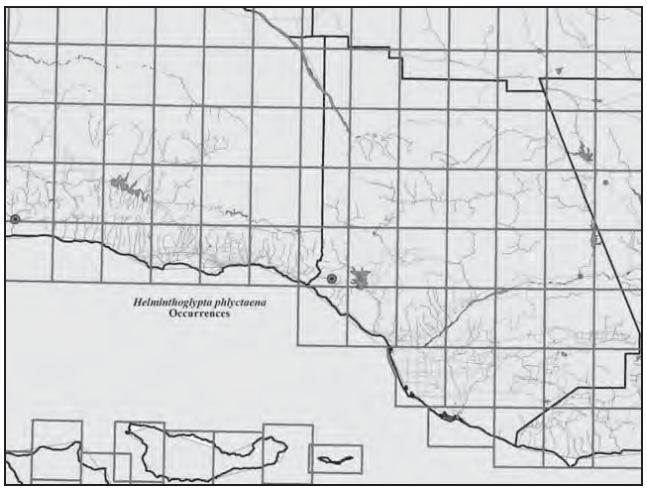
Please contact me if you have any questions or comments about this critique.

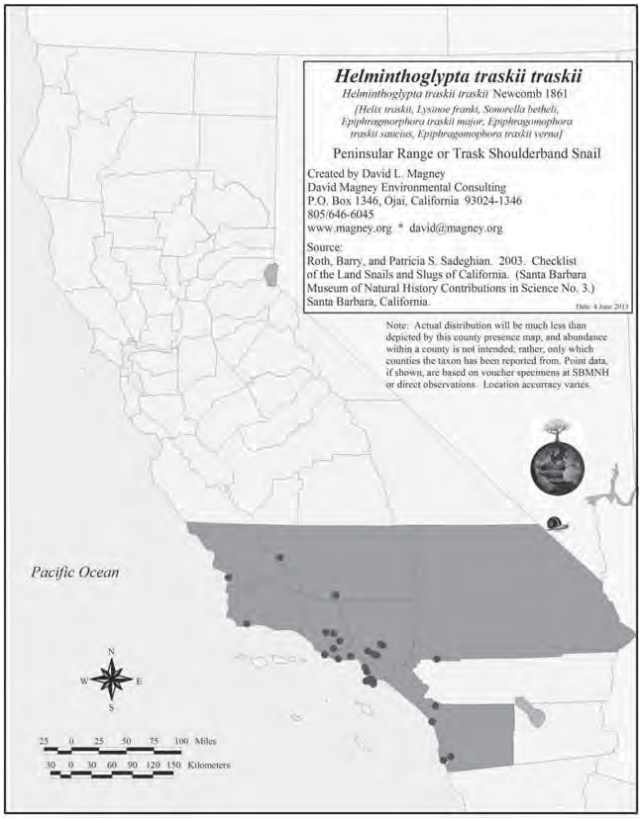
Sincerely,

David L. Magney, CCB-0001
President, Certified Botanist, Certified Arborist

Attachments: Distribution maps of *Haplotrema caelatum*, *Helminthoglypta phlyctaena*, and *H. traskii*




Helminthoglypta phlyctaena
Occurrences


Helminthoglypta traskii traskii
Helminthoglypta traskii traskii Newcomb 1861
[Helix traskii, Lysinoe franki, Somorella betheli, Epiphragmorphora traskii major, Epiphragomophora traskii saucins, Epiphragomophora traskii vernal]
Peninsular Range or Trask Shoulderband Snail
Created by David L. Magney
David Magney Environmental Consulting
P.O. Box 1346, Ojai, California 93024-1346
805/646-6045
www.magney.org * david@magney.org
Source:
Roth, Barry, and Patricia S. Sadeghian. 2003. Checklist of the Land Snails and Slugs of California. (Santa Barbara Museum of Natural History Contributions in Science No. 3.) Santa Barbara, California.
Date: 4 June 2013
Note: Actual distribution will be much less than depicted by this county presence map, and abundance within a county is not intended; rather, only which counties the taxon has been reported from. Point data, if shown, are based on voucher specimens at SBMNH or direct observations. Location accuracy varies.
Pacific Ocean
N
W
E
S
25 0 25 50 75 100 Miles
30 0 30 60 90 120 150 Kilometers

David L. Magney

President, Biologist/Certified Consulting Botanist, Wetland Scientist, Certified Arborist

EDUCATION:

B.A. Environmental Studies and Geography (emphasis is botany, cartography, and remote sensing), University of California at Santa Barbara, 1985.

A.S. Landscape Horticulture and Certificate of Completion in Natural Resources, Ventura College, 1975.

CERTIFICATIONS AND PERMITS:

Certified Consulting Botanist #001, California Native Plant Society, Board of Certification

Approved Biologist: Los Angeles County Regional Planning Department, Sensitive Ecological Areas

Approved Biologist: Ventura County Planning Division

Approved Biologist: Santa Barbara County Planning Department

Certified Arborist: International Society of Arboriculture (certification #WE-7674A)

Approved Arborist: City of Oxnard

Expert Witness, Botanist: U.S. Department of Justice

California Dept. of Fish and Game Scientific Collecting Permit #801066-05

TRAINING:

Improving Wetland Restoration Success: Riverine/Riparian Wetland Restoration Webinar, Assoc. of State Wetland Managers, 9 June 2015

Hydrogeomorphic Assessment of Wetland Function training course: National Wetland Science Training Cooperative, 1996.

Hydrogeomorphic Approach to Assessment of Functions of Waters of the U.S., Including Wetlands, in the Santa Margarita Watershed. National Wetland Science Training Cooperative, 1997.

Wetland Delineation, Federal Wetland Policy: Wetland Training Institute, 1989, 1991.

Desert Tortoise Handling and Surveying: trained by Desert Tortoise Council (John Weir), 1988.

Hazardous Waste Health and Safety Monitoring Training: Dames & Moore, 1987.

ArcView 3 (GIS) training: Geo InSight International, 1998.

Vegetation Rapid Assessment Classification: California Native Plant Society, 2003.

Successful CEQA Compliance 2005: Ron Bass, for Ventura County Resource Management Agency, 16 June 2005. CEQA = California Environmental Quality Act.

California Red-legged Frog Survey Methods: Vince Semonsen 2005.

The Wildlife Society San Joaquin Valley Chapter workshop: Habitat Conservation Planning, 1992.

American Association for the Advancement of Science symposium: Vernal Pools, 1989.

Professional Soil Scientists of California workshop: Field Identification of Hydric Soils, 1989.

SPOT Image Corporation: Satellite Imagery and GIS training course, 1995.

Jones & Stokes Associates workshops: Project Management Seminars, 1990-92, Hydric Soils, 1991, 1992; Clean Water Act Regulations Concerning Wetlands (1989), and CEQA Requirements and Document Preparation, 1993, 1990, 1989; WordPerfect, Lotus 1-2-3 and Allways, Microsoft Word, Excel, ArcView, and GRASS software programs.

Project Management Training: Dames & Moore seminar, 1988.

California Agricultural Pest Control Adviser's License, 1975-77 (expired).

QUALIFICATIONS AND EXPERIENCE:

Mr. Magney, President of David Magney Environmental Consulting, has over 30 years experience in biological studies and 25 years in environmental consulting. He has worked on or managed projects focusing on large-scale habitat classification and mapping, wetlands inventory and restoration planning, and water reuse and diversion that affect wetland habitats (palustrine, riverine, and estuarine) containing Southern Steelhead Trout, Tidewater Goby, Unarmored Threespine Stickleback, California Red-legged Frog, and Southwestern Pond Turtle. He has surveyed for and/or monitored projects with Desert Tortoise, Giant Garter Snake, Blunt-nosed Leopard Lizard, San Diego Horned Toad, Snowy Plover, California Least Tern, Least Bell's Vireo, California Gnatcatcher, Burrowing Owl, San Joaquin Kit Fox, San Joaquin Antelope Squirrel, Mojave Ground Squirrel, Giant Kangaroo Rat, Tipton's Kangaroo Rat, Stephen's Kangaroo Rat, Los Angeles Pocket Mouse, fairy shrimp, as well as numerous special-status plant species. Mr. Magney also managed special-status species surveys in the Four Corners Region, Great Valley, Sierra Nevada, the California Central Coast, Southern California (coastal and Inland Empire), and on Santa Cruz Island.

David L. Magney

President, Biologist/Certified Consulting Botanist, Wetland Scientist, Certified Arborist

QUALIFICATIONS AND EXPERIENCE (continued):

Mr. Magney has prepared and reviewed biological resources sections of Environmental Impact Statements (EIS) and Environmental Assessments (EA) prepared pursuant to the National Environmental Policy Act (NEPA).

He managed the botanical resources section for EIS on the Central Valley Project Improvement Act of 1990, which included most of California; EAs for Fort Hunter Ligget, Camp Roberts, a drilling project in the Los Padres National Forest (LPNF), off-highway vehicle trails in the LPNF, and the Santa Cruz Island Acoustic Range Facility (a former Navy facility).

Mr. Magney has prepared and managed biological resources sections of Environmental Impact Reports (EIRs) and Initial Studies (IS) pursuant to the CEQA for numerous projects in California. He has prepared EIRs for: General Plans for the Cities of Lodi and Fairfield; the San Joaquin North County Landfill; a water main extension for Newhall County Water District, the Bridle Ridge Development in Santa Barbara County, and the Lyons Canyon Ranch development in Newhall for Los Angeles County Regional Planning. Mr. Magney has prepared numerous Initial Studies on biological resources for the Ventura County Planning Division since 1995. He has critically reviewed numerous CEQA documents since 1982, including Ventura Regional Sanitation District's EIR for the Toland Road Landfill on behalf of Ventura County Planning, and an EIR on a landfill project in Orange County for a neighboring city.

Mr. Magney has conducted numerous floristic, focused rare plant surveys, and vegetation sampling throughout California and the West. He has completed a floristic survey of 62,000+ acres of the Tejon Ranch for the Tejon Ranch Conservancy, documenting the flora, rare plants, and plant communities of 5 areas of the ranch; a floristic survey of the Wind Wolves Preserve in southern Kern County, and is currently conducting floristic surveys of the Bitter Creek National Wildlife Refuge in southwestern Kern County.

Mr. Magney has sampled natural vegetation in a wide variety of habitats, including grasslands, wetlands, chaparral, and desert communities. He conducted floristic and rare plant surveys for Sprint's fiberoptic cable between San Bernardino and Las Vegas, Nevada, which included construction monitoring. Mr. Magney has conducted botanical surveys at scattered sites throughout the Great Basin, Mojave, and Colorado Deserts, including near China Lake, the Owens Valley, Granite Mountains, Clark Mountains, Randsburg/Johannasburg, Clipper Mountains, Chuckwalla Mountains, Chuckwalla Bench, Needles area, and the I-10 corridor (ARCO Line 90 pipeline from Colton, California to Albuquerque, New Mexico).

Mr. Magney has managed projects to establish wetland habitat mitigation banks, one in the Mojave Desert focused on playa and desert wash wetlands, and two banks focused on perennial, intermittent, and ephemeral wetland and upland habitats in Ventura County. These projects included delineation of jurisdictional wetlands, measuring wetland functions using HGM, determining existin biological resources at each site, and developing restoration and management plans for increasing wetland functions.

Mr. Magney has served as an expert witness in Federal and California state courts. He was the U.S. Department of Justice's expert witness botanist on the EPA vs. Adam Bros. et al. wetlands violation case (Los Angeles District Court). He served as wetlands/environmental expert witness for the Old Creek Ranch vs. Robert Watson (Ventura County Superior Court) on a property damages liability lawsuit. Both cases were settled prior to trial in DMEC's client's favor. Mr. Magney is also an expert witness one a property damage case related to landscape maintenance and a personal injury case focusing on nonvascular plants for Pro/Consul, Inc.

Mr. Magney has interpreted and processed satellite and aerial imagery (Landsat, SPOT, SAR, and color and IR aerial photography) using GRASS, ARC/INFO, and ERDAS Imagine software for large-scale projects: all of California to support an EIS for the Central Valley Project Improvement Act of 1992, natural vegetation of the Calleguas Creek watershed (n Ventura County) for the USFWS, Camp Pendleton Marine Corps Base, endangered species habitats within the Contra Costa Water District interim service area, central Ventura County for Unocal, the Ventura River for the Matilija Dam Removal Project, pipeline projects in coastal Ecuador and Mississippi to Alabama, and an impact evaluation for an oil-related project in Amazonian Ecuador. He has used satellite imagery to map vegetation/land cover for the Great Basin as part of a transmission line routing study.

David L. Magney

President, Biologist/Certified Consulting Botanist, Wetland Scientist, Certified Arborist

QUALIFICATIONS AND EXPERIENCE (continued):

Mr. Magney has managed oak tree assessment projects in California, including for the Lyons Canyon Ranch development in Newhall, creating a unique and robust GIS database and maps of all assessed oak trees, working closely with Certified Arborists.

Mr. Magney is conducting extensive research on the flora of Ventura County, California, which will be published a A Flora of Ventura County, California, with an expected publication date in late 2013. A complete checklist was published in October 2011. This project was started in earnest in 1982 and includes original research and research on collections made by other botanists.

Mr. Magney has worked on watershed management plans, including the Calleguas Creek watershed in Ventura County, focusing on upland and wetland habitat functions, characterizing habitat conditions, and developing restoration and management strategies to restore or enhance impacted functions. He also characterized and analyzed the urban streams within the City of Ojai.

Mr. Magney has been involved with a wide variety of projects including studies for oil/gas facilities, dams, residential and commercial developments, transportation facilities, landfills, sand and gravel mining operations, off-highway vehicle trails, wind farm siting, and electrical/communications transmission lines. He has studied botanical and zoological resources, classified and mapped vegetation, delineated jurisdictional wetlands and waters of the United States, identified opportunities and constraints for land development, conducted initial studies and investigations for projects requiring CEQA and NEPA documentation, and prepared Natural Environmental Studies for Caltrans. Mr. Magney has extensive experience in wetlands, developing mitigation and restoration plans for coastal, riparian, and vernal pool wetlands.

Mr. Magney has conducted water quality sampling and monitoring for several projects to establish baseline conditions and conduct construction and post-construction monitoring, such as for Exxon's Las Flores refinery in Corral Canyon, Santa Barbara County. He has developed and implemented water quality controls for use during project construction and mitigation implementation. Mr. Magney is developing a water quality field sampling educational program for the Ojai Unified School District, including purchasing of field sampling equipment.

Prior to establishing David Magney Environmental Consulting, Mr. Magney worked as Senior Program Manager for Natural Resources at Fugro West, Inc. from 1995 to 1997; as a Senior Botanist for Jones & Stokes Associates, Inc., of Sacramento, California, from 1989 to 1995 where he worked on and managed projects with major biological or regulatory compliance components; and prior to 1989, and as the Botanist for Dames & Moore at their Santa Barbara office. He has also worked with the U.S. Forest Service, Los Padres National Forest, as a GS-9 Botanist (temporary) and on a voluntary basis, and as a Research Associate with the UC Santa Barbara Herbarium, NOREAS, and BioResource Consultants. Mr. Magney formerly owned and operated the Ojai Wilderness Institute.

PROFESSIONAL AFFILIATIONS:

American Society of Plant Taxonomists
AnacapaGIS, co-founder
Association of State Wetland Scientists
Botanical Society of America
California Botanical Society
California Lichen Society, Conservation Committee
California Native Plant Society (President 1991-1994; Chairman of Chapter Council 2011-2014; Board Member 2002-2007, VP Conservation 1996; VP Legislation 1995; Channel Islands Chapter President 2004-2013, Redbud Chapter Conservation Committee Chairman 2010-2016, Fellow), Botanist Certification Program Committee Chairman (2014-2017)
Channel Islands Regional Geographic Information Systems (CIRGIS), charter board member
International Society for Arboriculture (ISA), Western Chapter ISA
Native Plant Coalition, founder
Northern California Botanists
Sespe Institute, cofounder and president
Society of Wetland Scientists
Southern California Academy of Sciences
Southern California Botanists

David L. Magney

President, Biologist/Certified Consulting Botanist, Wetland Scientist, Certified Arborist

PUBLICATIONS:

Magney, David L. in ed. *A Flora of Ventura County*. David Magney Environmental Consulting, Cedar Ridge, California.

Magney, David L. in ed. Vascular Flora of Ventura County, California. Submitted to *Madroño*.

Magney, David L. in ed. A Comparison of Swedish and American Wetland Protection Laws.

Magney, D.L., J. Broberg, J. Logan, and V. Peters. 2015. A Preliminary Draft Regional Guidebook for Applying the Hydrogeomorphic Approach to Assessing Wetland Functions of Playa Depressional Wetlands in the Mojave Desert. (PN 12-0004.) David Magney Environmental Consulting, Ojai, California. Prepared for U.S. Army Corps of Engineers, Los Angeles, California. Prepared on behalf of Richard and Laurie Lyons, Ojai, California.

Magney, David L. 2015. Lichens of Ventura County: Annotated Checklist. (Version 1.3.) David Magney Environmental Consulting, Ojai, California. First published January 2014. http://www.magney.org/photofiles/Ventura_County_Lichens.htm

Magney, David L., and Shirley Tucker. 2012. Lichens of Burton Mesa Chaparral, Santa Barbara County, California. Sespe Institute, Inc., Ojai, California. www.sespeinstitute.com.

Magney, David L. 2011. Checklist of Vascular Plant Flora of Ventura County, California. 19 October 2011. Ojai, California. www.venturaflora.com

Magney, David L. 2011. Vascular Plants of the Palos Verdes Penisnula, Los Angeles County, California. 20 July 2011. David Magney Environmental Consulting, Ojai, California. www.sespeinstitute.com.

Magney, David L. 2010. Flora of Kings County, California. 6 December 2010. David Magney Enviornmental Consulting, Ojai, California. www.sespeinstitute.com.

Magney, David L. 2010. Native Trees of Southern California (list). (30 December 2010.) California Native Plant Society, Channel Islands Chapter, Ojai, California. http://cnpsci.org/html/PlantInfo/Checklists.htm

Magney, David L. 2010. Terrestrial Gastropods of Los Angeles County. 29 September 2010. David Magney Environmental Consulting, Ojai, California. www.sespeinstitute.com.

Magney, David L. 2009. Checklist of Ventura County Rare Plants. 19 October 2009, Fifteenth edition. California Native Plant Society, Channel Islands Chapter, Ojai, California. www.cnpsci.org.

Magney, David L., and Callen L. Huff. 2010. Preliminary Checklist of Los Angeles County Bryophytes. 16 March 2010. David Magney Environmental Consulting, Ojai, California. www.sespeinstitute.com.

Magney, David L. 2009. Ventura County Bryophytes. 12 November 2009. David Magney Environmental Consulting, Ojai, California. http://www.venturaflora.com/files/checklists/Ventura_County_Bryophytes.pdf

Magney, David L. 2009. Ventura County Wildlife - Terrestrial Snails and Slugs. 1 June 2009. David Magney Environmental Consulting, Ojai, California. http://www.magney.org/photofiles/VenturaCountySnails1.htm.

Magney, David L. 2008. Spenceville Wildlife Area, Nevada and Yuba Counties, California, Checklist of the Vascular Plants. 21 June 2008. David Magney Environmental Consulting, Ojai, California. http://magney.org/photofiles/Spenceville_Wildlife_Area.htm

Chattin, L., L. Rubin, and D. Magney. 2006. A Winning Combination: Local Land-use Planning and Fine-scale Vegetation Maps. *Fremontia* 34:3(9-13).

Knudsen, Ken, and David L. Magney. 2006. Rare Lichen Habitats and Rare Lichen Species of Ventura County, California. January 2006. *Opuscula Philolichenum* 3:49-52.

Magney, David L. 2006. Vascular Plants of South Ormond Beach, Oxnard, Ventura County, California. California Native Plant Society, Channel Islands Chapter, Ojai, California. Published on http://www.cnpsci.org/html/PlantInfo/SouthOrmondBeachPlants.pdf.

Magney, David L., and Illeene Anderson. 2005. Plants of the Clipper Mountains, Mojave Desert. 24 March 2005. Ojai, California. http://magney.org/photofiles/ClipperMtns.htm

David L. Magney
President, Biologist/Certified Consulting Botanist, Wetland Scientist, Certified Arborist

PUBLICATIONS (continued):

Magney, David L., and Illeene Anderson. 2005. Plants of the Dead Mountains, Mojave Desert, California. 22 March 2005. David Magney Environmental Consulting, Ojai, California. http://magney.org/photofiles/DeadMtnpics.htm

Magney, David L., and Illeene Anderson. 2005. Plants of the Granite Mountains, Mojave Desert, California: Al A. Alanson Trail Plant Checklist. 23 March 2005. David Magney Environmental Consulting, Ojai, California. http://magney.org/photofiles/GraniteMtns.htm

Magney, David L. 2004. How Common Are Mistletoes Anyway? *Crossosoma* 30:1

Magney, David L., and K.G. Niessen. 2005. Oak Tree Data Assessment Solutions Using GIS. 9 May 2005. David Magney Environmental Consulting, Ojai, California. Presented to ESRI ArcView User's Group, Ventura College, California.

Magney, David L. 2005. Atlas of California Native Terrestrial Snails in Ventura County. 16 March 2005. David Magney Environmental Consulting, Ojai, California. Prepared for County of Ventura, Resource Management Agency, Planning Division. Ventura, California.

Magney, David L. 2004. Checklist of Ventura County Rare Plants. 15 June 2004. California Native Plant Society, Channel Islands Chapter, Ojai, California. Updated periodically.

Magney, David L. 2001. Ventura County Plant Species of Local Concern. December. California Native Plant Society, Channel Islands Chapter, Ventura, California.

Magney, David L. 1999. Preliminary List of Rare California Lichens. *Bulletin of the California Lichen Society* 6(2):22-27.

Tupen, Gaylene, and David Magney. 1996. San Antonio Creek Habitat Characterization Study. Poster presented at the American Fisheries Society Southern Steelhead Symposium, Ventura, California, March.

Ferren, Wayne R. Jr., David L. Magney, and Teresa Sholars. 1995. The Future of California Floristics and Systematics: Collecting Guidelines and Documentation Techniques. *Madroño* 42(2): 197-210, April-June.

Magney, David L., and Emily B. Roberson. 1995. CNPS Statement on Seeding Following Wildfire. In *Brushfires in California: Ecology and Resource Management* (conference proceedings). International Association of Wildland Fire, Fairfield, Washington.

Clark, George M., and David L. Magney. 1994. Vascular Plants of Bear Valley, Walker Ridge, and Surrounding Areas, Colusa and Lake Counties, California. *Four Seasons* 9(4):25-32.

Magney, David L., and Kenneth M. Bogdan. 1993. What are ARNIs? *National Wetlands Newsletter* 15(3):4-5, May/June.

Magney, David L. 1993. Focus On Vernal Pools. *National Wetlands Newsletter* 15(3):6, May/June.

Magney, David L. 1993. Faults with Growing Season Determinations Using the U.S. Army Corps of Engineers Wetlands Delineation Manual. In *Riparian Management: Common Threads and Shared Interests* – Proceedings of a Conference, February 4-6, 1993; Water Resources Research Center, Albuquerque, New Mexico; College of Agriculture, University of Arizona, Tucson.

Magney, David L. 1992. Descriptions of Three New Southern California Vegetation Types: Southern Cactus Scrub, Southern Coastal Needlegrass Grassland, and Scalebroom Scrub. *Crossosoma* 18(1):1-9, June.

Ferren, Wayne, Mark Capelli, Anuja Parikh, David Magney, K. Clark, and John R. Haller. 1990. *Botanical Resources at Emma Wood State Beach and the Ventura River Estuary, California: Inventory and Management*. (Herbarium Environmental Report No. 15.) University of California, Santa Barbara.

Magney, David L. 1988. Habitat Survey for California Jewelflower *Caulanthus californicus* (S. Watson) Payson in the Los Padres National Forest. Ojai Wilderness Institute, Ojai, California. Prepared for U.S. Forest Service, Los Padres National Forest, Supervisor's office, Goleta, California, August 3.

David L. Magney
President, Biologist/Certified Consulting Botanist, Wetland Scientist, Certified Arborist

PUBLICATIONS (continued):

Magney, David L. 1988. Analysis of water quality of an intermittent stream, Santa Barbara County, California. (Presented as a poster at the California Riparian Systems Conference), Davis, California, September.

Magney, David L. 1987. Distribution and Two New Populations of *Boschniakia strobilacea* (Orobanchaceae). *Madroño* 34(4):379-380.

Olson, T., and David L. Magney. 1987. Distribution of Sensitive Plant and Wildlife Species Along Transmission Line Corridors in Southwestern San Joaquin Valley, California. In *Endangered and Sensitive Species of the San Joaquin Valley, California,* (proceedings of a conference) Contribution 36, December 10-11, California State College, Bakersfield.

Ferren, Wayne, and David Magney. 1986. Wetland Vegetation of the Proposed Mandalay Beach State Park. Campbell & Campbell Associates, Santa Monica, California.

Magney, David L. 1986. A Flora of Dry Lakes Ridge, Ventura County, California. (Herbarium Publication No. 5.) University of California, Santa Barbara.

AWARDS AND GRANTS:

California Native Plant Society - 1985, grant to conduct research on the flora of Ventura County, California.

Swedish-American Bicentennial Fund - 1995, grant from Swedish government to conduct research on a comparison of American and Swedish wetland protection laws and how they are applied.

California Native Plant Society – 2013, designated as a Fellow.

COMMITTEES:

California Native Plant Society, Botanist Certification Program Committee chairman since 2014.

Ojai Trees, Inc., Advisor Arborist, 2014-2015.

Caltrans Environmental Advisory Committee member, 1991-1996; also a panelist for Caltrans Mid-Level Managers training workshops.

U.S. Army Corps of Engineers Regional Assessment Team "A-Team" vernal pool expert for developing Hydrogeomorphic Model for Vernal Pool Wetlands, an inter-agency task force for the National Plan to implement the Hydrogeomorphic Approach for assessing wetland functions, 1995-1996.

Caltrans CaliforniaWILD (Wildflowers in Landscape Design) steering committee member.

Calleguas Creek Watershed Management Plan Committee member, since 1996. Habitat and Recreation Subcommittee and Scientific Advisory Group member.

Ojai Valley Land Conservancy, Lands Committee Sespe Institute, nonprofit California Corp.

California Lichen Society, Conservation Committee

California Native Plant Society, Rare Plant Program Committee, since 2000, Conservation Committee.

Channel Islands Regional Geographic Information Systems Collaborative (CIRGIS), charter member since 2000, Incorporator, Chairman for 2002-2003, Board of Directors 2004-2007.

East Merced County NCCP, Habitat & Biological Resources Committee, 2002-2004.

Ventura County Planning Division, Sensitive Biological Resources Committee, since 2003.

City of Ojai, Tree Committee, since 2005.

Los Angeles County Regional Planning, Environmental Review Board, member since August 2006.

Ventura River Watershed Planning Committee, member since 2005

EXHIBIT L

November 28, 2016

VIA Electronic Mail

Elise Cossart-Daly, Attorney
1055 Wilshire Blvd. Suite 1660
Los Angeles, CA 90017 and
603 West Ojai Ave., Suite F
Ojai, CA 93023

SUBJECT: Engineering Geology Review:--Earth Systems Pacific Appendix D: 2013 Ocean Bluff Erosion Retreat Study and Appendix E: 2013 Canyon Slope Stability Analysis and Erosion Study, both from 1837½ El Camino de la Luz Residence Second Revised Draft Environmental Impact Report, SCH No. 2005041031.
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REFERENCES: See attached References Cited

Dear Ms. Cossart-Daly:

Introduction

At your request, we have reviewed the subject two appendices from the Revised Draft Environmental Impact Report (RDEIR) report with regard to the potential for ocean bluff erosion retreat at the subject property. The subject Earth Systems Pacific (Earth Systems or ESP) appendices and RDEIR were provided as website links to Adobe Acrobat files. The subject appendices reference numerous other reports, and incorporate other maps and photographs, that are mentioned herein as well. Some of these reports referenced by Earth Systems were reviewed, in part, as appropriate. References cited by others are not included in the References Cited section of this report. Earth Systems performed aerial photograph and topographic analysis for the ocean bluff erosion study (Earth Systems, 2013a) and conducted limited field studies and performed laboratory tests for the canyon slope stability study (2013b). Within this letter report Figures A, B, and C follow the text.

Background

The proposed project would be a two-level single-family residence (2,089 gross square feet developed on a vacant 23,885 square foot parcel located north of and adjacent to the Pacific Ocean, south of La Mesa Park, and west of and adjacent to Lighthouse Creek. The proposed residence would be located in the northwest corner of the project property. Non-developed area consists of a coastal bluff on the south that rises approximately 105 feet above the adjacent beach and a canyon slope in the eastern portion of the property that rises 25 to 35 feet above the Lighthouse Creek channel (Rodriguez Consulting, Inc., 2016).

Discussion and Comments

This section is subdivided into Bluff Edge Determination and Bluff Retreat Rates (Earth Systems, 2013a), and Lighthouse Canyon Stability and Erosion (Earth Systems, 2013b). In summary our conclusions are:

Bluff Edge Determination – Based on Earth Systems (2013a) Figures 3 and 4 the 1953 bluff edge is 8.2 feet farther north than shown by the 2012 "ocean bluff top" designation (blue line). The bluff edge is buried beneath artificial fill according to ESP Figure 4. Even though buried, this constitutes the true bluff edge as defined by the State (Johnsson, 2003). Using the ESP 75-year setback, an additional 7.6

feet would be added to the 8.2 feet for a total of 15.8 feet from the "Present 2012 Ocean Bluff Top" shown their Plate 1: Site Map.

Bluff Retreat Rates - Earth Systems (2013a, Figure 3) determined a bluff retreat rate for the subject property of 1.02 inches per year ("/yr) based in their estimation of 5 feet of bluff edge retreat at the far southwest edge of the "paved lot" upon which the residence location is proposed. They cite other studies at this property and along this coastline that average 4 to 4.5"/yr retreat rate with some in the range of 8 to 10"/yr. Using 1870 U. S. Coast Survey map (http://www.caltsheets.org/socal/download.html, 2016) for this coastline, we superimposed it over the 2016 Google Earth image for the subject property. The coastline and bluff (sea cliff) from 1870 to 2016 shows 5.5 to 8.2"/yr of retreat corresponding to the higher estimates. Also, this is a true measurement of the marine erosion causing the retreat at the base of the bluff not a measure of terrestrial erosion with man-influenced topographic contours. The main consequence of these high retreat rates will be to erode the El Camino de la Luz landslide toe at the coastline and cause continued renewed landslide movement to the west and southwest that would likely encroach into the subject property within the next 50 to 75 years. In addition, the continued erosion of the sea cliff along the south property line will very likely lead to bluff face retreat that will over-steepen the bluff and lead to failures immediately south of the subject property.

Lighthouse Canyon Stability and Erosion – This study does not address the coastal bluff edge retreat issue, but focused on the stability at the east edge of the subject property along Lighthouse Canyon. Earth Systems determined using standard geotechnical methods that the slope descending eastward into Lighthouse Canyon is stable. They did recommend a 10-foot setback from the top of the canyon slope (their cross-section A-A'), if standard spread footing foundations are proposed. This would necessitate caisson (pile) foundations for the proposed project to be feasible.

Bluff Edge Determination

Earth Systems Pacific (ESP, 2013a) indicates:

> "Stereographic interpretation of the 1953 aerial photographs was performed using manual and digital/computer stereo-scope techniques to determine the bluff top conditions and to identify the edge of the bluff top. Once the alignment of the bluff top was determined and plotted on the 1953 air photograph, it was imported and geo-registered into the program Global Mapper (ver. 14). The bluff top as it existed in 1953 and in 2012 were then plotted on the 2010 digital La Mesa ortho photograph. The determination of the location of the 2012 bluff top was based on site observations, site mapping, the conditions exposed in the previously discussed Geological Inspection Trench (Anikouchine, 2009), and the 2012 topographic site map."

ESP plots the results of their analysis in plan view on Figures 1 and 3, and they reproduce the southern portion of the Anikouchine (2009) geological inspection trench log as a cross-section in Figure 4.

To begin, we believe the use of the term "ocean bluff top" is inappropriate based on Johnsson (2003); we will use bluff edge defined by Johnsson as "The bluff edge is simply the line of intersection between the steeply sloping bluff face and the flat or more gently sloping bluff top." Johnsson also discusses the bluff edge as follows (*emphasis* added):

> "The position of the bluff edge may be changed by a variety of processes, natural and anthropogenic. Most obvious is the landward retreat of the bluff edge through coastal erosion. A

> bluff edge also may move seaward, through tectonic processes, but such movement is rare and usually small on human time scales. More significant is the anthropogenic modification of the bluff edge by grading or the construction of structures. A landward shift of the bluff edge commonly occurs through cutting into and removing natural materials during grading operations or the construction of seawalls. *Conversely, placing artificial fill on or near the bluff edge generally does not alter the position of the natural bluff edge; the natural bluff edge still exists, buried beneath fill, and the natural bluff edge is used for purposes of defining development setbacks*."

The sentence emphasized above is the case illustrated in the Anikouchine trench shown on Figures 3 and 4. Figure 4 shows the buried bluff edge at approximately 8.2 feet north of the south end of the trench, yet ESP places the 1953 bluff edge at the end of the trench as shown in Figure 3 coincident with the edge of a paved lot created sometime "during the 1950's." Per Johnsson's discussion above the true 1953 bluff edge is 8.2 feet farther north than shown on Figures 1 and 3, see our Figure A below. Therefore, if one assumes the bluff retreat rate of 1.02 inches per year (this is discussed below) is correct, the setback at the trench would be an additional 8.2 feet to the north.

The ESP 2012 bluff top location is based on the south edge of the "paved lot". 1953 aerial photographs and 2012 topographic contours were cited as the basis for the 2012 bluff edge. The 2012 topographic contours are only shown within the subject property and provide no evidence of the 2012 bluff edge west of the property. Where shown this is a man-made edge protected by asphalt having nothing to do with bluff retreat and has no connection to the 1953 buried bluff edge shown in the Anikouchine trench as shown by ESP.

The following analysis is put forth by EPS to document the 5-feet of claimed bluff retreat within the property.

> "The alignment of the 1953 bluff top was then compared with the alignment of the present 2012 bluff top to estimate the maximum distance that the bluff has retreated. Areas of maximum bluff erosion were identified and bluff retreat losses were measured. Annual maximum bluff retreat loss was calculated for the approximate 59-year period between 1953 and 2012. These results were then used to project the maximum bluff retreat (loss) for the 75-year design life span anticipated for the proposed residence."

The analysis to get 5 feet of bluff edge erosion in 59 years for 1.02 inches per year is at the artificial paved lot south edge and a projected 1953 bluff edge projected onto the property from the west. It is not clear when the paved lot grading was done and what grading was done in the small area at the west property line where the 5-feet of erosion is estimated. Was there cutting or filling that obliterated the natural bluff edge shown clearly in the Anikouchine trench? Since this area is not within the oceanographic bluff edge, but within the terrestrial erosion zone, it is decoupled from erosion at the base of the bluff and from sea level rise. The focus is on what unknown, and not discussed, human activities took place at the top of the slope. In our opinion it offers nothing useful for estimating future sea cliff retreat

Bluff Retreat Rates

ESP indicates:

> "Predicted rates of bluff retreat at the site, as presented in the numerous geologic studies prepared for the project site, have varied widely. Some of the rates reported were based upon

original research of aerial photographs and field measurements, while some were based upon review of earlier reports.

Therefore, the only predicted rate from ESP (2013a) is based on what we believe are mistaken interpretations of the 1953 and 2012 bluff edge locations arising from the Anikouchine trench results and the poor quality of the 1953 aerial photographs west of, within, and east of the project site.

ESP summarizes the bluff retreat rates (in inches per years—"/yr) stated by others for the project site and nearby areas, some based on the methods quoted above and many with no stated methodology. The net affect of the nine studies called out, three were based on aerial photographs and one by Dibblee (19 with no method specified. The ranges of retreat values were 1.02 "/yr, 4"/yr., less that 4"/yr, and 6 to 8"/yr. The City of Santa Barbara estimated 3 to 10"/yr. An approximate simple average would be 4 to 4.5 "/yr. This would appear to raise questions about a 1.02 "/yr value, particularly as discussed above.

We purchased from UCSB the same four photographs used by ESP, namely CC-1-44 and 45, and C-4950-F-72 and -73, all in high quality digital form. The photographs were reviewed by stereoscopic methods and greatly enlarged on a computer screen. Figure B shows the 1953 aerial photograph with the following features:

1. The line defined by an apparent slope change that is said by ESP to be the 1953 bluff edge, but also aligns with the 1978 El Camino de la Luz landslide scarp;
2. An unexplained apparent topographic "step" west of the subject property;
3. The boundary (red line) of the location defined by Pacific Materials (1978) as a "potential short term plane of failure"; and
4. The subject property boundary in blue.

Geotechnologies, Inc. summarizes the very well in their September 5, 2007 report, which includes a cross-section A-A' that recommended a planar failure slope stability analysis that to our knowledge was never done. We believe the cross-section for planar slope stability analysis should drawn in a slightly more northwesterly direction to incorporate the projection of Pacific Materials 1978 plane of failure line and cross the eastern portion of the 1978 El Camino de la Luz landslide (see Figure B green line). This can be done maintaining a down-dip orientation. The reason for this is to tie back to future bluff retreat as discussed below.

The County of Santa Barbara (2012) describes the coastal processes affecting Goleta Beach that is applicable to the east-west shoreline at the project site. Due to the high level of detail one must read the document to put into full context the conclusions applicable to the project site. These conclusions are:

1. "Storms during El Niño events approach from a more westerly direction and typically generate larger waves with longer periods between each swell that increase the amount of energy reaching the Southern California coast (Revell et al. 2011)." [Page 4.4-5]
2. "The PDO [Pacific Decadal Oscillation] is a pattern of long-term climate variability in the Pacific Ocean that typically has shifted every 20 to 30 years and is described as being in either a warm or cool phase." [page 4.4-6]
3. "PDO phases last much longer – typically 20 to 30 years for a single warm or cool phase – than ENSO [El Niño Southern Oscillation] events – 6 to 18 months for a single warm (El Niño) or cold (La Niña) phase." [Page 4.4-7]

4. "Studies suggest that ENSO effects on North American climate are strongly dependent on the phase of the PDO, such that "strong" El Niño and La Niña patterns are only observed during years in which ENSO and PDO extremes are "in phase" (i.e., with warm PDO and El Niño, and cool PDO and La Niña, but not with other combinations) (Gershunov and Barnett 1998; Gershunov et al. 1999; McCabe and Dettinger 1999)." [Page 4.4-8]
5. "Sea level rise projections include acceleration of the rise due to melting of polar ice caps. The most recent State-sponsored projections for sea level rise along the Southern California coast identify a sea level rise of up to 24 inches by 2050 and 66 inches by 2100 (Table 4.4-1)." [Page 4.4-10]
6. "Goleta Beach is very sheltered from wave energy except for a narrow window from the west from 240 degrees to 275 degrees relative to true north (0 degrees) (Figure 4.4-3) (Moffatt & Nichol 1988). Waves approaching Point Conception from between 275 degrees and 290 degrees can also cause significant wave energy at Goleta Beach as they refract around Campus Point to reach Goleta Beach, especially those with periods in the 11 to 13 second range." [Page 4.4-11]

Our concern regarding the potential severity of sea cliff erosion at the project site is we see no consideration of the items 1 through 4 and 6 above in the analysis of future beach erosion. This must be considered in order to adequately project potential impacts 75 years after any project is constructed. Unlike Goleta Beach, the project area is not protected by a nearby point of land. It is fully exposed to the 240 to 275 degree wave directions that will increase as the current PDO cool cycle change back to the warm cycle with higher and more energetic waves, and with the potential for coincident strong El Nino and La Nina patterns.

The importance of the wave direction and severity for the site is the direction of the beach supporting the El Camino de la Luz landslide. This beach faces to the south-southwest and is susceptible to the 245 to 270 large wave impacts. If the beach area "toe" of the landslide erode more rapidly than the south facing bedrock cliffs this will cause further movement of the landslide mass and it would likely encroach into t he proposed development area. This is why slope stability analyses are necessary as recommended above.

In fact there is evidence that this landslide mass has moved since before the 1870s. Figure C shows the 2016 Google Earth image of the coastline and the subject property. Overlain and registered on this image are:

1. The 1870 U. S. Coast Survey topographic map of the coastline at and adjacent to the subject property with orange tracings of the approximate coastal bluff edges;
2. Tracings in blue of the 2016 (dashed) and 1870 (solid) coastlines showing the erosion and retreat over the 146 years at 5.5" to 8.2 "/yr;
3. The boundaries (red) of the El Camino de la Luz landslide;
4. The approximate area of proposed residential construction (purple); and,
5. Blue arrows indicating the westerly exposure for significant wave energy (from 245 and 270 degrees).

We believe Figure C provides a reasonable estimate of the potential continued rate of bluff retreat (5.5" to 8.2"/yr) at the subject site that is consistent with other estimates for this coastal area. Since this rate impacts the stability of the periodically active El Camino de la Luz landslide that we believe may continue into the subject property, estimates of 1.02"/yr are not thought to be reasonable.

Lighthouse Canyon Stability and Erosion

This study (Earth Systems, 2013b) addresses the stability at the east edge of the subject property along Lighthouse Canyon. Earth Systems drilled two borings, collected samples, performed laboratory tests, and using standard geotechnical analysis methods calculated that the slope descending eastward into Lighthouse Canyon is stable. The factors of safety are 1.53 for static and 1.16 for seismic stability. Based on their cross-section A-A' they recommended a 10-foot setback from the top of the canyon slope if standard spread footing foundations are proposed. These analyses and conclusions should be verified by the County or City of Santa Barbara reviewers.

References Cited

Anikouchine, William, 2009, Geological Inspection Trench at *1837112* El Camino De La Luz, Santa Barbara, California.

City of Santa Barbara, 2016, 1837½ El Camino de la Luz Residence, Second Revised Draft Environmental Impact Report, Community Development Department, October, 2016, SCH No. 2005041031, by Rodriguez Consulting, Inc. Santa Barbara, California, October 2016.

County of Santa Barbara, 2012, Goleta Beach County Park Managed Retreat Project 2.0 Final Environmental Impact Report State Clearinghouse No. 2012061040, Chapter 4.4 COASTAL PROCESSES, 63 pages.

Dibblee, T.W., Geologist Report, 1837 El Camino De La Luz, Santa Barbara, California, dated June 24, 1986.

Earth Systems Pacific, 2013a, Ocean Bluff Erosion Retreat Study, Barthels Residence, 1837½ El Camino de la Luz, Santa Barbara California.

Earth Systems Pacific, 2013b, Canyon Slope Stability Analysis and Erosion Study, Barthels Residence, 1837½ El Camino de la Luz, Santa Barbara California.

Geotechnologies, Inc., 2007, Geotechnical Engineering Commentary, Proposed Single-Family Residence, 1837 ½ El Camino De La Luz, Santa Barbara, California," R. T. Knur.

Johnsson, Mark, 2003, Establishing Development Setbacks from Coastal Bluffs, Memorandum W11.5, California Coastal Commission.

Pacific Materials Laboratory, Inc., 1978, Preliminary Landslide Investigation, Sea Cliff Property, El Camino De La Luz, Santa Barbara, California, Lab No. 2993-G2, File No. 8-4859-2, dated March 6, 1978.

U. C. Santa Barbara, 2016, Aerial photographs—Flight-frame numbers, CC-1-44 and 45 (1953) and C-4950-F-72 and 73 (1938).

U. C. Santa Barbara, 2016, 1870 Coastal Survey Chart (T-1230), U. S. Coast Geodetic Survey, Map of a Part of the Coast of California, Santa Barbara Channel from Santa Barbara to Pelican Point, Scale 1:10000, 20-foot contour interval, http://charm.physics.ucsb.edu/people/hnn/t1230e.jpg and http://www.caltsheets.org/socal/download.html.

Closure

This report has been prepared for the sole use and benefit of our client. The analysis, results, and conclusions were prepared in general compliance with normal industry practice in Santa Barbara County. Other consultants may arrive at different results and conclusions with the same information. The intent of the report is to advise our client of engineering geologic and coastal process conditions at the subject site, and the possible effects of these conditions on the proposed development and surrounding properties. It should be understood that the engineering geologic and coastal processes consulting provided represents professional opinions and the contents of this report are not perfect. Any errors or omissions noted by any party reviewing this report should be reported to Wilson Geosciences Inc. in a timely fashion. Only the client can authorize subsequent use of this report. No warranty is either expressed or implied.

Please contact the undersigned if you have any questions.

Sincerely,

WILSON GEOSCIENCES INC.

Kenneth Wilson
Principal Geologist
P.G. #3175, C.E.G. #928
(626) 791-1589

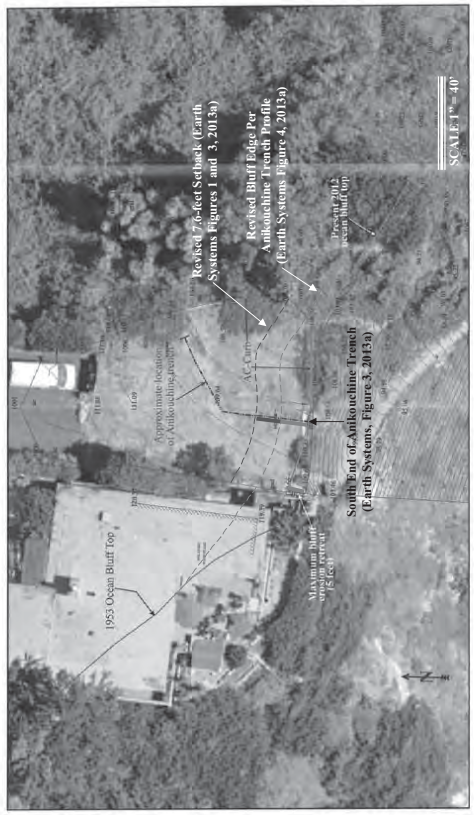
PROFESSIONAL GEOLOGIST
KENNETH LEE WILSON
No. 928
CERTIFIED
ENGINEERING
GEOLOGIST
STATE OF CALIFORNIA

EXP 2-28-17

APPENDIX

Figures A, B, and C

FIGURE A – Suggested 1953 Bluff Edge Location Based on Earth Systems Pacific Figure 3 and the Anikouchine Trench Log [1]

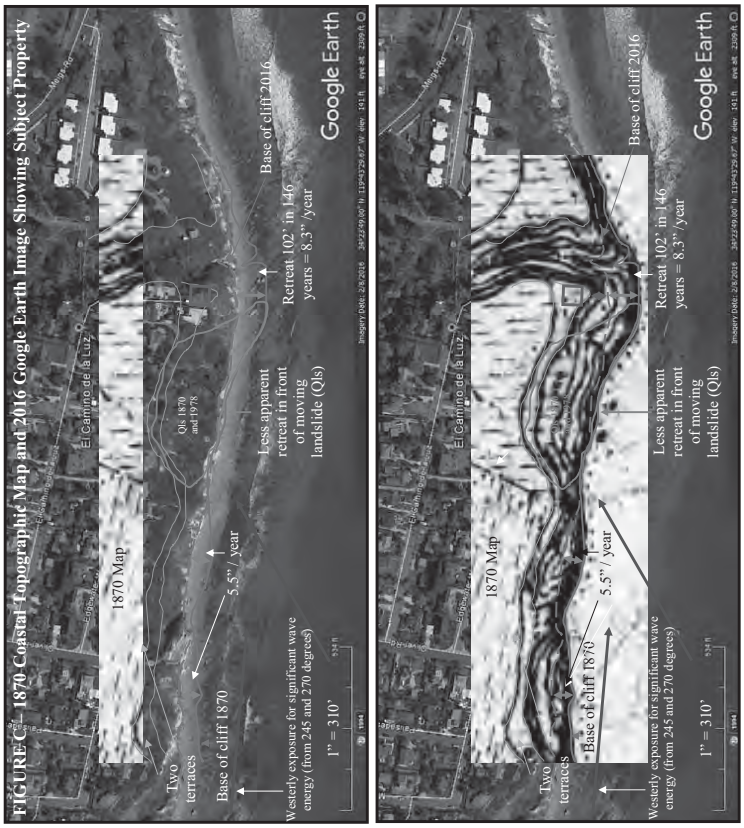


1. Bluff edge covered by artificial fill per description by Johnsson, 2003.

FIGURE B – 1953 Aerial Photograph CC-1-45 Showing Subject Property

1. Landslide scarp pre-1978 El Camino de la Luz Landslide and/or 1953 bluff edge.
2. Subtle topographic feature may represent a bluff edge or past landslide movement.
3. "Potential short term plane of failure" (red line) defined by Pacific Materials (1978).
4. Necessary geologic cross-section line (green) for evaluation of slope instability due to reactivation of a larger El Camino de la Luz landslide caused by continued westward and southwestward wave erosion of the landslide toe area.

FIGURE C – 1870 Coastal Topographic Map and 2016 Google Earth Image Showing Subject Property



KENNETH WILSON

Principal Engineering Geologist

EDUCATION

University of California at Riverside, B.S. Geological Sciences (1967)
University of California at Riverside, M.S. Geological Sciences (1972)

PROFESSIONAL REGISTRATIONS

Professional Geologist, California, PG #3175 [Expires February 28, 2017]
Certified Engineering Geologist, California, CEG #928 [Expires February 28, 2017]

PROFESSIONAL SUMMARY

Kenneth Wilson is responsible for management, technical supervision and performance of engineering geology, geotechnical, environmental impact, and environmental geology projects, and is a registered Professional Geologist (#3175) and Certified Engineering Geologist (#928) in California. During his professional career Mr. Wilson has worked as a staff and project engineering geologist (4 years) for Converse-Davis and Associates (now Converse Consultants), as a project and senior engineering geologist, project manager, and vice-president for Fugro-Earth Technology Corporation in Long Beach (15 years), and for Wilson Geosciences Inc. as principal geologist for 21 years.

Mr. Wilson performs and supervises environmental assessments for commercial, industrial and government projects covering the disciplines of hydrogeology, engineering geology, geology, hydrology, seismicity, tectonics, faulting, mineral resources, and waste management. Geotechnical studies include fault evaluations, ground failure assessments, slope stability and foundation materials characterization, liquefaction potential, flooding hazards and site selection. The emphasis of his work is on defining geologic and geotechnical conditions, and hazards, which may affect the feasibility and design of any type of development project. Kenneth has over 20 years of technical performance and project experience in critical facilities studies, radioactive/mixed/hazardous waste management, energy plant site licensing, impacts to surface and groundwater resources, waste disposal site development, dams and reservoirs and numerous other engineered structures. Specialized experience is in engineering geology in support of geotechnical studies, site selection/evaluation, seismic safety, integration of multidisciplinary technical teams, project management, and EIRs, EAs, and EISs.

Mr. Wilson has performed numerous risk assessments involving earthquake and fault rupture, as well as studies involving risks to schools from natural gas and petroleum pipelines, large diameter water pipelines and aqueducts, and railroads. While each study is different, they involve a combination of deterministic and probabilistic evaluations to quantify to the degree possible the potential for unacceptable negative consequences on a specific proposed project. For earthquakes and fault rupture, probabilistic seismic hazard assessments (PSHA) or probabilistic fault displacement hazard analyses (PFDHA) are performed to evaluate the level of earthquake ground shaking or amount of fault displacement/ground rupture expected for a project site. Agencies, such as Caltrans, have standards and recommended methodologies for these studies. Pipeline and railroad risks are approached by determining the likelihood of a system failure and then estimating the consequences of such a failure of a specific project or site. Again, there are standard and agency-specific methods (e.g., LAUSD and California Department of Education) established for these evaluations. These assessments have been conducted, when necessary, in cooperation with geotechnical engineers and risk specialists (e.g., ABS Consulting and ImageCat Inc.).

Characteristics of the area in and around the Santa Barbara coast require that issues such as strong seismic ground shaking, fault rupture, liquefaction, lateral spreads, weak foundation materials, water, erosion, sedimentation, and excavation methods be addressed for most projects. The presence of local faults (Santa Ynez and North Channel), regional faults (San Andreas), and weak saturated sediments drive most of these issues. Mr. Wilson has a familiarity with land- and offshore-based geophysical techniques/data (e.g., Dana Point, Santa Barbara Channel, Monterey Bay) and drilling/cone penetration testing methods often used to obtain relevant data to define subsurface conditions in coastal areas.

PROFESSIONAL EXPERIENCE

- ***Wilson Geosciences Inc. [WGI], Engineering and Environmental Geology [1989-Present]***

Principal Engineering Geologist

- ***The Earth Technology Corporation [1974-1989]***

Corporate Vice President; Vice President; Director, Program Management; Vice President, Associate and Senior Manager

- ***Converse Consultants (formerly Converse, Davis and Associates) [1970-1974]***

Staff and Project Geologist

PROFESSIONAL ORGANIZATIONS

Member Association of Engineering Geologist, National Section
Member Association of Engineering Geologist, Southern California Section

COURSES, SEMINARS, AND WORKSHOPS

(1) Seismic Interpretation for Geologists, (2) Engineering Geophysics Short Course (CSM), (3) Fundamentals of Ground-Water Monitoring Well Design, Construction, and Development, (4) New Developments in Earthquake Ground Motion Estimation and Implications for Engineering Design Practice, and (6) Seismic Hazards Analysis.

RELEVANT PROFESSIONAL EXPERIENCE AND COASTAL PROJECTS

Kenneth Wilson has performed similar services in the southern California for each of the companies noted below and his experience includes performance and management of small task orders and multi-million dollar/multi-year regional investigations. With WGI, approximately 60-percent of the firms work has been CEQA or NEPA-related. During his career, he has conducted technical investigations in onshore and offshore project environments, including subsurface sampling (e.g., drilling, cone penetration testing [CPT], and grab) and geophysics (e.g., offshore seismic reflection and side-scan sonar). Mr. Wilson's has a strong familiarity with the land- and offshore-based geophysical techniques/data (e.g., offshore Dana Point, Santa Barbara Channel, and Monterey Bay) and drilling/CPT methods often used to obtain relevant data to define subsurface conditions in coastal areas. He has prepared Geology and Soils sections of CEQA/NEPA documents and the equivalent of Special Environmental Studies (SES) report based on review of existing technical reports and maps and performance of field surveys under applicable environmental laws, regulations, and policies.

Orange County Sanitation District, Geologic, Geotechnical, and Seismic Technical Background Report (TBR) Bay Bridge Pump Station and Force Mains Rehabilitation Study, SP-178 Orange County Sanitation District (OCSD) Newport Beach, Orange County, California (HAI-Hushmand Associates—Ben Hushmand, (949) 777-1266)

Principal Engineering Geologist: Based on the review of project area-specific data (subsurface and surface material descriptions, geotechnical reports) and local/regional data, Mr. Wilson prepared the Engineering Geology portion of the subject report.

Port of Los Angeles, City Dock No. 1--DEIR Geology and Soils Section (ICF Jones & Stokes—Chad Beckstrom, (949) 333-6625)

Principal Engineering Geologist: Based on a field inspection, review of project area-specific data (subsurface and surface material descriptions, geotechnical reports) and local/regional data, Mr. Wilson prepared the Draft Environmental Impact Report Geology and Soils section.

Port of Los Angeles, West Basin EIR--Geology and Soils Section (Envicom Corporation—Travis Cullen, (818) 879-4700)

Principal Engineering Geologist: Using project area-specific data (seismic reflection records and local geology mapping) and regional data, Mr. Wilson prepared the Geology and Soils section of the Environmental Impact Report.

Port of Long Beach, Cemera Long Beach LLC Construction Aggregate Terminal, 1710 Pier B Street, Long Beach—DEIR Geology and Soils Section (ICF Jones & Stokes—Madonna Marcello (213) 593-7769 [now AECOM])

Principal Engineering Geologist: Based on a field inspection, review of project area-specific data (subsurface and surface material descriptions, aerial photographs) and regional data, Mr. Wilson prepared the Geology and Soils section of the Environmental Impact Report.

City of San Diego, Seismic and Geologic Technical Background Report for the City of San Diego Midway-Pacific Highway and Old Town Community Plan Updates, and Environmental Impact Report, City of San Diego, San Diego County, California (Contact: AECOM—Yara Fisher, 1420 Kettner Boulevard, Suite 500, San Diego CA 92101, (619) 233- 1454, yara.fisher@aecom.com)

The project is located at the northwest edge of San Diego Bay and the technical background report (TBR)/DEIR required a field inspection, review of project community-specific environmental and geotechnical/engineering geology data, as well as local/regional agency data. Mr. Wilson prepared the TBR and DEIR for Geology and Soils section. The site is crossed by an active fault and is underlain by artificial fill and young bay sediments.

Gerald Desmond Bridge, Long Beach—Analysis of Drilling Results (Diaz-Yourman Associates—Nadesh Nadeswaran (714) 245-2920)

Principal Engineering Geologist: Boring logs and selected subsurface samples were used to define the subsurface geologic formation encountered during geotechnical drilling. A description of the nature, thickness, age, and hydrogeologic characteristics of the Gaspur aquifer were provided with this information from a directional drill site near the west side of the Gerald Desmond Bridge.

Port of Los Angeles, Dredging—On-site Operational Monitoring (Converse Consultants—POLA Contact Chris Zadoorian (714) 634-3701 [now GeoDesign, Inc.])

Field Engineering Geologist: Based on a review and analysis of existing offshore seismic reflection records and bottom drilling/sampling, Mr. Wilson monitored the dredging operation to determine the materials encountered and proper depths attained for a portion of the ship channel.

EXHIBIT M

November 23, 3016

Venskus & Associates, A.P.C.
603 West Ojai Avenue, Suite F
Ojai, California 93023

Attention: Sabrina Venskus

Subject: Second Draft EIR, 1837-1/2 El Camino de la Luz, Santa Barbara, CA

Dear Ms. Venskus:

At your request, I reviewed the Geology Section in the Second Revised Draft Environmental Impact Report (DEIR) and Initial Study for the proposed residential development in Santa Barbara County located at 1837-1/2 El Camino de la Luz.

Pertaining to the evaluation of geologic hazards and impact, both the Initial Study and DEIR are deficient. The Initial Study dismisses potential seismic hazards to the property, which are not evaluated in the DEIR. Furthermore, the DEIR also presents technical information and data that conflict with the impact assessment and conclusions.

Deficiencies in the Initial Study and DEIR are discussed below under separate headings. Comments are number IS-x and GS-x, respectively

Initial Study

General Comments – Initial Study

IS-1 Environmental Setting – Page 1

Seismic/Geologic Conditions: The project site is subject to low level hazards associated with seismic activity and minimal liquefaction potential. The project site is located in an area of historically active landslides with high potential for erosion.

The statement ". . . low level hazards associated with seismic activity . . ." is unsupported.

IS-2 Geophysical Conditions – Discussion, Page 13

Issues: Geophysical impacts involve geologic and soil conditions and their potential to create physical hazards affecting persons or property; or substantial changes to the physical condition of the site. Included are earthquake-related conditions such as fault rupture, groundshaking, liquefaction (a conditions in which saturated soil looses [loses] shear strength during earthquake shaking); or seismic sea waves; unstable soil or slope conditions, such as landslides, subsidence, expansive or compressible/collapsible soils; or erosion; and excessive grading or topographic changes.

Impact Evaluation Guidelines: Potentially significant geophysical impacts may result from:

- Exposure to or creation of unstable earth conditions due to geologic of soil conditions, such as landslides, settlement, or expansive, collapsible/compressible or expansive soils.
- Extensive grading on slopes exceeding 20%, substantial topographic change, destruction of unique physical features; substantial erosion of soild, overburden, or sedimentation of a water course.

Geophysical Conditions – Existing Conditions and Project Impacts, Page 13

IS-3 ***5.a-c) Seismic and Ground Shaking/Liquefaction Hazards, Page 13***

The property is not subject to fault rupture, seiche, or tsunami, and has minimal liquefaction potential because there are no known faults on the project site, the site is not near an enclosed body of water that could subject it to a seiche, soils at the site are not saturated sand (necessary prerequisites for liquefactions) and the site is well above the tsunami run-up area. Therefore, there would be no impact from seiche, fault rupture, tsunami, or liquefaction. Future development on the site would be subject to requirements of the Uniform Building Code, which includes provisions to ensure that proposed structures withstand the effects of ground shaking, resulting in a less than significant impact.

". . . no known faults on the project site . . ." The EIR does not indicate how this determination was made. No supporting discussion of the detailed fault assessment that would be necessary to make this conclusion.

". . . requirements of the Uniform Building Code, which includes provisions to ensure that proposed structures withstand the effects of ground shaking . . ." The Uniform Bulding Code does not preclude substantial structural damage resulting caused by potential severe groundshaking hazards from a large earthquake on a nearby fault. The section does not provide an evaluation of potential motion that could occur at the site during the project life, or compare this potential ground motion to the design requirements in the Uniform Building Code. Therefore, the conclusion is not adequately supported.

IS-4 ***5.d-f) Geologic or Soil Instability, Page 13 and 14***

Landslides:

The project site is located on a coastal bluff area characterized by landslides in the recent past. The peer review of prior geological studies of the site by Dr. William Anikouchine (Exhibit E), included an analysis of the potential for landslides on the project site. The report concludes that the project site is stable in the short term and that there could be stability problems on the site in the long term. The City requires that geological information be provided to verify that the portions of the site including any primary structures would not erode in a 75-year period. Dr. Anikouchine also verified the accuracy of the top of bluff identified on the plans, determined by Fisher Geologic in December 2001. The top of bluff was determined based on the California Coastal Commission's definition of "bluff edge." This definition states that, "when the top edge of the cliff is rounded away from the face of the cliff as a result of erosional processes related to the presence of the steep cliff face, the edge shall be defined as the point

nearest the cliff beyond which the downward gradient of the land surface increases more or less continuously until it reaches the general gradient of the cliff. In a case where is a steplike feature at the top of the cliff face, the landward edge of the topmost riser shall be taken to be the cliff edge."

". . . a coastal bluff area characterized by landslides in the recent past." This is a red flag. Landslides in the recent past indicates that the coastal bluff area exhibits instability. The EIR presents evidence that this is a potential impact.

Fracture systems in the project area could increase landslide hazards and risks. Large fracture systems may represent fault zones that were not previously mapped or identified. Fault zones and large fracture systems substantially increase slope instability.

The peer review indicates that the project development would not be susceptible to slope failure during the life of the structure, provided that surface runoff is captured and conveyed away from the bluff face and use of irrigation in this area is minimized. The proposed project could result in increased runoff being directed onto the bluff face and this could cause slope failure, a potentially significant, mitigable impact. A mitigation measure to minimize the amount of water in the underlying soils would reduce the impact of landslides to a less than significant level.

IS-5 ***Geophysical Conditions – Required Mitigation, Page 14***

G-1 All surface drainage from the site shall be intercepted as soon as possible, collected, and conveyed (using impervious facilities designed to minimize infiltration into site soils) to the ravine east of the parcel or the beach. Landscaping shall be designed to use native species that do not require irrigation except for their propagation. Limited areas of non-native plants may be used if long-term irrigation is not required.

Mitigation Measure G-1 does not provide for periodic inspections and reporting. G-1 should define the following: type of inspection, qualifications of the inspector, frequency of reporting, reporting and reviewing agency.

G-2. The location and design of structural foundations on the site shall be approved by a licensed Engineering Geologist or Geotechnical Engineer.

Mitigation Measure G-2 is deferred mitigation. A future design review and approval is deferred mitigation. Project approval should be contingent upon a structural foundation design that can be verified as practical and feasible. Mitigation should state "California licensed Engineering Geologist or Geotechnical Engineer".

Geophysical Conditions – Residual Impacts, Page 14

Potentially significant impacts to geophysical conditions would be reduced to a less than significant level with the incorporation of the identified mitigation measures.

DEIR – Geology Section

GS-1 EIR Comments – Section 5.2

The EIR document does not evaluate all potential geological impacts. It dismissed potential impacts without providing substantial evidence to support the stated conclusion.

Mitigation measures presented do not provide sufficient detail and definition to ensure that potentially significant impacts are reduced to a less than significant level.

GS-2 ***Page 5.2-4 – EIR text***

> Project Site Coastal Bluff Retreat. Coastal bluff retreat is an erosion- and landslide-related hazard that affects the bluffs along the City's coast. Coastal bluff retreat is a continual, natural process caused by both marine and terrestrial erosion process that cause the bluffs to "retreat" or move landward. The bluff environment is very dynamic and there can be great variation in the composition, structure and strength of the rocks and soil that form the bluffs.

This statement clearly indicates that landslides should be included in the analysis for coastal bluff retreat rates. These evaluations should span many decades to develop a statistically valid retreat rate that includes landslides. Landslide frequency should also be evaluated.

GS-3 ***Page 5.2-5, Figure 5.2-1***

- Red line shows 2012 Bluff Top
- Blue line shows 75-year Bluff Top Building Setback – based on erosion rate established in EIR. If this erosion rate is flawed, then the setback distance is incorrect.
- Both lines project toward the southeast, but do not curve to follow the bluff face

There should be a second set of lines for the bluff top above Lighthouse Creek, including setback, as shown separately on Figure 5.2-2.

Bluff retreat rate and setback should include a factor of safety.

GS-4 ***Page 5.2-7 – EIR text***

> Top of Bluff Setback Requirements. Coastal Act policies and regulations, and City LCP and Safety Element policies address top of bluff setbacks. The LCP policy (Seacliff Retreat Section) states "New development on the top of a cliff shall be placed at such distance away from the edge of the cliff that normal rates of erosion and cliff material loss will not seriously affect the structure during its expected lifetime." A 75-year timeframe was used to evaluate the effects of bluff retreat because this is the period of time generally used by the City as the expected design life of new residential structures.

This statement does not indicate the annual rate used to determine the 75-year setback.

GS-5 ***Page 5.2-9, Figure 5.2-2, Canyon Top of Slope and Borehole Locations***

- Green line shows Canyon top of slope, and crossing through the middle of the proposed residence.
- Yellow line Canyon top of slope 10-foot building setback for shallow foundations founded into fill soil (Setback not required for caisson foundations founded into bedrock)

The structure location plotted assumes that the foundation design includes caissons that are installed in competent bedrock. With a previous slope failure (landslide) documented in this area, the EIR does not establish that the bedrock along Lighthouse Creek is competent.

GS-6 ***Page 5.2-11, Figure 5.2-3, Project Sited Geology Cross Section***

This cross-section indicates a recommended 10-foot top of slope building setback.

GS-7 ***Page 5.2-12 – EIR text***

> **Landslide Hazards**. Landslide conditions associated with the on-site coastal bluff and Lighthouse Creek canyon slope are described below.
>
> Coastal Bluff. Landslides affecting the coastal bluff on the project parcel are reported to have occurred in the 1970's. Soil slumps have also occurred near the edge of the cliff. The scarp left by one of these slumps is still visible just below the base of the wooden stairs leading to the concrete-lined swale in western portion of the project site.
>
> Another landslide at 1839 El Camino de la Luz, west of the proposed project site, occurred in November 1995. That slide did not alter the form of the upper edge of the cliff.
>
> Anikouchine, along with others, identified evidence of a large landslide that affected the coastal bluff in the southeast corner of the project property. The direction of movement for this slide was to the southwest, nearly perpendicular to the dip direction of the Monterey formation strata. This failure might have been exacerbated by the removal of lateral support by erosion in Lighthouse Creek.

This discussion clearly indicates a slope stability and landslide hazard for the subject property.

GS-8 ***Page 5.2-13 – EIR text***

> Lighthouse Creek Canyon Slope. The Monterey Formation bedrock that comprises the creek canyon's western slope is considered to be grossly stable due to its favorable cross bedding strength characteristics and its bedding orientation dipping into the slope face. . .

This conclusion is in conflict with the discussion on Page 5.2-12 pertaining to landslide hazards. A "grossly stable" slope would not exhibit a history of recent landslides.

GS-9 ***Page 5.2-13, Section 5.2.2 Impact Significance Criteria – EIR text***

Criterion A. Exposure to or creation of unstable earth conditions due to seismic conditions, such as earthquake faulting, groundshaking, liquefaction, or seismic sea waves.

> "The property is not subject to fault rupture, seiche, or tsunami, and has minimal liquefaction potential because there are no known faults on the project site, the site is not near an enclosed body of water that could subject it to a seiche, soils at the site are not saturated sand (necessary prerequisites for liquefaction) and the site is well above the tsunami run-up area. Therefore, there would be no impacts from seiche, fault rupture, tsunami, or liquefaction. Future development on the site would be subject to requirements of the Uniform Building Code, which includes provisions to ensure that proposed structures withstand the effects of ground shaking, resulting in a less than significant impact."

This discussion presented in the EIR does not provide any background information on ground motion (groundshaking) potential at the site. The potential ground motion the site could experience, using a 10 percent probability of occurrence in 50 years, is extremely high. Compliance with existing building requirements (e.g., Uniform Building Code) does not reduce the potential effects of high ground accelerations to a less than significant impact. The EIR does not provide any technical evaluation of the potential high ground motion that the site could experience, and therefore, the conclusion of less than significant is unsupported.

GS-10 ***Page 5.2-15, Figure 5.2-4***

The geologic structure (strike and dip) of the Monterey Formation shown on this map directly contradicts statements in the EIR regarding slope stability. This map show the bedding planes dipping out of the slope in a general southwesterly direction, indicating a relatively high potential for block-slide type slope failures.

GS-11 ***Page 5.2-17 – EIR text***

> The 2009 site investigation concluded that strata under the project site dip southward and that the strike (the compass direction at a right angle to the dip) of the strata is not parallel to the east-west trend of the toe of the coastal bluff. Due to this orientation, the rock strata that form the coastal bluff at the project site are buttressed to west. Conditions similar to this have resulted in failures of the coastal bluff elsewhere along the shoreline in the project area. The 2009 site investigation concluded that additional analysis would be required to evaluate the slope stability of the project site.

This text is partially incorrect and presents misleading conclusions. Dip is in a general southwesterly direction, not southward. As a result, bedding planes are generally dipping away from the slope, more so than indicated.

Slope stability does not include an evaluation of seismically induced landslides. Landslides are common during moderate to major earthquakes. The sites close proximity to major fault systems capable of generating very large earthquakes, M 6 to 7, creates a risk that was not identified in the EIR and the readily available information was not applied to the site evaluation and slope stability analysis.

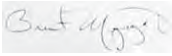
GS-12 ***Page 5.2-35 – Mitigation Measures***

> **Subsidence**. Based on a laboratory evaluation of on-site soils conducted by Buena Engineers (1971), it was concluded that the project site is subject to soil settlement-related impacts. The report indicates that potential subsidence impacts can be adequately addressed using a properly engineered foundation design. Proposed mitigation measure GEO-2 requires that the proposed project provide an appropriate structure foundation. With the implementation of the mitigation measure GEO-2, potential subsidence impacts are **significant but mitigable (Class II)** and would be reduced to a less than significant level.
>
> **Expansive Soils**. An evaluation of the project site conducted by Smith (1980) concluded that soils at the project site are expansive. This potentially significant impact can be reduced to a less than significant level by the use of a caisson foundation as proposed by the project, rather than foundation footings. Proposed mitigation measure GEO-2 requires that the proposed project provide an appropriate structure foundation and that the foundation be approved by a licensed Engineering Geologist or Geotechnical Engineer. With the implementation of mitigation measure GEO-2, potential expansive soil impacts would be **significant but mitigable (Class II)** and would be reduced to a less than significant level.

CEQA requires that mitigation measures are feasible. Mitigation measure GEO-2 does not provide a mechanism to monitor execution of the measure to ensure that it is feasible and implemented in a manner that fulfills the requirements. GEO-2 is deferred mitigation.

Let me know if you have any questions pertaining to these comments.

Sincerely,



Brent Miyazaki, PG, CHG

Comment Letter No. 5
Citizens to Protect & Preserve the Mesa's Coastal Bluffs, Greg and Judith Smith, Venskus & Associates
Date: November 30, 2016

5-1. These comments make a variety of assertions related to issues including the history of the creation of the project site parcel; the legal status of the project parcel; the project applicant's ability to make a takings claim; the project's requirement and ability to comply with the Conditional Certificate of Compliance issued by the City in 1999. These issues do not address changes in existing environmental conditions that could occur if the project were to be approved and implemented, and do not address the adequacy of the environmental review provided by the EIR. CEQA Guidelines Section 15088 requires the Lead Agency to provide written responses to comments that address "significant environmental issues." Since the comments do not address environmental issues, no additional response is required. The comment has been included in the Final EIR to inform decision-makers of the commenter's opinions.

5-2. The project site was surveyed for rare plants on three occasions. Tierney surveyed the site on September 14, 2001 and July 18, 2002 (Second Revised Draft EIR Appendix A, Exhibit D); and Hunt surveyed the site on August 17, 2013 (Second Revised Draft EIR Appendix G). Tierney lists two plants identified by the California Natural Diversity Data Base as having the potential to occur on the project site: Plummer's baccharis and Santa Barbara honeysuckle. Surveys by Tierney and Hunt did not detect the presence of these plants. Plummer's baccharis blooms between May and October, and Santa Barbara Honeysuckle blooms between May and August (http://www.calflora.org. Accessed 12/20/16). Therefore, Plummer's baccharis could have been in bloom during all three site surveys, and Santa Barbara honesuckle could have been in bloom during two of the site surveys. Both plants are perennial species that would have been visible during site surveys even if not in bloom.

The site survey methodologies used by Tierney and Hunt are appropriate for the project site, which is an urbanized area and extensively disturbed, with vegetation located in proposed development areas dominated by invasive plant species. Therefore, the project site has been adequately evaluated for potential impacts to sensitive plant species. The project and EIR also provide for habitat restoration which would result in a net improvement to native vegetation and habitat resources in the area.

5-3. The CA Coastal Act (Section 30107.5) defines environmentally sensitive areas as follows: *"Environmentally sensitive area" means any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and development.*

The Santa Barbara Municipal Code (Zoning Ordinance) Section 28.44.040(j) includes this same definition of (Environmentally Sensitive Area, and Section 28.75.045 provides development standards applicable to the development of Hazardous Waste Management Facilities but not applicable to the proposed project.

Environmentally Sensitive Habitat Areas (ESHAs) have not been specifically designated by the Coastal Commission or City Local Coastal Plan or delineated on City maps, however impacts to areas meeting the ESHA criteria per the Coastal Act definition are evaluated as part of environmental review and policy evaluation for development applications. The Revised Initial Study (EIR Appendix A) and Section 9.0 (Impacts Fount Not to be Consistent) evaluate the project's impacts to potentially sensitive habitat in the project vicinity and demonstrate that identified impacts would be reduced to a less than significant level with the implementation of proposed mitigation measures. No additional analysis of the project's impacts to sensitive biological resources or additional mitigation is required.

5-4. The EIR does address potential effects to wetlands. The EIR indicates that riparian habitat is located on a portion of the project site along the active Lighthouse Creek channel (i.e., at the bottom of the canyon). The area containing riparian habitat is mapped in EIR Appendix G, Figure 1. The only project-related direct (i.e., removal) impact to riparian habitat would result from the installation of the proposed storm water discharge pipe within a limited disturbance area. This would be a temporary construction-related impact that would be reduced to a less than significant level by proposed mitigation measure BIO-5, which requires the applicant to obtain a Streambed Alteration Agreement from the California Department of Fish and Wildlife, which would apply any measures to lessen the impact as deemed warranted by that regulatory agency. Potential habitat disturbance impacts that may result from construction of the storm water discharge pipe would also be reduced to a less than significant level by mitigation measures to minimize impacts to nesting birds (BIO-6), minimize impacts to other wildlife that have the potential to be located on the project site (BIO-7), and minimize impacts to sensitive habitat located beyond proposed construction areas (BIO-8). Potential indirect impacts to on-site sensitive habitat were also identified by the EIR, including impacts that may result from short- and long-term water quality degradation, and the dispersal of seeds that may occur when non-native habitat is removed from the project site. Potential water quality impacts would be reduced to a less than significant level by proposed mitigation measures BIO- 2, 3 and 4; and potential seed dispersal impact would be reduced to a less than significant level by mitigation measure BIO-1. The Second Revised Draft EIR did evaluate potential project-related impacts to wetland-related functions of Lighthouse Creek, and no additional analysis or mitigation is required.

5-5. During the review of the proposed project's potential impacts to sensitive wildlife, both Tierney (Second Revised Draft EIR Appendix A, Exhibit D) and Hunt (Second Revised Draft EIR Appendix G) state that habitat for monarch butterfly has been identified in La

Mesa Park north of the project site. Both Tierney and Hunt concluded that the due to the lack of suitable habitat on the project site, and the separation distance between the La Mesa Park roosting site and the project site (at least 600 feet), the project would not have significant impacts to monarch butterfly.

Additional invertebrates identified by Magney include three species of snail. Of those species, only *H. traskii traskii* is tracked by the CNDDB as a sensitive species. The California Department of Fish and Wildlife BIOS program identifies locations where this snail species has been reported, and indicates that the closest known observation site is near Point Mugu in Ventura County, approximately 40 miles southeast of the project site (https://map.dfg.ca.gov/bios. Accessed 12/9/16). Given the separation distance and the non-migratory characteristics of this snail species, the potential for it to be found on the project site is remote. No significant impacts would result from the project. The comment does not provide substantial evidence that the sensitive snail or other rare invertebrates could be located on the project site. No additional surveys for sensitive species are required.

5-6. The biological evaluations conducted by Tierney (Second Revised Draft EIR Appendix A, Exhibit D) were based on a previous design for the proposed residence. The previous project design, however, had a development footprint that is similar to the current project design. The 2013 evaluation conducted by Hunt (Second Revised Draft EIR Appendix G) was based on the project's current design. The biological evaluations included in the Second Revised Draft EIR adequately describe the potential impacts of the proposed project.

5-7. This comment mischaracterizes statements made in the EIR description of habitat conditions on the project site. For example:

On page 6-2, the EIR states: "*A 2013 biological evaluation of the project property found that the proposed building site and the upper slopes of the Lighthouse Creek canyon are predominately covered with a variety of ruderal (weedy) plant species, although some native plants are interspersed along the upper slope of the Lighthouse Creek canyon. While the level portion of the project site and the upper slopes of the Lighthouse Creek canyon provide little biological value, the middle and lower portions of the Lighthouse Creek canyon slope support native, woody scrub vegetation.*"

On page 6-3, the EIR states: "*A 2013 biological evaluation of the project property found that the proposed building site and the upper slopes of the Lighthouse Creek canyon are covered with a variety of ruderal (weedy) plant species. Imbedded in the non-native plants are sparse stands of native plants, including blackberry, toyon, lemonadeberry, poison oak, and wild rye. While the level portion of the project site and the upper slope of the Lighthouse Creek canyon provide little biological value, the middle and lower portions of the Lighthouse Creek canyon slope support native, woody scrub vegetation.*"

On Page 6-4, the EIR states: "*The vegetation on the Lighthouse Creek canyon slope that would be directly impacted (i.e., removed) by the project consists mostly of non-native species that provide little biological value. Native vegetation on the mid- and lower-portions of the Lighthouse Creek canyon slope and in the creek channel provides "moderately high" quality habitat for amphibians, reptiles, birds and small mammals.*"

The analysis provided on these pages is consistent with the conclusions of the EIR that the project would have the potential to result in significant impacts to biological resources, and those impacts can be reduced to a less than significant level with identified mitigation measures. Please refer to response 5-4 for additional information regarding the impacts and mitigation measures identified by the EIR.

5-8. Please refer to response 5-4 for additional information regarding the analysis of impacts to biological resources provided by the EIR.

5-9. Please refer to response 5-7. This response states that the vegetation on the Lighthouse Creek canyon slope that would be directly impacted (i.e., removed) by the project consists mostly of non-native species that has little biological value. Please also refer to response 5-4, which summarizes the direct and indirect impacts that the proposed project may have on the sensitive biological resources supported by Lighthouse Creek. As described by response 5-4, the EIR evaluates the project's impacts to the creek and identified mitigation measures to reduce impacts to a less than significant level. Please refer to response 5-10 regarding creek bank setbacks required by the City.

5-10. The development standards included in Santa Barbara Municipal Code Section 28.87.250 apply only to Mission Creek (see Section 28.87.250.A, Legislative Intent) and are not applicable to Lighthouse Creek. The statement made by this comment that the City applies the development standards required by this Section to all creeks in Santa Barbara is incorrect as only setback standards for Mission Creek have been established.

Creek setback requirements that are applicable to the proposed project are provided by Local Coastal Plan (LCP) Policy 6.10, which requires that a setback for native vegetation be provided between the top of the bank and proposed development. The Policy states: "*The City shall require a setback buffer for native vegetation between the top of the bank and any proposed project. This setback will vary depending upon the conditions of the site and the environmental impact of the proposed project.*" Based on the requirements of Policy 6.10, the setbacks for new development along Lighthouse Creek are to be reviewed on a project-specific basis.

5-11. Comments from the Urban Creeks Council will be considered by decision-makers. Please refer to the Final EIR's response to comments submitted by the Urban Creeks Council (Comment Letter No. 4).

5-12. Please refer to Planning Commission comment response No. 1, which provides clarification regarding the terms "top of bank" and "top of canyon slope." As stated by the response, the "top of canyon slope" identified by the EIR conforms to and is the same as the top of bank as it is defined by the City's Zoning Ordinance.

5-13. This comment states that the Santa Barbara Municipal Code requires the project to be set back from the top of bank/top of canyon slope at least 25 feet. This statement is not correct. Please refer to response 5-10.

5-14. The Revised Initial Study and EIR evaluates impacts of the currently proposed project design, including the portion of the structure that would extend over the Lighthouse Creek top of canyon slope. The proposed residence would be a minimum of approximately 20-30 feet west of the coastal bluff scrub habitat located on the central portion of the project site slope that descends to Lighthouse Creek, and approximately 70-80 feet west of the riparian vegetation located along the Lighthouse Creek channel. Therefore, the project would provide substantial setbacks from the native vegetation on the project site that has the highest habitat and biological value. The project's habitat setback distances would be similar to or greater than the setbacks provided by other homes located on the east side of the project site access driveway. The vegetation on the Lighthouse Creek canyon slope that would be directly impacted (i.e., removed) by the project consists mostly of non-native and invasive plant species that provide little biological value. In addition, the project would restore approximately 8,000 square feet of the upper slopes of the Lighthouse Creek canyon slope by removing existing non-native vegetation and creating native vegetation habitat (EIR Figure 3.3-8, Landscape Plan). Please refer to response 5-4 above, which describes the conclusions of the Second Revised Draft EIR's evaluation of impacts the proposed project may have on biological resources and mitigation measures to reduce identified impacts to a less than significant level. Please refer to response 5-10 above regarding the City's top of bank setback requirements. Please refer to response 5-11 regarding comments from the Urban Creeks Council.

5-15. An evaluation of the project's potential impacts to biological resources was provided by the Revised Initial Study (EIR Appendix A). The Initial Study's analysis concludes that with the implementation of identified mitigation measures, the project's impacts to biological resources would be reduced to a less than significant level. The Revised Initial Study's evaluation conclusions were also summarized in the Second Revised Draft EIR (Section 9.0, Impacts Found Not To Be Significant). EIR Section 9.0 also supplemented the Initial Study's analysis by including the results of an updated evaluation of biological conditions located on the project site (see EIR Appendix G). That updated biological evaluation also concluded that the project's impacts to biological resources would be reduced to a less than significant level with the implementation of proposed mitigation measures. In addition, Section 6.0 of the EIR (Plans and Policies Analysis) provides an evaluation of the project's consistency with applicable Coastal Act and Local Coastal Program (LCP) policies related to the protection of biological resources. That evaluation

determined that with the implementation of proposed mitigation measures the project would be consistent with Coastal Act and LCP policy requirements. Therefore, the project's potential impacts to biological resources have been fully disclosed and measures to reduce identified impacts to a less than significant level have been identified, consistent with the requirements of CEQA.

5-16. The evaluation of the proposed project's impacts to biological resources included in the Revised Initial Study determined that the discharge of runoff water from the proposed building area to Lighthouse Creek would have the potential to result in significant erosion and water quality impacts. The Initial Study's analysis concluded that the proposed stormwater discharge system would require a Streambed Alteration Agreement from the California Department of Fish and Game (now Wildlife). Implementation of a Streambed Alteration Agreement approved by CDFW in compliance with Section 1602 of the Fish and Game Code would further reduce the potential for the project to result in significant impacts to Lighthouse Creek as it is anticipate that the Agreement would specify requirements related to: on-site planting and restoration; on- and off-site resource protection; construction requirements for structures placed within the creek channel (e.g., a proposed drain pipe and erosion control rip rap); and methods to control erosion and other pollutants. Compliance with the requirements of the required Agreement would reduce impact to Lighthouse Creek to a less than significant level. Mitigation measure BIO-5 requires the project applicant to obtain the required Agreement. No additional analysis or mitigation of the project's potential stormwater discharge impacts is required.

5-17. The EIR consistently uses the term "top of bluff" rather than "bluff edge." This difference in terminology does not affect the clarity or legal adequacy of the EIR. In regard to the location of the top of bluff, this comment asserts that the top is located 8.2 feet north (landward) of where it was mapped by Earth Systems Pacific (EIR Appendix D). This assertion is based on the results of the on-site trench investigation conducted by Anikouchine (EIR Appendix B). The Earth Systems Pacific report references the trench investigation and includes a cross section drawing of the north-south leg of the trench. The cross section drawing shows that the profile of bedrock exposed in the trench closely reflects the topography of the bluff. As depicted by the cross section drawing, the fill material placed over the proposed building site has raised the top of bluff elevation by approximately three to four feet, but did not extend the edge of the bluff to the south as indicated by this comment. The California Coastal Commission staff geologist reviewed and concurred with location of the top of bluff as identified by the Earth Systems Pacific report.

5-18. The Earth Systems Pacific report (EIR Appendix D) estimated the rate of bluff retreat at the project site and provides a detailed explanation of the methodology used to derive the estimated rate of retreat. The report provides substantial evidence regarding bluff retreat conditions at the project site. The report concluded that the rate of retreat at the project site was 1.02 inches per year. That rate of retreat was increased by 20 percent in recognition of potential increases in sea level and wave action that could occur as a result

of climate change. The 20 percent increase in the on-site bluff retreat rate was not a "standard increase" as suggested by this comment. Rather, the increase accounts for rising sea levels, more frequent and intense storms, and increased wave action. Tthe adjusted rate of bluff retreat used by the EIR (1.22 inches per year) does account for climate change-related changes in the ocean environment.

5-19. The City's Safety Element of the General Plan provides the following description of the bluff retreat process: "*…sea cliff retreat occurs as a result of terrestrial and marine erosion processes, can be influenced by human activities and variations in the structure of the bluffs, and can occur slowly due to 'grain-by-grain' erosion or rapidly as a result of large landslides. When all of these factors are considered over an extended period of time, an average rate of bluff retreat can be estimated."* As described by the Safety Element, the overall rate of bluff retreat includes slow, almost imperceptible losses of rock and soil that comprise the bluff, and larger losses of material that occur episodically. Given the overall stability of the bluff in the area of the project site, as described by Anikouchine (EIR Appendix C), it is unlikely that future landslides at the project site will substantially influence the estimated long-term rate of bluff retreat.

5-20. This comment asserts that the rate of bluff retreat at the project site ranges between 5.5 and 8.2 inches per year. This estimate is based, in part, on a map prepared in 1870 and an interpretation of where that map depicts the location of the base of the ocean bluff at the project site. Determining the historic location of an evolving topographic feature, such as the base of an ocean bluff in a dynamic marine environment, requires mapping precision and clarity that is not reflected by the 1870 map that is included in Exhibit L, Figure C of this comment letter. Even if the 1870 map was prepared with accuracy comparable to modern surveying methods that would allow it to be accurately overlaid onto a recent satellite aerial photo, City and Coastal Commission requirements for determining an appropriate setback from the top of an ocean bluff require that the erosion rate at the top of the bluff be estimated, not the erosion rate of the base of the bluff. Rates of erosion and bluff retreat at the base of the bluff are typically higher than at the top of the bluff because erosion at the base is primarily affected by wave action, while the retreat of bluff top is more influenced by terrestrial erosion such as runoff water flowing over the bluff edge. The rate of bluff retreat suggested by this comment was derived by applying the estimated rate of base erosion to long-term erosion conditions at the top of the bluff, which has substantially over-estimated bluff retreat rates at the top of the bluff.

5-21. The EIR (Page 5.2-33) states that the estimated rate of historic bluff retreat at the project site is less than the average city-wide bluff retreat rate of approximately eight inches per year. The EIR and the Earth Systems Pacific bluff retreat study (EIR Appendix D) also state that similarly low retreat rates have been reported in the project area, such as at Station WHEELER, located 0.56 miles to the west of the project site, which has had zero inches of retreat since 1927. The Earth Systems Pacific report provides an explanation of why bluff retreat rates at the project site are lower than the city-wide average. In summary, the report stated that:

- The Monterey Formation, which forms the bluff at the project site, has variable resistance to wave attack and erosion, and the highly siliceous shale at the project site is resistant to erosion.
- The bedding planes at the project site trend sub-parallel along the bluff face, which also increase resistance to wave erosion.
- Only minor undercutting along the bluff was observed, further illustrating that the bedrock is resistant to wave erosion.

5-22. The City Safety Element does not assert that bluff retreat will (emphasis added) increase to approximately 12-24 inches be year between 2012 and 2050. More precisely, the Safety Element states that the *City of Santa Barbara Sea Level Rise Vulnerability Study* (Griggs, 2012) concludes that there is a "moderate" potential for city-wide average bluff retreat rates to double during the short- to intermediate term (2012 to 2050). However, if bluff retreat rates were to double at the project site, the rate of retreat would increase to approximately two inches per year. The Safety Element also states: "…*there is extensive variation in predictions regarding future increases in the rates at which sea cliff retreat will occur.* This is due in part to underlying geologic formations in individual locations. As discussed earlier, the project site has strong, stable underlying geology and thus a lower erosion rate than the average for the city coast. *The California Climate Adaptation Strategy (2009) indicates that a recent study of southern California concluded that erosion rates are expected to accelerate by 20 percent for a sea-level rise of 39.4 inches (100 cm).* The analysis of bluff retreat rates at the project site included in the EIR increased measured rates of retreat by 20 percent for estimated future retreat, consistent with the guidance provided by the *California Climate Adaptation Strategy*, and conservative given the site geology. This methodology was reviewed and accepted by the California Coastal Commission staff geologist.

5-23. For reasons described in responses 5-17, -18, -19, -20, -21 and -22, the top of bluff and estimated bluff retreat rates at the project site presented by this comment are not considered to be representative of conditions at the project site. Furthermore, the location of the top of bluff and the bluff retreat rates used by the EIR were peer reviewed and by Mark Johnsson, the California Coastal Commission staff geologist, who concurred with the conclusions. Consistent with the requirements of CEQA Guidelines Section 15151 the stated disagreements with the location of the top of bluff and the rate of bluff retreat at the project site does not make the EIR inadequate, and the points of disagreement are included as part of the document. The opinions of the commenter regarding the location of the top of bluff and bluff retreat conditions at the project site will be provided to decision-makers for their consideration.

5-24. This comment provides introductory remarks and does not address specific aspects of the EIR's evaluation of geological hazard impacts. No additional response is required.

Please see subsequent responses to specific comments regarding EIR geologic impact analysis and mitigation.

5-25. The page 1 Revised Initial Study (EIR Appendix A) reference is to the brief introductory summary of environmental constraints, which notes identified low level of seismic groundshaking and liquefaction (per City Master Environmental Assessment information). It goes on to state that the site is located in an area of historically active landslides. Page 13 of the Initial Study provides the substantive analysis, and recognizes that development on the project site has the potential to be adversely affected by landslide, and based on geotechnical studies, concludes that due to the site's stable underlying geologic structure in this location, the site would not be susceptible to slope failure within the life of the structures with application of drainage controls. The EIR provides further analysis of this issue.

5-26. As indicated by response 5-25, the Revised Initial Study indicates that the project has the potential to be affected by earthquake-related groundshaking. In regard to landslides that have occurred in the project area, the Revised Initial Study and the Second Revised Draft EIR both describe the El Camino de la Luz landslide of 1978. EIR Figure 5.2-7 (Landslides in the Project Area) describes and depicts the location of the 1978 landslide, and the effects and probable causes of the landslide are described on EIR pages 5.2-3 and -25. The Shoreline Park landslide mentioned by this comment occurred approximately one mile east of the project site. That landslide was described by Anikouchine (EIR Appendix C, page 12) and a photograph of the slide is provided in Figure 11 of Anikouchine's 2011 slope stability report (EIR Appendix C).

5-27. This comment states a concern for the potential of the site to be affected by "severe ground shaking hazards from a large earthquake on a nearby fault" but provides no evidence that ground shaking conditions at the site could be "severe." The City's Safety Element Figure 8 (Peak Ground Acceleration) depicts anticipated peak ground acceleration contours throughout the City. The figure indicates that peak earthquake-related ground accelerations at the project site would be approximately 0.461g, which is generally similar to, or in some cases lower than, anticipated ground accelerations that are predicted to occur throughout the City. As stated by the Revised Initial Study, compliance with building code requirements specified by the Uniform Building Code (California Building Code), would be sufficient to reduce potential earthquake-related damage to the proposed residence to a level similar to the risk throughout much of the City and to a less than significant level. No further analysis of potential groundshaking impacts is required to comply with the impacts analysis requirements of CEQA.

5-28. With regard to potential liquefaction-related impacts, both the Revised Initial Study (page 13) and the Second Revised Draft EIR (Appendix B, page 5) conclude that the potential for liquefaction hazards at the project site is slight due to the soil conditions and low water table conditions.

5-29. The drainage system proposed for the project site would consist primarily of catch basins, a drainage swale, and a pipe that would convey collected water to an area above the Lighthouse Creek channel. The proposed gravity-based system would not require extensive maintenance, and mitigation measure GEO-1 specifies that the property owner shall be responsible for providing long-term maintenance that is required to ensure the system operates adequately. Similar to other private lot drainage systems in Santa Barbara, the City would not be responsible for conducting maintenance inspections, but if necessary, would respond to complaints that the system is not working adequately. The proposed Mitigation Monitoring and Reporting Program for the project (EIR Appendix H), which would be approved by the City decision-maker for the permit application as a condition of project approval, identifies responsible parties and content of monitoring reports consistent with the requirements of the CEQA.

5-30. Mitigation measure GEO-2 requires that the proposed caisson foundation system be approved by a licensed Engineering Geologist or Geotechnical Engineer. Approval of final foundation design details is not deferred mitigation because the EIR has provided substantial evidence that the use of a caisson supported foundation system would reduce potential slope stability impacts to the Lighthouse Creek canyon slope, as well as potential subsidence and expansive soil impacts, to a less than significant level (see Second Revised Draft EIR pages 5.2-32 and 35, and 2013 Canyon Slope Stability Analysis and Erosion Study (EIR Appendix E). The Revised Initial Study also evaluated potential construction-related noise impacts that could result from the use of drills to construct the caissons and determined that mitigation measures N-1, N-2 and N-3 would ensure that short-term noise impacts would be less than significant. Please refer to Planning Commission comment response No. 17 for additional information regarding the installation of foundations caissons at the project site. Therefore, the Draft and Final EIRs provide adequate information to conclude that the proposed caisson supported foundation system is practical and feasible, and would not result in additional significant environmental impacts. Therefore, the requirement for a review of final foundation design details is not deferred mitigation.

5-31. CEQA requires an EIR to address any project inconsistencies with the General Plan or resource plans. Required yard areas on the project site are depicted on the EIR Figure 3.3-1 (Site Plan). As shown, the proposed development would comply with applicable yard setback requirements of the City Zoning Code. Analysis of the project's compliance with zoning standards is provided by the City staff report and presentation in conjunction with their review of the requested Coastal Development Permit for the project.

5-32. Please refer to response 5-10 above. The City has not established specific setback requirements applicable to Lighthouse Creek as indicated by this comment; adequate setbacks are determined on a case-by-case basis based on conditions of the site and project. The analysis provided by the EIR regarding the project's compliance with LCP Policy 6.10 indicates that proposed development would be located approximately 20 to 30 feet from areas on the Lighthouse Creek canyon slope that support native vegetation,

and would be approximately 70-80 feet from the Lighthouse Creek channel. Therefore, substantial evidence is provided that the project would be potentially consistent with the requirements of Policy 6.10.

5-33. Please refer to responses 5-2 through 5-9 above, which address comments included in this comment letter related to the opinions expressed by David Magney. In general, the responses indicate that the proposed project's potential impacts to wildlife, vegetation and habitat have been adequately evaluated, and the impacts of the project would be reduced to a less than significant level with the implementation of mitigation measures BIO-1 through BIO-8, and mitigation measure W-1. In addition, the project would be consistent with Coastal Act and City LCP policy requirements to enhance and preserve ecological resources because the project's impacts to biological resources would not be significant after mitigation and the project proposes to restore approximately 8,000 square feet of native habitat on the project site. The project would also be consistent with the requirements of LCP Policy 6.8 as substantial setbacks would be provided between proposed on-site development and the biological resources associated with Lighthouse Creek (see Response 5-32), and the project's potential water quality impacts would also be reduced to a less than significant level. Therefore, the EIR has provided substantial evidence that the project would be consistent with applicable LCP goals and policies related to the protection and enhancement of biological resources.

5-34. Please refer to response 5-16 regarding the EIR's mitigation requirement that the project applicant obtain a Streambed Alteration Agreement from the California Department of Fish and Wildlife. Please also refer to response 5-10 regarding the City's top of bank setback requirements.

5-35. Please refer to response 5-5 regarding the potential for sensitive invertebrates to be located on the project site. As stated by that response, the only sensitive invertebrate identified by Magney is known to exist at a site approximately 40 miles from the proposed project site. Please refer to response 5-3, which states that no Environmentally Sensitive Habitat Areas (ESHAs) have been designated by the City or the California Coastal Commission within the City's Coastal Zone. Response 5-3 also states that impacts to areas meeting the ESHA criteria per the Coastal Act definition are evaluated as part of environmental review and policy analysis for development applications, and that the Revised Initial Study (EIR Appendix A) and EIR Section 9.0 (Impacts Fount Not to be Consistent) evaluate the project's impacts to potentially sensitive habitat in the project vicinity. The analysis demonstrates that identified impacts would be reduced to a less than significant level with the implementation of proposed mitigation measures. Therefore, the project would not result in significant impacts to environmentally sensitive resources. Please refer to response 5-2, which states that the project site was surveyed for rare plants on three occasions. Therefore, adequate data and substantial evidence has been provided to conclude that the proposed project would be potentially consistent with the LCP Policy related to the preservation of habitats of rare and endangered species.

5-36. Please refer to responses 5-14, 5-15 and 5-33, which demonstrate that the proposed project's impacts to the resources of Lighthouse Creek would be reduced to a less than significant level with the implementation of identified mitigation measures. Please refer to response 5-3, which states that there is no designated ESHA in the City and that SBMC Section 28.75.045 pertaining to hazardous waste facilities is not applicable to the proposed project. The SBMC does not include a Section 28.44.440. If commenter meant to refer to Section 28.44.040, that section provides Definitions of terms, not specific permit requirements applicable to the project.

5-37. Please refer to responses 5-17 through 5-23. As demonstrated by those responses, the Second Revised Draft EIR adequately reviewed impacts related to the location of the top of bluff and the rate of bluff retreat at the project site. Therefore, the EIR provides substantial evidence that the project is potentially consistent with the requirements of Coastal Act Section 30253.

5-38. The Second Revised Draft EIR provides extensive analysis of the slope stability conditions of the project site and the slope stability impacts of the project. Please refer to the following:

- EIR Appendix A: Revised Initial Study Section 5d-f (Geologic or Soil Instability) and Exhibit E (Anikouchine, 2005)
- EIR Section 5.2.1 (Setting: landslide hazards).
- EIR Section 5.2.3 (Impact Evaluation: Bedding Plane Fracture Investigation; Additional Slope Stability Analysis; and Lighthouse Creek Canyon Slope Stability).
- EIR Section 5.2.5 (Mitigation Measures and Residual Impacts).
- EIR Appendices B, C and E.

The information included in the Revised Initial Study and the EIR sections described above provide substantial evidence that with the implementation of mitigation measures identified in EIR Section 5.2.5 the project's potential slope stability impacts would be reduced to a less than significant level. The EIR also provides substantial evidence that the project could be found consistent with the requirements of Coastal Act Section 30253 and policies of the City's LCP related to cliff top development.

5-39. Please refer to response 5-29 regarding the project's proposed drainage and maintenance requirements. With the implementation of mitigation measure GEO-1 the project would provide a drainage system consistent with the drainage system requirements of the LCP.

5-40. Proposed grading on the project site would not be conducted on the bluff face. Therefore, the project would not result in grading in areas that have been affected by small landslides or soil slumps in the recent past. Also, please refer to response 5-38, which demonstrates that based on substantial analysis, the ocean bluff on the project site is considered stable. Proposed grading would occur on the Lighthouse Creek canyon slope.

The slope stability analysis conducted for that slope concluded that it is grossly stable (see EIR Appendix E). Grading plans and reports would be prepared by qualified professionals (e.g., soils engineers, geotechnical engineers, engineering geologists) per Building Code requirements (SBMC § 22.04).

5-41. Coastal Act Policy 30251 requires that the scenic and visual quality of coastal areas be "considered and protected." LCP Policy 9.1 has similar requirements. The EIR provides extensive analysis of the potential for the project to adversely affect views of coastal resources, including the ocean. Through the use of photosimulations the EIR visually demonstrates that the proposed residence would have a minor effect on existing public views of the ocean. The EIR also provides substantial evidence that potential ocean view impacts that may result from landscaping (if trees allowed to grow above the roofline, and visual compatibility impacts that may result from future changes to the color of the proposed residence (if not neutral or earth-tone) can be reduced to a less than significant level by color specification and design review. Therefore, existing coastal views have been considered and protected as required by Coastal Act Policy 30251. Policy 30251 also requires that alterations to natural landforms be minimized. As proposed, the project would result in minor grading (288 cubic yards of cut and 21 cubic yards of fill). Therefore, the project would also be consistent with requirements to minimize landform alterations.

5-42. The EIR provides extensive analysis of the potential for the project to adversely affect views of coastal resources, including the Lighthouse Creek canyon and channel. Through the use of photosimulations (see EIR Figures 5.1-4 and 5.1-5) the EIR visually demonstrates that the proposed residence would have a minor effect on the existing visual conditions of Lighthouse Creek. On page 5.1-17 of the EIR, the analysis concludes "*..the structure would not substantially alter the visual extent of the view corridor because the western edge of the corridor would continue to be defined by existing trees, bushes and houses.*" The "view corridor" mentioned by this EIR excerpt refers to the Lighthouse Creek channel, canyon and adjacent residential development. In addition, the project would remove approximately 8,000 square feet of non-native vegetation and replace it with native plants and habitat. This restoration effort would have a beneficial effect on existing visual conditions. Therefore, the EIR provides substantial evidence that the project would be potentially consistent with the LCP policy referred to by this comment.

5-43. The Revised Initial Study (EIR Appendix A) includes photosimulations depicting the appearance of the residence that was originally proposed for the project site. Those simulations include views of the project site from three viewpoints on the beach near the project site. The original residence design was for a two-story residence that would have had a structure height approximately 10 feet taller than the current project design that is depicted in Final EIR Figures 3.3-2 and 3.3-3.

The previous project design photosimulations show that the residence would have been partially visible from the selected viewpoints along the beach near the project site. The

Second Revised Draft EIR (page 5.1-33) concluded that, based on the photosimulations prepared for the previous project design, the current project design would not result in significant impacts to views from the beach because the original (taller) residence design would not have interfered with views of scenic resources such as the Santa Ynez Mountains; and the reduced height of the current project design would be less visible from the beach than what is depicted by the original residence design simulations. Although the currently proposed residence may be visible from viewpoints along the beach, the project would not result in the loss of a substantial amount of open space or result in grading or vegetation removal that would adversely affect existing views from the beach. The proposed residence constitutes limited in-fill development within an existing residential neighborhood, and would have a size that is similar to or smaller than other ocean front homes in the project area. Also, the proposed design must be approved by the City's Single Family Design Board, which would ensure design consistency with other nearby residences and the natural context that can be seen from the beach. Therefore, the proposed project would not result in significant impacts to views from the beach. Therefore, the Second Revised Draft EIR provides substantial evidence that the project would be potentially consistent with the requirements of LCP Policy 9.1.

5-44. Please refer to topical response pertaining to the EIR analysis of bluff retreat and response 5-43. Over the life of the proposed project it is expected that the project site bluff will gradually retreat landward. However, the retreat of the bluff would not substantially alter the visual context of the project site, the project area, or the proposed residence. Over time, the proposed residence would continue to be visually compatible with other residential structures in the existing coastal residential neighborhood, and the gradual bluff retreat does not have the potential to substantially change the project's visual effect to and from the coast.

5-45. Please refer to EIR Figure 3.3-1 (Site Plan). The project site plan shows and labels an "existing pedestrian access easement" along the western perimeter of the project site. It is not a public path. Also as shown by the site plan, the project would not result in the development of any structural impediments that would hinder access to or use of the easement.

5-46. Please refer to the Access Easement Topical Response, which is provided above and addresses access-related issues related to the proposed project.

5-47 As shown on Safety Element Figure 20 (City of Santa Barbara General Plan High Fire Hazard Zones) the project site is not located in a designated high fire hazard zone. The Fire Department has, however, required that the proposed structure be built in accordance with the City's High Fire Construction requirements (mitigation measure H-3), which would lessen potential fire hazards, and has found access for fire response to be adequate with this measure. Other required fire safety measures in accordance with the City Fire Code include the installation of sprinklers (mitigation measure H-1), monitored fire alarm (mitigation measure H-2), and fire protection systems maintenance agreement (mitigation

measure H-4). Based on input from and the requirements of the Fire Department, the EIR concludes that the required mitigation measures would be adequate to reduce potential project-related fire protection impacts to a less than significant level.

This comment also refers to a specific fire risk reduction standard related to vegetation management adjacent to driveways within designated High Fire Hazard Areas. The project is not located within a designated High Fire Hazard area, and the referenced standard would not be applicable to the proposed project. Also please note that the only vegetation adjacent to the project site's access driveway is a very minor amount of ornamental landscaping that would not be considered to pose a fire hazard.

5-48. These paragraphs summarize CEQA requirements related to the evaluation of alternatives to a proposed project. No response is required.

5-49. This comment provides a summary of the alternatives analysis included in the Second Revised Draft EIR. In regard to the summary provided, please note that:

- The EIR evaluated two alternatives to the project, the mandatory "No Project" alternative and a Smaller Project Alternative.

- The Smaller Project Alternative design assumed that the residence developed on the project site would have a total floor area of 1,604 square feet compared to the 2,089 square feet of the proposed project. The alternative design would result in a floor area reduction of 485 square feet, a substantial overall reduction of approximately 23 percent, when compared to the proposed project.

- The EIR uses photosimulations to evaluate potential aesthetic/view obstruction impacts of the Smaller Project Alternative, which would have a maximum height that is three feet taller than the proposed project. That analysis concludes that the Alternative's impacts would be similar to or slightly reduced when compared to the proposed project. The EIR also evaluates potential grading-related impacts that would result from the Smaller Project Alternative, which would require approximately 500 cubic yards of grading, compared to approximately 288 cubic yards for the proposed project. That analysis concludes that potential grading-related impacts would be similar to those of the proposed project, which would be reduced to a less than significant level with the implementation of mitigation measures.

- Please refer to responses 5-10 and 5-14 regarding required top of bank setbacks in the City, and the proposed project's setbacks from native habitat that would be provided by the proposed project. Please refer to response 5-17 and 5-20 regarding the location of the top of bluff at the project site and the proposed building setback from the top of bluff. As demonstrated by those responses, the

proposed project and the Smaller Project Alternative would implement appropriate bluff and creek setbacks.

5-50. The Smaller Project Alternative evaluates the environmental effects that would result from two major changes to the proposed project: a substantially different design appearance for the residence on the project site; and a substantial reduction in the size of the proposed project. Therefore, the Smaller Project Alternative combined the evaluation of two feasible alternatives to the proposed project: a smaller project alternative and a project redesign alternative. The analysis of the Smaller Project Alternative concludes that a residence on the project site that is smaller than the proposed project would slightly reduce already less-than-significant project impacts related to the obstruction of an important scenic view (views of the ocean), even though the maximum height of the alternative design would three feet higher than the height of the proposed project. The analysis also concludes that the implementation of the Smaller Project Alternative would not be required to reduce the impacts of the proposed project to a less than significant level. Other visual aesthetic and geology impacts of the Smaller Project Alternative would generally be similar to the impacts of the proposed project, and potential grading related impacts that could result from the Alternative would be reduced to a less than significant level with the implementation of proposed mitigation measures.

The EIR evaluated a feasible alternative that would attain the basic objectives of the project. The analysis of the Smaller Project Alternative concludes that developing a smaller residence on the project site would result in additional reductions in less than significant project-related impacts to ocean views. With impacts already less than significant, it is not necessary for the EIR to evaluate an even smaller design alternative to demonstrate that reducing the size of the residence on the project site further reduces the project's less than significant impacts on ocean views. Therefore, information provided by the analysis of the Smaller Project Alternative promotes informed decision-making and complies with the requirements of CEQA.

5-51. The EIR considered other potential alternatives to the project, such as developing alternative uses on the project site, an alternative project site, and relocating the residence to another location on the project site. The project site has long been designated for residential use, and those suggested alternatives were rejected as being inconsistent with the primary objective of the project, which is to develop a residence on the developable portion of the project site, or because they were infeasible for reasons outlined in the EIR. CEQA requires that alternatives be capable of implementing most of the basic objectives of the project, and involve reduction of significant impacts of the project. CEQA provides that infeasible alternatives not be further evaluated. As a result of these provisions, the range of feasible and reasonable alternatives to the proposed project is limited. Please refer to response 5-50, which demonstrates that the EIR did not need to evaluate an alternative residence design that was smaller than what was evaluated by the Smaller Project Alternative. The other alternatives suggested by this comment would not attain

the basic objective of the project to construct a residence on the project site and as such are not feasible alternatives to the project and are not required to be evaluated.

5-52. This comment provides opinions of the commenter regarding the proposed project and requests that additional environmental review for the project be conducted. Please refer to the responses provided above, which indicate that the environmental review included in the EIR adequately evaluates the impacts of the proposed project under the provisions of CEQA, and no additional analysis is required.

Letter No. 6

From: Rodriguez, Julie
To: Kennedy, Kathleen
Subject: FW: Public comment for draft EIR at 1837 1/2 El Camino de la Luz
Date: Thursday, December 08, 2016 8:45:38 AM

From: Lou deBourbon [mailto:loudebourbon@hotmail.com]
Sent: Tuesday, November 29, 2016 3:53 PM
To: Community Development PC Secretary <pcsecretary@SantaBarbaraCA.gov>
Subject: Public comment for draft EIR at 1837 1/2 El Camino de la Luz

Dear Planning Commissioners,
I am writing in opposition to the proposed development at 1837 1/2 El Camino de la Luz.

For over 20 years I have had the pleasure of visiting the area. The view from La Mesa Park and the foot bridge over Lighthouse Creek is a special and beautiful coastal feature and has always provided a wonderful view past the creek mouth to the ocean and islands. From the beach below the undisturbed canyon opening also is an impressive sight for locals and out of town visitors.

At the November 17 hearing there was a great deal of discussion about the interpretation of "top of ocean bluff" and "top of creek/canyon" as though they were separate entities. At the location under consideration they come together and form a unique coastal corner. It is a special landmark where the canyons and creeks come to the sea, and the earth and water meet and only two high points exist. 6-1

The forces of nature slowly whittle away the land on each side. This natural boundary transformational process in nature is very special. This is what I cherish most about this view toward the ocean - the rounded corner of the bluff, undisturbed and gradually changing over time.

These ocean/creek corners should have special protection in Santa Barbara. There are so few they should be considered

Heritage Sites. As long as they are allowed to weather naturally, future generations will be able to enjoy, not just the moment, but the historical perspective nature has provided. A 100 foot caisson, or even a 10 foot one would forever deprive us of that experience. 6-1

Sincerely,
Louis DeBourbon

Comment Letter No. 6
Lou DeBourbon
Date: November 29, 2016

6-1 This comment conveys opposition to the project, and expresses a variety of opinions regarding views of the ocean available from La Mesa Park and the footbridge over Lighthouse Creek; the EIR's definition of the top of ocean bluff and the top of the Lighthouse Creek canyon slope; and the general visual appearance of the project site and surrounding area. These statements do not address the adequacy of the environmental impact analysis provided by the EIR but have been included in the Final EIR to inform decision-makers of the commenter's opinions. Also please see topical responses pertaining to top of bluff and top of creek canyon slope.

From: Rodriguez, Julie on behalf of Community Development PC Secretary
Cc: Gularte, Beatriz; Vincent, Scott; Kennedy, Kathleen
Subject: FW: Objection to 1837½ El Camino de la Luz Residence (SCH No. 2005041031) 2nd Draft EIR
Date: Monday, November 14, 2016 9:19:18 AM

Public Comment letter received for 1837.5 El Camino de la Luz.

Julie Rodriguez
Planning Commission Secretary
CITY OF SANTA BARBARA, Community Development
(805) 564-5470 x 4535 | PCSecretary@SantaBarbaraCA.gov

Letter No. 7

From: Kim Finegold [mailto:kfinegold73@gmail.com]
Sent: Saturday, November 12, 2016 2:52 PM
To: Community Development PC Secretary
Cc: Kennedy, Kathleen
Subject: Objection to 1837½ El Camino de la Luz Residence (SCH No. 2005041031) 2nd Draft EIR

Joe and Kim Finegold
1903 El Camino de la Luz
Santa Barbara, Ca 93109
November 17, 2016 Hearing
Planning Commission
City of Santa Barbara
Community Development Department
630 Garden St.
Santa Barbara, CA 93102
Re: Second Draft EIR
1837.5 El Camino de la Luz
SCH No. 2005041031
Honorable Commissioners:

We have lived at 1903 El Camino de la Luz since 2014. We object to the development proposed at 1837.5 El Camino de la Luz. We are adding our voices of those of our neighbors who have very clearly and consistently, over the last 20 plus years, objected to the development of this very small parcel of land at the edge of the bluff. We agree with all the points submitted by Greg and Judith Smith, Stan Krome and Joanna Morgan, Bruce and Grace Peterson and Rafael and Linda Franco among others

Of particular concern to us is the issue of the setback from the edge of the bluff. Section 30253 of the Coastal Act states *Minimization of adverse impacts New development shall: (1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard. (2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.* Mark Johnsson, Staff Geologist in his MEMORANDUM of 16 January 2003 states 7-1

Because coastal bluffs are dynamic, evolving landforms, establishing appropriate development setbacks from coastal bluffs is far more challenging than it is for manufactured or natural slopes not subject to erosion at the base of the slope. The mechanisms of coastal bluff retreat are complex, but can be grouped into two broad categories. Bluff retreat may occur suddenly and catastrophically through slope failure involving the entire bluff, or more gradually through grainby-grain erosion by marine, subaerial, and ground water processes. For both processes, the setback must be adequate to assure safety over the design life of the development.

The EIR authors cite various sources (page 107) who, using a variety of techniques, predict the rate of retreat of the bluff ranges from 1-8 inches per year. Additionally, the inherent instability of our bluffs is well evidenced by the major slide in 1978 just to the west of the proposed building site, the loss of many segments of the bluff in Shoreline Park and the loss of several trees from the bluffs in Douglas Family Preserve. To allow a construction project of this magnitude at and over the edge of the bluff is irresponsible at best and risking the lives and property of those currently living in the area at worst. 7-2

Finally, as stated so many times in the past, this small parcel of land lacks legal access with the driveway back to the parcel being 6.5 feet wide at one point and either 7.5 feet or 9 feet for most of the rest. It is 7-3

hard to imagine the equipment needed to construct a building of this size being able to access the site. However, of greater concern to us, is the inadequate access for emergency vehicles, particularly fire trucks. Should a fire break out in or around this structure, it would be impossible for fire trucks to reach the site and this would put our entire neighborhood in danger. 7-3

Thank you for your consideration,

Kim and Joe Finegold

1903 El Camino de la Luz

Comment Letter No. 7
Kim and Joe Finegold
Date: November 14, 2016

7-1. This comment conveys opposition to the project, and expresses concurrence with comments made by others in opposition to the proposed project, cites Coastal Act Section 30253, and provides an excerpt from a California Coastal Commission guidelines for assessing ocean bluff retreat impacts on new development.

The EIR determines that based on the extensive slope stability analysis that has been conducted for the project site and for the proposed project, the project could be found consistent with the requirements of Coastal Act Section 30253 pertaining to slope stability and setbacks. Please refer to comment response 2-7 above, which explains that the EIR evaluates the potential for bluff retreat impacts at the project site using the methodology outlined in the Coastal Commission guidelines titled *Establishing Development Setbacks from Coastal Bluffs* (Johnsson, 2003).

7-2. This comment expresses general opinions regarding reported bluff retreat rates at the project site and potential slope stability impacts that may affect the project. The comments do not specifically address the adequacy of the analysis included in the EIR, therefore, no additional response is required. The comment has been included in the Final EIR to inform decision-makers of the commenter's opinions.

7-3. Please refer to the Access Easement topical response provided above regarding the adequacy of project-related access easements. The existing access easements were evaluated by the Santa Barbara Fire Department and determined to be adequate with the implementation of proposed mitigation measures..

EIR Section 9.1.3 (Impacts Found Not to be Significant: Hazards) addresses the potential for fire hazard due to the project location adjacent to native vegetation and the narrow width of the access driveway. The EIR concludes, in accordance with Fire Department recommendations, that potential fire hazards would be less than significant with provisions requiring that the structure be built in accordance with the City's Fire Code and High Fire Construction requirements (mitigation measure H-3), the installation of sprinklers (mitigation measure H-1), monitored fire alarm (mitigation measure H-2), and fire protection systems maintenance agreement (mitigation measure H-4). The EIR concludes that the required mitigation measures would be adequate to reduce potential project-related fire hazard impacts to a less than significant level.

Rafael Franco
1835 El Camino de la Luz
Santa Barbara, CA 93109

November 17, 2016

Letter No. 8

Planning Commission
City of Santa Barbara
Community Development Department
630 Garden St.
Santa Barbara, CA 93102

Re: Second Draft EIR
1837.5 El Camino de la Luz
SCH No. 2005041031
October 2016

Honorable Commissioners:

Attached you will find the comments of the neighbors of the subject Draft EIR and other relevant information to help you evaluate that document. This exhaustive EIR was mandated to answer three simple questions posed by this Commission eleven years ago. After rejecting a Mitigated Negative Declaration the Commission asked in 2005 for a FOCUSSED EIR to study the followings:

1. Vehicular and pedestrian public access to the site and the beach
2. Geotechnical stability of the site
3. Visual impacts of the project from the La Mesa Park and the beach

8-1

You may wonder why it has taken eleven years to factually answer these questions, but in fact, the 470 pages of this document represent only a partial file of the past forty-year effort by the applicant to build on this site. This process has included four lawsuits, 22 geotechnical reports, six architectural proposals, six different staff planners, three City attorneys and at least thirty Planning Commissioners. This letter will try to simply summarize the answers to the above questions.

1. **Access to the site** is by a 15 ft wide easement to my house. The easement then narrows to 7.0 ft through a portion of my property and widens to 9 ft through 1837, the Peterson property. There is also a 5 ft pedestrian public access easement to the beach. Vehicular access does not conform with the 15 ft wide easement presented to the City Council to allow the lot split in 1958. A spurious easement without consent of the neighbors was recorded in 1963 when the newly created lot was sold. This was settled in the course of two lawsuits by which the applicant was compensated for his loss and he quit claimed all rights to the adjoining property needed to create his easement. The applicant has not been able to perfect a 15 ft easement in forty years. He only succeeded in narrowing his easement to 6.5 ft

8-2

in his third lawsuit when he conceded a 1ft prescriptive easement for an existing wall on my property.

REQUIRED MITIGATION.....Per the Conditional Certificate of Compliance for the parcel, show proof of a 15 ft easement to the entrance of the lot and maintain the 5 ft public access easement down to the beach. 8-2

2. **Geotechnical stability** has been reviewed and reported in twenty two reports by various engineers. Incredibly this is still not resolved. The last slope stability analysis was completed in 2011. The analysis and report are five years old and do not reflect the current design or load values. The conclusions of new slope regression analysis contradict all ocean bluff setback standards recognized City and State, and even the recommendations of the EIR's lead geologist. Most confusing of all is the fact that the Geologist who performed this latest analysis stated that he did not recommend the set backs indicated in the EIR and does not know how they got in the EIR. 8-3

   PROPOSED MITIGATION.....There is no mitigation. Historical evidence and sea level rise studies suggest that if the 23rd report is done right, the project will not meet the code required slope stability.

3. **Visual and aesthetic impacts** are personal and subjective. The EIR does a good job presenting the views from the park, the benches area, and the bridge. However, since these renderings were produced, the location of the house has shifted closer to the bluff. There are no renderings from the beach below. The house has shifted down into the slope of Lighthouse Creek, extends 30 ft over the bluff edge, and it does not comply with design guidelines for creek side or slope development. 8-4

   PROPOSED MITIGATION.....The EIR suggests painting the house with approved colors. The project shown uses stone siding.

Hopefully this summary answers the three simple questions, but just in case you wish to read all 470 pages of the EIR, I would suggest that you list all the documents in the appendices in chronological order. Even I, who have been part of this saga for forty years found the scrambled information difficult to track and understand. My comments to the EIR follow the same outline format as the EIR. If there appear to be duplicated comments, it is because the items are duplicated in the EIR. 8-5

I am also attaching three documents to this letter that may be of help. A) PROJECT CHRONOLOGY and CHAIN OF TITLE with recording references until 2003. B) PRIMER ON COASTAL BLUFF EROSION BY CCC geologist Dr Mark Johnson, and C) CITY OF SANTA BARBARA SEA-RISE VULNERABILITY ASSESSMENTS by Dr. Gary B Griggs a preeminent authority on California coastal bluffs.

Respectfully,

Draft EIR Comments
Nov. 17, 2016
Rafael Franco

2.5 AREAS OF CONTROVERSY / ISSUES TO BE RESOLVED

On May and June 2005, the Planning Commission rejected the mitigated Negative Declaration for a project on the subject site and asked for a FOCUSED EIR on three areas of concern, Visual Impacts, Geology, and Access. Visual Impacts is the only subjective issue. The other issues are easily identified legal or technical facts. To describe this as controversy is the wrong characterization for something that has taken eleven years to produce this Draft EIR. 8-6

Table 2.3-1. Geologic Hazards

This table is a gross characterization and omission of the potentially life threatening impact not just to the residents of the project, but to the adjacent neighbors. To simply say that "The proposed residence has the potential to be adversely affected by fill soil previously placed at the project site, subsidence and expansive soil imports" ignores and omits the existence of three previous landslides on the property, two fractures cutting the bluff, and unsupported bedding planes of the underlying shale bedrock. All of these factors affect no just the subject property, but also the adjacent property. See Figure 4 of the Slope Stability study by Dr. Anikouchine on Nov. 9, 2011. 8-7

The table also lists as mitigation the foundation design "which implements a caisson supported foundation system shall be approved by a licensed Engineering Geologist OR Geotechnical Engineer". California building codes require the signature and approval by both, an Engineering Geologist AND a Geotechnical Engineer. This is one of the principal issues for the project, the avoidance of using a Geotechnical Engineer to perform the slope stability calculation for the coastal bluff. The emphasis has been on looking for the one calculation than indicates acceptable stability, the strong link in the chain, when in fact what the building code requires is looking for the one weakest link or cross section of the slope. That is common geotechnical practice since that is where the slope will fail. 8-8

The proposed mitigation using caissons also ignores the long term impacts of this type of foundation on receding coastal bluffs. What happens to these deep concrete piles when the 75 years are over? The answer is visible on the bluffs of Isla Vista, Hope Ranch and Sandpiper. Clearly this is a negative environmental impact that will be with us for hundreds of years and not identified in the EIR. 8-9

Table 2.3-1

The transportation issue is well covered by T-1 for vehicular access, the narrowest point is 6.5 ft. Just as important is the PUBLIC ACCESS issue, the easement recorded with the original subdivision. This five foot PUBLIC ACCESS easement was created and remains in use to this day. The easement is marked in bold letters on the pavement and can easily be searched in public records. The plans for this project incorrectly narrow the easement to three feet and indicate a wall to do the same. 8-10

T-2.3-1 Imposes a condition and almost impossible mitigation requiring free parking on site or other off-site location. Whoever wrote this did not understand the dynamics of El Camino De La Luz or requirements for construction. Our cul-de-sac serves eleven houses through five driveways, a pedestrian access through Lighthouse Creek, the pump station for the main sewer line, and a fire hydrant. 8-11

3.0. PROJECT DESCRIPTION

This section does not mention the 10 ft high by 75 ft long retaining walls required for the lower level of the house. These walls are supported by caisson foundations. There is no mention of the construction impacts on Lighthouse Creek. Typically the excavation for the basement would take place before the caissons are drilled. How will the Marine Terrace deposits be removed and re-compacted? There will be approximately 300 cubic yards of topsoil and bedrock to be removed from the site just for the basement with no turning radius for excavating equipment or haul trucks. 8-12

The finish grade for the project is 111 feet above sea level. The south edge of the existing pad is at 105 feet ASL. This indicates that there will be six feet of fill to change the grade. Will this be place directly over the uncertified eight feet of marine terrace alluvium? This is not permitted by code. No stairs are indicated to maintain the five foot pedestrian access easement. 8-13

5.1. VISUAL AESTHETICS

The EIR states that "design changes similar to those recommended by the previous Draft EIRs have been incorporated into the design of the currently proposed project and the potential for the project's current design to result in significant visual aesthetic impacts is evaluated by the Second Revised EIR".

Thirty six pages of the EIR are dedicated to this topic. The concluding impact AES-1 mitigation is "the use of bright colors or contrasting combination of colors would have the potential to degrade important public scenic views". This is not what the Planning Commission discussed when they ordered a Focus EIR to study this issue. The very simple question was, show us what it looks like from the park, the bridge AND from DOWN ON THE BEACH. That is not included in the EIR. 8-14

The project has been moved down into the creek bank, in contravention to creek side design guidelines, including cantilever floors and decks, and it is moved within 7.5 ft of the ocean bluff edge of the property. To say that the project visual impacts can be mitigated with paint colors is ridiculous. The fundamental question is ....when does the diamond on my nose enhance or detract? 8-15

5.2. GEOLOGY

In 1978 the properties just west of the subject parcel were subject to a massive landslide that destroyed three houses. The City retained Donald Weaver & Associates to investigate the failure. The massive slide extended more than 100 feet into the ocean. At that time it was believed to be a rotational slide. His report also included a zone of high risk that extended to Lighthouse Creek right through the middle of the proposed building pad of the subject site. His prediction corresponds to the USGS LiDAR imagery of the coastal bluff. El Camino de la Luz has become the study model for much of the coastal bluffs of Central California. 8-16

In 1982 Dr. Weaver wrote..."Demonstration of the existence of this continuous planar detachment surface coincident with local bedding in the Monterrey Formation, has caused us to alter our previous interpretations concerning the types of movement which took place during sliding. It is now our belief that there were only minor amounts of rotational movement involved and that the major sense of movement was translational along the bedding plane surface.....These factors in conjunction with the undercutting of the prehistoric slide mass by wave action, day-lighted bedding plane surfaces, and the presence of expansive bentonite clay layers, all contributed to the detachment and sliding of the fractured block". He concluded ...."continued mass wasting of the toe of the slide by wave action is inevitable". These are conditions similar to the subject site. 8-16

Page 5.2-1 lists five different geotechnical reviews and reports referenced to different appendices, but it does not list the reports by Geotechnologies Inc. while the argument may be made that this firm was not contracted by the preparer of the EIR, neither were other reports paid for by the applicant directly. The trench work was paid for by the applicant supposedly at the direction of his attorney, and the two reports by Earth Systems are addressed directly to the applicant. 8-17

The 2005 report by Dr. Anikouchine was a peer review of 17 previous reports, most of them without borings, excavations or tests of materials. Without any of this information, Dr. Anikouchine took it upon himself to do slope stability calculations and draw unsubstantiated conclusions. This report included observations of two landslides on the property, one very large one on the southeast corner to which he expressed surprise at the weak shear strength of the bedrock. The other landslide was a smaller surficial slide at the western property line. He did not detect the largest 1995 landslide under the westerly property covered by vegetation. 8-18

2007 Geotechnologies Inc. performed a peer review of the 2005 report and commented on existing conditions, unsupported bedding planes and methodologies for slope stability analysis.

2008 Dr. Anikouchine wrote a rebuttal and this time included information about other landslides west of the property. (Figure B). Note that Figure A of this letter does not indicate these landslides.

Four years later, in 2009, an excavation was contracted for and paid by the applicant to perform two exploratory excavations in search of a fracture referenced in one of the reports years earlier. Dr. Anikouchine did not locate the stated fracture and claimed to refill the trenches to 95% using compaction equipment and water. We witnessed the re-compaction, however there was no water available. Within days the trenches began to settle and the applicant was advised to cover them with asphalt. Even after that, the trenches continued to settle. Then, just before the visit by the Planning Commission, the applicant brought in soil to cover up the settlement. To this day, the settlement is still visible and has become a drainage culvert for all the water coming from the driveways all the way to Camino de la Luz. 8-19

Figure 5.2-8 PROJECT SITE GEOLOGY AND THEORETICAL WEDGE FAILURE AREA

This drawing is misleading. The potential impact of the geology extends beyond the property boundaries. The Monterrey formation should be shown and analyzed from the northwest corner of the site down to the sea. This drawing looks more like the path of a plane failure than a 8-20

wedge failure. If there is a plane failure, it would obviously affect the adjacent residence. The drawing also omits the large landslide Qls at the SE corner of the property identified by Dr Anikouchine elsewhere in the report.

There is also no indication of the potential high risk zone indicated by Dr. Weaver in his 1978 report on the landslide at 1925 el Camino de la Luz. This line of potential failure traverses the paved area of the site. This intuitive and educated conclusion can now be verified with USGS LiDAR Imagery. 8-20

In 2011 Dr. Anikouchine produced a slope stability report concluded that the slope met the pseudo static factor of safety required by the Building Code 1.2 vs 1.1 and therefor the static analysis was not required. The load used for his analysis was 50 psf , but it should be noted that with the additional five to six feet of fill to achieve the 111 elevation in the latest plan, the loads have increased. Considering the marginal factor of safety, lack of static analysis and the relocation of the project closer and within 7.5 ft of the bluff edge, it is prudent to re run the calculations for both pseudo static and static conditions. 8-21

The report states...."**the equation for the factor of safety was modified to apply to a compound sloped bluff (see Figure 5).** Some factors of the equation are shown on the table titled PLANE FAILURE ANALYSIS INPUT. The compound nature of the analysis is reflected in the different angles used for the strike of the bedding and the strike of the bluff face. What would be the result if the plane failure occurred along the same strike of the bedding? 8-22

The same question is raised about the load used in the formula. The author chooses the LIVE LOAD requirements of the building code 50 psf, but neglects the dead load of the building and the changed proximity to the bluff. The new plan for the project indicates an average of two feet of compacted new soil, caissons, grade beams and concrete slabs. Just the concrete slabs weigh 50 lbs per square foot. Two feet of compacted soil add 100lbs. Caissons and grade beams are indeterminable at this point. Add all of this to the 50 psf live load in the report and the result is clearly over 200 psf. What would be be factor of safety if this factor was changed in the formula? 8-23

It is further noted in the Geotechnologies Inc report of April13, 2012 ...."The slope stability analyses (in the report) are not performed along a distinct bedding plane or fracture or a range of computer generated alternatives through the existing topography. The analyses are based on synthetically derived geometries that do not reflect the variability of the site". Translation.....in common practice, Geotechnical Engineers run hundreds of possible slide scenarios through the computer to find the weakest potential plane of failure. As evidenced by the existing various and different slope failures on site, one cannot simply select one laboratory generated condition and apply that result to the entire heterogeneous and folded Monterrey Formation. 8-24

RELOCATION OF TOP OF BLUFF

After almost 20 years we have almost come to agreement on the location of the top of bluff. After visits by Mark Johnson, Staff Geologist for the CCC, there is agreement that the edge of 8-25

the paved area is the top of bluff. However, Figure 5.2-1 indicates a red line that dives down seaward perpendicular to the contours of the slope. This is incorrect. The red line should follow the contour to meet with the green line on Figure 5.2-2 Canyon Top of Slope demarcation. 8-25

PROJECT SITE BLUFF RETREAT & SETBACK REQUIREMENTS

This is perhaps the most shocking revision in this Draft EIR. This report addressed to the applicant contradicts all evidence, all technical reports, and all expert testimony about the rate of bluff retreat for the next 75 years. The basis of the report is a photographic comparison of existing coastal elements from 1953 and 2012 and from that derives an average annual bluff retreat of 1.2 inches per year. A similar comparison was shown in my letter of February 11, 2011 that compared the shoreline retreats between 1995 and 2001. That six year period indicates a retreat of six feet or 12 inches per year. While the EIR cites the disparities, from 1.2 to 12 inches per year, it presents a project using the lowest value and closest proximity to the bluff. The edge of the building is 7.5 ft from the cliff formed by the Marine Terrace artificial fill. The supporting ocean side slope exceeds a 1:1 ratio. The photographic analysis of the past is no evidence of future recession. In the case of a progressively receding shoreline, especially by sea level rise, it is not just the bluff retreat that has to be examined, but the entire underlying support structure of the bluff. 8-26

CCC guidelines for establishing bluff retreat are very clear, missing from the EIR, and ignored by the project. These guidelines state that once the retreat rate is established, 1.2, 4, 6, 8 or 12 inches per year multiplied by the 75 year economic life of the project, you are to add 10 ft as a safety margin. This would yield a require setback of minimally 17.5 ft to 85 ft from the edge of the bluff. Even the 2011 slope stability analysis of the EIR recommends a retreat rate of 5 inches per year. This translates to 21.25 ft plus 10 ft or a total setback of **31.25 ft.** 8-27

The EIR states that CCC geologist Mark Johnson agreed with the methodology used to determine bluff retreat rates for the project. **If** this is true we should include this in writing for it contradicts everything he has written about the subject. 8-28

LIGHTHOUSE CREEK AND DESIGN GUIDELINES

The project clearly violates the City's design guidelines for slopes and creek side development. The project encroaches 30 ft into the creek side, it violates the 10 ft setback from the top of the creek slope and uses prohibited cantilevers. The resultant visual aesthetics of the project is one of the three major elements of the FOCUSED EIR directed by the Planning Commission. As previously stated, this will be a subjective decision by the Commission, but COLOR SELECTION is not a mitigating factor. 8-29

7.0. GROWTH INDUCING IMPACTS

The EIR lightly addresses the extension of public services. "The proposed project would not require an extension of public services...." The installation of public services would be a major disruption for all neighbors. Currently public services stop at the north property line of 1837 El Camino de la Luz. The underground power, telephone and cable go under my house and are 8-30

not sized for the additional service. Cutting up 300 ft of driveway would be a significant construction impact on all neighbors.

8.0. ALTERNATIVES

This is where the EIR veers from an information document to an advocacy document. Clearly this is one of the last great sites left in Santa Barbara, but it is also the most difficult if not unbuildable sites left. CEQA guidelines for EIRs require the analysis of Alternative Projects, Smaller Projects or No Projects. Sometimes the No Project option is the correct option. This EIR however takes the position that the No Project option "WOULD NOT ACHIEVE THE PRIMARY OBJECTIVE OF THE PROJECT TO DEVELOP A SINGLE-FAMILY RESIDENCE ON THE PROJECT SITE." With that statement the EIR loses impartiality and becomes an advocacy document. This is why this project has the longest lasting unresolved application in the history of Santa Barbara. 8-31

PROJECT CHRONOLOGY 1837.5 El Camino de la Luz

CHAIN OF TITLE:

1948 1st National Bank to Kienzle Bk 826 pg 433
1949 Kienzle to Eaton Bk 883 pg 328
1962 Fred Eaton to Gertrude Eaton Bk 1941 pg 1400
1963 Eaton to Brewer #15214
1967 Brewer to Jenkins Bk 2184 pg 923
1976 Jenkins to Barthels Bk 2636 pg 1197

Dec. 1947 Blanco E. Fryer Tract is created. This shows three parcels encompassing the east end of El Camino de la Luz Bk 28 pg 124

Oct. 1948 Blanco Fryer Tract is further subdivided creating eight new parcels, and 15 ft. access easement, Bk. 29 pg 25

May 29, 1958 City Council approves request for lot subdivision. Requires recordation of such within 12 months.

Dec. 2, 1958 Eaton records a lot split creating 1837.5 El Camino de la Luz Bk 43 pg 84 She expands burden on the 15 ft. access easement without consent of other property owners.

April 1963 Eaton grants to Brewer an access easement 15 ft. x 350.95 ft. without consent of other property owners. She had a 15 ft x 205.18 ft. easement to her property. #15214. Across 1937 El Camino de la Luz she limits the easement to 10 ft due to location of the existing house.

1976 Barthels buys the property for $24,500.

Sep. 26, 1988 Barthels was authorized by SB Planning Dept to file an application

Jan 23, 1989 Barthels files a master application for a 2,500 sq. ft. home.

Mar 22, 1989 Affected property owners send letter to the SB Planning Department outlining 10 different issues to be considered in reviewing this project.

April 1989 Jerald Haws, attorney for Joanna Morgan advises Santa Barbara Title Company that Gertrude Eaton did not have any interest in Parcel 46 and the Deed to Barthels is spurious.

Santa Barbara Title Company agreed the title was spurious and issued a check to Barthels for $42,875 representing the purchase price as increased by the title insurance policy inflation endorsement.

Barthels sued Santa Barbara Title for $800,000 plus $280,000 for his time, and attorney's fees. Santa Barbara Superior Court Judge Patrick L. McMahon awarded the $42,875 for the property, $21,524.40 for his out of pocket expenses, and $10,000 for his time @ $66.66 per hour. At trial, Barthels testified that there was no easement and therefore his property was worthless.

In 1994 Barthels appeals to the Second Appellate District. The appeals court affirms the decision of the lower court. See Daily Appellate Report Tuesday, September 27, 1994.

On 30 Nov. 1995 a quitclaim deed is recorded whereby Barthels quitclaims any interest in Joanna Morgan's property, including her half, 7.5 ft. of the 15 ft. access easement.

On April 1996 Franco writes a letter to the Planning Commission questioning the 15 ft. access easement to the Barthels parcel.

Jun 4, 1997 City Attorney writes letter to James Lindsey, attorney for Barthels, informing him that "it is the City's conclusion that the required legal access to the parcel is not clearly and definitively established from a legal standpoint. As a result, the City cannot process an application for the development of that parcel with a single family home until you and Dr. Barthels demonstrate that the 15 ft. wide easement access originally represented to the City Council as the necessary vehicular access to the parcel does in fact exist and can legally be utilized in perpetuity."

Dec 8, 1999 SB City Engineer issues a Conditional Certificate of Compliance for the lot conditioned with the following specific condition: "Provide evidence, satisfactory to the City Engineer that the owner of the parcel described herein substantially possesses the required amount of legal access that formed the basis of the originally approved lot split." No notice of this action is sent to neighbors.

September 10, 2001 the Francos, Wrights and Sloans sent a letter via certified mail to Barthels requesting proof of easement or right to access, demanding that Barthels stop trespassing across their properties.

June 2002 Barthels submits revised plans for a smaller residence to ABR.

Jun 7, 2002 Franco writes a letter to the ABR and City Council questioning the process, lack of an Initial Study and CEQA review.

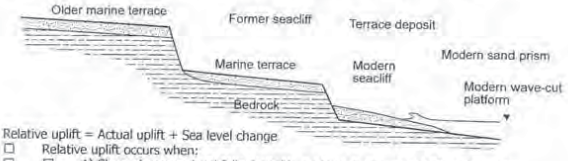
Nov. 7, 2003 Affected property owners submit comments on the proposed project and the history of the parcel, including a copy of the Daily Appellate Report for Sep 27, 1994.

Nov. 2003 ABR reviews the project, makes comments about size and sizing, and refers the project to the Planning Commission to review the environmental issues.

A Primer on Coastal Bluff Erosion

Mark J. Johnsson, Staff Geologist, California Coastal Commission

Seacliffs and coastal bluffs are formed by a rapid uplift of the shore relative to sea level. When the relative uplift of the shore is slow or zero, a wave-cut terrace is formed



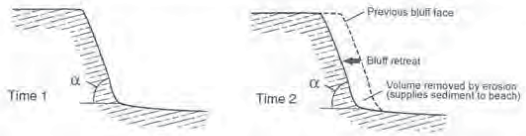
Relative uplift = Actual uplift + Sea level change

- ☐ Relative uplift occurs when:
- ☐ ☐ 1) Shore rises; sea level falls, is stable or rises at a lower rate than shore; or
- ☐ ☐ 2) Shore is stable; sea level falls; or
- ☐ ☐ 3) Shore falls; sea level falls at a faster rate
- ☐ Relative uplift is zero when shore and sea level rise or fall at the same rate (which may be zero)☐☐

The term "coastal bluff" refers to the entire slope between a marine terrace or upland area and the sea. The word "seacliff" refers to the lower, near vertical portion of a coastal bluff. Erosion of the entire seacliff-bluff system must be considered together.

Coastal Bluff Retreat

The question of how slopes erode is one of the oldest problems in geomorphology. Much argument has revolved around models calling on parallel slope retreat, versus slope erosion by flattening - the answer may lie somewhere between the two extremes. In any case, steep bluffs tend to erode parallel to the bluff face at an equilibrium stability angle, α. In unconsolidated materials this angle is known as the "angle of repose." α is a function of material strength. A bluff will erode through various mechanisms to establish and maintain the characteristic slope angle for the material of which it is composed.



If a bluff becomes oversteepened (slope angle greater than α) through non-equilibrium erosion (such as marine erosion at the toe of a seacliff), it will be unstable and will tend to erode back to α - perhaps through sudden collapse (landslide, rock fall)

If the rate of erosion as well as α are different for the different materials making up the bluff, then the bluff will develop a bench (if erosion is faster in the upper unit) or overhang (if erosion is faster in the lower unit)

Because material is removed most rapidly from bluff tops and tends to accumulate at the base of bluffs, the overall steepness of the slope appears to decrease through time; but the active part of the slope retreats at the long-term equilibrium stability angle, α, despite short-term departures from this angle.

Mechanisms of Bluff Erosion

Sheetwash: Material loosened and carried down bluff by water flowing over its face as a film or sheet

Gullying and rilling: Organization of water flowing over bluff into distinct drainage systems or gullies; concentrates flow energy in narrow portion of bluff, increasing its erosive capacity

Creep: On shallow slopes consisting of poorly consolidated material, sediment may move downslope slowly as a coherent mass

Sudden bluff collapses may take several forms:

Falls: Vertical (or nearly so) movement of coherent masses of material

Erosional Agents Involved in Bluff Erosion

Surface runoff: Promotes sheetwash, rilling and gullying
Ground water: Promotes creep, facilitates slumps and slides
Marine erosion (wave attack): Oversteepens cliffs (above equilibrium stability angle), facilitating slumps, landslides and falls. Exacerbated by wave-driven projectiles (logs, cobbles, etc.)
Wind erosion: Usually less important, but may erode cohesionless sands
Other agents may be important in some situations: e.g., slaking through alternate wetting/drying; wedging by salt crystals, etc.

Role of the Beach

Affects only marine erosion

POLICY ISSUES AND OPTIONS

Building in areas safe from bluff erosion - establishing setbacks

Bluff retreat rates:
- Represent long-term averages useful over economic lifespan of development; useless over shorter timespans due to episodic nature of bluff retreat
- Should be based on long time series of data, including both relatively quiescent periods in mid-twentieth century, and more active period beginning around 1980 (including El Niño winters of 82-83 and 97-98).
- Data sets: Aerial/satellite photography, topographic surveys, GPS surveys, LIDAR
- Setback = (annual average retreat rate) x (economic lifespan of development) + (buffer)

Slope stability analysis:
- Based on a quantitative model of stability of slope
- Establish likelihood of sudden (catastrophic) failures; currently largely limited to landslide hazards
- Data sets: material strength (cohesion, friction angle) and weight; slope geometry
- Setback = area behind the 1.5 factor of safety line (i.e., forces resisting landslide movement are 1.5 times as great as forces driving landslide)

Remedial measures - alternatives analysis

Control surface runoff:
- Direct runoff away from slope; regrade top of bluff, install berms and swales, extend drainage culverts down face of bluff
- Collect water on bluff face and carry it away through impervious channels/pipes

Control ground water:
- Reduce infiltration: Restrict irrigation, increase hardscape, install clay caps, plug and control rodent burrows
- Lower ground water levels: Install horizontal drains (hydroaugers), pumping wells

Protect base of bluff from marine erosion:
- Establish sand beach, maintain through nourishment
- Offshore structures: groins, submerged artificial reef, breakwaters, etc.
- Seawalls and revetments

Protect overly steep upper bluff:
- Remove and recompact soil; use of geogrid reinforcement
- Upper bluff retaining walls, shotcrete walls, soil nails, tieback anchors, etc.

"Correct" bluff geometry:
- Seacave and notch infills
- Regrade bluff, remove and recompact soil, possibly use of geogrid reinforcement

Negative effects of seawalls and bluff retaining devices

- Fix back of beach; as front of beach moves landward during sea level rise, beach disappears
- Retain sand in coastal bluff which would otherwise have become available to replenish the beach
- Encroach on public beach, reducing area of beach
- May limit vertical and lateral access to beach
- Visual impacts

§30235 of Coastal Act and CEQA require approval of shoreline protective structures only when:

- Required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion
- Designed to eliminate or mitigate adverse impacts on local shoreline sand supply
- The least environmentally damaging alternative available

Some points to bear in mind...

Coastal bluff collapse and retreat are natural erosional processes

Coastal bluff erosion is caused by a combination of processes

Bluff retreat can be stopped or slowed significantly through sufficient engineering

Engineered structures may have negative visual, access, and secondary erosional effects

CITY OF SANTA BARBARA SEA-LEVEL RISE VULNERABILITY STUDY

A White Paper from the California Energy Commission's California Climate Change Center

Prepared for: California Energy Commission

Prepared by: University of California, Santa Cruz

JULY 2012

CEC-500-2012-039

ABSTRACT

Cliff and bluff erosion, flooding of low-lying areas, and damage to shoreline infrastructure and development will continue to affect California's coastal communities in the decades ahead. Depending upon the rate of future sea-level rise, changes in wave energy, and coastal storm intensity and frequency, these hazards will be likely become more severe, with increasing risks to coastal communities. This study assesses the vulnerability of the City of Santa Barbara to future sea-level rise and related coastal hazards (by 2050 and 2100) based upon past events, shoreline topography, and exposure to sea-level rise and wave attack. It also evaluates the likely impacts of coastal hazards to specific areas of the City, analyzes their risks and the City's ability to respond, and recommends potential adaptation responses. By 2050, the risk of wave damage to shoreline development and infrastructure in Santa Barbara will be high. Options are limited and adaptive capacity will be moderate, with retreat being the most viable long-term option. By 2100, the risk will become very high. By 2050, flooding and inundation of low-lying coastal areas will present a moderate risk to the City by 2050, which will have a moderate capacity for adaptation. If the high sea levels projected by the State occur, this risk will become very high, and adaptive capacity will become low by 2100. Cliff erosion has been taking place for decades, and as this process continues or increases, additional public and private property in the Mesa area will be threatened. The risk of increased cliff erosion will be moderate by 2050 and very high by 2100. Because armoring is ineffective here and retreat necessitates the relocation of structures, adaptive capacity will be low. Inundation of beaches presents a low threat to the City by 2050 but a high threat by 2100. The City faces a dilemma: protect oceanfront development and infrastructure or remove barriers and let beaches migrate inland. By 2100 structures will have to be moved if beaches are to be maintained.

Keywords: adaptation, adaptive capacity, climate change, coastal cliff erosion, coastal hazards, coastal storm damage, flooding, inundation, risk assessment, sea-level rise, vulnerability assessment, wave climate

Please use the following citation for this paper:

Griggs, Gary, and Nicole L. Russell (University of California, Santa Cruz). 2012. ***City of Santa Barbara Sea-Level Rise Vulnerability Study.*** California Energy Commission. Publication number: CEC-500-2012-039.

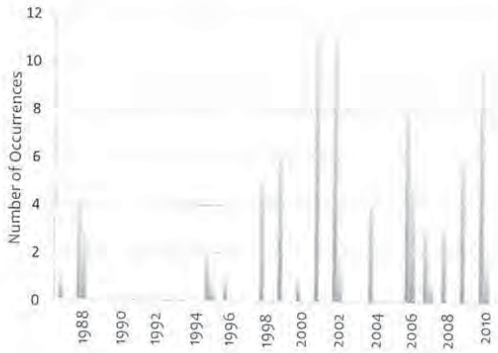


Figure 2.4: Increasing Frequencies of Waves Exceeding 16 Feet in Height Off of the Coast of Southern California Since 1986 (South of Point Conception)

Source: Coastal Data Information Program (CDIP)

2.3 Cliff Retreat

Both terrestrial and marine processes can drive sea cliff retreat, which can be delayed or accelerated by human actions. Wave impact can cause erosion at the base of a sea cliff, removing support for the overlying cliff face and triggering failure of the overlying materials. Where beaches are wide and waves seldom reach the bases of cliffs or bluffs, terrestrial processes, such as landsliding, runoff, and gullying, can dominate over wave erosion. Seawalls, revetments, and other armor structures can halt or slow coastal cliff or bluff erosion over the short to intermediate term.

Monterey Shale, capped by unconsolidated marine terrace deposits, makes up the majority of Santa Barbara's coastal cliffs. These materials are susceptible to erosion from waves as well as from terrestrial runoff, and they are also prone to landslides and slumps. The Monterey Shale has been deformed and tilted throughout this area, and in some places, its bedding dips (or tilts) toward the beach. This is known as a "dip slope condition." This is highly conducive to bluff failure, in which sliding occurs preferentially along exposed bedding planes (Figures 2.5 and 2.6).

Figure 2.5: Dip Slope in the Monterey Shale along the Gaviota Coast, North of Santa Barbara

Source: California Coastal Records Project

The cliffs at both ends of the City are experiencing active erosion and retreat. The changing position of the cliff edge was measured on historical aerial photographs in order to find average long-term erosion rates, which are reported to fall in the range of about 6 to 12 inches/year (Griggs et al. 2005). Hapke and Reid (2007) completed a statewide assessment that compares cliff edge position on aerial photographs from the 1930s with LiDAR data from 1998 (approximately a 70-year period) and obtained similar values: an average of about 4 inches to 18 inches/year for the Mesa area and just under 6 inches/year for the Clarke Estate/Cemetery cliffs.

The range in erosion rates is a product of local variations in bedrock strength, bedding plane orientation, and the effects of development and human interference, including protective cobbles, boulders, or riprap on the fronting beaches. However, the overall linear trend of the coastline along the Mesa indicates that long-term rates of cliff retreat are fairly uniform alongshore.

Figure 2.6: Dip Slope in the Monterey Shale along the Shoreline Park Coastline, which Produces Conditions That Are Conducive to Slope Failure

Source: California Coastal Records Project

Cliffs may appear to go unchanged for years until the right combination of groundwater saturation, sea level, wave attack, and/or seismic shaking causes episodic failure. The loss of two homes on the Mesa in 1978 to a large landslide shows how landsliding along the bluff edge can result in the nearly instantaneous loss of oceanfront property and structures. The winter of 1978 saw the first large El Niño event in years, and rainfall was heavy in Santa Barbara for several weeks prior to the slide. The Mesa failure was a typical rotational slump on a curved failure (rupture) surface, with a nearly vertical head scarp. Movement began on a February evening and destroyed two houses within a few hours. Over time, wave erosion at the base of the cliff will gradually remove loose material, and renewed slumping movement will likely occur in the future.

On January 25, 2008, Shoreline Park suffered a landslide that extended 70 feet along the cliff and moved the cliff edge back by 38 feet (Figure 2.7). Since its construction in the late 1960s, different sections of the cliff at the park have retreated intermittently. As erosion has occurred, walkways, picnic tables, and fencing have been relocated inland. Progressive retreat of the cliff fronting Shoreline Park can be expected to continue, possibly by an increased rate, in the future.

There are four miles of coastal cliffs within the City limits, including those extending from the City limits, west of Arroyo Burro Beach County Park, through Shoreline Drive and Shoreline Park on the west side, and those fronting the Clarke Estate and cemetery

on the east side. Cliffs gradually decrease in height from about 150 feet, east and west of Arroyo Burro Beach Park, to about 100 feet at Meigs Road along the Mesa, to about 50 feet at Leadbetter Point. Cliffs at the Clarke Estate are over 50 feet in height, but they decline in elevation toward Butterfly Beach.

Figure 2.7: January 2008 Landslide along the Cliff at Shoreline Park Moved the Cliff Edge Landward by as Much as 38 Feet and Eliminated a Portion of the Sidewalk

Approximately 98 single-family homes and a few undeveloped parcels line the cliffs of the Mesa within the City limits. Existing homes along Cliff and Shoreline Drives and El Camino De La Luz are vulnerable to cliff erosion. These cliff top homes were constructed at different times, and current setbacks from the cliff edges vary. Some Shoreline Drive homes or their additions (such as decks, patios and other accessory structures) are located immediately adjacent to or within a few tens of feet of the cliff edge (Figures 2.8 and 2.9). Google Earth was used to measure distances from the cliff edge to homes along the Mesa. These range from about 35 to 300 feet, with an average of about 100 feet. The proximity of a large number of homes and their additions to the cliff edge, combined with the cliff's general instability and long-term retreat rates, results in a moderately high vulnerability to future cliff retreat and accelerated erosion due to a rising sea level and an increase in wave energy.

The cliffs that front the Clarke Estate and the adjacent cemetery are subject to ongoing failure through landsliding (Figure 2.10). Uninterrupted riprap was placed at the base of

the bluff below the estate in the 1980s. This has reduced wave impact at the base of the bluff, but it does not seem to have halted the failure of overlying materials, which appears to result primarily from terrestrial processes. An old concrete seawall that was built years ago at the east end of the bluffs below the cemetery has gradually deteriorated, and riprap and some cliff-top retaining walls have been constructed in its place in an attempt to slow erosion. Many years ago, several groins were built in this area in order to trap littoral drift and to widen the beach, but these have also deteriorated over time and are no longer effective.

Average annual rates of cliff erosion in this area have been measured from historical aerial photographs, which show a rate of about 6 to 12 inches/year (Griggs et al. 2005; Hapke and Reid 2007). Along the Mesa, these rates can be expected to at least continue, and likely increase in the future as sea level rises and wave energy increases. A geotechnical firm has monitored the cliff edge by the cemetery since 1990 in order to provide advice about appropriate actions. Some of the gravesites that were once closest to the cliff edge have been moved back over time.

Figure 2.8: Structures along the Mesa That Are Virtually at the Cliff's Edge

Source: California Coastal Records Project

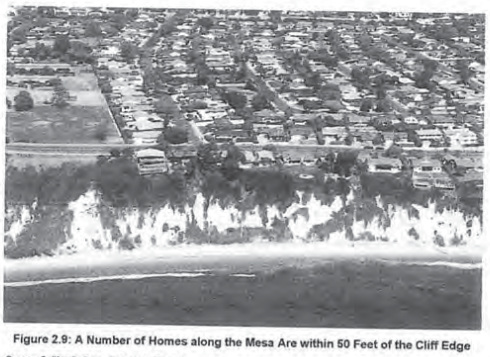


Figure 2.9: A Number of Homes along the Mesa Are within 50 Feet of the Cliff Edge

Source: California Coastal Records Project

Figure 2.10: Active Cliff Erosion along the Clarke Estate and the Adjacent Cemetery

Source: California Coastal Records Project

With average historic retreat rates of between 6 and 12 inches per year, City bluffs can be expected to retreat by at least 10–20 feet over the 20-year lifespan (by 2030) of *Plan Santa Barbara* and potentially by even more than that in places where hazards such as uncontrolled drainage, historic landslides, or adverse bedding planes exist (AMEC 2010). Six to 12 inches/year translates to about 45 to 90 feet of retreat by the year 2100. Although bluff retreat is episodic, this projected retreat rate could expose a number of existing oceanfront homes, accessory structures, and other developments to severe damage or destruction. Portions of the oceanfront walkways, trails, the playground and picnic areas, and two restrooms at Shoreline Park are located within 50 feet of the present cliff edge, and portions of the two parking lots are located within 100 feet of it.

PWA (2009) developed a model for predicting future bluff retreat by using the projected increase in the exposure of the base of a bluff to wave impact as sea level rises. This model (Figure 2.11) indicates that the Shoreline Park area is projected to retreat by 270 feet, while the Mesa is projected to retreat by 525 feet. These projections correspond to average erosion rates for the next 88 years that are 3 to 6 times higher in the Shoreline Park area and 6 to 12 times higher in the Mesa area than average erosion rates of historic times (6 to 12 inches/year). Retreat of 270 feet by 2100 would require an average erosion rate of 3 feet/year for the next 90 years, and losing 540 feet would require an average annual cliff erosion rate of 5.8 feet. This would threaten most of the cliff top homes, public roads, and utilities, and it would substantially reduce or potentially eliminate public amenities such as Shoreline Park and the Douglas Family Preserve. Increased coastal erosion could also affect the nearly four miles of coastal bluffs that front the Mesa and eastern Hope Ranch (Hope Ranch is not within the City's jurisdiction). When considering historic cliff retreat, projected future sea-level rise rates, the nature of cliff failure in this area (which is primarily driven by terrestrial processes) and the inherent uncertainties in any model, these accelerated erosion rates appear to be very high and need to be updated over time. **It is recommended that a cliff edge monitoring program be established with a set of surveyed transects that can be regularly re-measured in order to document and track rates of retreat along all sea cliffs within the City limits.**

Figure 2.11: Projected Future Cliff Erosion Lines on the Mesa for 2025, 2050, and 2100 from the Plan Santa Barbara Environmental Impact Report (EIR)

There is an additional discussion of future cliff erosion in Section 3. With the exception of the Sea Ledge Lane revetment at the western edge of the City, there is no shoreline armoring along the Mesa area at present, although there are many Monterey Shale boulders at the base of the cliff that act like riprap in some places (Figure 2.12).

Figure 2.12: Boulders and Cobbles of Monterey Shale Form Natural Riprap below the Mesa

2.4 Shoreline or Beach Retreat

As sea level rises, the shoreline will gradually move landward. Within the City of Santa Barbara, this could lead to a gradual loss of the more than three miles of beaches that front low-lying coastal land, including Leadbetter Beach, its associated facilities and infrastructure, and East Beach and West Beach. Park facilities, parking lots, and Cabrillo Boulevard serve as back beach barriers to the City beaches, such that the beaches cannot retreat in response to a rising sea level.

The construction of the Santa Barbara Harbor breakwater (circa 1930) and the ongoing maintenance dredging and spoils disposal permanently altered much of the City's beach area. Leadbetter Beach was created as littoral drift (sand) from the west was impounded (dammed) by the breakwater. The present sandy beach is fairly narrow and varies in width from about 50 to 175 feet. However, the former back beach area was gradually covered over with park facilities, parking lots, a road, a stadium, and a number of harbor-related buildings and infrastructure (see Figures 4.1, 4.2 and 4.3). In spite of this,

West Beach is much wider now than it was during pre-harbor conditions because of the sheltering effect of the harbor breakwater. The beach that lies just east of the Harbor (toward East Beach) is affected by harbor dredge discharge, but it progressively decreases in width and artificiality from west to east.

Any narrowing or loss of these beaches (Leadbetter, West, and East beaches) would progressively expose public facilities such as the coastal bike trail, public parking lots, restrooms, and development at the Santa Barbara Harbor, Cabrillo Boulevard, Stearns Wharf, and the Cabrillo Bath House to periodic flooding and/or increased damage from wave action. Many of the City beaches and facilities already periodically experience moderate levels of damage from high tides and winter storms (Figure 2.13).

The entire City shoreline, including the Leadbetter Beach parking lot, City beaches, the coastal bike path, and the municipal wharf, sustained damage during the El Niño storms of 1983 (see Box Essay on the effects of the 1983 winter and Figures 2.14, 2.15, 2.16, and 2.17). Significant narrowing or erosion of these beaches could also impair or reduce recreational areas, with possible economic consequences. However, in the near-term years (until at least 2050) it is the large El Niño events with their elevated sea levels that will likely be the most hazardous to the shoreline when they are combined with high tides and storm waves.

It is important to keep in mind that the harbor breakwater and dredge disposal have significantly altered the Santa Barbara shoreline such that Leadbetter and West Beaches are no longer considered to be natural. As a result, it is somewhat uncertain how these beaches will respond to a gradual rise in sea level and a possible change in wave conditions. This will be discussed in Section 3's risk assessment.

The El Niño winter of 1983 affected the entire California coastline, from Crescent City in the north, to San Diego in the south. Elevated sea levels, plus a series of big storms that generated large waves that also happened to coincide with high tides, combined to produce the *highest* tides on record at many West Coast tide gages, causing over $200 million in damage along the State's coastline (in 2009 dollars). Thirty-three oceanfront homes were completely destroyed, over 3000 homes and businesses were damaged, and losses to public facilities and infrastructure were widespread.

Figure 2.13: Waves Overtopping West Cabrillo Boulevard in 1914

Figure 2.14: Beach Erosion Extended beneath the Santa Barbara Yacht Club in March 1983

Source: Santa Barbara News-Press

Box Essay: Effects of the 1983 Winter on Santa Barbara, California

As a society, we tend to quickly forget past disasters, tragedies, and losses as we clean up and rebuild. Be that as it may, past disasters stand as evidence of events that can happen again in the future and as such, provide important information for city planning. As explained previously in this study, it is the severe El Niño events, such as those which occurred in 1983 and 1997–98, that will be the most damaging to the Santa Barbara coast in the near term (until at least 2050). In time, a changing climate and a rising sea level will increase the severity and frequency of coastal hazards and extreme events. It is useful to seek some perspective from the 1983 winter, as reported in the pages of the *News-Press* nearly 30 years ago, on March 2, 1983:

Savage Surf Slams County Coast -

Santa Barbara News-Press - March 2, 1983.

"Monstrous surf, which one expert said was the biggest he's seen in more than 20 years here, ravaged the Santa Barbara coastline overnight, seriously damaging dozens of homes, closing Stearns Wharf, and turning the harbor into a debris-strewn wasteland."

"Clean-up crews worked around the clock, boat owners grabbed valuables from their vessels and beachfront dwellers boarded up windows in anticipation of another round of pounding breakers late this morning."

"Stearns Wharf suffered at least $100,000 damage as waves hammered away at pilings and planking...the structure, which has been closed indefinitely to the public, lost an estimated 20 pilings. The most serious damage occurred at the Moby Dick Restaurant, which caught the brunt of pounding waves. The restaurant sagged significantly toward the harbor [Figure 2.14], and Paul Nefstead (wharf manager) said further damage could result if high surf continues."

"At the harbor, a wave as high as a two-story building washed over the harbormaster's office at about 10:30 pm, flooding the building and forcing it to be evacuated. Both that office and the Santa Barbara Yacht Club (Figure 2.13) were seriously undermined by the force of the waves, which caused cars in nearby parking lots to tip over, a major gas leak and three small electrical fires. Several other businesses in the area were battered extensively by the surf, including Carter's bait and tackle shop."

"The Leadbetter Beach parking lot was destroyed, officers added."

"Along the Montecito waterfront, debris and rocks the size of basketballs that been pushed over the seawall by the pounding waves littered Chanel Drive in front of the

Planning Commission Presentation
Draft EIR # 2
1837.5 El Camino de la Luz

Rafael Franco

11/17/2016

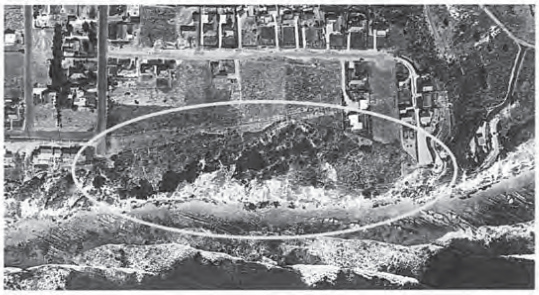
Issue 2 -Geology

1928

Issue 2 -Geology

1928 – El Camino de la Luz – Escarpment

1953

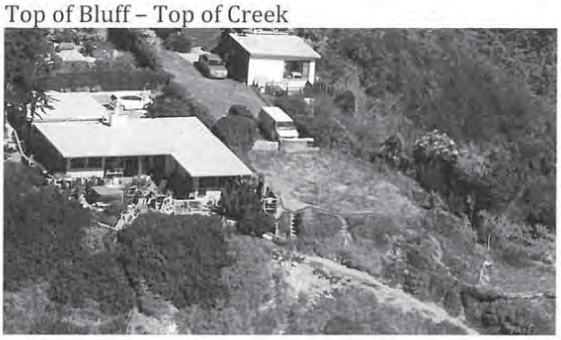


Issue 3 – Geology

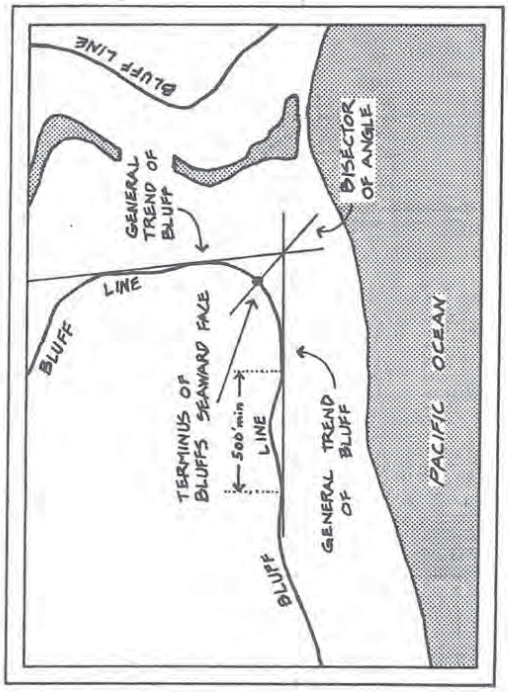
California Coastal Project 2013

Issue 3 – Geology

Top of Bluff – Top of Creek

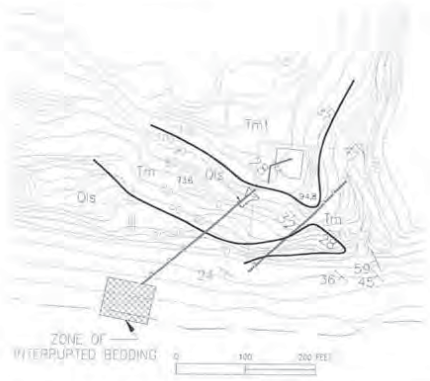


CCC Figure B of 28 December 1979 Staff Report recommending definition of bluff line termini



Issue 3 – Geology

EIR Identified Fractures



Topographic map showing geological data used in the assessment of the potential for slope failure at 1837½ Camino de la Luz. The parcel boundary is outlined with a thin cyan line. The heavy black lines are contacts between relatively undisturbed Monterey formation beds (Tm), the unconsolidated materials capping the elevated marine terrace (Tmt), and landslide debris (Qls). The heavy red lines mark the location of fractures seen cutting the bluff. They are dashed and queried where uncertain. Bedding attitudes are shown by strike and dip symbols and dip values in degrees. The light blue lines are drainage tubes extending towards the beach. The approximate building footprint is outlined with a thin black line. The geologic exploration trench is shown by a heavy green line.

Source: Modified from Anikouchine, 2011

City of Santa Barbara

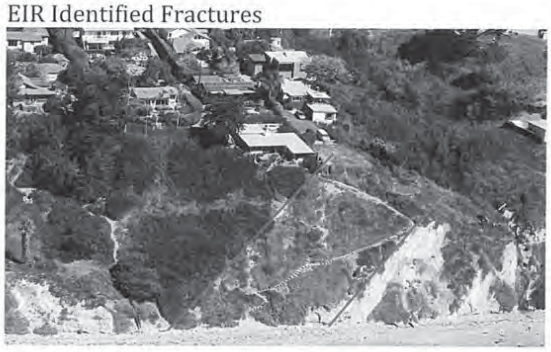
1837½ El Camino del la Luz

Figure 5.2-6

Project Site Geologic Conditions

Issue 3 – Geology

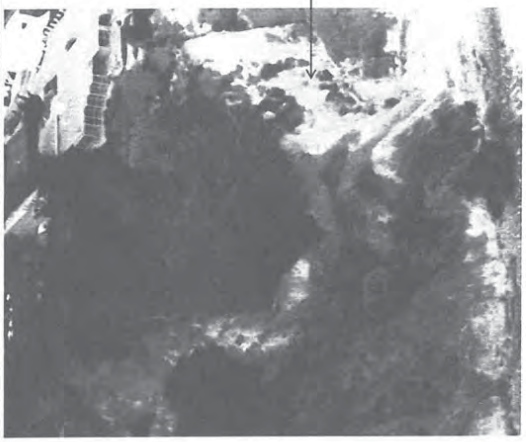
EIR Identified Fractures



Issue 3 – Geology

Potential Planar Slide

1978 Landslide – East End El Camino de la Luz



Issue 3 – Geology

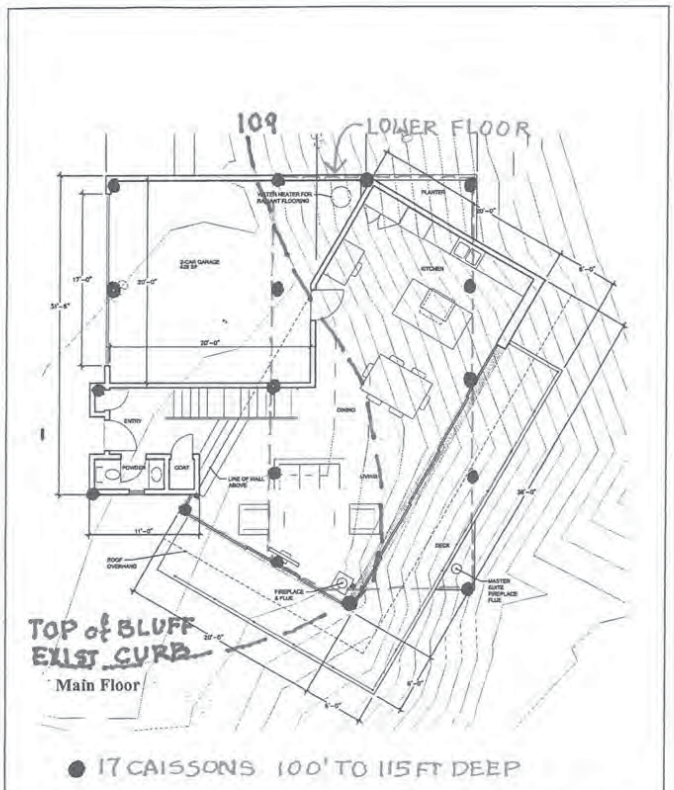
1995 Western Slide

1995 Southeast Slide

Issue 3 – Visual Impacts

Proposed

Future Legacy (Isla Vista)

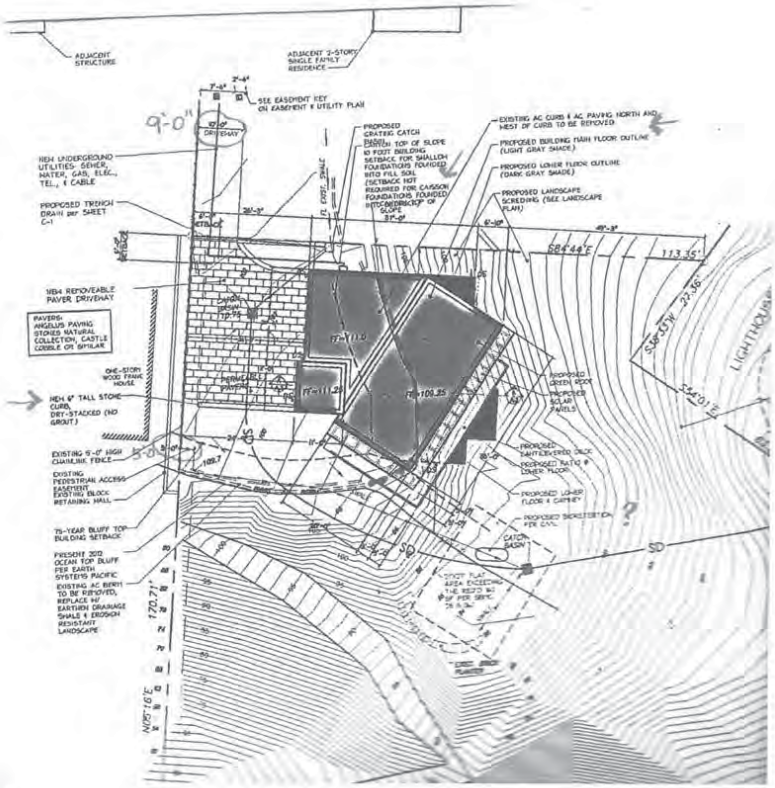


Not to Scale Source: Peikert Group Architects, 2012

City of Santa Barbara

1837½ El Camino del la Luz

Figure 3.3-5
Floor Plan – Upper Level


ADJACENT STRUCTURE
ADJACENT 2-STORY SINGLE FAMILY RESIDENCE
2'-4"
7'-4"
SEE EASEMENT KEY ON EASEMENT & UTILITY PLAN
9'-0"
12'-0" DRIVEWAY
NEW UNDERGROUND UTILITIES- SEWER, WATER, GAS, ELEC., TEL., & CABLE
PROPOSED TRENCH DRAIN per SHEET C-1
8'-0" SETBACK
26'-3"
PROPOSED GRATED CATCH BASIN: TOP OF SLOPE
10 FOOT BUILDING SETBACK FOR SHALLOW FOUNDATIONS FOUNDED INTO FILL SOIL (SETBACK NOT REQUIRED FOR CAISSON FOUNDATIONS FOUNDED INTO BEDROCK) TOP OF SLOPE
37'-0"
EXISTING AC CURB & AC PAVING NORTH AND WEST OF CURB TO BE REMOVED
PROPOSED BUILDING MAIN FLOOR OUTLINE (LIGHT GRAY SHADE)
PROPOSED LOWER FLOOR OUTLINE (DARK GRAY SHADE)
PROPOSED LANDSCAPE SCREENING (SEE LANDSCAPE PLAN)
6'-10"
49'-3"
S88°44'E
113.35'
S54°45'W 22.36'
S44°01'E
LIGHTHOUSE
NEW REMOVEABLE PAVER DRIVEWAY
PAVERS: ANGELUS PAVING STONES NATURAL COLLECTION, CASTLE COBBLE OR SIMILAR
ONE-STORY WOOD FRAME HOUSE
NEW 6" TALL STONE CURB, DRY-STACKED (NO GROUT)
EXISTING 5'-0" HIGH CHAINLINK FENCE
EXISTING PEDESTRIAN ACCESS EASEMENT
EXISTING BLOCK RETAINING WALL
75-YEAR BLUFF TOP BUILDING SETBACK
PRESENT 2010 OCEAN TOP BLUFF PER EARTH SYSTEMS PACIFIC
EXISTING AC BERM TO BE REMOVED, REPLACE W/ EARTHEN DRAINAGE SWALE & EROSION RESISTANT LANDSCAPE
170.71'
N75°16'E
PROPOSED GREEN ROOF
PROPOSED SOLAR PANELS
PROPOSED CANTILEVERED DECK
PROPOSED PATIO & LOWER FLOOR
PROPOSED LOWER FLOOR & CARPORT
PROPOSED DEMOLITION PER CIVIL
CATCH BASIN
SD
SD
SITE PLAN AREA EXCEEDING 5'-0" PER SBMC 29.10.080

Comment Letter No. 8
Rafael Franco
Date: November 17, 2016

8-1. Please refer to EIR Section 1.3 (Scope and Content of this EIR) and Section 1.4 (EIR Preparation History for the Proposed Project). Those impacts determined to be less than significant or mitigated to a less than significant level as part of the Initial Study are not part of the EIR scope of analysis for further study. As described, the Revised Initial Study prepared for the project (EIR Appendix A) concludes that the proposed project would have the potential to result in significant aesthetic impacts that required evaluation in a project-specific EIR. The analysis of project-related geologic impacts was subsequently added to the scope of the EIR following the public scoping hearing. The Revised Initial Study concluded that potential environmental impacts related to project site access would be less than significant level with legal confirmation of access (mitigation measure T-1), which has since occurred. The further EIR evaluation of vehicular and pedestrian access to the project site and adjacent beach is not necessary and has not at any stage been part of the scope of EIR analysis for the project.

8-2. Please refer to the Access Topical Response, which addresses access-related issues related to the proposed project.

8-3. The 2011 slope stability evaluation prepared for the proposed project (EIR Appendix C) concludes that "…the bluff laden with the largest building conceivable for the site is stable under conditions for planar failure even during a seismic event." As indicated, the weight of a new structure on the project site was included in the slope stability analysis.

Please refer to response 5-21, which compares estimated rates of bluff retreat at the project site with retreat rates at other locations in the City. In regard to the proposed structure's setback from the top of the coastal bluff, please refer to EIR Appendix D Plate 1 and EIR Figure 5.2-1 (Revised Top of Bluff Location). The top of bluff setbacks depicted by the Appendix and EIR figures are identical.

8-4. The photosimulations depicting the proposed residence included in EIR Figures 5.1-5, 5.1-7 and 5.1-9 reflect the current project design and location. Therefore, the simulations provide an accurate depiction of visual conditions at and near the project site that would result if the proposed project were to be implemented. Please refer to response 8-15 regarding the project's compliance with the City's creek bank development requirements. In regard to the comment related to building color, proposed mitigation measure AES-1 addresses potential impacts that could occur in the future if the color of the proposed residence were to be changed, which could include painting the proposed stone veneer.

8-5. These comments indicate that additional information has been attached to the comments submitted regarding the EIR. The additional information items have been attached to the end of the comment letter.

8-6. Please refer to response 8-1 regarding the scope of analysis required to be included in the project EIR.

8-7. The referenced table does not represent the entirety of the analysis. Please refer to EIR Sections 5.2.1 (Setting) and 5.2.3 (Impact Evaluation), which provide additional detail regarding existing conditions at the project site and potential impacts that could result from the presence of fill soil, subsidence, expansive soils, and landslides. The potential effects of these geological conditions have been extensively evaluated by the EIR, which concludes that the proposed project design and mitigation measures would reduce potential geologic hazard impacts of the project to a less than significant level.

8-8. In addition to complying with the requirements of mitigation measure GEO-2 (Foundation Design Approval) the project would be required to obtain a building permit that implements the requirements of the California Building Code as it has been adopted by the City of Santa Barbara. This provides for geologist and geotechnical engineering basis for grading and building plan approvals. The slope stability analysis prepared for the project was prepared by Dr. Anikouchine, a Certified Engineering Geologist, who is qualified to conduct slope analyses in marine environments. Also, Dr. Anikouchine's 2011 slope stability analysis was reviewed by California Coastal Commission geologist Mark Johnsson, who concurred with the analysis and conclusions.

8-9. The use of foundation support caissons at the project site is a project design feature and is not a mitigation measure recommended by the EIR. The proposed caissons would extend approximately seven to eight feet below the ground surface of the project site. Therefore, due to their relatively small size, and their size in relation to the approximately 110-foot high project site ocean bluff, should some of the caissons be exposed after the 75-year useful life of the proposed residence, their appearance would not substantially affect coastal views.

8-10. Please refer to the Access Topical Response, which address access-related issues related to the proposed project.

8-11. Recommended measure T-3 requires that the City Transportation and Parking Manager approve the location of parking spaces for construction workers. The intent of this measure is to identify a suitable parking location that will minimize conflicts with surrounding land uses and circulation.

8-12. The proposed project does not include the construction of "10 ft high by 75 ft long retaining walls" as asserted by this comment. Please refer to EIR Figures 3.3-2 and 3.3-3 (building elevations), which show that the project would include the use of foundation walls. Section 5.1.1 of the EIR evaluated potential aesthetic impacts of the proposed foundation walls and concluded that they would not result in a significant aesthetic impact. In addition, EIR Section 6.3 (Single Family Residence Design Guidelines)

concluded that the proposed foundation walls would be consistent with the design guidelines. The Revised Initial Study identifies that grading and construction activities at the project site would have the potential to result in erosion and other water quality impacts to the Lighthouse Creek, and that mitigation measure BIO-4 (Erosion Control/Water Quality Plan) would reduce potential erosion and water quality impacts to a less than significant level.

Please refer to the Access to the Project Site topical response provided above for additional information regarding the construction vehicles that would be used at the project site. The proposed project would excavate approximately 288 cubic yards of soil from the project site. The excavated soil would be removed from the project site using a small pickup truck.

8-13. As depicted on EIR Figure 3.3-1 (Site Plan) the finished floor elevations for the proposed residence would be between 109 and 111 feet above sea level. The existing asphalt pad on the project site, where the western portion of the proposed residence would be located, has an elevation of approximately 109 feet in the southeast corner, and an elevation of approximately 112 feet in the northwest corner. Therefore, no fill material would be required to construct the proposed residence. As stated in EIR Section 3.3.3 (Grading), construction of the project would require the excavation of approximately 288 cubic yards of soil. Most of the excavated material would be removed from the eastern portion of the proposed construction site. Approximately 21 cubic yards of fill would be required to construct the proposed driveway.

8-14. The Planning Commission did not request evaluation of views from the beach as part of the EIR scoping, as indicated in hearing minutes from September 22, 2005 included in Appendix A of the EIR. Section 5.1.3 (Impact Evaluation: Other Views) of the EIR provides an evaluation of potential project-related impact to views from the beach. That analysis concludes that the project's impacts would be less than significant. Also, please refer to Planning Commission Comment Response No. 7, which provides additional information related to the project's impacts to views from beach viewpoints located near the project site.

8-15. This comment does not identify the creek side design guidelines that the proposed project would be inconsistent with. The City's Zoning Ordinance includes setback standards for new development along the banks of Mission Creek (Section 28.87.250, Development Along Creeks), however, those requirements apply only to Mission Creek and are not applicable to Lighthouse Creek and the project site. Local Coastal Plan (LCP) Policy 6.10 addresses setback requirements from creeks in the City's coastal zone and requires that a setback for native vegetation be provided between the top of the bank and proposed development. The Policy states: "*The City shall require a setback buffer for native vegetation between the top of the bank and any proposed project. This setback will vary depending upon the conditions of the site and the environmental impact of the proposed project.*" Based on the requirements of Policy 6.10, the setbacks for new development

along Lighthouse Creek are to be reviewed on a project-specific basis. The EIR evaluates creek-related effects of the project, including visual effects, and concludes that with identified mitigation measures, impacts would be less than significant. Section 6.2 of the EIR (Coastal Act and Local Coastal Plan (LCP) Policies) concludes that the proposed project could be found consistent with the requirements of LCP Policy 6.10.

The project is of limited scope and would be in-fill development within an existing residential neighborhood context on a lot designated for residential development. The EIR provides extensive analysis of the potential for the project to adversely affect views of coastal resources, including the ocean. Through the use of photosimulations the EIR visually demonstrates that the proposed residence would have a minor effect on existing public views of the ocean. The EIR also provides substantial evidence that potential ocean view impacts that may result from landscaping, and potential visual compatibility impacts that could result from future changes to the color of the proposed residence can be reduced to a less than significant level with identified requirements. The project requires City Design Review approval per City design guidelines, which will also ensure visual compatibility and no significant view impacts.

8-16. Exhibit E of the Revised Initial Study for the proposed project (EIR Appendix A) is a review of 17 previous reports that pertain to geological conditions at the project site. The review of the previous reports was conducted by Dr. Anikouchine. Dr. Anikouchine's review of the previous reports includes a summary of Dr. Weaver's investigation of the 1978 El Camino de la Luz landslide. Dr. Anikouchine was aware of Dr. Weaver's investigation when he prepared the more detailed 2011 slope stability analysis for the specific project site and proposed project (EIR Appendix C). Also, The Revised Initial Study and the EIR both describe the El Camino de la Luz landslide of 1978. EIR Figure 5.2-7 (Landslides in the Project Area) describes and depicts the location of the 1978 landslide, and the effects and probable causes of the landslide are described on EIR pages 5.2-3 and -25. The EIR identifies potential existing geological conditions and hazards and concludes that the project site underlying geologic formation is stable and the project can be engineered without significant geological impact.

8-17. The Geotechnologies Inc. reports referred to by this comment were not used to prepare the project EIR. The reports are, however, included in EIR Appendix I and the project analysis was informed by them.

In regard to comments regarding Dr. Anikouchine's work on the El Camino de la Luz Residence project EIR, Dr. Anikouchine has not prepared project-related studies under the direction of the project applicant. All work conducted by Dr. Anikouchine related to the analysis and review of the proposed project has been conducted to implement scopes of work developed with and approved by the City of Santa Barbara Planning Division in accordance with contract requirements between the City of Santa Barbara and Rodriguez Consulting Inc, the preparer of the Project EIR. Throughout the entire EIR preparation process, Dr. Anikouchine worked exclusively as a subconsultant to Rodriguez Consulting

Inc., with payment for all work conducted by Dr. Anikouchine related to the analysis and review of the proposed project provided by Rodriguez Consulting Inc. In addition, the applicant submitted updated reports prepared by EarthSystems Pacific, at the request of the City of Santa Barbara Planning Division.

8-18. The EIR provides an extensive evaluation of the slope stability characteristics of the project site (EIR Section 5.2.3 and Appendix C) and concludes that the bluff slope is stable and would remain stable after the addition of the weight of the proposed residence. In addition, the Coastal Commission staff geologist reviewed and concurred with the slope stability analysis conducted for the project.

8-19. Comments related to the backfilling of the geological inspection trench constructed at the project site do not address the adequacy of the environmental impact analysis included in the EIR. Please refer to EIR Appendix I, response 20-1, which provides information regarding the backfilling of the inspection trench.

8-20. This comment expresses opinions that EIR Figure 5.2-8 is misleading and asserts that the figure appears to depict a plane failure rather than a wedge failure. Please refer to the analysis on EIR page 5.2-27, which states that Figure 5.2-8 depicts a potential wedge bock failure area. The slope stability analysis was conducted by Dr. Anikouchine, who is a registered geologist and a certified engineering geologist with over 37 years of experience in the fields of shoreline erosion, coastal oceanography and engineering geology, and conducting slope stability analyses, and utilized State evaluation criteria. The analysis considered all types of potential failures, including both wedge and plane. In addition, California Coastal Commission geologist Mark Johnsson has reviewed the slope stability analysis prepared by Dr. Anikouchine and indicated that he concurs with the analysis and conclusions of the report. The commenter is not a registered geologist, certified engineering geologist or geological engineer, however, the comments will be forwarded to decision-makers so they will be aware of the commenter's opinions. Please refer to response 8-16 regarding Dr. Weaver's investigation of the 1978 El Camino de la Luz landslide.

8-21. Please refer to response 8-13. No fill material would be used to construct the proposed residence. The slope stability analysis determined that the ocean bluff on the project site would be stable after the addition of project-related weight under earthquake conditions. Therefore, the project site would also remain stable under static (non-earthquake) conditions. No additional slope stability analysis is required.

8-22. This comment suggests that additional geologic factors should be considered related to the evaluation of the proposed project's potential slope stability impacts. Please refer to response 8-20. The project technical analysis considered factor of safety and potential for plan failure in accordance with State evaluation criteria.

8-23. The 2011 slope stability analysis (Second Revised Draft EIR Appendix C) assumed that the project would add 100,000 pounds (50 tons) of weight to the proposed building area. The analysis did not include the weight reduction that would result from grading and removing approximately 288 cubic yards of soil from the project site. Therefore, the project-related weight assumptions used to evaluate potential slope stability conditions and impacts are conservative, meaning they likely over-estimate the weight-related effects of the project.

8-24. This comment suggests that additional geologic factors should be considered related to the evaluation of the proposed project's potential slope stability impacts. Please refer to response 8-20. The project geotechnical analysis was conducted by qualified geologists in conformity with State evaluation criteria.

8-25. The existing top of bluff depicted on EIR Figure 5.2-1 (Revised Top of Bluff Location) depicts the current top of bluff and reflects existing conditions at the project site, including the topography of the bluff edge where it descends steeply towards Lighthouse Creek. The Figure also depicts the projected location of the top of bluff after the estimated 75-year period of seacliff retreat. As indicated in EIR Section 1.4 (EIR Preparation History for the Proposed Project), the California Coastal Commission staff geologist has reviewed and concurred with the Second Revised Draft EIR's depiction of the existing and projected locations of the top of bluff at the project site.

8-26. This comment asserts that the rate of bluff retreat at the project site over a recent six year period was 12 inches per year. The Earth Systems Pacific report (EIR Appendix D) estimated the rate of bluff retreat at the project site and provides a detailed explanation of the methodology used to derive the estimated rate of retreat. As such, the report provides substantial evidence regarding bluff retreat conditions at the project site. The report determined that the rate of retreat at the project site was 1.02 inches per year. That rate of retreat was increased by 20 percent to 1.22 inches per year in recognition of potential increases in sea level and wave action that could occur as a result of climate change. The bluff retreat rates used by the EIR were peer reviewed and found to be adequate by Mark Johnsson, the California Coastal Commission staff geologist.

8-27. Please refer to response 2-7 above, which describes how the bluff retreat impacts of the proposed project were evaluated consistent with Coastal Commission guidelines.

8-28. Please refer to the Coastal Commission comment letter regarding the proposed project dated December 1, 2016. Both City of Santa Barbara staff and California Coastal Commission geologist Mark Johnsson (2013) concur with the retreat rate identified by Earth Systems Pacific report. City of Santa Barbara staff discussed the retreat rate and report with Mark Johnsson by telephone.

8-29. Please refer to response 8-15 regarding design guidelines that are applicable to the proposed project. Please refer to responses 8-1 and 8-14 regarding the scope of analysis

included in the project EIR. In regard to mitigation measures identified by the EIR to reduce potential visual impacts, the EIR provides extensive analysis of the potential for the project to adversely affect views of coastal resources, including the ocean. Through the use of photosimulations the EIR visually demonstrates that the proposed residence would have a minor effect on existing public views of the ocean. The EIR also provides substantial evidence that potential ocean view impacts that may result from landscaping, and visual compatibility impacts that may result from future changes to the color of the proposed residence can be reduced to a less than significant level. The project requires City Design Review approval per City design guidelines, which will also ensure visual compatibility and no significant view impacts.

8-30. This comment regarding the EIR's evaluation of growth inducing impacts provided an incomplete quote from the EIR. The complete statement in the EIR is provided below recognizes the feasibility of providing public services and utilities:

"The El Camino de la Luz residence project would be served by sewer, water and other utility services that have been established in the project area. Access to the project site is proposed to be provided by an existing substandard-sized easement. No road improvements would be required to obtain access to the project site. Therefore, the proposed project would not require an extension of public services that have the potential to result in or facilitate unplanned growth in the project area."

As an existing legal lot, the project would be served by utility extensions including for power, telephone, and cable.

As stated by the EIR, the project would not have the potential to remove an obstacle to population growth and its growth inducing impacts would not be significant.

8-31. The EIR quotes several sections from the CEQA Guidelines that provide direction regarding the analysis of project alternatives and the selection of the environmentally superior alternative. For example, the EIR quotes Section 15126.6(a), which states that "*an EIR shall describe a range of reasonable alternatives to the project or to the location of the project, <u>which would feasibly attain most of the basic objectives of the project</u> but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives*" (underline emphasis added). Also, the EIR quotes CEQA Guidelines Section 15126.6(e)(2), which states: "*if the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives."*

The EIR identified the No Project Alternative as the environmentally superior alternative. Then, in compliance with CEQA, the EIR identified the alternative that would attain most of the basic objectives of the project (i.e., developing a single-family residence on the project site). Therefore, the alternatives analysis included in the EIR has complied with the requirements of CEQA.

Rafael Franco
1835 El Camino de la Luz
Santa Barbara, CA 93109

19 November 2016

Santa Barbara Planning Commission
630 Garden St.
Santa Barbara CA 93101

Letter No. 9

Subject: Draft EIR October 2016
1837.5 El Camino de la Luz

Honorable Commissioners:

The following are additional comments and or answers to questions after the Planning Commission hearing Nov 17, 2016 for the subject project.

PUBLIC ACCESS EASEMENT

At the meeting Staff and the EIR consultant stated that there was NO PUBLIC ACCESS EASEMENT to the coastal trail. I refer them to Document File No. 16515 recorded Dec 10, 1947 page 3 that reads as follows:

Also reserving from Parcel One a right of way 5 ft in width, for use in common with others, as a means of ingress and egress to and from the ocean beach, over upon and along the present existing beach trail located on the bluff bank in the southerly portion of land here in described, together with the right to enter upon said 5 foot strip for the purpose of repairing and maintaining said existing beach trail. 9-1

Please note that the trail down the bluff has changed over the years following erosion of the bluff. A comparative exhibit of two different trail locations was submitted with my previous comments.

OWNERSHIP OF LIGHTHOUSE CREEK

Lighthouse Creek is property owned by the U. S. Federal Government. Please refer to Record of Survey and Filing Certificate No 14629 of July 1948 by Penfield and Smith. The applicant's plans indicate discharge of storm water to property he does not own or have the right to. 9-2

STORM WATER MANAGEMENT

The proposed project or the Draft EIR do not indicate how the project will comply with the City's adopted Storm Water Management Program (SWMP), the National Pollution Discharge System (NPDES) requirements, or how the project will comply with storm water pollution prevention plans (SWPPP) as required by Federal permits issued to the City of Santa Barbara. 9-3

LINES LOCATING TOP OF BLUFF AND CREEK BANK

There was significant discussion about this topic at the hearing. We think this was resolved and agreed upon that both of these lines were to follow the existing asphalt curb. This conclusion conforms to Coastal Commission Guidelines issued as Figure B of a CCC staff report dated 28 December 1979. This drawing is almost identical to the subject site and has been the basis of CCC judgement for 37 years. The drawing was submitted with our previous comments. 9-4

The interpretation of the CCC guidelines was submitted to the Planning Department as a record of survey and surveyor's statement by Penfield and Smith on a survey dated July 27, 2007. This was further confirmed by CCC geologist Mark Johnson on his subsequent site visit, and now seems to be the agreed boundary.

GEOLOGY

The Slope Stability Analysis for the ocean bluff is incorrect and incomplete. There are various types of slides that have occurred on this and the adjacent site. The basic guidelines for analysis of possible landslides are listed in CCC Memorandum **W11.5** dated January 16, 2003. They read as follows:

A slope stability analysis is performed by testing hundreds of potential slide surfaces. The surface with the minimal factor of safety will be the one on which failure is most likely to occur. Generally, as one moves back from top edge of the slope, the factor of safety against land sliding increases. Therefore to establish a safe setback for slope stability from the edge of the coastal bluff, one needs to find the distance from the bluff edge at which the factor of safety is equal to 1.5. 9-5

The project geologist did not do this. He concluded that because his pseudostatic analysis of potential planar failure factor of safety exceeded the code requirement (1.14 vs 1.1) he did not have to do the analysis of the much higher static factor of safety requirement of 1.5. This is an erroneous assumption. Other selective and more accurate variables in his equation would have yielded different results.

The fact is that the strike and dip of the Mesa Bluffs is very similar and thus produced a history of landslides including the historic 1978 landslide. This history is why the US

Gelogical Survey and other studies have designated El Camino de la Luz Bluffs a HAZARDOUS ZONE *(USGS Professional Paper1693).* 9-5

Dr. Donald W Weaver was the geotechnical analyst hired by the City to study the cases and type of landslide that occurred in 1978, just three houses from the subject site. In 1978 he mapped the slide and concluded that it was a classic rotational slide. subsequently and after further exploration and study, he changed his opinion and concluded on May 6, 1982 that this massive slide was a planar slide along the same dip and strike as our subject site. The planar slide was caused by the weakening of planar surfaces and by the undercutting of the supporting toe of the slope by wave action. 9-6

These same conditions exist east of the 1978 landslide. Three older homes between the landslide and the subject site sit perilously on Marine Terrace alluvium above Monterrey Shale waiting for the next slide. There is no avoidance, it is just a matter of time.

WHY 100 FOOT CAISSONS?

On the drawing submitted on November 17th I projected the location of the 17 caissons stated in the EIR. I noted a depth of 100 ft as a minimum depth for base bearing caissons. This conclusion was to establish a base at sea level; they may be deeper if they are to penetrate bedrock at least 5 ft. Friction piles this close to the shoreline will not work when the toe of the slope is eroded by wave action. 9-7

EROSION RATE AND BLUFF SETBACK

At the site meeting prior to the hearing, the EIR consultant stated that “wave action is not a determination of bluff top retreat”. This unbelievable statement ignores the most significant impact on our coast, WAVE ACTION. It was the cause of the 1978 landslide 200 ft away. Every professional technical study of ocean bluffs lists wave action as the most important consideration in ocean bluff landslide geotechnical slope stability analyses generally are performed on the status quo at the time of the calculation. The problem with this practice is that they do not reflect the stability of the slope in this dynamic environment, in 10, 20, 50 or 75 years. The history of slope failures and existing bedrock fractures on this site are proof of this deficiency. 9-8

Based on the revised edge of bluff determination, the proposed house does not meet any of the setback requirements. Even if a new slope stability analysis concludes that the slope is stable, the CCC and the Creeks Division will require a 25 ft setback from the ledge. 9-9

CREEK SIDE EROSION

The project and the EIR ignore the current location of Lighthouse Creek and the erosion rates for the creek banks. There has been no survey since 1947 that defines the creek. The 1958 survey submitted for the subdivision that created the parcel excludes the easterly boundary of the parcel and the creek. A current survey of the subject parcel and Lighthouse Creek should be included in the EIR. 9-10

SITE ACCESS

At the hearing, the applicant's attorney asserted that the conditions of proof of access of the Conditional Certificate of Compliance had been met and approved by the City Engineer and Fire Department. This is contrary to the historical interpretations of City Attorneys and City Engineers. He provides no written evidence of this approval. He makes no reference to the contrary letter written to the applicant by the City Engineer on June 27, 1989. This letter was one of the basis for the applicant's complaint against the title companies. Superior Court file number 186256 DEPOSITION OF HERBERT E. BARTHELS on February 11,1992 in the case of Joanna K Morgan vs HERBERT E. BARTHELS clarifies the issues of site access and claims thereof.

EASEMENTS

The Staff Report for the November 17th hearing included a brief prepared by the office of the applicant's attorneys Hollister & Brace and signed by attorney Richard C. Monk and architect Detlev Peikert. This brief makes the following **libelous statement:**

In 2007 and 2008 Rafael Franco and some other residents of the subject stretch of El Camino de la Luz denied the City's retained geologist, Dr. Anikouchine access to the Barthels property for the purpose of performing certain geological investigations which Mr. Franco and said other residents had demanded be performed.

9-11

Statements of fact:

1. I was not there. I wasn't even in Santa Barbara.

2. Neither Mr. Monk or Mr. Peikert were there

3. Neither I nor the neighbors "demand" that this exploration be done. The work was done at the direction of the applicant and paid for by the applicant directly to explore the existence of a rock fracture extending to the base of the cliff. The applicant was admonished by Planning Department and he responded that his attorney "told me to do it". Payment checks to the excavation company are included in the EIR.

Dr. Anikouchine's report concluded that he could not locate the fracture and that he compacted the excavation to 95% using a sheep's foot compactor and water. Neighbors witnessed and photographed the re-compaction to which there was no water available. During this process the excavating equipment trespassed to gain access to and from the site. Photographic evidence of this fiasco was presented to the Planning Commission at the Draft EIR hearing of April 5, 2012.

Based on what we perceived to be a destabilization of the slope by the excavation of an 8 ft deep X 45 ft trench at the top of the bluff, we filed suit against the applicant, Dr. Anikouchine and the excavator. We dropped the suit after repeated responses that Dr. Anikouchine was too ill to be deposed and the excavator responded that he was just doing what he was told.

4. At the hearing and in his brief Mr Monk referred to the Superior Court's stipulated access order of September 9, 2009 which states that we "shall not block , impede or limit access to the Benefited Property....." paragraph (b) states

(b) Shall sign any paperwork required by government agencies relating to or conforming access rights, ***as long as the paperwork accurately describes all easement terms.***

9-11

Mr. Monk omitted mention of the SETTLEMENT AND RELEASE AGREEMENT signed by all neighbors, the applicant and attorneys. The first paragraph of this document reads:

(A) Stipulated judgement to confirm easement per survey, subject to minor existing encroaching improvements".

(G) EXISTING ENCROACHMENTS ARE:
Franco wall segment
Wright planter
Sloan planter and landscaping

The applicant's easement across my property is 7.5 ft. The encroachment of my wall reduces access to 7.0 ft. Mr Monks admonishment to me at the November 15 site visit was....**"TEAR DOWN THAT WALL".**

Thank you for your attention

Rafael Franco

Comment Letter No. 9
Rafael Franco
Date: November 19, 2016

9-1. Please refer to the Access Topical Response, which addresses access related to the proposed project.

9-2. EIR Figure 3.3-1 (Site Plan) depicts the property line boundaries of the project parcel. As shown, the proposed stormwater discharge pipe and discharge location would be located on the project property.

9-3. Project plans include a draft storm water management plan, which received review and approval by the City Creeks Division staff. Please also refer to Mitigation Measure BIO-4 (Erosion Control/Water Quality Plan). That measure specifies a variety of best management practice requirements to control erosion and the discharge of sediment and other pollutants from the project site. The project would require approval of a final storm water management plan prior to building permit issuance consistent with City ordinance provisions, which would ensure that the project would not result in a significant impact associated with pollution or sediment in storm water runoff water.

9-4. This comment expresses concurrence with the location of the top of bluff and the top of the Lighthouse Creek canyon slope by the EIR. No additional response is required.

9-5. This comment expresses opinions that additional geologic factors should be considered in assessing slope stability conditions and impacts at the project site. The slope stability analysis was conducted by Dr. Anikouchine, who is a registered geologist and a certified engineering geologist with over 37 years of experience in the fields of shoreline erosion, coastal oceanography and engineering geology, and conducting slope stability analyses. In addition, California Coastal Commission geologist Mark Johnsson has reviewed the slope stability analysis prepared by Dr. Anikouchine and indicated that he concurs with the analysis and conclusions of the report. The commenter is not a registered geologist, certified engineering geologist or geological engineer, however, these comments will be forwarded to decision-makers so they will be aware of the commenter's opinions.

9-6 Exhibit E of the Revised Initial Study prepared for the proposed project (Second Revised Draft EIR Appendix A) is a review of 17 previous reports that pertain to the geological conditions of the project site. The review of the previous reports was conducted by Dr. Anikouchine. Dr. Anikouchine's review of the previous reports includes a summary of Dr. Weaver's investigation of the 1978 El Camino de la Luz landslide. Therefore, Dr. Anikouchine was aware of Dr. Weaver's investigation when he prepared the 2011 slope stability analysis for the proposed project (Second Revised Draft EIR Appendix C). Also, The Revised Initial Study and the Second Revised Draft EIR both describe the El Camino de la Luz landslide of 1978. EIR Figure 5.2-7 (Landslides in the Project Area)

describes and depicts the location of the 1978 landslide, and the effects and probable causes of the landslide are described on EIR pages 5.2-3 and -25.

9-7. All of the proposed caissons would extend through the artificial fill material that has been deposited over the proposed building area and would be anchored into competent bedrock beneath the fill material. The depth of the fill material varies in the proposed building area varies, but on the level portion of the site the material is approximately four (4) feet in depth, and on the Lighthouse Creek Canyon slope the fill material is approximately 1.5 to 2.5 feet in depth (Earth Systems Pacific, 2013b). Therefore, the depth of the proposed caissons would vary but in general they would extend on the order of seven to eight feet below the existing ground surface.

9-8. This comment misquotes and misinterprets statements made at the project site meeting. Both terrestrial erosion and wave action contribute to the retreat of ocean bluffs. However, rates of erosion at the base of the bluff are typically higher than at the top of the bluff because erosion at the base is primarily affected by wave action while the retreat of bluff top is more typically influenced by terrestrial erosion such as runoff water flowing over the bluff edge.

9-9. This comment asserts that the proposed residence does not meet top of bluff setback requirements. Please refer to response 2-7 above, which describes how the bluff retreat impacts of the proposed project were evaluated consistent with Coastal Commission guidelines. Also, the 2011 slope stability analysis for the proposed project (EIR Appendix C) concluded that the project site ocean bluff is stable and would remain stable after the implementation of the proposed project. California Coastal Commission geologist Mark Johnsson has reviewed the slope stability analysis and indicated that he concurs with the analysis and conclusions of the report. Therefore, no additional slope stability analysis is required.

9-10. The Lighthouse Creek slope stability evaluation (Earth Systems Pacific, 2013; Second Revised Draft EIR Appendix E) provided the following description of erosion conditions associated with Lighthouse Creek on the project site property:

"Erosion along the creek appears to be confined within the thread of the creek. No defined eroded banks were observed within the bottom of the creek adjacent to the proposed building area. In addition, no significant erosion has occurred along the top edge of the canyon slope during the last 60 years."

Therefore, the banks of the creek are considered to be stable and no additional surveys of the project site to map the location of the creek are required.

9-11. These comments pertain to previous geologic investigations conducted at the project site, the temporary geologic exploration trench constructed on the project site, and easements

that provide access to the project site. Comments related to the construction and backfilling of the geological inspection trench do not address the adequacy of the environmental impact analysis included in the Revised Draft EIR. In regard to comments pertaining to the project site access easements, please refer to the Access Topical Response. .

From:	Stan Krome
To:	Kennedy, Kathleen
Cc:	Community Development PC Secretary
Subject:	Comments Re: Second Draft EIR, 1837.5 El Camino de la Luz, SCH No. 2005041031
Date:	Friday, October 28, 2016 11:57:53 AM
Attachments:	morgan_krome_response_barthels_draft_eir_response_letter_ver3.pdf

Please see attached comments and include in the November 17, 2016 Planning Commission Meeting.

Thank you

Letter No. 10

November 17, 2016 Hearing
Planning Commission
City of Santa Barbara
Community Development Department
630 Garden St.
Santa Barbara, CA 93102
pcsecretary@santabarbaraca.gov
Re: Second Draft EIR, 1837.5 El Camino de la Luz, SCH No. 2005041031
Honorable Commissioners,
We have lived at 1843 El Camino de la Luz for over 28 years, and have been opposed to Dr. Barthels project from his initial submittal over 20 years ago.
We believe that the subject draft EIR should more accurately reflect the access issues. Dr. Barthels approached us around 1990 to claim access and to claim his "easement" literally through our house. We disagreed with his claim and sought legal advice. **It was found that his easement and access claim was false.** His lot was sold to him with the fraudulent claim of a perfected access easement. A lawsuit ensued and we prevailed. 10-1
Dr. Barthels quit claimed any and all interest in our property by deed dated November 17, 1995. Further Dr. Barthels granted us a 1-foot prescriptive easement for our fence, which has been there since the 1940's.
Our lawsuit resulted in Dr. Barthels access claim being reduced to 7.5 feet at a bottleneck at the northerly end of our property.
Then a third lawsuit Franco/Barthels resulted in Dr. Barthels conceding another

1-foot prescriptive easement for Franco's driveway wall. The ultimate result of Dr. Barthels access was thereby reduced to the current 6.5 foot access.

We are mystified that the subject draft EIR does not accurately reflect the access issues. Was this done on purpose by the developer and expediters to provide false information to the Planning Commission?

It is our understanding that, in a court of law it was determined that Dr. Barthels, does not possess the REQUIRED 15 foot access from the street to the subject property. And until this is obtained, a building permit will not be issued. Has the City of Santa Barbara changed this law?

Apparently the current City of Santa Barbara system does not prevent him from applying for a Coastal Development Permit, and this EIR is part of that process. However, it seems obvious that Barthels does not have a legal lot with legal access to build his project. 10-1

Documentation shows that Dr. Barthels lot was created illegally and sold to him fraudulently claiming he had adequate access to his lot. After his lawsuit with us, he turned around and **he sued the title company on this premise saying he had been sold an "Unbuildable" lot. The court agreed and granted him double the value of his title insurance policy.**

Additionally since Dr. Barthels already owns his current residence at 1702 Shoreline Drive, a beautiful oceanfront home with a lovely whitewater view, it would appear his need to develop 1837.5 El Camino de la Luz is purely for the intention of selling for profit. Dr. Barthels is a former Olympian and it seems as though this project is just another game for him. I believe this is the City of Santa Barbara's longest running project in the pipeline for some 20 years. Unfortunately, Dr. Barthels quest for victory seems to be at the expense of everybody else for ultimately when the project is denied, the City staff will have wasted months if not years of valuable time on his project. And we as neighbors are at the whim of his determination to win.

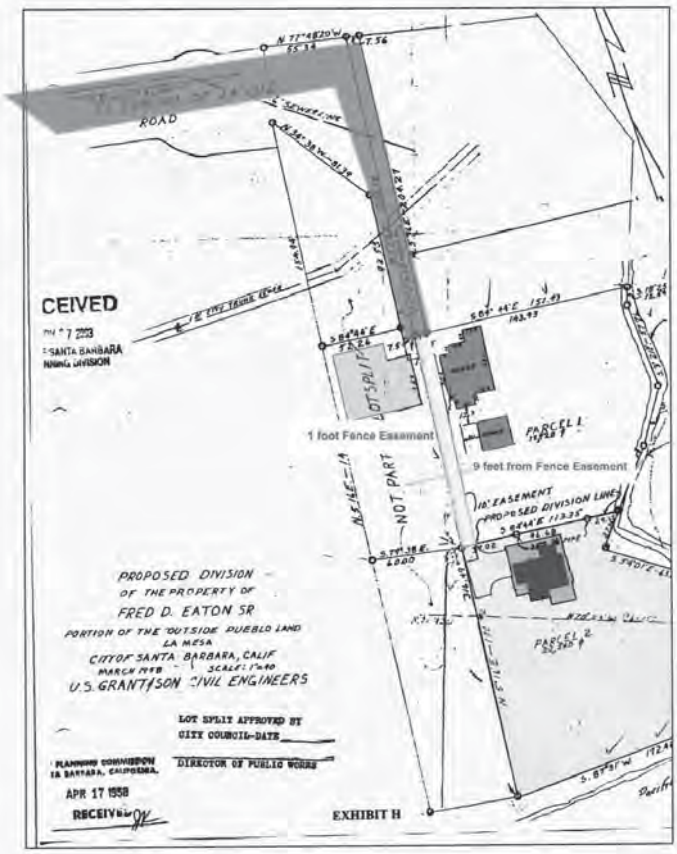
Thank you for considering our concerns.

Joanna Morgan and Stan Krome

Comment Letter No. 10
Joanna Morgan and Stan Krome
Date: October 28, 2016

10-1. This comment expresses a variety of opinions primarily related to the adequacy of access easements that would be relied upon by the proposed project. CEQA Guidelines Section 15002(a)(1) states that a basic purpose of CEQA is to "*Inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities*." CEQA Guidelines Section 15358(b) states that "*Effects analyzed under CEQA must be related to a physical change.*" The proposed use of existing access easements does not result in physical changes to existing environmental conditions. CEQA Guidelines Section 15088 requires the Lead Agency to provide written responses to comments that address "environmental issues." Since the comment does not address an environmental issue, no additional response is required. The comment has been included in the Final EIR to inform decision-makers of the commenter's opinions. In addition, please refer to the Access Topical Response, which provides information related to project-related vehicle and pedestrian access easements.

Easement Map



Easement Map

Letter No. 11

Grant Deed

"Santa Barbara Title Company"

1976 52624 2636 1197

JENKINS TO BARTHELS

DEC 7 8 00 AM '76

RECORDING REQUESTED BY:
SANTA BARBARA TITLE COMPANY

AFTER RECORDING MAIL TO:
Herbert E. Barthels
1831 Cliff Drive
Santa Barbara, CA

610095

Escrow 70465 SC

ABOVE SPACE FOR RECORDER'S USE

GRANT DEED

PLACE INTERNAL REVENUE STAMPS IN THIS SPACE

DOCUMENTARY TRANSFER TAX IS $ 28.05
(X) COMPUTED ON FULL VALUE OF PROPERTY CONVEYED, OR
( ) COMPUTED ON FULL VALUE LESS LIENS & ENCUMBRANCES REMAINING THEREON AT TIME OF SALE.

APN 51-100-45

City of Santa Barbara

ARLENE JENKINS, a single woman

FOR A VALUABLE CONSIDERATION, HEREBY GRANTS TO

HERBERT E. BARTHELS, an unmarried man

the real property in the County of Santa Barbara, California, described as:

See Legal Description attached hereto and made a part hereof.

Arlene Jenkins

Dated: September 13, 1976

STATE OF CALIFORNIA
COUNTY OF Los Angeles ss.
On October 8, 1976 before me, the undersigned, a Notary Public in and for said County and State, personally appeared Arlene Jenkins to me known to be the person whose name is subscribed to the within instrument and acknowledged that she executed the same. WITNESS my hand and official seal.

Notary Public in and for said County and State

MAIL TAX STATEMENTS TO: Same as above

2636 1199

LEGAL DESCRIPTION

THAT PORTION OF THE OUTSIDE PUEBLO LANDS OF THE CITY OF SANTA BARBARA ON THE MESA, SO-CALLED, IN THE CITY OF SANTA BARBARA, COUNTY OF SANTA BARBARA, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

PARCEL ONE:

BEGINNING AT A 1/2 INCH IRON SURVEY PIPE SET ON THE NORTHERLY LINE OF EL CAMINO DE LA LUZ AT THE EXTREME EASTERLY END THEREOF, AS SAID EL CAMINO DE LA LUZ IS SHOWN ON A MAP OF SURVEY OF THE BLANCO E. FRYER TRACT FILED IN BOOK 38 AT PAGE 435 OF RECORD OF SURVEYS; THENCE ALONG THE SOUTHERLY PROLONGATION OF THE EASTERLY LINE OF SAID EL CAMINO DE LA LUZ AS SHOWN ON SAID MAP, SOUTH 5°16' WEST 336.95 FEET TO THE TRUE POINT OF BEGINNING; THENCE SOUTH 5°16' WEST 170.72 FEET, TO THE LINE OF MEAN HIGH TIDE OF THE PACIFIC OCEAN; THENCE NORTH 87°31' EAST 177.48 FEET TO A POINT; THENCE NORTH 4°28' EAST 58.76 FEET TO A 1/2 INCH SURVEY PIPE; THENCE NORTH 32°07' WEST 37.45 FEET TO A 1/2 INCH SURVEY PIPE; THENCE NORTH 54°41' WEST 61.36 FEET TO A 1/2 INCH SURVEY PIPE; THENCE NORTH 38°33' EAST 37.36 FEET TO A 1/2 INCH SURVEY PIPE; THENCE NORTH 87°46' WEST 133.35 FEET TO THE TRUE POINT BEGINNING.

EXCEPTING THEREFROM ANY PORTION OF SAID LAND, WHICH AT ANY TIME WAS TIDE LAND, WHICH WAS NOT FORMED BY THE DEPOSIT OF ALLUVION FROM NATURAL CAUSES AND BY IMPERCEPTIBLE DEGREES.

PARCEL TWO:

AN EASEMENT AND RIGHT OF WAY FOR ROAD AND PUBLIC UTILITY PURPOSES TO BE USED IN COMMON WITH OTHERS, OVER SAID EL CAMINO DE LA LUZ AS SHOWN ON SAID MAP OF THE BLANCO E. FRYER TRACT, ABOVE REFERRED TO.

PARCEL THREE:

AN EASEMENT AND RIGHT OF WAY FOR ROAD AND PUBLIC UTILITY PURPOSES OVER A STRIP OF LAND 15 FEET IN WIDTH, THE CENTER LINE OF WHICH IS DESCRIBED AS FOLLOWS:

BEGINNING AT THE TRUE POINT OF BEGINNING OF THE PARCEL ONE HEREIN-ABOVE DESCRIBED; THENCE NORTH 5°16' EAST 336.95 FEET TO SAID 1/2 INCH SURVEY PIPE SET AT THE EXTREME EASTERLY END OF THE NORTHERLY LINE OF SAID EL CAMINO DE LA LUZ AS SHOWN ON SAID MAP.

PARCEL FOUR:

AN EASEMENT AND RIGHT OF WAY FOR ROAD AND PUBLIC UTILITY PURPOSES OVER A STRIP OF LAND 3 1/2 FEET IN WIDTH, THE EASTERLY LINE OF SAID 3 1/2 FOOT STRIP BEING A PARALLEL TO AND 3 1/2 FEET DISTANT

Ten Foot Easement

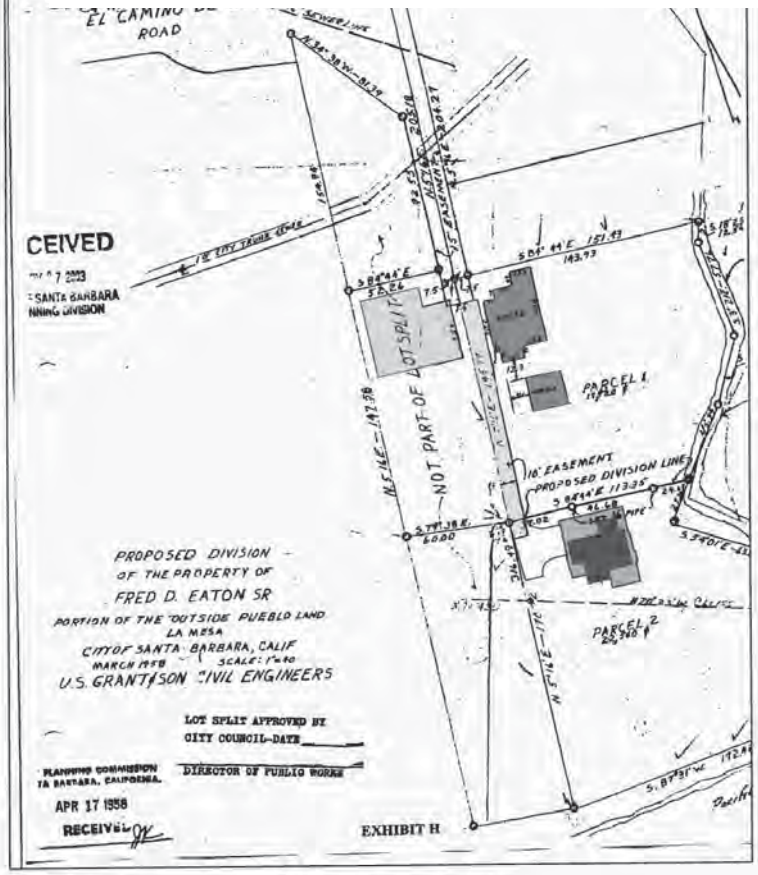


Exhibit 3 **10 Foot Easement**

Quit Claimed Easement

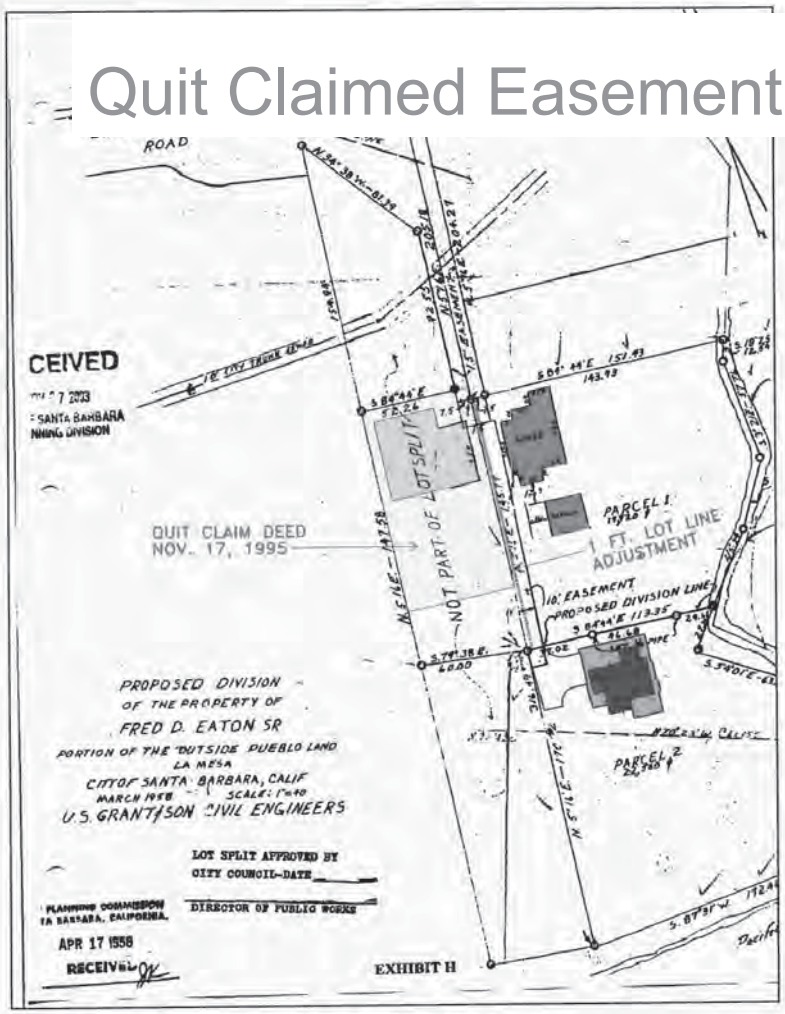


Exhibit 4 **Quit Claim Deed**

ANALYSIS OF CONDITIONAL CERTIFICATE of COMPLIANCE for 1837.5 El Camino de la Luz
November 22,2016

The **CONDITIONAL CERTIFICATE OF COMPLIANCE** for the subject parcel states that in order to certify the legality of the subject parcel, the applicant must show proof to the satisfaction of the City Engineer that the owner has the legal access to the subject parcel as originally presented to the City Council when the lot split that was approved in 1958.

ORIGINAL LOT SPLIT APPLICATION 1958
The application for the lot split was submitted to the Planning Department in April 1948. A Planning Department stamp RECEIVED April 27, 1958 appears on a plan survey submitted by the then applicant, Mrs Eaton. This plan delineates an existing 15 ft wide easement extending approximately 18 ft into the northwest corner of 1837, and northeast corner of 1839 El Camino de la Luz, the westerly adjacent property. The survey also delineated a proposed 10 ft easement along the westerly side of 1837 as the access to the proposed new parcel.

PLANNING COMMISSION DENIAL 1958
The Planning Commission denied the proposed lot split because the delineated 10 ft access easement did not comply with the 15 ft required Code access

CITY COUNCIL CONDITIONAL LOT SPLIT APPROVAL
The applicant, Mrs Eaton, appealed to the City Council. Minutes of the Council meeting record the applicant stating that she had the required 15 ft access required. the City Council approved the lot split conditioned on recording the stated 15 ft easement within one year of the approval.

RECORDED SURVEY DECEMBER 1958
A survey of the newly created parcel in Dec, 1958. This survey is identical to the April 1958 originally submitted survey. The delineated access easements are the same as on the April 27, 1958 plan submitted to the Planning Department.

RECORDATION OF THE 15 ft ACCESS EASEMENT 1963
As a condition of sale of the subject parcel to Brewer, Mrs Eaton recorded a 15ft spurious easement extending south to the subject parcel.

SPURIOUS 15 ft EASEMENT
The current applicant, Dr Barthels discovered the spurious nature of title when he was advised by the City Engineer's office in 1989 that he needed to show that he had Title to a 16 ft of access down to the subject parcel.

CITY ATTORNEY ADVISES APPLICANT THE APPLICATION WILL NOT BE PROCESSED
City Attorney, Stephen Wiley, writes a letter to Dr Barthels Advising him that the City will not continue to process his application until the applicant shows proof of access as originally presented to the City Council when the lot split was approved.

DR BARTHELS QUITCLAIMS EASEMENT Nov. 17,1995
In a legal settlement with the adjacent property owner, Joanna Morgan, Dr. Barthels quit claims any rights to any of Morga'n's property. He thus gives up even the right to a portion (7.5 ft) of the 15 ft easement that extended 18 ft into the Morgan property Indicated in both 1958 surveys. This would serve to make his parcel illegal at that time.

ONE FOOT LOT LINE ADJUSTMENT Nov 17, 1995
The owner of 1937, Bruce Peterson and Dr Barthels agree to a 1 ft lot line adjustment for a 1 ft wide encroachment of an existing fence along the entire westerly property line of 1837. This adjustment reduces the 10 ft easement along the entire Peterson property to 9 ft.

DR BARTHELS SUES THE TITLE COMPANY
Claiming that the City rejected his permit application because the lot was not legal, Dr. Barthels sued his title insurance company for the spurious title to a 15 ft easement to the subject parcel, the easement that was filed by Eaton in 1963. The Title company acknowledged the spurious nature of title and paid Dr Barthels per the provisions of his title insurance policy. Dr Barthels appeals this settlement claiming his settlement should have been for the then value of the land if he could obtain a building permit, plus his time and costs, a sum over $1,000,000. The District Court of Appeals rejected that argument and found for the title company settlement.

CONDITIONAL CERTIFICATE OF COMPLIANCE Dec 8, 1999
The applicant received a CONDITIONAL CERTIFICATE OF COMPLIANCE under the California Map Act. This guarantees ownership, access and the right to sell the subject parcel but it does not guarantee the right to permits until he proves to the satisfaction of the City Engineer that he possesses the access easements as presented to the Council when it approved the lot split in 1958. This did not foreclose his opportunities to obtain that easement now, in the future or as he had in the PAST.

APPLICATION FOR CURRENT PERMIT 2003
The applicant submits new plans for the current plan using the same site plan as was submitted and rejected in 1958. The plan Has a Planning department date received stamp of 2003. The plan has no indication of quit claimed easements or the 1 ft lot line adjustment of 1995.

NO PERMITS CAN BE ISSUED
By his own actions, quit claiming any rights to the adjacent parcel, the applicant has yet to show proof of the access presented to the Council in 1958. The current easements do not comply with the April 27, 1958 map submitted with the original lot split application, the current easements do not comply with the recorded December 1958 survey, and they don't even comply with the spurious 1963 recorded easement. Thus the statement by City Staff, the EIR consultant, and the applicant's attorney that the applicant has complied with the conditions of the Certificate of Compliance is erroneous and false, and **NO PERMITS CAN BE ISSUED AT THIS TIME.**

Comment Letter No. 11
Joanna Morgan and Stan Krome
Date: November 21, 2016

11-1. This submittal depicts information related to access easements that would be relied upon by the project, and depicts other information regarding the project, project site, and the area near the project site. Also included are historic photos of the project site and surrounding areas. The submittal does not include an explanation of the purpose or intent of submitting the material. Therefore, no additional response is required, however, the material has been included in the Final EIR so it can be reviewed by decision-makers.

Letter No. 12

From: Stan Krome
To: Kennedy, Kathleen
Cc: Community Development PC Secretary
Subject: Comments Second Draft EIR, 1837.5 El Camino de la Luz, SCH No. 2005041031
Date: Wednesday, November 23, 2016 9:16:55 AM
Attachments: krome_morgan_barthels_easement_analysis_112016.pdf

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Re: Second Draft EIR, 1837.5 El Camino de la Luz, SCH No. 2005041031

To Whom It May Concern, please see our additional comments regarding the Barthels Draft EIR. We ask that you further explore Barthels access issue and the legality of the lot split. Attached is the easement/access analysis which should be highlighted in the Final EIR. 12-1

Thank you

Joanna Morgan – Stan Krome

1843 El Camino de la luz

Santa Barbara, CA 93109

Comment Letter No. 12
Joanna Morgan and Stan Krome
Date: November 23, 2016

12-1. This comment requests additional exploration of project-related access issues and the validity of the project site lot. CEQA Guidelines Section 15002(a)(1) states that a basic purpose of CEQA is to "*Inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities*." CEQA Guidelines Section 15358(b) states that "*Effects analyzed under CEQA must be related to a physical change.*" The proposed use of existing access easements and the legal status of the project site parcel do not result in physical changes to existing environmental conditions. CEQA Guidelines Section 15088 requires the Lead Agency to provide written responses to comments that address "environmental issues." Since the comment does not address an environmental issue, no additional response is required. The comment has been included in the Final EIR to inform decision-makers of the commenter's opinions. In addition, please refer to the Access Easement Topical Response, which provides information related to project-related vehicle and pedestrian access easements.

Letter No. 13

From: Bruce Peterson [mailto:brucefpeterson@cox.net]
Sent: Wednesday, October 26, 2016 9:09 AM
To: Community Development PC Secretary
Subject: 1837.5 El Camino de la Luz November 17,2016 Letter to Planning Commission

Dear Secretary for the Planning Commission:

Please distribute these comments to all the Planning Commissioners..

Bruce and Grace Peterson
1837 El Camino de la Luz
Santa Barbara, CA 93109

November 17, 2016 Hearing

Planning Commission
City of Santa Barbara
Community Development Department
630 Garden St.
Santa Barbara, CA 93102

Re: Second Draft EIR
1837.5 El Camino de la Luz
SCH No. 2005041031

Honorable Commissioners: 10/25/16

I have lived at 1837 El Camino de la Luz for over 29 years, and have learned so much about easements, land use, coastal geology, bluff top retreat and creek protection.

Easements: In a court of law it has been determined that the property owner at 1837.5 El Camino de la Luz, does not possess the REQUIRED 15 foot access from the street to the subject property. Until this is obtained, a building permit will not be issued. The current system does not prevent him from Applying for a Coastal Development Permit, and this EIR is part of that process. 13-1

Land Use: Some legal lots are build-able, others are not; 1837.5 El Camino de la Luz falls into the later category. 13-2

Public view corridors are essential to maintain the unique beauty of Santa Barbara, this most recent rendition would interfere with public views from La Mesa Park, public benches and the footbridge that crosses Lighthouse Creek. Instead of viewing an undisturbed vegetated large creek bed as well as the ocean and Santa Cruz Island. the proposed house would protrude 30 feet over the creek edge and into the highly visible drainage basin. 13-3

Coastal geology: For a technical analysis, please refer to my next door neighbor, Ray Franco, who, as an architect, has a deep understand of geology and knows the correct methods of slope stability analysis in regards to building codes. Please read his analysis. On a more general note, the 1978 landslide at 1925 El Camino de la Luz, less than 400 feet from the subject property is well documented. Less publicized is the January 25, 2008 massive landslide at Shoreline Park, which resulted in a section of the Park, 60 feet wide and 120 feet long, moving 45 feet downward toward the ocean. Frank Kenton, the geologist who did the subsequent study, recommended the new sidewalks (the old sidewalk was gone) should be setback 30 feet in one area, and 33 feet in another area, from the NEW top of bluff edge. 13-4

Bluff Top Retreat: The stated average rate of bluff top retreat in Santa Barbara is 8 inches. Over a 75 year period, an average bluff would recede landward 50 feet. While being a property owner in the 1990's in Isla Vista, the Del Playa oceanfront property lost over 8 feet per year. A later owner was forced to shorten the building from 100 feet to 65 feet. That building was erected in the 1960”s and didn't even last 40 years! To prevent these planning mistakes from being repeated, the California Coastal Commission has developed standards for development on bluff top areas. Ray Franco has provided the publication by Mark Johnson PhD. the California Coastal Commission's geologist, regarding bluff top determination and SETBACKS required for building construction. If all geologic factors were perfect, which they seldom are, the absolute MINIMUM SETBACK would be 25 feet from the bluff edge. He told me by phone I could quote him on that fact. His phone number is 415 904-5245 in San Francisco. 13-5

Lighthouse Creek: November 2000 the City voters passed Measure B, which increased the TOT (bed tax) from 10% to 12%, the extra 2% was to fund the Creeks Division through Parks and Recreation. Lighthouse Creek, which borders the subject property on the East, is one of 5 major Santa Barbara Creeks, and it has water year-round. As a protective measure, the new construction standard is 50 feet from the top of creek edge. In rare cases, the standard can be reduced to 25 feet. The voters disapproved Veronica Springs Multiple Housing Project which had 100 foot SETBACKS from the Arroyo Bruuo top of creek edge. Needless to say, the hired architect for the subject property did not contact the Creeks Division before drawing the latest sketches. It appears Rodriquez Consulting, the firm working on this EIR, missed comments from the Planning Commission at a previous meeting that asked the question "Has anyone checked with Creeks". George Johnson, Supervisor of the Creeks Division, can be reached at 805 897-1958. 13-6

In conclusion, I am sure the most recent sketches and drawings DO NOT meet the SETBACK requirements from either the Pacific Ocean bluff top or Lighthouse Creek. As a starter, the applicant at the subject parcel should return to the drawing board and provide a design that allows for a minimum of 25 feet for these two SETBACKS. 13-7
This revised EIR, does correctly identify part of the Pacific Ocean bluff top edge, however, the Eastward delineation is still in error. This EIR is a work in progress, still fraught with errors and a disregard for California Coastal Commissions Regulations and the Standards of the City of Santa Barbara's Creek Division..

Thank you for considering our concerns.

Comment Letter No. 13
Bruce Peterson
Date: October 26, 2016

13-1. This comment asserts that the project does not have adequate access from the street. CEQA Guidelines Section 15002(a)(1) states that a basic purpose of CEQA is to *"Inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities*." CEQA Guidelines Section 15358(b) states that *"Effects analyzed under CEQA must be related to a physical change."* The proposed use of existing access easements does not result in physical changes to existing environmental conditions. CEQA Guidelines Section 15088 requires the Lead Agency to provide written responses to comments that address "environmental issues." Since the comment does not address an environmental issue, no additional response is required. The comment has been included in the Final EIR to inform decision-makers of the commenter's opinions. In addition, please refer to the Access Easement Topical Response, which provides information related to project-related vehicle and pedestrian access easements.

13-2. This comment states an opinion that the proposed project site is not a buildable lot, but does not provide any support for this assertion. This comment does not address the adequacy of the environmental impact analysis provided by the EIR but has been included in the Final EIR to inform decision-makers of the commenter's opinion.

13-3. The EIR provides extensive analysis of the potential for the project to adversely affect views of coastal resources, including the Lighthouse Creek canyon and the Pacific Ocean. Through the use of photosimulations (see EIR Figures 5.1-4 and 5.1-5) the EIR visually demonstrates that the proposed residence would have a minor effect on the existing visual conditions of Lighthouse Creek and ocean views. On page 5.1-17 of the Draft EIR the analysis concludes "*..the structure would not substantially alter the visual extent of the view corridor because the western edge of the corridor would continue to be defined by existing trees, bushes and houses."* The "view corridor" mentioned by this EIR excerpt refers to the Lighthouse Creek channel, canyon and adjacent residential development.

13-4. The Revised Initial Study and the EIR both describe the El Camino de la Luz landslide of 1978. EIR Figure 5.2-7 (Landslides in the Project Area) describes and depicts the location of the 1978 landslide, and the effects and probable causes of the landslide are described on EIR pages 5.2-3 and -25. The Shoreline Park landslide mentioned by this comment occurred approximately one mile east of the project site. This landslide was described by Anikouchine (EIR Appendix C, page 12) and a photograph of the slide is provided in Figure 11 of Anikouchine's 2011 slope stability report (EIR Appendix C). The EIR states that bluff retreat rates in the City are highly variable (page 5.2-4), the City's Local Coastal Plan requires that setbacks from the bluff edge be determined based on site-specific geological surveys (EIR page 6-8). The proposed project's setback from

the top of the ocean bluff is based on site-specific analysis as required by the Local Coastal Program.

13-5. Please refer to response 13-4 regarding the use of site-specific estimates of long-term bluff retreat rates. Please refer to response 2-7 above, which indicates that the EIR's evaluation of bluff retreat impacts at the proposed project site are consistent with the evaluation methodology guidelines specified by the California Coastal Commission staff geologist.

13-6. The only development standards adopted by the City of Santa Barbara related to setbacks from creeks is Santa Barbara Municipal Code Section 28.87.250, which applies only to Mission Creek (see Section 28.87.250.1, Legislative Intent). No creek setback standards have been adopted that are applicable to Lighthouse Creek.

Creek setback requirements that are applicable to the proposed project are provided by Local Coastal Plan Policy 6.10, which requires that a setback for native vegetation be provided between the top of the bank and proposed development. The Policy states: "*The City shall require a setback buffer for native vegetation between the top of the bank and any proposed project. This setback will vary depending upon the conditions of the site and the environmental impact of the proposed project.*" Based on the requirements of Policy 6.10, the setbacks for new development along Lighthouse Creek are to be reviewed on a project-specific basis. Creeks Division staff are consulted on projects that are adjacent to creeks during project review and provide comments on proposed restoration plans.

13-7. This comment expresses opinions that proposed building setbacks from the top of bluff and Lighthouse Creek are not consistent with City requirements. Please refer to responses 13-5 and 13-6.

This comment also states that the eastward delineation of the project site top of bluff is in error. The existing top of bluff depicted on EIR Figure 5.2-1 (Revised Top of Bluff Location) depicts the current (2012) top of bluff and reflects existing conditions at the project site. The Second Revised Draft EIR (page 5.2-4) provides the following description of the revised top of bluff location:

"The location of the top of bluff was re-evaluated by Earth Systems Pacific (2013a) and determined to be located south of and adjacent to the proposed building pad, generally following the location of an existing concrete curb and drainage swale. At the southeastern corner of the paved area, the bluff top follows a moderately broad ridgeline that trends down to the mouth of Lighthouse Creek. This top of bluff location is consistent with the Coastal Commission definition that refers to the "landward edge of the topmost riser."

EIR Figure 5.2-1 also depicts the projected location of the top of bluff after a 75-year period. As indicated in EIR Section 1.4 (EIR Preparation History for the Proposed Project), the California Coastal Commission staff geologist has reviewed and concurred with the Second Revised Draft EIR's depiction of the existing and projected locations of the top of bluff at the project site.

Gregory M. Smith
1839 El Camino de la Luz
Santa Barbara, CA 93109

November 30, 2016

Letter No. 14

Santa Barbara Planning Commission
630 Garden St.
Santa Barbara CA 93101

Subject: 2nd Draft EIR October 2016
1837½ El Camino de la Luz

Honorable Commissioners:

My wife Judith and I live on the lot next-door to the proposed development, nearer and more vulnerable than any other lot. We are members of *Citizens to Protect and Preserve the Mesa's Coastal Bluffs*, a citizens group dedicated to protecting the Mesa's Bluffs and preserving Lighthouse Creek and the views from La Mesa Park. The group has hired the law firm of Venskus & Associates to help us oppose residential development of 1837½ El Camino de la Luz. Comments from our lawyers and others have covered most of the issues, but we would like to add some words from our unique point of view. 14-1

We bought our property in 2010, much more recently than the other neighbors, and were influenced by the history of the City's actions with regard to the proposed development. We were worried that construction and excavation of the lot next-door might destabilize and threaten our lot, but were assured by the neighbors that no house could be built there because of a defect in the creation of the lot involving insufficient access. A study of the record confirmed that a *Conditional Certificate of Compliance* was in effect prohibiting a building permit from being issued unless the owner could prove that he had a much wider driveway than he obviously had. We decided to make 1839 El Camino de la Luz our seaside retirement home—a simple board-and-batten, flat-roofed house built in 1958 close to the edge of the bluff. (Too close, but we were willing to live dangerously.) 14-2

Thus began our involvement in a drama that has been going on for over 26 years! Ordinarily, I would be sympathetic to any landowner who wanted to build a house, but Dr. Barthels has been told repeatedly since at least 1989 that he could not build on this malformed lot for which he paid $24,500 in 1976. The insurmountable problem has always been the narrow access easement. Along with our neighbors, we saw that the

access problem should and would prevent development, so we offered to purchase the property for twenty times what Dr. Barthels paid for it, intending to keep it as open space.

Our belief that the parcel could not be developed was bolstered by the discovery that the application contradicted the applicant's assertions in *Barthels v. Santa Barbara Title Company* (1994) that his lot was worthless because getting a building permit would be impossible because of a deficiency in title to a sufficient amount of legal access to the property.[1] In that law suit Dr. Barthels used the very real access problem to get a recovery on his title insurance policy. Now he has reversed himself and wants us to believe that no significant access problem exists, even though there has been no change in the width of his easement. (In a separate comment, our lawyers will be making a case for judicial estoppel because of the applicant's contradictory claims in judicial and quasi-judicial proceedings.)

In his 2012 letter to Assistant City Attorney Stephen Wiley, David Magnusson, attorney for one of our neighbors, expressed his concern that Dr. Barthels might at some point claim that he has been processing the project for years, expending untold thousands of dollars, and that the City never held him to the access requirement—and that then he might seek compensation from the City if the City later enforces the 15-foot requirement. As to this claim and a possible claim of a "taking" by the City, the case of *Barthels v. Santa Barbara Title* proves that the applicant knew his land was worthless without sufficient access. He assumed the risk of loss of value upon permit denial when he went ahead without having a path to compliance with the *Conditional Certificate of Compliance*. 14-2

We are concerned that, on the access issue, the Planning Commission may not be aware of the strictness of the City's position in the past. A very strict condition has been attached to this lot and we have been relying on it. In order for the lot to be developed, the Map Act and the *Conditional Certificate of Compliance* must be respected and the applicant must prove that he has the required amount of legal access.

The November 7, 2016, letter to the Commission by attorney Richard Monk does not offer such proof. Instead, his argument pivots to an irrelevant map. That 1958 map shows the (inadequate) access that existed (including a width of 7½ feet along one section). The map is not a picture of the amount of legal access that formed the basis of the lot split. The lot split was based on a representation that the owner possessed at least 15 feet of

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[1] "At trial Barthels testified that in 1989 when he learned of the deficit in title, the property was worth $800,000 with the 15 foot easement and nothing without the easement. . ." *Barthels v. Santa Barbara Title,* 2d Civil No. B076806 (Super. Ct. No. 182179) (Santa Barbara County) California Court of Appeal Second Appellate District Division Six Filed September 23, 1994

legal access from the street to the lot. There is no "Lot Split Map" of the type implied. The access shown on the map was never "approved" as adequate. It is a map of what existed, not what formed the basis of the lot split. Approval of the lot split was based on a misrepresentation. The lot split was allowed because the owner claimed to have more access than she legally possessed—at least 15 feet—whether by mistake or fraud. Mr. Monk uses the case of *Barthels v. Franco,* Santa Barbara Superior Case No.1268293*,* to show that the Applicant's legal access easements have been conclusively judicially determined to exist and that they are of various widths, 15 to 7½ feet—but that is not enough to meet the requirements of the *Conditional Certificate of Compliance*. The case cited by Mr. Monk establishes the *amount* of access that the Applicant has, not whether that amount is *sufficient.* Likewise, the title report map provided by Mr. Monk in Exhibits "C" and "D", correctly showing the amount of legal access possessed, is not evidence of the amount required.

In short, with no animosity toward Dr. Barthels, we have no reservations about opposing this project. The applicant never had a *reasonable* expectation that the City would allow him to build. He has recovered his purchase price, plus expenses, from Santa Barbara Title Company and he will suffer no loss if this application is denied—except for money he spent pursuing a goal rejected in 1989 and definitively foreclosed in 1999 by the *Conditional Certificate of Compliance* which governs this application. On the other hand, we neighbors would be damaged by the City if it did *not* impose its own conditions on the proposed development. The City must follow its own rules. 14-2

The burden of proof is on the applicant to show that he has "the required amount of legal access that formed the basis of the originally approved lot split", namely a minimum of 15 feet. In the absence of such a showing, he should not be allowed to proceed and, to the extent that he is allowed to proceed, we are being damaged by being forced to fight the project on issues such as design, geotechnical factors, setback, environmental impact, etc., while the threshold issue of access is being ignored. In a case where *no house* should be allowed, Dr. Barthels is engaging the City in a discussion of *what kind of house* might be allowed—and we are suffering the expense and anxiety of trying to win the debate on these other issues.

We wish that the City would stand by its position that "the parcel does not appear to satisfy a fundamental condition of its original creation, the existence of the 15 foot wide access easement for the full length necessary for vehicular access from the public street to

the parcel"[2] and require the owner to meet his burden of proof on the access issue before this application gains further momentum. Failing that, the application should be denied on the basis of all the other problems, especially the near-zero setback from the ocean bluff, the actual intrusion into the Lighthouse Creek canyon, and the legendary geologic instability of our Mesa's coastal bluffs. 14-2

Sincerely,

Gregory M. Smith

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[2] Assistant City Attorney Stephen P. Wiley, June 4, 1997:

"After reviewing all the materials submitted as well as all the materials contained within City records, including particularly the minutes of the May 1958 City Council approval of the lot split which created the parcel at 1837 1/2 Camino De La Luz, it is our conclusion that the required legal access to the parcel is not clearly and definitively established from a legal standpoint. As a result, the City cannot process an application for the development of that parcel with a single family home until you [his attorney] and Dr. Barthels demonstrate that the 15 foot wide easement access originally represented to the City Council as the necessary vehicular access to the parcel does in fact exist and can legally be utilized in perpetuity.

In conclusion, the City does not believe it is appropriate to process an application to develop a parcel where the parcel does not appear to satisfy a fundamental condition of its original creation, the existence of the 15 foot wide access easement for the full length necessary for vehicular access from the public street to the parcel."

Comment Letter No. 14
Gregory M. Smith
Date: November 30, 2016

14-1. This comment refers to comments submitted Venskus & Associated. Please refer to responses to comment letter No. 5 provided above.

14-2. These comments pertain to the requirements of the Conditional Certificate of Compliance for the project site, the legality of the project site parcel, and access easements that would be used by the project. CEQA Guidelines Section 15002(a)(1) states that a basic purpose of CEQA is to "*Inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities*." CEQA Guidelines Section 15358(b) states that "*Effects analyzed under CEQA must be related to a physical change.*" Concerns regarding compliance with the Conditional Certificate of Compliance, the legality of the project parcel, and the potential use of existing access easements, do not result in physical changes to existing environmental conditions. CEQA Guidelines Section 15088 requires the Lead Agency to provide written responses to comments that address "environmental issues." Since the comment does not address an environmental issue, no additional response is required. The comment has been included in the Final EIR to inform decision-makers of the commenter's opinions. In addition, please refer to the Access Topical Response, which provides information related to project-related vehicle and pedestrian access easements. The Staff Report for the project will address additional issues beyond environmental review issues identified in the EIR.

From: Judith Smith
To: Community Development PC Secretary
Cc: Kennedy, Kathleen
Subject: RE: 1837-1/2 El Camino de la Luz SCH No.2005041031: Comment on 2nd Draft EIR 2016
Date: Saturday, November 19, 2016 4:29:33 PM

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19 November 2016

Planning Commission Secretary

P.O. Box 1990

Santa Barbara, CA 93102
pcsecretary@SantaBarbaraCa.gov
kkennedy@SantaBarbaraCa.gov

Letter No. 15

Re: 2nd Draft EIR 2016
1837-1/2 El Camino de la Luz
SCH No.2005041031

Greetings to All Planning Commissioners:

Since the The Planning Commission Hearing last Thursday, November 17th, 2016, I have written a comment about an issue that hasn't been mentioned yet about the **2nd Draft EIR for 1837-1/2 El Camino de la Luz**. Here it is:

Transportation

"The proposed use of existing driveway easements for project site ingress/egress has the potential to result in a significant access-related impact.

COMMENT:

The actual construction process to build this proposed house would create more than a significant impact at the *cul-de-sac* at the end of El Camino de la Luz. This tiny dead-end area serves cars from sixteen parcels. All day long, there is a steady stream of visitors from the whole Mesa neighborhood who converge on this area in order to cross the Lighthouse Creek Bridge. This bridge sits right at the end of the *cul-de-sac.* The visitors come via Oliver Rd. and turn on to El Camino de la Luz, walking, running, bicycling, skate boarding, and/or driving. This popular and unique bridge looks down into the Lighthouse Creek and leads to La Mesa Park. The bridge provides a valuable view of the Pacific Ocean, The Channel Islands, whales, dolphins, sailboats and the Creek's vegetation. **The 1837-1/2 El Camino de la Luz 2nd Draft EIR does not address** the great public service the Lighthouse Creek Bridge and La Mesa Park play in the well-being of the whole Lower Mesa neighborhood. The EIR says nothing about how this community's way of life will be impacted by construction right at this critical juncture on this dead-end street. 15-1

Even if the project can find enough access to bring machinery to the site, the nuts and bolts of construction are still going to create a crushing impact of nightmare proportions on a beloved public footpath and 15-2

thoroughfare. This very small dead-end area funnels people onto the bridge and into La Mesa Park and up to Shoreline Drive. Not only is the bridge a tourist attraction because of the Lighthouse, it is a popular place for Santa Barbara residents to visit and enjoy.

The regular daily foot traffic at the end of El Camino de la Luz **on to** and **off of t**he Bridge, makes our street a well-traveled friendly hub for runners, dog walkers, women with strollers containing babies and toddlers, lovers, families, and bicyclists. The onset of the construction process will affect a large swath of the general public who will have to bear the brunt of this high impact project. Parking for construction workers, huge trucks delivering building materials, and the staging of large machinery to build this house will heavily congest our *cul-de-sac,* and that is an understatement! What is now a recreational oasis for this urban community, will become a filthy, over-crowded, noisy, and **dangerous place for the public to navigate**, **even if the bridge stays open.** The narrow easement driveway to the building site and lack of turnaround on the site will prevent construction trucks from going there. Their vehicles will pile up on the *cul-de-sac* and have trouble turning around. Residents will have trouble exiting their homes in the morning. 15-2

Right below the bridge, nestled into the vegetation at the end of the *cul-de-sac*, is the City's Pumping Station for all the sewage of the neighborhood. City workers regularly do maintenance there. Construction congestion will affect the City's access to the manholes and to the pump. Even just one or two of the City's trucks can create difficulties with ingress/egress. I shudder to think about the problems this construction project would unleash.

The Mesa community and the neighbors who reside closest to this project are going to have to pay a tremendous price just so this project can proceed. This proposed project is already fraught with problems and questions about its safety. The impact of its actual construction **would create a situation of unnecessary peril for the public on this street.** This project will be a public nuisance that will go on for 1-2 years!

It is up to you, our obviously thoughtful and concerned Planning Commissioners, to protect and preserve this City/Neighborhood treasure. Perhaps this project **COULD** BE BUILT, but the question is, **SHOULD** IT BE BUILT? This was the question **you**, **The Planning Commissioners**, asked when you denied Mr. Thomas Felkay's application to build his house at 1925 El Camino de la Luz. His parcel is situated just a short way up the street from our *cul-de-sac.* If the City Council approves Mr. Felkay's project at the December 6, 2016 Appeal Hearing, our street will turn into a Hell that will reverberate exponentially and turn El Camino de la Luz into a war zone. The cul-de-sac at the end of El Camino de la Luz cannot bear one, let alone two, high impact construction projects. 15-3

I am asking you to think deeply about the transportation impact of the 1837-1/2 El Camino de la Luz project which I strongly oppose.

My husband, Greg, and I bought our home at 1839 El Camino de la Luz seven years ago. We live at the south end of the easement driveway adjacent to the driveway leading to the proposed building site. I walk my dog many times a week using the Lighthouse Creek Bridge. I know the character and atmosphere of the place well and I am grateful I get to be a part of it. 15-4

Thank you for your time and energy,

Judith Smith
1839 El Camino de la Luz

Comment Letter No. 15
Judith Smith
Date: November 19, 2016

15-1. This comment describes the El Camino de la Luz cul-de-sac and states that the EIR does not evaluate the proposed project's impacts on the "well-being" of area residents and visitors to the project area. CEQA Guidelines Section 15002(a)(1) states that a basic purpose of CEQA is to "*Inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities*." CEQA Guidelines Section 15358(b) states that *"Effects analyzed under CEQA must be related to a physical change."* Concerns regarding well-being of project area residents and visitors is highly speculative and not a physical change to existing environmental conditions. CEQA Guidelines Section 15088 requires the Lead Agency to provide written responses to comments that address "environmental issues." Since the comment does not address an environmental issue, no additional response is required. The comment has been included in the Final EIR to inform decision-makers of the commenter's opinions.

15-2. This comment asserts that project-related construction operations and traffic will impact El Camino de la Luz and the bridge south of La Mesa Park. The Revised Initial Study prepared for the proposed project evaluated the potential for the project to result in short-term traffic-related impacts. That analysis concluded that due to the limited scope of the project (the construction of one single-family residence) and the temporary increase in local traffic that would result from the project, construction-related traffic impacts would not be significant. To minimize construction traffic impacts to the surrounding neighborhood to the extent feasible, the Revised Initial Study recommended the implementation of several standard measures. These measures include Recommended Measure T-2, which requires the City Transportation Engineer to approve large equipment haul routes, and places limitations on the hours that truck trips may occur. Recommended Measure T-3 requires the City Transportation and Parking Manager approve proposed construction worker parking areas and prohibits the storage of construction material within the public right-of-way.

15-3. This comment states that cumulative development in the project area, specifically the proposed single-family residence project at 1925 El Camino de la Luz, would result in additional construction-related traffic impacts. Due to the limited extent and duration of construction traffic that would result from the construction of two single-family residences in the project area, construction traffic impacts would not be cumulatively considerable. In addition, potential construction traffic impacts of the proposed project would be minimized by the requirements of recommended measures T-2 and T-3, and since those are standard requirements, similar measures would likely be requirements of a future project at 1925 El Camino de la Luz.

15-4. This comment expresses opinions of the commenter that do not address the adequacy of the EIR. No additional response is required.

From: Rodriguez, Julie
To: Kennedy, Kathleen
Subject: FW: COMMENTS on 2nd Draft EIR 1837-1/2 El Camino de la Luz SCH No. 2005041031
Date: Thursday, December 08, 2016 8:46:30 AM

From: Judith Smith [mailto:shoshin@mac.com]
Sent: Wednesday, November 30, 2016 12:41 PM
To: Community Development PC Secretary <pcsecretary@SantaBarbaraCA.gov>
Subject: RE: COMMENTS on 2nd Draft EIR 1837-1/2 El Camino de la Luz SCH No. 2005041031

30 November 2016

Planning Commission Secretary
P.O. Box 1990
Santa Barbara, CA 93102
pcsecretary@SantaBarbaraCa.gov

Letter No. 16

RE: 2nd Draft EIR 2016
1837-1/2 El Camino de la Luz
SCH No.2005041031

Honorable Commissioners:

Please add this pertinent comment to my November 19th, 2016 2nd Draft EIR letter, already on file with the Planning Commission secretary. That letter comments extensively on the more than significant transportation impact the 1837-1/2 El Camino de la Luz development will have on a large swath of Mesa locals, Santa Barbara residents and visiting tourists who daily frequent the popular Lighthouse Creek Bridge and La Mesa Park.

Transportation

"The proposed use of existing driveway easements for project site ingress/egress has the potential to result in a significant access-related impact.

COMMENT:

Yesterday, as I crossed the Lighthouse Creek Bridge from our El Camino de la Luz *cul-de-sac,* I was struck by how every one of the benches on the La Mesa Park hillside above the Lighthouse Creek were full with ocean viewers taking in the splendor of another day in Santa Barbara. In my last comment letter, I forgot to mention how much use these benches get for rest and repose by the public. I imagined how this beloved view would get blocked by the owner's proposed house, both to the ocean and from the ocean. 16-1

I think Dr. Barthels, the owner, needs to put up story poles so we can all see just how much of the actual view the general public will lose. I am not sure what issues trigger the requirement of story poles, but I am sure this situation warrants the visuals. We could see in real time, not just in an architectural drawing or on a simulated story board online, how this proposed house will impact the views.

I am sure that story poles will add deeper insight into the true impact the proposed house will

have on the views, more so than any other visual ever could. Let's actually see how many people who use those cherished ocean-facing benches and the Lighthouse Creek Bridge want a house built into their beloved public view. I, personally, would organize to collect petition signatures to find out once those story poles are up. 16-1

Thank you again for your consideration,

Judith Smith
1839 El Camino de la Luz

Comment Letter No. 16
Judith Smith
Date: November 30, 2016

16-1. The EIR includes extensive analysis of the proposed project's potential impacts to views from the "benches" area of La Mesa Park. The EIR's analysis includes the use of photosimulations that depict how the proposed project would affect existing views from the benches area (see EIR Figures 5.1-4 and 5). Based on the depiction of post-project views provided by the photosimulations, the EIR analysis concluded:

"The proposed project would result in the development of a new residence within the "benches" area view corridor and would change the appearance of the project site from a vacant appearance to a developed condition. As shown by Figure 5.1-5, the proposed structure would appear to be lower in height than the existing houses that are currently visible within the view corridor. As can be seen by comparing Figures 5.1-4 and 5.1-5, the proposed residence would result in a minor loss in the amount of ocean that is currently visible. The proposed residence would be visible along the western edge of the "benches" area view corridor, however, the structure would not substantially alter the visual extent of the view corridor because the western edge of the corridor would continue to be defined by existing trees, bushes and houses. Therefore, as seen from the Mesa Park "benches" area, the proposed project would not substantially reduce or interfere with existing ocean views, and the project's impact to public views of an important visual resource would be ***less than significant (Class III)."***

In addition to the EIR's analysis, story poles were erected in 2005 and 2008 prior to the respective Planning Commission hearings.

The photosimulations included in the EIR provide substantial evidence that the proposed project would have a less than significant effect on existing views from the "benches" area. Therefore, no additional analysis of this impact has been added to the EIR.

11 November 2016

Letter No. 17

Planning Commission Secretary
PO Box 1990
Santa Barbara, CA 93102-1990

RE: 1837-1/2 El Camino de la Luz: Comments on 2nd Draft EIR

Dear Planning Commissioners,

We have reviewed the 2nd Draft EIR for the proposed development at 1837-1/2 El Camino de la Luz that is scheduled to come before the Commission for comments on Thursday, November 17th. We support the "no project alternative" due to the substantial impacts that either 1) remain unresolved and/or 2) for which wholly unsatisfactory mitigation measures are proposed. 17-1

We note and/or question the following in the 2nd Draft EIR:

Transportation

"The proposed use of existing driveway easements for project site ingress/egress has the potential to result in a significant access-related impact.
T-1 Evidence of Adequate Access. Provide evidence, satisfactory to the City Engineer and City Attorney, that the owner of the subject parcel substantially possesses the required amount of legal access that formed the basis of the original lot split."

17-2

Comment:
No mitigation measure, other than evidence of proof, is proposed for the required amount of legal access in the document. Absent proof of the required legal access, the proposed project cannot provide safe ingress/egress to the site.

Class II Impact – Visual Aesthetics

"Potentially significant but mitigable impacts to the three important public scenic views in the project area that may be caused by proposed colors or future color changes could be reduced to a less than significant level by requiring Single Family Design Board approval of proposed colors and future building color changes. Proposed mitigation measure AES-1 requires that the proposed structure's exterior colors be neutral or earth-tone, and that any subsequent color changes be approved by the Single Family Design Board. With the implementation of this mitigation measure, color-related visual aesthetic impacts would be a potentially significant but mitigable (Class II) impact and would be reduced to a less than significant level." 17-3

Comment:
The Coastal Act Policy related to visual quality states: "Section 30251. The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas."

The proposed home blocks a significant portion of public views of the ocean enjoyed by many from La Mesa Park, and from the bridge connecting El Camino de la Luz and La Mesa Park. This public resource should be protected in its entirety as stipulated in the Coastal Act Policy. There are no exterior colors that can adequately mitigate for loss of a significant portion of these public ocean views. 17-3

Section 3.3.2 – Project Description

"The eastern portion of the area that would be used to develop the residence slopes downward to the east towards Lighthouse Creek. As depicted on Figure 3.3-7, the main floor of the residence would be cantilevered over the top of the canyon slope. The eastern portion of the residence would extend approximately 12 to 30 feet beyond (east) of the identified top of the Lighthouse Creek canyon slope."

Comments:

Local Coastal Plan Policy 6.8 states: "The riparian resources, biological productivity, and water quality of the City's coastal zone creeks shall be maintained, preserved, enhanced, and, where feasible, restored." The large proposed cantilever over Lighthouse Creek canyon will alter sun and shade patterns of the canyon and could affect riparian resources and the biological productivity and diversity of Lighthouse Creek, and is clearly contrary to this LCP Policy. 17-4

Local Coastal Plan Policy 6.10 states: "The City shall require a setback buffer for native vegetation between the top of the bank and any proposed project. This setback will vary depending upon the conditions of the site and the environmental impact of the proposed project." The proposed project cantilever substantially protrudes into and over Lighthouse Creek's western bank, and the proposed project does not provide for a required vegetated setback.

Section 3.3.4 - Drainage

"Water collected by catch basins and the vegetated swale would be conveyed by underground drains and discharged to Lighthouse Creek. Energy dissipating rip rap would be placed in the creek at the proposed discharge location to minimize the potential for erosion-related impacts. The proposed project site drainage system is depicted on the Figure 3.3-1."

Comments:

Local Coastal Plan Policy 6.8 states: "The riparian resources, biological productivity, and water quality of the City's coastal zone creeks shall be maintained, preserved, enhanced, and, where feasible, restored." Vegetated swales and the energy dissipating rip-rap require routine and, occasionally, emergency maintenance to ensure their continued value in treating and moving storm water. Frequency and methodology of maintenance is inadequately addressed. Regularly scheduled maintenance of these systems should be required of the Owner, with written reports submitted to the City's Creek Division of the Parks & Recreation Department. 17-5

There is a risk that groundwater pollutants could be discharged without knowledge into Lighthouse Creek from on-site activities long after the project is completed, and be harmful to the Creek's ecosystem. Regularly scheduled monitoring of water quality at the outfall should be required of the Owner, with written reports submitted to the City's Creek Division of the Parks & Recreation Department. 17-6

Maintenance and monitoring are inadequately addressed.

Section 4.2.1 – Existing Conditions

"A narrow trail is located on the bluff face. Wooden stairs located near the southwestern corner of the proposed residence development site lead to the trail, which switches back across the south exposure of the bluff face and terminates at the beach below the adjacent property west of the project site."

Comment: 17-7

This trail is recorded public access to the beach from El Camino de la Luz. People have used it for many years. The EIR does not address how this public access will be protected and maintained.

Section 5.2.3 – Impact Evaluations

"*Conclusion. The 2011 slope stability analysis concluded that the project property coastal bluff would remain stable after the development of the proposed residence, and the slope would remain stable under earthquake conditions. The probability of a wedge type slope failure at the project site would be increased if storm water runoff and/or landscape irrigation water is allowed to infiltrate into the ground in amounts sufficient to result in a substantial rise in local groundwater levels."*

Comments: 17-8

According to the US Geological Survey's landslide definition and causes, "landslides can be initiated in slopes already on the verge of movement by rainfall, snowmelt, changes in water level, stream erosion, changes in ground water, earthquakes, volcanic activity, disturbance by human activities, or any combination of these factors." The conclusion in the EIR supports stability after construction is completed. There is no discussion of methodologies employed during construction to support slope stability, including excavation, impacts of heavy equipment, stockpiling of materials, protection of the existing surrounding developed sites, to protect the site and surrounding area from a construction activities-related landslide.

According to the *2013 General Plan Appendix: Technical Background Report (for Safety Element) (page 408)* the project site is located in Hazard Area 4 – High Landslide Potential. The report states: "Slopes in Hazard Area 4 are considered to be naturally unstable and subject to failure even without being modified by grading or other development-related processes." Since this site is part of a much larger Hazard 4 area, the risks for property damage, property loss, and safety of existing residents back of the top of bluff extend beyond the property limits of the site. Landslides have no property boundaries. 17-9

We strongly recommend that you support the "no project alternative." Thank you for considering our comments. 17-10

Sincerely,

Scott & Lesley Wiscomb

Scott & Lesley Wiscomb
1930 El Camino de la Luz

(Submitted via Email on 11 November 2016 to PC Secretary & Kathleen Kennedy – City of Santa Barbara)

Comment Letter No. 17
Scott and Lesley Wiscomb
Date: November 11, 2016

17-1. This comment provides introductory remarks. No additional response is required.

17-2. This comment pertains to the adequacy of mitigation measure T-1. Please refer to the Access Easement Topical Response, which provides information regarding the project's compliance with the requirement of mitigation measure T-1.

17-3. Coastal Act Policy 30251 requires that the scenic and visual quality of coastal areas be "considered and protected." The EIR provides extensive analysis of the potential for the project to adversely affect views of coastal resources. Through the use of photosimulations the EIR visually demonstrates that the proposed residence would have a minor effect on existing public views of the ocean. The EIR also provides substantial evidence that potential aesthetic impacts that may result from landscaping, and visual compatibility impacts that may result from future changes to the color of the proposed residence, can be reduced to a less than significant level. Therefore, existing coastal views have been considered and protected as required by Coastal Act Policy 30251. Policy 30251 also requires that alterations to natural landforms be minimized. As proposed, the project would result in minor grading (288 cubic yards of cut and 21 cubic yards of fill). Therefore, the project would also be consistent with requirements to minimize landform alterations.

17-4. As proposed, the residence would be located a minimum of approximately 20-30 feet west of the coastal bluff scrub habitat that is located on the central portion of the project site slope that descends to Lighthouse Creek, and approximately 70-80 feet west of the riparian vegetation located along the Lighthouse Creek channel. Therefore, the project would provide substantial setbacks from the native vegetation on the project site that has the highest habitat and biological value. The vegetation on the Lighthouse Creek canyon slope that would be directly impacted (i.e., removed) by the project consists mostly of non-native and invasive plant species that provide little biological value. In addition, the project would restore approximately 8,000 square feet of the upper slopes of the Lighthouse Creek canyon slope by removing existing non-native vegetation and creating native vegetation habitat (EIR Figure 3.3-8, Landscape Plan).

The EIR and the Revised Initial Study also concluded that other potential project-related impacts to biological resources of Lighthouse Creek could be reduced to a less than significant level with the implementation of proposed mitigation measures. The proposed mitigation measures include requirement to:

- Restore native vegetation on the project site (mitigation measures BIO-1 and 2).

- Minimize on-site irrigation and implement best management practices to minimize construction-related water quality impacts to Lighthouse Creek (BIO-3 and BIO-4).
- Minimize construction impacts that may result from the proposed drainage discharges into Lighthouse Creek by obtaining a Streambed Alteration Agreement from the California Department of Fish and Wildlife (BIO-5).
- Conduct pre-construction surveys for nesting birds (BIO-6).
- Conduct wildlife protection monitoring during initial grading (BIO-7), and
- Install temporary fences to protect sensitive habitat from construction-related impacts (BIO-8).

In regard to the potential for the project to result in shade-related impacts, the separation distance between the proposed residence and native vegetation on the Lighthouse project slope would minimize the potential for significant shadow-related. Also, the coastal bluff scrub habitat on the middle portions of the Lighthouse Creek canyon slope is approximately 20 feet below the elevation of the top of the canyon slope, and riparian vegetation adjacent to Lighthouse Creek is approximately 30 feet below the elevation of the top of canyon slope. Due to their location in the Lighthouse Creek canyon and on an east-facing slope, those habitat areas are currently affected by shade when the sun is low on the horizon and the proposed project would not substantially increase the amount or duration of shade in on-site native habitat areas.

Based on the proposed project design and proposed mitigation requirements, the EIR concludes that the project could be found consistent with the maintenance, preservation, enhancement, restoration and setback requirements of LCP Policies 6.8 and 6.10.

17-5. The drainage system proposed for the project site would generally consist of catch basins, a drainage swale, and a pipe that would convey collected water to Lighthouse Creek. The proposed gravity-based system would not require extensive maintenance, and mitigation measure GEO-1 specifies that the property owner shall be responsible for providing long-term maintenance that is required to ensure the system operates adequately. Similar to other private lot drainage systems in Santa Barbara, the City would not be responsible for conducting long-term monitoring, but if necessary, would respond to complaints that the system is not working adequately.

17-6. If the proposed project is approved, it would be required to demonstrate prior to the approval of a building permit that it would be consistent with the requirements of the City's Storm Water Management Program. Through compliance with those standards, the project would not be a substantial source of pollutants that would significantly impact the quality of runoff water. Similar to other single-family dwellings in the project area and throughout the City, the proposed single-family residence would not be a substantial source of pollutants that could adversely affect the quality of ground water at or near the project site.

17-7. As shown on EIR Figure 3.3-1 (Site Plan), the proposed project would not block or interfere with the existing three-foot wide pedestrian access easement located along the western perimeter of the project site. Please also refer to the Access Easement Topical Response.

17-8. The foundation for the proposed residence would be supported by 17 drilled caissons. 11 of the caissons would be located on the relatively level portion of the project site and six (6) would be located on the Lighthouse Creek canyon slope. No caissons would be located on the ocean bluff located on the southern portion of the project site. All of the proposed caissons would extend through the artificial fill material that has been deposited over the proposed building area and would be anchored into competent bedrock beneath the fill material. The depth of the fill material varies in the proposed building area, but on the level portion of the site the material is approximately four (4) feet in depth, and on the Lighthouse Creek Canyon slope the fill material is approximately 1.5 to 2.5 feet in depth (Earth Systems Pacific, 2013b). Therefore, the depth of the proposed caissons would vary but in general they would extend on the order of seven to eight feet below the existing ground surface. The 11 caissons that would be installed on the relatively level portion of the proposed building site would not result in ground disturbance that would have the potential to result in increased slope instability. The six caissons that would be installed on the Lighthouse Creek Canyon slope would be relatively shallow and located on a slope that has been determined to be stable (Earth Systems Pacific, 2013b). Therefore, the proposed foundation caissons would not result in significant slope stability impacts.

Caissons would be drilled using a typical truck-mounted or track-mounted caisson drill rig. An auger (rather than a bucket) would be powered by the drill rig to excavate the holes. If neither a truck- nor a track-mounted rig could access the hole locations, a crane-mounted rig could be used to better reach the hole locations. As soil is removed from the each caisson excavation, a backhoe or small excavator would be used to pick up the cuttings and load them into a small truck for removal from the site. At the completion of each hole, the drill rig would be used to lift and set the reinforcement steel into the holes. Concrete would then be pumped to the project site and placed in each hole.

17-9. As described by the Revised Initial Study and the EIR, the stability of slopes located on the project property have been studied extensively. Some of the studies that have been prepared include:

- A peer review by Dr. Anikouchine (2005) of 17 previous geological reports and studies prepared for the project site (Revised Initial Study, Exhibit E).
- A geological inspection trench constructed and evaluated (Anikouchine, 2009) at the project site by (Second Revised Draft EIR Appendix B).

- A site-specific slope stability evaluation (Anikouchine, 2011) that determined the project site slope would remain stable after the addition of a new residence (Second Revised Draft EIR Appendix C).
- An evaluation of the stability of the Lighhouse Creek canyon slope (Earth Systems Pacific, 2013) that determined the canyon slope is stable (Second Revised Draft EIR Appendix E).

In regard to the 2011 and 2013 evaluations of on-site slope stability, those reports were reviewed and accepted as adequate by the California Coastal Commission staff geologist. The Revised Initial Study and EIR have provided substantial evidence related to the geological conditions at the project site. The slope stability investigations and analyses conclude that the project would not result in significant slope stability-related impacts.

17-10. This comment expresses an opinion by the commenter that the "No Project Alternative" be supported. No additional response is required.

Richard C. Monk
Steven Evans Kirby
Bradford F. Ginder
Paul A. Roberts
Peter Susi
John G. Busby
Susan H. McCollum
Marcus S. Bird
Peter L. Candy
Michael P. Denver
Kevin R. Nimmons
Sarah Berkus Gower
Lauren E. Joyce

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Since 1966
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November 7, 2016

Via e-mail: ***kkennedy@santabarbaraca.gov***

Letter 18

Ms. Kathleen Kennedy, Associate Planner
City of Santa Barbara
630 Garden Street
Santa Barbara, CA 93101

Re: **Barthels Residence, Access Easement**
1837 ½ Camino de la Luz, Santa Barbara, California

Dear Kathleen:

Hollister & Brace, in conjunction with RRM Design Group, have been retained by Dr. Herbert E. Barthels, Trustee of the Herbert E. Barthels Trust dated December 9, 1985 (the "Applicant") in connection with the 1837 ½ El Camino de la Luz residential project (the "Project").

This letter will provide some early comments on the Project's Second Revised Draft Environmental Impact Report ("DEIR") as well as provide the additional information you requested regarding the legal status of the easements that provide access to the Applicant's property at the above referenced address.

The DEIR states as follows regarding Transportation/Circulation:

> "The proposed project would have the potential to result in a significant vehicle access-related impact because the legal adequacy of the driveway providing access to the project site has been disputed. To resolve this issue and reduce potential access-related impacts to a less than significant level, Revised Initial Study mitigation measure T-1 requires the project parcel owner to provide the City with satisfactory evidence that 'the required amount of legal access that formed the basis for the original lot split' is available to serve the project." DEIR, Section 9.1.4, p. 9-8.

18-1

ATTACHMENT

And, Table 2.3-1 proposes the following Mitigation Measure:

> "T-1 **Evidence of Adequate Access.** Provide evidence, satisfactory to the City Engineer and City Attorney, that the owner of the subject parcel substantially possesses the required amount of legal access that formed the basis of the original lot split." DEIR, p. 2-11.

There is no evidence to support the DEIR's conclusion that "the legal adequacy of the driveway provided to the project site has been disputed" nor that the "proposed project would have, the potential to result in a significant vehicle access-related impact." In fact, as appears more fully below, the evidence proves the contrary.

In 2007 and 2008 Rafael Franco and some of the other residents of the subject stretch of El Camino de la Luz denied the City's retained geologist, Dr. Anikouchine, access to the Barthels property for the purpose of performing certain geological investigations which Mr. Franco and said other residents had demanded be performed. As a result, Dr. Barthels' attorneys, Hollister & Brace, filed a legal action on Dr. Barthels' behalf against Mr. Franco and said other residents of El Camino de la Luz, being Santa Barbara Superior Case No. 1268293, in order to perfect Dr. Barthels' legal easement rights. As the City's Staff Report of September 8, 2009 correctly stated, the Santa Barbara Superior Court entered its Judgment on September 8, 2009 in said Case that Dr. Barthels has access easements varying in width from 7.5 feet to 15 feet in width along the subject stretch of El Camino de la Luz.

18-1

The Superior Court's stipulated access order of September 9, 2009 entered in said Case provides that Mr. Franco and the other named defendants in the lawsuit:

> "(a) Shall not block, impede or limit access to the Benefitted Property over the Bound Properties to the full width of the Access Easement as described in Exhibits "A" and "B."
>
> (b) Shall sign any paperwork required by government agencies relating to or confirming access rights, as long as the paperwork accurately describes all easement terms.
>
> (c) Shall provide access to City staff or other authorized persons who need access to address or handle a pending application of Benefitted Owner."

and also provides as follows:

> "7. NOTICE TO ANY PEACE OFFICER: You may accept a copy of this Order, and are instructed to implement it if so requested by any party, on the conditions stated. You are authorized to order Bound

Party to comply with the Order, to tow any blocking vehicles or item blocking access, or to otherwise enforce this Order, subject to further instructions of the Court.

"8. NOTICE TO BOUND PARTIES: Failure to comply with this Order shall subject you to further Orders of the Court, and the costs of any proceeding to enforce this Order."

The Superior Court's Judgment is final and binding and no appeal therefrom is possible.

The Conditional Certificate of Compliance issued by the City of Santa Barbara for the subject legal parcel and recorded December 8, 1999 as Instrument No. 99-0095608 provides that the owner of said parcel must:

> "Provide evidence satisfactory to the City Engineer that the owner of the parcel described herein substantially possesses the required amount of legal access that formed the basis of the originally approved lot split."

Evidence presented to the City of Santa Barbara by the Applicant's surveyors, land use agents, and attorneys over the past eleven years demonstrates that the existing width of the road accessway to the subject parcel, which generally ranges from 9 feet to 15 feet (except for the 7.5 pinch point) is in substantial conformity with the width of the road access shown on the 1958 Lot Split Map. Moreover, City Fire Department representatives have consistently opined over the past eleven years that the width of the road access way is sufficient to provide adequate and safe access, including fire protection access to the parcel. 18-1

Based upon all of the foregoing, the subject parcel has legal access and such access substantially conforms to the access approved on the 1958 Lot Split Map. And, there is no necessity for proposed Mitigation Measure T-1. Further, there is no evidence whatsoever that the "proposed project would have the potential to result in a significant vehicle access-related impact" because the Applicant's legal access easements over the subject stretch of El Camino de la Luz have been conclusively judicially determined to exist and are legally enforceable. Hence, no land use nor CEQA issue is presented which requires mitigation.

We are providing the following exhibits below, for your reference:

A. Aerial view showing location of the easement
B. Parcel Map
C. Legal Access Exhibit per Title Report
D. Larger Scale Map Legal Access Exhibit per Title Report
E. Establishment of Legal Access (narrative)

We trust that this information provides you with the documentation needed to show that the Applicant has a legally established easement that provides adequate access to his property for the purpose of developing the proposed residence. 18-1

Please let us know if we can be of further assistance.

Very truly yours,

HOLLISTER & BRACE

By: _____
Richard C. Monk

RRM DESIGN GROUP

By: _____
Detlev Peikert, AIA, LEED
AP BD+C
Principal
CA License No. C15008

RCM:crr
Enclosures: Exhibits A-E

cc: Dr. Herb Barthels
N. Scott Vincent, Deputy City Attorney

EXHIBIT A

Aerial photo

Taken from the north

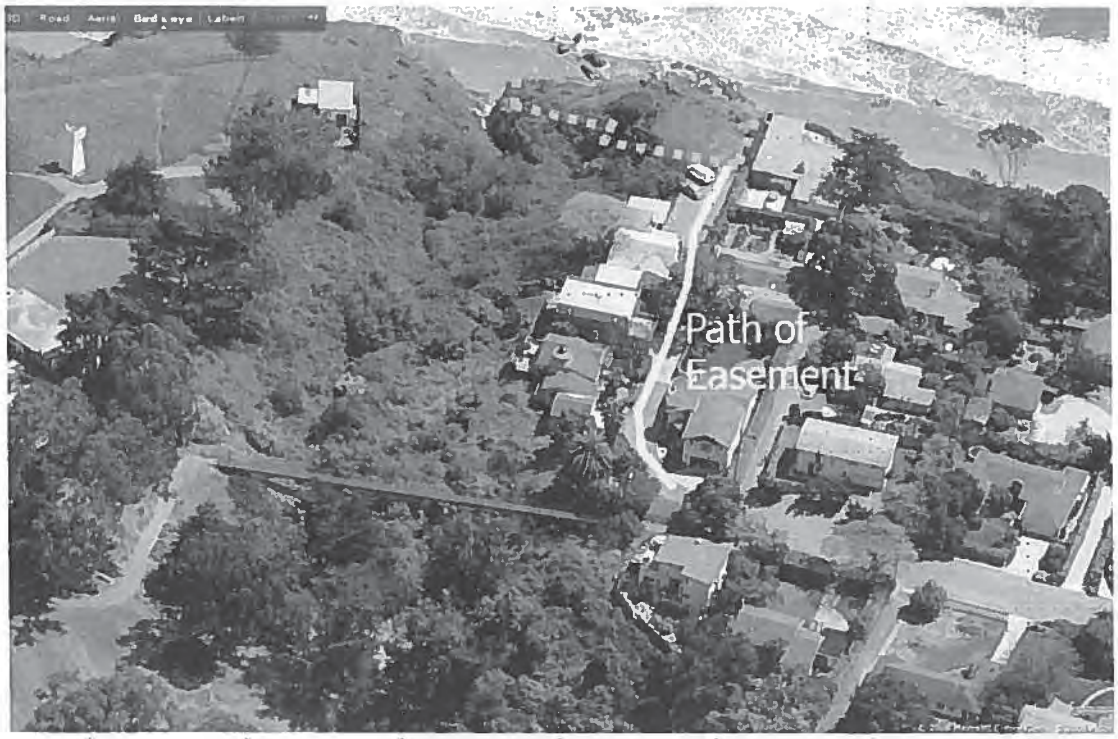

EXHIBIT B

Parcel Map

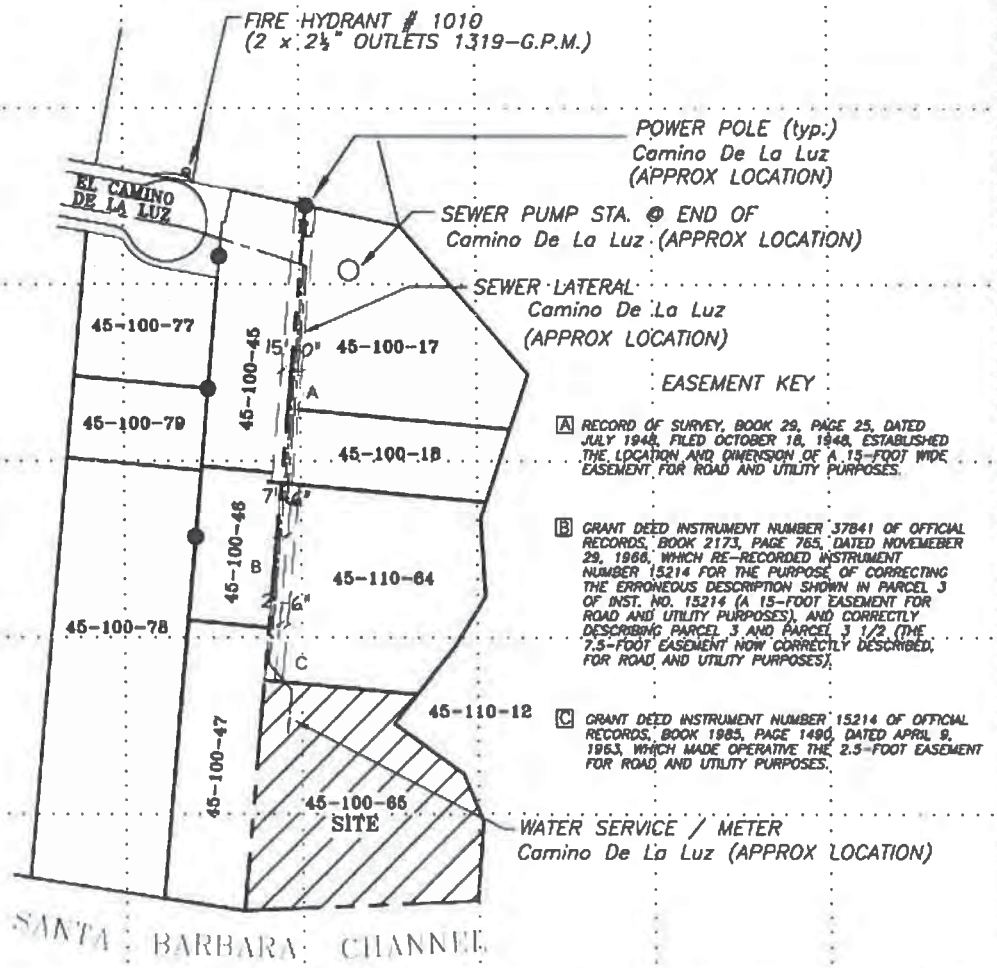

EXHIBIT C

Legal Access Exhibit Map
Per Title Report

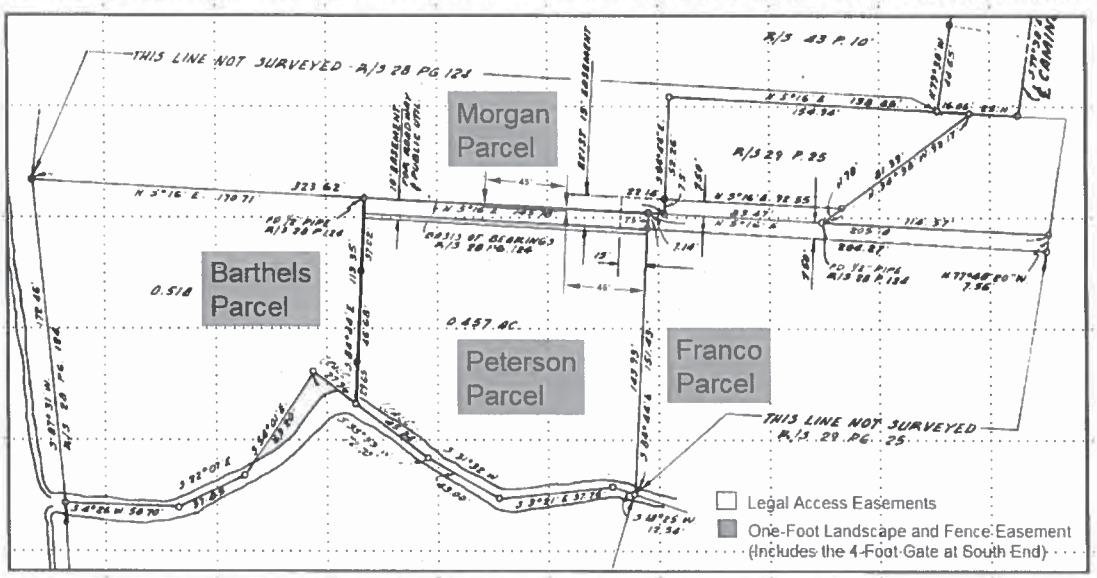

EXHIBIT D

Legal Access Exhibit Map Per Title Report

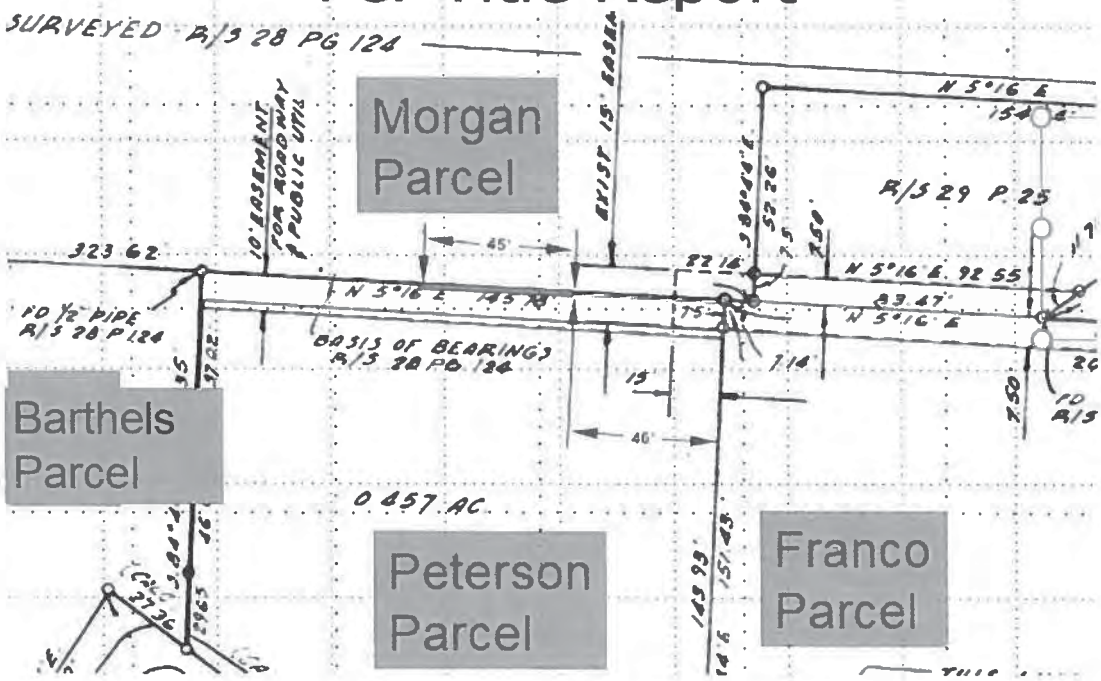

EXHIBIT E

Establishment of Legal Access to Parcel

NOVEMBER 17, 1995 EASEMENT DEED -

►On November 17, 1995, Dr. Barthels executed an Easement Deed in favor of Joanna K. Morgan granting to Morgan the following one-foot wide easement within the aforesaid combined 10-foot easements:

"An easement , of a prescriptive nature, for fence and landscaping purposes only, and expressly limited to those present and current exact uses only, on and over a strip of land one foot in width, located within a non-exclusive right of way easement presently owned by Herbert E. Barthels, said one foot wide strip being located immediately to the east of and contiguous with and adjacent to the easterly property line of said 'MORGAN PROPERTY'," **Instrument No 95-066680, recorded November 30, 1995, Official Records, Santa Barbara County.**

NOVEMBER 17, 1995 AGREEMENT -

►The aforesaid one-foot easement was further referenced in a written agreement entered into between Dr. Barthels and Joanna K. Morgan dated November 17, 1995 ("the November 17, 1995 Agreement"), wherein the parties confirmed that Dr. Barthels has combined record access easements of 10 feet in width:

"The 10 feet (being the 7 ½ foot of driveway easement plus the 2 ½ foot other easement) on the PETERSON side of the centerline is valid and still existing." **November 17, 1995 Agreement, p.3.**

►The November 17, 1995 Agreement further confirms that the one-foot easement strip granted by Dr. Barthels to Joanna K. Morgan pursuant to the Easement Deed is concurrent with the aforesaid combined 10-foot wide access easement:

"That said one foot easement strip was and is concurrent with the easement rights held by BARTHELS as to the 10 foot driveway easement on the PETERSON property held by BARTHELS." **November 17, 1995 Agreement, p.3.**

COURT OF APPEAL OPINION -

►Court of Appeal acknowledged that the Property still has access, albeit not 15 feet in width:

"Barthels, a local dentist, planned to build his residence on the parcel. In June of 1989, during the permitting process, he learned that the access easement was only 7½ feet wide, and not 15 feet as represented by the title company." **Barthels v. Santa Barbara Title Co. (1994) 28 Cal.App.4th 674 at 677.**

►Joanna K. Morgan confirmed in the November 17, 1995 Agreement that the subject Property has a valid and existing access easement:

"The 10 feet (being the 7 ½ foot of driveway easement plus the 2 ½ foot other easement) on the PETERSON side of the centerline is valid and still existing." **November 17, 1995 Agreement, p.3.**

SUBJECT PROPERTY HAS LEGAL ACCESS IN SUBSTANTIAL CONFORMITY TO 1958 LOT SPLIT MAP –

►The Conditional Certificate of Compliance recorded December 8, 1999 as Instrument No. 99-0095608 provides that the subject Property is required to comply with the following specific condition:

"Provide evidence satisfactory to the City Engineer that the owner of the parcel described herein substantially possesses the required amount of legal access that formed the basis of the originally approved lot split."

Comment Letter No. 18
Hollister & Brace
Date: November 7, 2016

18-1. EIR Section 9.1.4 (Impacts Found Not to be Significant: Transportation/Circulation) summarizes the conclusions of the Revised Initial Study prepared for the project. The Revised Initial Study concluded that "*…any development of the subject parcel without adequate legal access to satisfy the requirements of the CCC* (Conditional Certificate of Compliance) *is a potentially significant impact. The Condition of the CCC, included as Mitigation Measure T-1, must be satisfied in order to reduce this impact to a less than significant level.* It should also be noted that numerous public comments submitted regarding the EIR have disputed the proposed project's use of the existing access easement. Please refer to the Access Topical Responses for additional information.

City of Santa Barbara
Planning Division

PLANNING COMMISSION MINUTES

November 17, 2016

CALL TO ORDER:

Chair Campanella called the meeting to order at 1:05 P.M.

I. ROLL CALL

Chair John P. Campanella, Vice-Chair June Pujo, Commissioners Jay D. Higgins, Sheila Lodge, Deborah L. Schwartz, and Addison Thompson.

Absent: Commissioner Mike Jordan

STAFF PRESENT:

Beatriz Gularte, Senior Planner
Tava M. Ostrenger, Assistant City Attorney
Barbara Shelton, Project Planner/Environmental Analyst
Steven Greer, Project Planner/Environmental Analyst
Kathleen Kennedy, Associate Planner
Julie Rodriguez, Planning Commission Secretary

II. PRELIMINARY MATTERS:

A. Requests for continuances, withdrawals, postponements, or addition of ex-agenda items.

None.

B. Announcements and appeals.

None.

C. Review, consideration and action on the following draft Planning Commission Minutes and Resolutions:

1. November 3, 2016
2. PC Resolution No. 029-16
   1400-1700 Blocks of Cabrillo and 1414 Park Place
3. PC Resolution No. 030-16
   1127 Bath Street

MOTION: Schwartz/Pujo
Approve the minutes and resolutions as presented.

This motion carried by the following vote:

Ayes: 6 Noes: 0 Abstain: As noted. Absent: 1 (Jordan)

D. Comments from members of the public pertaining to items not on this agenda.

Chair Campanella opened public comment at 1:07 P.M. and, with no one wishing to speak, closed public comment.

III. ENVIRONMENTAL HEARING:

ACTUAL TIME: 1:07 P.M.

APPLICATION OF RRM DESIGN GROUP, ARCHITECT FOR DR. HERB BARTHELS, 1837½ EL CAMINO DE LA LUZ, APN 045-100-065, E-3/S-D-3 (ONE-FAMILY RESIDENCE/ COASTAL OVERLAY) ZONES, LOCAL COASTAL PLAN DESIGNATION: RESIDENTIAL (5 UNITS/ACRE) (MST2002-00214)

A Second Revised Draft Environmental Impact Report (DEIR) has been prepared for the 1837 ½ El Camino de la Luz residence project, pursuant to the California Environmental Quality Act, which evaluates environmental impacts of the proposed project.

The proposed project consists of a 1,505 square-foot (net), two-story, single-family residence with an attached 429 square foot garage on a 23,885 square foot vacant bluff-top lot in the appealable jurisdiction of the Coastal Zone and Hillside Design District. Grading quantities total approximately 288 cubic yards of cut and 21 cubic yards of fill. The proposed residence is 41% of the Guideline Floor to Lot Area Ratio (FAR). The proposal will require Planning Commission review and approval of a Coastal Development Permit and certification of the environmental document.

The hearing is to receive public and Commission comment on the draft environmental document only. No action on the environmental document or project permit request will be taken by the Planning Commission at this hearing. The public review period for the DEIR extends through November 30, 2016.

Contact: Kathleen Kennedy, Associate Planner
Email: KKennedy@SantaBarbaraCA.gov Phone: (805) 564-5470, ext. 4560

Kathleen Kennedy, Associate Planner, gave the Staff presentation. Barbara Shelton, Environmental Analyst/Project Planner, and Steve Rodriguez, Rodriguez Consulting, Inc., were available to answer any of the Commission's questions.

Detlev Peikert, Architect, RRM Design Group, introduced Richard Monk, Attorney, Hollister & Brace, who gave the applicant presentation. Rick Gorman, Geologist, Earth Systems Pacific, and Dr. Herb Barthels, owner, were also available to answer any questions.

Chair Campanella opened the public hearing at 1:40 P.M.

The following people commented on the project:

1. Sabrina Venskus, Venskus and Associates, a public interest law firm, attorney for Citizens to Preserve and Protect the Mesa's Coastal Bluffs, stated that the lot is not a legal lot and that the applicant was fully compensated when he sued the title company in the early 1990's claiming the lot could not be developed. The EIR is deficient because there is no discussion of whether or not it is a legal lot. With respect to the biological impacts, the conclusion is not supported by substantial evidence. The biological assessment is insufficient to support the DEIR's findings because there were no surveys done for sensitive invertebrates. The DEIR does not appear to conduct any rare plant surveys. The geological findings are not supported by substantial evidence. The required bluff and creek setbacks do not take into account landslides. The mitigation measures proposed do not provide sufficient detail to ensure that they will be enforceable. The DEIR's conclusion with respect to land use policies are unsupportable because the analysis is missing on a number of the policies. The DEIR does not analyze or evaluate ESHA. The findings regarding shoreline access are not supported by substantial evidence. The visual quality analysis is deficient. The determination that the project is potentially consistent with Coastal Act Policies including LCP Policy 9.1 related to visual resources are not supported by substantial evidence because the figures in the analysis indicate that the project as proposed would obstruct public views of the ocean from La Mesa Park and the bridge. The DEIR is most deficient in the feasible alternatives analysis. CEQA provides that agencies must engage in a reasonable range of alternatives. There is only one alternative that is only slightly smaller than the proposal and does not reduce the significant impacts to a level of insignificance. There are alternatives to the project, a much smaller alternative. Time was ceded to Ms. Venskus by Elise Cossart-Daly of Venskus and Associates, Daniel McCarter, and Sarah M. McCarter.

2. Ray Franco, neighbor, distributed written comments to the Commission and staff. He agrees with Ms. Venskus that the applicant does not have the 15 foot easement that was originally presented to the City Council when the lot split was approved. He showed a copy of the original settlement agreement signed by all parties that states that they agree that there is a 7.5 foot easement but that it also includes a list of encroachments that were to be preserved at that time. He stated that as of two days ago, he was told that he was going to have to tear down his wall. He stated that this is not the amicable way to get a project done. He provided a PowerPoint presentation showing the history of the project area since 1928. He stated that there would be 100 foot caissons. He showed slides from EIR geological reports regarding fractures in bedrock. He disputes the statement made at the site visit that wave action does not have any impact on the bluff and that the statement that caissons will stabilize the bluff is false. Time was ceded to Mr. Franco by Lou de Bourbon, Thomas Morrison, and Nancy Brock.

With no one else wishing to speak, the public hearing was closed at 1:59 P.M.

Mr. Monk rebutted comments by Ms. Venskus regarding the referenced lawsuit settlement by stating that the lawsuit had nothing to do with the legality of the lot, but with the width of the easement. The parcel was created by a 1958 lot split approval before it was ever acquired by Dr. Barthels. There is no challenge to the validity of the lot.

The Commissioners made the following comments:

Commissioner Higgins:

- Recommends that the Initial Study section about plans and policy discussion be moved forward into the body of the document.
- Would like to see more information from Transportation Division staff on vehicular access and whether the pinch point will be consistent with their standards and whether they have any further mitigation or design considerations.
- Would like to see more of the neighbor's point regarding removing some structures in the easement.
- Would like some discussion included in the section on the Subdivision Map Act regarding the original condition for a fifteen foot easement.
- Incorporate slope definitions including a succinct discussion on whether or not scientific terms come with a regulatory standard at the local level and the coastal level, and even the State level for the Streambed Alteration Agreement.
- Appreciates Ms. Venskus' comments about whether the City has adequately addressed alternatives and is receptive to hearing her alternatives.
- Would like clarification on the nature of the existing pedestrian easement prescriptive or otherwise and whether or not there is any likelihood that the Coastal Commission will exact a public easement out of the CDP and if it is a possibility, need to evaluate whether or not it will have an effect on the slope.
- Would like to see information in the document on construction vehicles and what types can be used, such as cranes, etc.

Commissioner Lodge:

- Concurred with Commissioner Higgins' comments.
- Referenced section 3.3.2 on page 3-5 of the DEIR and could not support a vegetated roof.
- Would like to see that the solar panels are included in the photo simulations.
- Would like to see clarification on the access situation between what is in the last sentence in section 4.2.1 on page 4-1 referencing the trail and picture 3.3-8 that indicates different contour lines for the trail.
- Would like to see clarification on the terms coastal bluff, top of bank, and top of canyon slope.

Commissioner Thompson:

- Commissioner Thompson would like to see the vegetated roof evaluated by the Fire Department, since they have recently disapproved similar designs, and include the Fire Department's response in the EIR.
- Stated that the depiction of the coastal top of bluff is erroneous where it goes down the hill. The top of canyon ends eight feet from where the top of bluff is shown going downhill. It makes more sense for the top of bluff to connect to the top of canyon.
- The top of canyon versus the top of bank for the creek needs more clarification. On the topographic map, there is no break from the embankment going down to the creek so there is no justification to show a different top of creek bank and call something else the top of canyon.
- A view analysis from the ocean as required on all other coastal development permits needs to be included in the document.

Commissioner Schwartz:

- Referenced page one of the staff report stating that the focus has been on the potentially significant project impacts on visual aesthetics and geology. There are other outstanding issues outside of these two areas that have not been adequately vetted, such as the vehicular and pedestrian access and how it relates to the acceptable width of the easement. Comprehensive analysis is needed.
- In mentioning the geotechnical studies, she remains skeptical of the data that has been produced regarding the slope stability in this area of the Mesa. With the history of slides on the Mesa, she is not confident that we have the full history before us to properly analyze the likelihood of additional slide in this area.
- Stated that introducing the geologic term 'canyon top of slope' is problematic in having policy implications that are not incorporated into other major policy documents like the Coastal Act.
- Wants to see a current written opinion from the California Coastal Commission on all of the updated information.
- Regarding pedestrian public access along the easement, she recalled that in 2012, the neighbors submitted a variety of legal documents that should have been resolved today and that may affect decisions made as to the width of the driveway, the development envelope, the landscaping, and what else has to be provided for safe access for the public to continue pedestrian access to the bluff top and stairs to the beach.

Commissioner Pujo:

- Would like to see explanations in the introductory portions of the document that discuss that it is a focused EIR, as well as a discussion about the ability to continue to use the same baseline and its current validity.
- Recognizes the incredible amount of work and studies that have taken place on a difficult site and that it is an extraordinary effort.
- Agrees with Commission Thompson on the need for a visual analysis. The focus has been on the Lighthouse Bridge, the canyon, and La Mesa Park. There is a deficiency

in the discussion about the views from the beach and the ocean. The Initial Study does include some older visual simulations from the beach but are hard to read and do not give a clear picture of what the potential impact is from the beach. Suggest bringing it forward in the document as its own section with better resolutions or produce new simulations that show that the views are limited.

- Requests clarification about mitigation measure AES-2 in regard to the maximum allowed height of the vegetation.
- Verify the size of the proposed caissons and provided a discussion on how the caisson would affect slope stability.
- The policy section of the DEIR includes LCP policy 6.10 related to setbacks from a creek and the top of bank from a creek. In order to know if we meet consistency with that policy, we need to know what that top of bank is and include top of bank discussion and diagram in the document.
- More details are needed on what measures will be required to be assured that the landscaping and irrigation on the property will not exacerbate the conditions and to fully mitigate potential saturation of the soils on the site.
- In terms of monitoring for soil saturation, include not only for the creek restoration portion, but for the watering portion as well, and include monitoring, maintenance and reporting similar to what is in the Creeks Division letter so that we know that it will be carried out over time.
- Agrees with Commissioner Thompson on the top of bluff and would like further clarification on the location of the top of bluff and how it coincides with the Coastal Act definition of a step-like feature.
- Agrees with other Commissioners' comments about access and Commissioner Higgins comment, in particular, on needing more information on the pinch point and how feasible it would be for a car or construction equipment to make it to the other side and what to do if it can't.
- Would like clarification on the easements on whether or not it goes to the bottom of the bluff and clarification on who has rights of access through the easements.
- Would like a review of the document and confirmation that one alternative is adequate and how it relates to significant impacts and whether or not a second alternative should be chosen.

<u>Commissioner Campanella:</u>

- The definition of the top of bluff and the top of canyon slope really need to be defined. He understands that with the Coastal Commission there is agreement on the top of bluff and agreement on erosion. We do not have an agreement on a recommended setback from the top of bluff line. He wants to see an agreement by all (e.g., Santa Barbara Urban Creeks, Coastal Commission) on the definition and the proper setback when this document returns.
- The document as put together is a fine piece of work and easy to understand.

ACTUAL TIME: 4:00 P.M.

A. Committee and Liaison Reports

1. Staff Hearing Officer Liaison Report

   None was given.

2. Other Committee and Liaison Reports

   a. Commissioner Schwartz reported on the City Water Commission meeting she attended earlier in the day.

   b. Commissioner Lodge reported on the Historic Landmarks Commission meeting of November 16, 2016.

   c. Chair Campanella wished all a Happy Thanksgiving and adjourned the meeting to December 1, 2016.

IV. ADJOURNMENT

Chair Campanella adjourned the meeting at 4:11 P.M.

Submitted by,

Julie Rodriguez, Planning Commission Secretary

RESPONSES TO PLANNING COMMISSION COMMENTS

1. The Planning Commission requested that the Draft EIR's use of the term "top of canyon slope" be clarified, and that the relationship between "top of canyon slope" and "top of bank" also be clarified.

The Draft EIRs prepared for the 1837½ El Camino de la Luz project in 2006 and 2012 depicted a "top of bank" for Lighthouse Creek on the project site that was roughly seven to 10 feet west of the centerline of the creek channel. The top of bank location was identified by Fisher (2001) in a report titled *Engineering Geology Update Report, 1837½ El Camino De La Luz, Santa Barbara.* The same top of bank location was also described by Tierney (2006) in the biological assessment report that is attached to the Revised Initial Study prepared for the project (EIR Appendix A). Tierney described the project site and the east-facing slope that descends to Lighthouse Creek as follows: "*…the eastern edge of the building site drops steeply (greater than 45 degree slope) to the nearly vertical banks of the channel of Lighthouse Creek."* The top of bank identified by Fisher and Tierney coincides with the nearly vertical banks of the creek that were described by Tierney.

The creekside top of bank identified in these 2006 and 2012 geological and biological studies has a direct relationship to existing hydrological and biological functions of the creek, while the upper slopes of the creek are substantially distant and generally not influenced by the hydrologic functions of the creek. For example, the nearly vertical slopes adjacent to the centerline of Lighthouse Creek could be periodically affected by high water flows, while it is unlikely that the creek's upper slopes are affected by high water flows.[2] In regard to biological function, the areas within and adjacent to the top of bank identified in 2006 and 2012 support riparian and other native vegetation, while the upper slopes of the creek canyon primarily support non-native plants. Tierney described the vegetation along the banks and slopes of the creek "invert" (i.e., bottom) as consisting of intermittent, dense patches of arroyo willow, low-growing woody shrubs, and herbaceous vegetation. Vegetation on the upper portions of the east-facing slope, however, were described as consisting mostly of species found on disturbed properties (i.e., non-native, ruderal or landscape vegetation). A subsequent evaluation of biological conditions at the project site by Hunt (2013) is provided in EIR Appendix G. That report states that native vegetation is restricted to the middle and lower portions of the steep slopes above the creek, while the upper portions of the east-facing slope are dominated by highly invasive ornamental species.

The top of bank included in the 2006 and 2012 Draft EIRs identified a "functional" top of bank for Lighthouse Creek, however, the location does not utilize the criteria of the

[2] Santa Barbara County Flood Insurance Rate Map Panel 1390G shows that Lighthouse Creek does not have a mapped 100-year floodplain, therefore, flood flows would generally be contained within or near the active creek channel.

City's Zoning Ordinance definition of "top of bank." Zoning Ordinance Section 28.87.250 (Development Along Creeks) defines "top of bank" as "*the line formed by the intersection of the general plane of the sloping side of the watercourse with the general plane of the upper generally level ground along the watercourse; or, if the existing sloping side of the watercourse is steeper than the angle of repose (critical slope) of the soil or geologic structure involved, "top of bank" shall mean the intersection of a plane beginning at the toe of the bank and sloping at the angle of repose with the generally level ground along the watercourse. The angle of repose is assumed to be 1.5 (horizontal) : 1 (vertical) unless otherwise specified by a geologist or soils engineer with knowledge of the soil or geologic structure involved."* The primary purpose of the Zoning Ordinance definition is to consider the area potentially affected by flooding. In this case, the project site location is not within the 100-year floodplain or subject to flooding from the creek. However, based on this definition, the location of the top of the Lighthouse Creek bank on the project site was revised in the Second Revised Draft EIR so that it is located east of and adjacent to the existing asphalt pad that has been installed on the relatively level portion of project site. Figure 5.2-2 of the EIR depicts the revised top of bank in relation to the location of the proposed residence. As depicted, the top of bank as defined by the Zoning Ordinance extends roughly north to south across the central portion of the proposed building area. The Coastal Commission staff geologist (Johnsson, 2016) has reviewed and concurs with the location of the top of bank depicted on EIR Figure 5.2-2.

The EIR refers to the Zoning Ordinance-defined top of bank as the "top of canyon slope." This term was suggested by Coastal Commission staff to distinguish between the creek canyon slope and the ocean bluff slope located on the southern end of the project site. Regardless of the terminology, the "top of canyon slope" identified on EIR Figure 5.2-2 conforms to and is the same as the top of bank as it is defined by the Zoning Ordinance.

2. The Planning Commission requested additional information regarding how the top of canyon slope/top of bank designations relate to local and state policy and planning requirements.

New development may be required to provide a buffer area between the development and the top of a creek bank. The buffer may be required to minimize potential impacts to the creek, such as but not limited to: impacts to biological resources, water quality, flooding- and slope stability-related impacts, and impacts to visual resources. The City's Zoning Ordinance includes setback standards for new development along the banks of Mission Creek (Section 28.87.250, Development Along Creeks), however, those requirements apply only to Mission Creek and are not applicable to Lighthouse Creek and the project site. Local Coastal Plan (LCP) Policy 6.10 addresses setback requirements from creeks in the City's coastal zone and requires that a setback for native vegetation be provided between the top of the bank and proposed development. The Policy states: "*The City shall require a setback buffer for native vegetation between the top of the bank and any proposed project. This setback will vary depending upon the conditions of the site and the environmental impact of the proposed project.*" Based on the requirements of Policy

6.10, the setbacks for new development along Lighthouse Creek are to be reviewed on a project-specific basis.

Additional guidance that pertains to the review of new development adjacent to creeks is provided by LCP Policy 6.8, which states: "*The riparian resources, biological productivity, and water quality of the City's coastal zone creeks shall be maintained, preserved, enhanced, and, where feasible, restored.*"

The EIR and the Revised Initial Study prepared for the project conclude that the location of the proposed residence would not result in significant impacts to native vegetation within the Lighthouse Creek canyon. The proposed residence would be located a minimum of approximately 20-30 feet west of the coastal bluff scrub habitat that is located on the central portion of the project site slope that descends to Lighthouse Creek, and approximately 70-80 feet west of the riparian vegetation located along the Lighthouse Creek channel. Therefore, the project would provide substantial setbacks from the native vegetation on the project site that has the highest habitat and biological value. The vegetation on the Lighthouse Creek canyon slope that would be directly impacted (i.e., removed) by the project consists mostly of non-native and invasive plant species that provide lower biological value. In addition, the project would restore approximately 8,000 square feet of the upper slopes of the Lighthouse Creek canyon slope by removing existing non-native vegetation and creating native vegetation habitat (EIR Figure 3.3-8, Landscape Plan).

The EIR and the Revised Initial Study also conclude that potential project-related impacts to biological resources of Lighthouse Creek could be reduced to a less than significant level with the implementation of proposed mitigation measures. The proposed mitigation measures include requirement to:

- Restore native vegetation on the project site (mitigation measures BIO-1 and 2).
- Minimize on-site irrigation and implement best management practices to minimize construction-related water quality impacts to Lighthouse Creek (BIO-3 and BIO-4).
- Minimize construction impacts that may result from the proposed drainage discharges into Lighthouse Creek by obtaining a Streambed Alteration Agreement from the California Department of Fish and Wildlife (BIO-5).
- Conduct pre-construction surveys for nesting birds (BIO-6).
- Conduct wildlife protection monitoring during initial grading (BIO-7), and
- Install temporary fences to protect sensitive habitat from construction-related impacts (BIO-8).

It is anticipated that the Streambed Alteration Agreement required by Mitigation Measure BIO-5 would primarily address methods to minimize potential erosion and sedimentation

impacts resulting from the discharge of runoff water from the upper portions (i.e., developed areas) of the project site to Lighthouse Creek. Potential erosion-related impacts could be reduced to a less than significant level by the use of ungrouted rip rap at the discharge location, as shown on the proposed project plans (Figure 3.3-1, Site Plan). The California Department of Fish and Wildlife will determine where their jurisdiction is located on the project site (i.e., the bed and bank of Lighthouse Creek) and that determination will be reflected by the Streambed Alteration Agreement.

The EIR and the Revised Initial Study evaluated the potential for the project to result in significant drainage and water quality impacts to Lighthouse Creek. The analysis concluded that short-term, construction-related water quality impacts would be reduced to a less than significant level through the implementation of standard construction site best management practices, such as but not limited to short-term erosion and sedimentation control to prevent off-site discharges, and "good housekeeping" measures to prevent discharges of construction materials, that have been approved by the City (Mitigation Measure W-1). The project's long-term drainage impacts were determined to be less than significant because the project would not result in an increase in storm water flows. Long-term water quality impacts would be reduced to a less than significant level with the implementation of Mitigation Measure GEO-1, which requires long-term maintenance of the on-site storm water drainage system.

The EIR and the Revised Initial Study evaluated the potential for the project to result in significant slope stability and flooding impacts. The Draft EIR includes extensive analysis of the stability of the Lighthouse Creek canyon slope on the project site. That analysis concluded that with the implementation of the proposed project's design (i.e., the use of a caisson supported building foundation) the project would not result in a significant slope stability impact. The Revised Initial Study concluded that the project would not result in a significant flooding impact because the project site is not located within the 100-year floodplain or an area otherwise subject to flooding.

The EIR provides an extensive analysis of the proposed project's potential impacts to visual resources. That analysis concludes that views of the proposed residence would not dominate or appear to prominently extend into the view corridor that extends across the entire Lighthouse Creek canyon, and the proposed residence would appear to be a southward extension of existing houses that are located adjacent to the top of the western slope of the Lighthouse Creek canyon. The EIR also concludes that the project would not result in significant visual impacts related to project-related grading or vegetation removal.

In summary, the EIR and the Revised Initial Study conclude that although the proposed residence would extend beyond the Lighthouse Creek top of canyon slope/top of bank, the project's impacts to the creek and creek resources would not be significant or would be reduced to a less than significant level. Also, the EIR concludes that with the substantial setbacks that would be provided from native vegetation on the middle and

lower portions of the Lighthouse Creek canyon slope, the project could be found consistent with the requirements of LCP Policy 6.10. The Draft EIR also concludes that based on the project's design and with the implementation of proposed mitigation measures, the project could be found consistent with the requirements of LCP Policy 6.8.

The EIR includes evaluations of the project's consistency with applicable Coastal Act policies. The applicable policies generally pertain to water and marine environments, visual quality, hazards and public access. As described above and in Section 6.0 (Plans and Policies Analysis) of the Final EIR, the proposed project could be found consistent with the requirements of the Coastal Act.

3. The Planning Commission requested additional information regarding the range of alternatives evaluated by the Second Revised Draft EIR.

CEQA Guidelines Section 15126.6 provides guidance related to the evaluation of alternatives in an EIR and states: "*An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.*"

The EIR evaluates two alternatives to the project: the mandatory No Project Alternative, and a Smaller Project Alternative. The Smaller Project Alternative evaluated the environmental effects that would result from two major changes to the proposed project: a substantially different design appearance for the residence on the project site; and a substantial reduction in the size of the proposed project. Therefore, the Smaller Project Alternative combined the evaluation of two feasible alternatives to the proposed project: a smaller project alternative and a project redesign alternative.

The design evaluated by the Smaller Project Alternative was depicted in concept-level drawings that included depictions of building elevations. The elevations were used to prepare photosimulations that facilitated a detailed analysis of the alternative's impacts to important public viewpoints near the project site, and to compare the impacts of the alternative design to the impacts of the proposed project. The Smaller Project Alternative design assumed that the residence and garage developed on the project site would have a total floor area of 1,604 square feet (gross) compared to the 2,089 square feet (gross) of the proposed project. The alternative design resulted in a floor area reduction of 485

square feet, or an overall reduction of approximately 23 percent, when compared to the proposed project.

The Second Revised Draft EIR considered other potential alternatives to the project, such as developing alternative uses on the project site, an alternative project site, and relocating the residence to another location on the project site. Those potential alternatives were rejected as being inconsistent with the primary objective of the project, which is to develop a residence on the developable portion of the project site, or because they were infeasible for the reasons described in the Draft EIR. CEQA requires that alternatives be capable of implementing most of the basic objectives of the project, and does not require that infeasible alternatives be evaluated. As a result of these requirements, the range of feasible and reasonable alternatives to the proposed project is limited.

The analysis of the Smaller Project Alternative concludes that a residence on the project site that is smaller than the proposed project would further reduce already less than significant impacts related to the obstruction of an important scenic view (views of the ocean). Other visual aesthetic and geology impacts of the Smaller Project Alternative would generally be similar to the impacts of the proposed project.

In conclusion, the EIR evaluates a feasible alternative that would attain the basic objectives of the project. The analysis of the Smaller Project Alternative concludes that developing a smaller residence on the project site would result in additional reductions in less than significant project-related impacts to ocean views.

4. Commissioner Pujo requested that language be added to the EIR indicating that the document is a "focused" EIR.

CEQA Guidelines Section 15063 (c)(3) states that the preparation of an Initial Study can be used to assist in the preparation of an EIR by "*focusing the EIR on the effects determined to be significant.*" As described in Section 1.3 (Scope and Content of this EIR), the Revised Initial Study prepared for the project identified a potential for significant impacts related to views of the Pacific Ocean that required further analysis in an EIR. As part of the public scoping hearing, it was also identified that additional analysis of the potential geologic impacts of the project and alternatives to the project should also be evaluated. The Revised Initial Study concluded that other project-related environmental impacts would not be significant, or would be reduced to a less than significant level by implementing mitigation measures identified by the Initial Study and agreed-to by the applicant. Therefore, the environmental impact analyses provided by the EIRs prepared for the project have been focused on Visual Aesthetics and Geology impacts.

The underlined text provided below has been added to the Final EIR to state that the environmental impact analysis included in the EIR has been focused.

The Revised Initial Study concluded that the proposed residence could result in significant aesthetic impacts, resulting primarily from the potential for the structure to result in substantial changes to existing views of the Pacific Ocean that are provided from La Mesa Park and surrounding areas. Since the development of an alternative project design on the bluff-top project site could have the potential to result in significant geologic impacts, the EIRs have also evaluated the potential for the proposed project and the design alternatives to result in significant geologic hazard impacts. The Revised Initial Study concluded that project-related impacts to other environmental issue areas would not be significant, or would be reduced to a less than significant level by implementing mitigation measures identified by the Initial Study. Therefore, as described by CEQA Guidelines Section 15063 (c)(3), the environmental impact analyses provided by the Project EIR are focused on Visual Aesthetics and Geology impacts.

5. Commissioner Pujo recognized that the project's environmental process has occurred over an extended period of time and requested information related to the validity of baseline information included in the EIR.

As described in response 4 above, the environmental impact analysis provided by the EIR is focused on potential Visual Aesthetic and Geology impacts. In regard to existing visual conditions, site visits were made in 2015 and 2016 to confirm that the Second Revised Draft EIR accurately described existing visual conditions at and near the project site. In addition, photographs on EIR Figures 5.1-2 and 5.1-3 that show existing visual conditions were updated as needed to accurately depict existing conditions. Geological conditions at the project site have not changed substantially since the environmental review of the proposed project was initiated. The Second Revised Draft EIR was revised, however, to reflect revisions to the locations of the top of the ocean bluff and the top of the Lighthouse Creek canyon slope/top of bank.

The biological conditions on the project site were described and evaluated by the Revised Initial Study that was prepared for the project in 2006. To confirm that biological conditions had not changed substantially since 2006, an updated Biological Evaluation was prepared (Hunt, 2013). Information provided by the updated biological report was summarized in Section 9.1.1 of the Second Revised Draft EIR (Impacts Found Not to be Significant: Biological Resources), and the entire 2013 report is included in the EIR as Appendix G. The updated Biological Evaluation concluded that conditions on the project site were generally similar to those that existed in 2006.

Second Revised Draft EIR Section 9.1.5 (Water Resources) was updated to include the analysis of drainage studies that incorporate current City standards, and to describe existing drought-related conditions in the City. Baseline conditions for other environmental issues evaluated by the Revised Initial Study, such as Air Quality, Hazards, Traffic, etc., have not changed substantially or in a manner that would

significantly affect the analysis of the proposed project provided by the Revised Initial Study.

In conclusion, the descriptions of baseline conditions at and near the project site included in the Second Revised Draft EIR adequately describe the existing environmental conditions that were used to evaluate the potential environmental impacts of the proposed project.

6. Commissioner Pujo requested that the landscape planting height requirements of Mitigation Measure AES-2 be clarified.

Proposed Mitigation Measure AES-2 has been clarified to require that landscaping planted on the project site consist of trees and shrubs that when mature will not attain a height that exceeds the height of the residence roof line. A requirement has also been added that the property owner shall be responsible for ensuring that this requirement is complied with for the life of the project.

AES-2. Landscape Plan Compliance. The Owner shall comply with the Landscape Plan approved by the Single Family Design Board (SFDB). Such plan shall not be modified unless prior written approval is obtained from the SFDB. The landscaping on the Real Property shall be provided and maintained in accordance with said landscape plan, including any tree protection measures. If said landscaping is removed for any reason without approval by the SFDB, the owner is responsible for its immediate replacement. Proposed landscaping trees and shrubs shall consist of drought-tolerant species that when mature will not attain a height that exceeds the height of the proposed residence roof line. The project site property owner shall be responsible for maintaining landscaping in compliance with this requirement over the life of the project.

7. The Planning Commission requested that the EIR provide additional analysis regarding the visibility of the proposed residence from viewpoints on the beach near the project site.

The Revised Initial Study (EIR Appendix A) includes photosimulations depicting the appearance of the residence that was originally proposed for the project site. Those simulations include views of the project site from three viewpoints on the beach near the project site. The original residence design was for a two-story residence that would have had a structure height approximately 10 feet taller than the current project design that is depicted in Final EIR Figures 3.3-2 and 3.3-3.

The previous project design photosimulations show that the residence would have been partially visible from the selected viewpoints along the beach near the project site. The EIR (page 5.1-33) concluded that, based on the photosimulations prepared for the previous project design, the current project design would not result in significant impacts

to views from the beach because the original (taller) residence design would not have interfered with views of scenic resources such as the Santa Ynez Mountains; and the reduced height of the current project design would be less visible from the beach than what is depicted by the original residence design simulations. Although the currently proposed residence may be visible from viewpoints along the beach, the project would not result in the loss of a substantial amount of open space or result in grading or vegetation removal that would adversely affect existing views from the beach. In addition, the proposed residence would have size that is similar to or smaller than other ocean front homes in the project area. Also, the proposed design must be approved by the City's Single Family Design Board, which would ensure design consistency with other nearby residences that can be seen from the beach. Therefore, the proposed project would not result in significant impacts to views from the beach.

In response to a request from Commissioner Pujo, color copies of the visual simulations included in the Revised Initial Study that depicted the original two-story design of a residence on the project site are attached to this response as Exhibits A-C.

8. The Planning Commission requested that the EIR provide analysis regarding how the proposed project may impact views from off-shore locations.

The EIR does not include an analysis of project-related impacts to views from the ocean consistent with a decision by the California Court of Appeals (*Schneider v. California Coastal Commission* (2006) 140Cal. App 4th 1339). In that decision the Court determined that the Coastal Commission may not consider whether a proposed development impacts views of the coast from offshore, ocean-based vantage points. Based on the decision, the EIR is not required to evaluate potential impacts from off-shore locations. In general, however, the project would not result in the loss of a substantial amount of open space or result in grading or vegetation removal that would adversely affect views from off-shore locations. The project is limited in scope and located as in-fill development within an existing residential neighborhood. With this context of the project and the distance of viewpoint locations, the project does not have the potential to substantially change or degrade existing views from off-shore. In addition, the proposed residence would have a size that is similar to or smaller than other ocean front homes in the project area. Also, the proposed design must be approved by the City's Single Family Design Board. Therefore, the proposed project would not result in significant impacts to views of the coastline from off-shore locations.

9. The Planning Commission expressed concerns regarding the use of a vegetated roof as part of the proposed project's design.

The vegetated roof is no longer part of the design. The proposed residence design previously included a vegetated roof, which had the potential to provide visual, water quality and stormwater runoff flow reduction benefits. However, Fire Department staff recently confirmed that the vegetated roof would not be allowed. Although the project

site is not located in a designated high fire hazard zone, due to its location adjacent to the canyon and with limited access, the Fire Department requires that the residence be constructed to high fire construction standards as specified by Santa Barbara Municipal Code Section 22.04 (City of Santa Barbara Building Code) and Municipal Code Title 8 (Fire Protection). The building requirements specify construction requirements for buildings in high fire hazard areas, such as roofing material, exterior coverings, decks, exterior doors and windows, and building eves. Vegetated roofs, by design, are not compatible with these requirements.

10. Commissioner Higgins requested that policies applicable to the project identified by the Revised Initial Study be brought forward and included in the EIR discussion.

Local Coastal Program (LCP) policies identified by the Revised Initial Study that are applicable to the proposed project include Policies 2.1, 2.5, 5.3, 6.8, 6.10, 8.1, 8.2 and 9.1. Of the eight policies identified by the Revised Initial Study, seven were included in the Second Revised Draft, and policy 2.5 was inadvertently omitted. An analysis of the project's consistency with LCP Policy 2.5 is provided below and has been added to the Final EIR.

Policy 2.5. *Vista points shall be provided and maintained in areas where such use by the public has been established.*

Potentially Consistent. A public vista point has not been established or designated on the project site. Due to access and parking constraints, it would not be feasible to provide a vista point on or near the project site. The EIR analysis evaluates potential project view impacts on other viewing locations in the project area (e.g., benches, park), and concluded that no significant impact to scenic views would result due to the project. As such, the project would not result in an inconsistency with the policy direction for maintaining vista points where public use has been established.

11. Commissioner Lodge asked if the proposed solar panels were included in the photosimulations included in the EIR.

As depicted by EIR Figure 3.3-1 (Site Plan) the proposed solar panels would be incorporated into the eves of the residence and would be located along the east and south sides of the structure. The building eves are not a prominent structural element of the proposed residence and are difficult to discern in the photosimulations provided by EIR Figures 5.1-5, 7 and 9. However, the eves of the proposed residence are shown on the structure elevations provided by EIR Figures 3.3-2 and 3.3-3. As shown, the solar panels would not be a visually prominent element of the project, and by integrating the panels into the structure's eves they would not result in significant glare or other visual impacts.

12. Commissioner Thompson indicated that the depiction of the top of coastal bluff in the Second Revised Draft EIR was erroneous where it is shown going down the slope towards Lighthouse Creek and instead should connect to the top of the Lighthouse Creek Canyon.

The existing top of bluff depicted on EIR Figure 5.2-1 (Revised Top of Bluff Location) depicts the current top of bluff and reflects existing conditions at the project site. The EIR (page 5.2-4) provides the following description of the revised top of bluff location:

"The location of the top of bluff was re-evaluated by Earth Systems Pacific (2013a) and determined to be located south of and adjacent to the proposed building pad, generally following the location of an existing concrete curb and drainage swale. At the southeastern corner of the paved area, the bluff top follows a moderately broad ridgeline that trends down to the mouth of Lighthouse Creek. This top of bluff location is consistent with the Coastal Commission definition that refers to the "landward edge of the topmost riser."

As depicted on EIR Figure 5.2-1, the designated top of bluff follows the distinct break in topography that occurs on the project site south of and adjacent to the proposed building pad, then follows that break in slope as it plunges steeply to towards Lighthouse Creek. California Coastal Commission geologist Mark Johnsson (2013) has reviewed the revised top of bluff location and indicated that he concurs with the revised location.

13. Commissioner Schwartz requested additional analysis of project-related vehicle and pedestrian issues related to the width of the easements that provide access to the project site.

Please refer to Topical Response No. 5: Access to the Project Site and to the Beach.

14. Commissioner Schwartz stated that she was not confident that adequate information is available to evaluate the likelihood of slope instability at the project site.

As described by the Revised Initial Study and the EIR, the stability of slopes located on the project property have been studied extensively. Some of the studies that have been prepared include:

- A peer review by Dr. Anikouchine (2005) of 17 previous geological reports and studies prepared for the project site (Revised Initial Study, Exhibit E).
- A geological inspection trench constructed and evaluated (Anikouchine, 2009) at the project site (EIR Appendix B).

- A site-specific slope stability evaluation (Anikouchine, 2011) that determined the project site slope would remain stable after the addition of a new residence (EIR Appendix C).
- An evaluation of the stability of the Lighthouse Creek canyon slope (Earth Systems Pacific, 2013) that determined the canyon slope is stable (EIR Appendix E).

In regard to the 2011 and 2013 evaluations of on-site slope stability, those reports were reviewed and accepted as adequate by the California Coastal Commission staff geologist.

Guidance regarding how much information is sufficient to evaluate the potential environmental impacts of a project is provided by CEQA Guidelines Section 15151 (Standards for Adequacy of an EIR), which states in part: "*An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.*"

The Revised Initial Study and EIR have provided substantial evidence related to the geological conditions at the project site consistent with the requirements described by CEQA Guidelines Section 15151. The evidence provided indicates that the project would not result in significant slope stability-related impacts. State and City Building Code requirements further ensure that project design is based on geologic and soils engineering using State safety criteria. Per geologic report recommendations, a qualified engineering geologist would also oversee earthwork and foundation installation.

15. Commissioner Schwartz requested that a written opinion from the California Coastal Commission be provided regarding updated information included in the Second Revised Draft EIR.

Please refer to the comment letter dated December 1, 2016 (Comment Letter No. 2) submitted by the Coastal Commission regarding the Second Revised Draft EIR. This letter does not express concerns regarding the adequacy of the information used by the EIR to evaluate the environmental impacts of the proposed project for geologic and visual effects.

16. Commissioner Pujo requested additional information related to the use of landscape irrigation at the project site.

Ornamental landscaping proposed for the project site would be limited and consist primarily of trees along the northern project site property line, and ground cover and shrubs along a proposed drainage swale. The long-term irrigation requirements of these

areas would not be extensive and it is unlikely that irrigation would result in saturated soil conditions that could contribute to significant slope stability impacts. The most extensive planting that would occur on the project site would be the restoration of an approximately 8,000 square foot area that would be planted with native plant species. After an initial period of irrigation to establish the plants, irrigation would no longer be required and mitigation measure BIO-3 requires that temporary irrigation in the restoration area be removed after one full season of plant growth.

17. Commissioner Pujo requested additional information regarding the proposed use of caissons to support the proposed residence, and the potential for the caissons to adversely affect slope stability at the project site.

The foundation for the proposed residence would be supported by 17 drilled caissons. Eleven of the caissons would be located on the relatively level portion of the project site and six would be located on the Lighthouse Creek canyon slope. No caissons would be located on the ocean bluff located on the southern portion of the project site. All of the proposed caissons would extend through the artificial fill material that has been deposited over the proposed building area and would be anchored into competent bedrock beneath the fill material. The depth of the fill material varies in the proposed building area, but on the level portion of the site the material is approximately four (4) feet in depth, and on the Lighthouse Creek Canyon slope the fill material is approximately 1.5 to 2.5 feet in depth (Earth Systems Pacific, 2013b). Therefore, the depth of the proposed caissons would vary but in general they would extend on the order of seven to eight feet below the existing ground surface. The eleven caissons that would be installed on the relatively level portion of the proposed building site would not result in ground disturbance that would have the potential to result in increased slope instability. The six caissons that would be installed on the Lighthouse Creek Canyon slope would be relatively shallow and located on a slope that has been determined to be stable (Earth Systems Pacific, 2013b). Therefore, the proposed foundation caissons would not result in significant slope stability impacts.

Caissons would be drilled using a typical truck-mounted or track-mounted caisson drill rig. An auger (rather than a bucket) would be powered by the drill rig to excavate the holes. If neither a truck- nor a track-mounted rig could access the hole locations, a crane-mounted rig could be used to better reach the hole locations. As soil is removed from the each caisson excavation, a backhoe or small excavator would be used to pick up the cuttings and load them into a small truck for removal from the site. At the completion of each hole, the drill rig would be used to lift and set the reinforcement steel into the holes. Concrete would then be pumped to the project site and placed in each hole.

Source: interacta, 2004

City of Santa Barbara

1837½ El Camino de la Luz

Exhibit A

Original Project Two-Story Design – View From Adjacent Beach Simulation

B2 - Beach 2

16

Location: South West side of property, standing below project site on outcrop on beach.

current condition

View: Upper level of structure exposed.

proposed structure

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Source: interacta, 2004

City of Santa Barbara

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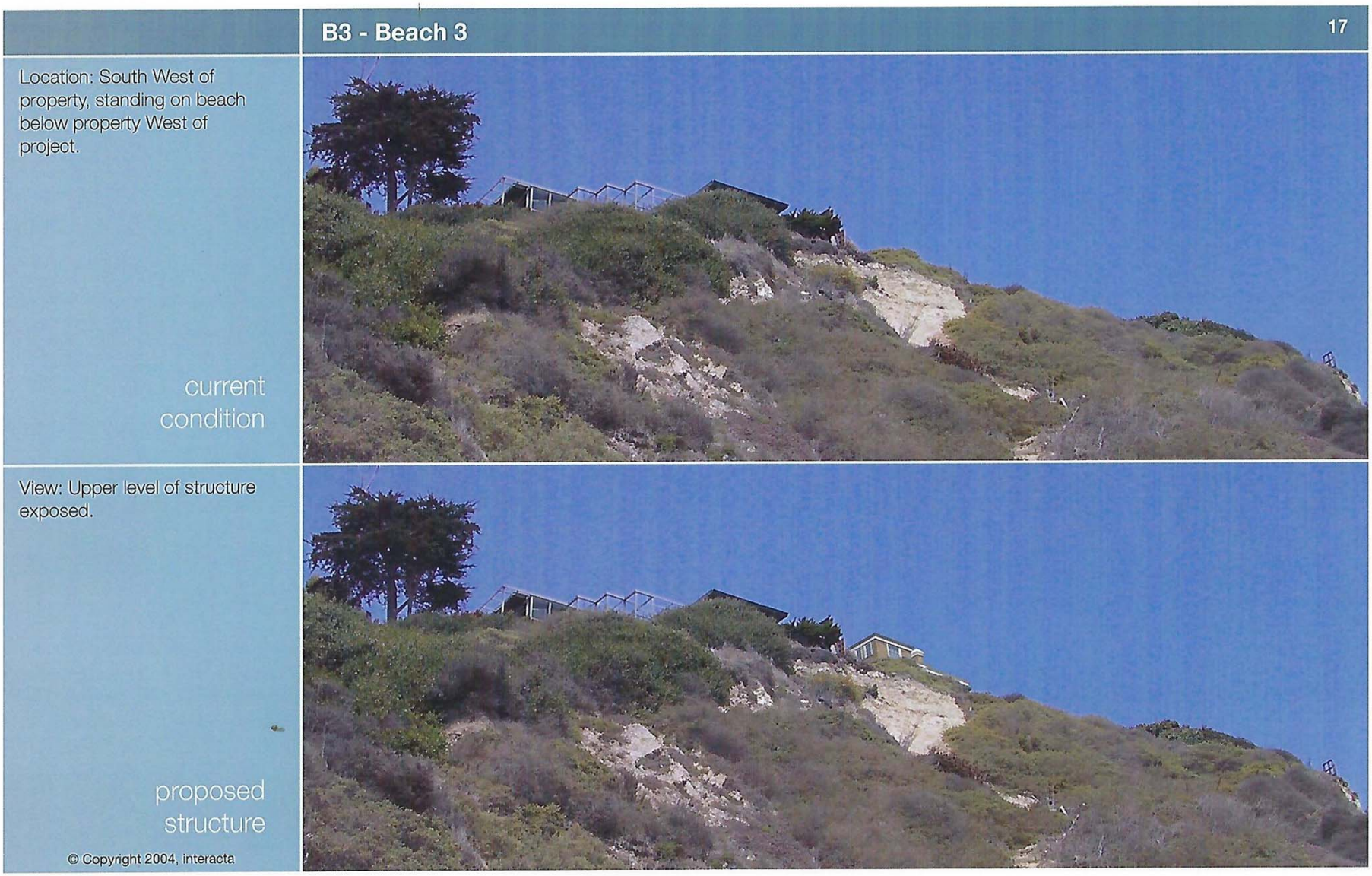
Exhibit B

Original Project Two-Story Design – View From Adjacent Beach Simulation



Source: interacta, 2004

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Exhibit C

Original Project Two-Story Design – View From Adjacent Beach Simulation