Attachment G

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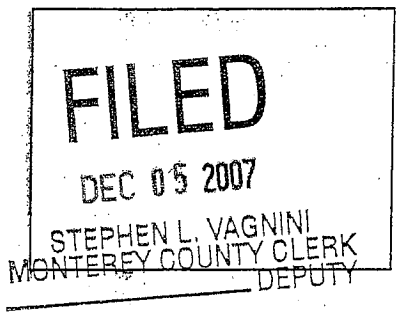
County of Monterey
State of California

MITIGATED NEGATIVE DECLARATION



Project Title:	Dale Skeen & JoMei Chang
File Number:	PLN060735
Owner:	Dale Skeen & JoMei Chang
Project Location:	26327 Scenic Road Carmel
Primary APN:	009-442-013-000
Project Planner:	Craig Spencer
Permit Type:	Combined Development Permit
Project Description:	COMBINED DEVELOPMENT PERMIT CONSISTING OF; 1) A COASTAL ADMINISTATIVE PERMIT TO ALLOW THE CONSTRUCTION OF A NEW TWO-STORY 2,950 SQUARE FEET SINGLE FAMILY DWELLING WITH A 545 SQUARE FEET ATTACHED GARAGE AND 990 CUBIC YARDS OF CUT; 2) A COASTAL DEVELOPMENT PERMIT TO ALLOW DEVELOPMENT WITHIN 750 FEET OF A KNOWN ARCHAEOLOGICAL RESOURCES; AND 3) DESIGN APPROVAL.

THIS PROPOSED PROJECT WILL NOT HAVE A SIGNIFICANT EFFECT ON THE ENVIRONMENT AS IT HAS BEEN FOUND:

a) That said project will not have the potential to significantly degrade the quality of the environment.

b) That said project will have no significant impact on long-term environmental goals.

c) That said project will have no significant cumulative effect upon the environment.

d) That said project will not cause substantial adverse effects on human beings, either directly or indirectly.

Decision Making Body:	Monterey County Board of Supervisors
Responsible Agency:	County of Monterey
Review Period Begins:	December 7, 2007
Review Period Ends:	January 7, 2008

Further information, including a copy of the application and Initial Study are available at the Monterey County Planning & Building Inspection Department, 168 West Alisal St, 2nd Floor, Salinas, CA 93901 (831) 755-5025

Date Printed: 12/4/2007

MONTEREY COUNTY

RESOURCE MANAGEMENT AGENCY – PLANNING DEPARTMENT
168 WEST ALISAL, 2ND FLOOR, SALINAS, CA 93901
(831) 755-5025 FAX: (831) 757-9516

NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION MONTEREY COUNTY ZONING ADMINISTRATOR

NOTICE IS HEREBY GIVEN that the Monterey County Resource Management Agency – Planning Department has prepared a draft Mitigated Negative Declaration, pursuant to the requirements of CEQA, for a Combined Development Permit (Skeen & Chang, File Number PLN060735) at 26327 Scenic Road Carmel (APN 009-442-013-000) (see description below). The project involves the construction of a new single family residence. The Mitigated Negative Declaration and Initial Study, as well as referenced documents, are available for review at the Monterey County Resource Management Agency – Planning Department, 168 West Alisal, 2nd Floor, Salinas, California. The Zoning Administrator will consider this proposal at a meeting on **January 31, 2008** at **1:30PM** in the Monterey County Board of Supervisors Chambers, 168 West Alisal, 2nd Floor, Salinas, California. Written comments on this Negative Declaration will be accepted from **December 7, 2007** to **January 7, 2008**. Comments can also be made during the public hearing.

Project Description: Combined Development Permit consisting of; 1) A Coastal Administrative Permit to allow the construction of a new two-story 2,950 square feet single family dwelling with a 545 square feet attached garage and 990 cubic yards of cut; 2) A Coastal Development Permit to allow development within 750 feet of a known archaeological resources; and 3) Design Approval.

We welcome your comments during the 30-day public review period. You may submit your comments in hard copy to the name and address above. The Department also accepts comments via e-mail or facsimile but requests that you follow these instructions to ensure that the Department has received your comments. To submit your comments by e-mail, please send a complete document including all attachments to:

CEQAcomments@co.monterey.ca.us

An e-mailed document should contain the name of the person or entity submitting the comments and contact information such as phone number, mailing address and/or e-mail address and include any and all attachments referenced in the e-mail. To ensure a complete and accurate record, we request that you also provide a follow-up hard copy to the name and address listed above. If you do not wish to send a follow-up hard copy, then please send a second e-mail requesting confirmation of receipt of comments with enough information to confirm that the entire document was received. If you do not receive e-mail confirmation of receipt of comments, then please submit a hard copy of your comments to ensure inclusion in the environmental record or contact the Department to ensure the Department has received your comments.

Facsimile (fax) copies will be accepted with a cover page describing the extent (e.g. number of pages) being transmitted. A faxed document must contain a signature and all attachments referenced therein. Faxed document should be sent to the contact noted above at **(831) 757-9516**. To ensure a complete and accurate record, we request that you also provide a follow-up hard copy to the name and address listed above. If you do not wish to send a follow-up hard copy, then please contact the Department to confirm that the entire document was received.

For reviewing agencies: The Resource Management Agency – Planning Department requests that you review the enclosed materials and provide any appropriate comments related to your agency's area of responsibility. The space below may be used to indicate that your agency has no comments or to state brief comments. In compliance with Section 15097 of the CEQA Guidelines, please provide a draft mitigation monitoring or reporting program for mitigation measures proposed by your agency. This program should include specific performance objectives for mitigation measures identified (CEQA Section 21081.6(c)). Also inform this Department if a fee needs to be collected in order to fund the mitigation monitoring or reporting by your agency and how that language should be incorporated into the mitigation measure.

All written comments on the Initial Study should be addressed to:

County of Monterey
Resource Management Agency – Planning Department
Attn: Mike Novo, Interim Director of Planning
168 West Alisal, 2nd Floor
Salinas, CA 93901

Re: Skeen & Chang; File Number PLN060735

From: Agency Name: _____
Contact Person: _____
Phone Number: _____

____ No Comments provided
____ Comments noted below
____ Comments provided in separate letter

COMMENTS: _____

DISTRIBUTION

1. State Clearinghouse (15 copies)—include Notice of Completion
2. CalTrans – San Luis Obispo office
3. California Coastal Commission
4. County Clerk's Office
5. Association of Monterey Bay Area Governments
6. Carmel Central School District
7. California American Water Company
8. Pacific Gas & Electric
9. Pacific Bell

10. Monterey Bay Unified Air Pollution Control District
11. City of Carmel
12. Carmel Highlands Fire Protection District
13. Monterey County Agricultural Commissioner
14. Monterey County Water Resources Agency
15. Monterey County Public Works Department
16. Monterey County Parks Department
17. Monterey County Division of Environmental Health
18. Monterey County Sheriff's Office
19. Dale Skeen & JoMei Chang, Owners
20. International Design Group, Agent
21. Property Owners within 300 feet (Notice of Intent only)
22. Alexander Henson (Attorney)

MONTEREY COUNTY

PLANNING & BUILDING INSPECTION DEPARTMENT
168 WEST ALISAL ST., 2nd FLOOR, SALINAS, CA 93901
PHONE: (831) 755-5025 FAX: (831) 755-9516

INITIAL STUDY (REVISED NOVEMBER 2007) MITIGATED NEGATIVE DECLARATION

I. BACKGROUND INFORMATION

Project Title:	Skeen & Chang
File No.:	PLN060735
Project Location:	26327 Scenic Road Carmel
Name of Property Owner:	Dale Skeen & Jo Mei Chang
Name of Applicant:	International Design Group
Assessor's Parcel Number(s):	009-442-013-000
Acreage of Property:	4,700 Square Feet ≈ .11 acres
General Plan Designation:	Residential
Zoning District:	MDR/2-D (18) (CZ)
	Medium Density Residential/ 2 units per acre-with a design control overlay zoning district and an 18 foot height limit in the Coastal Zone
Lead Agency:	Monterey County Resource Management Agency – Planning Department
Prepared By:	Craig W Spencer (Project Planner)
Date Prepared:	June 2007, Revised November 2007
Contact Person:	Craig W. Spencer
Phone Number:	(831) 755-5233 spencerc@co.monterey.ca.us

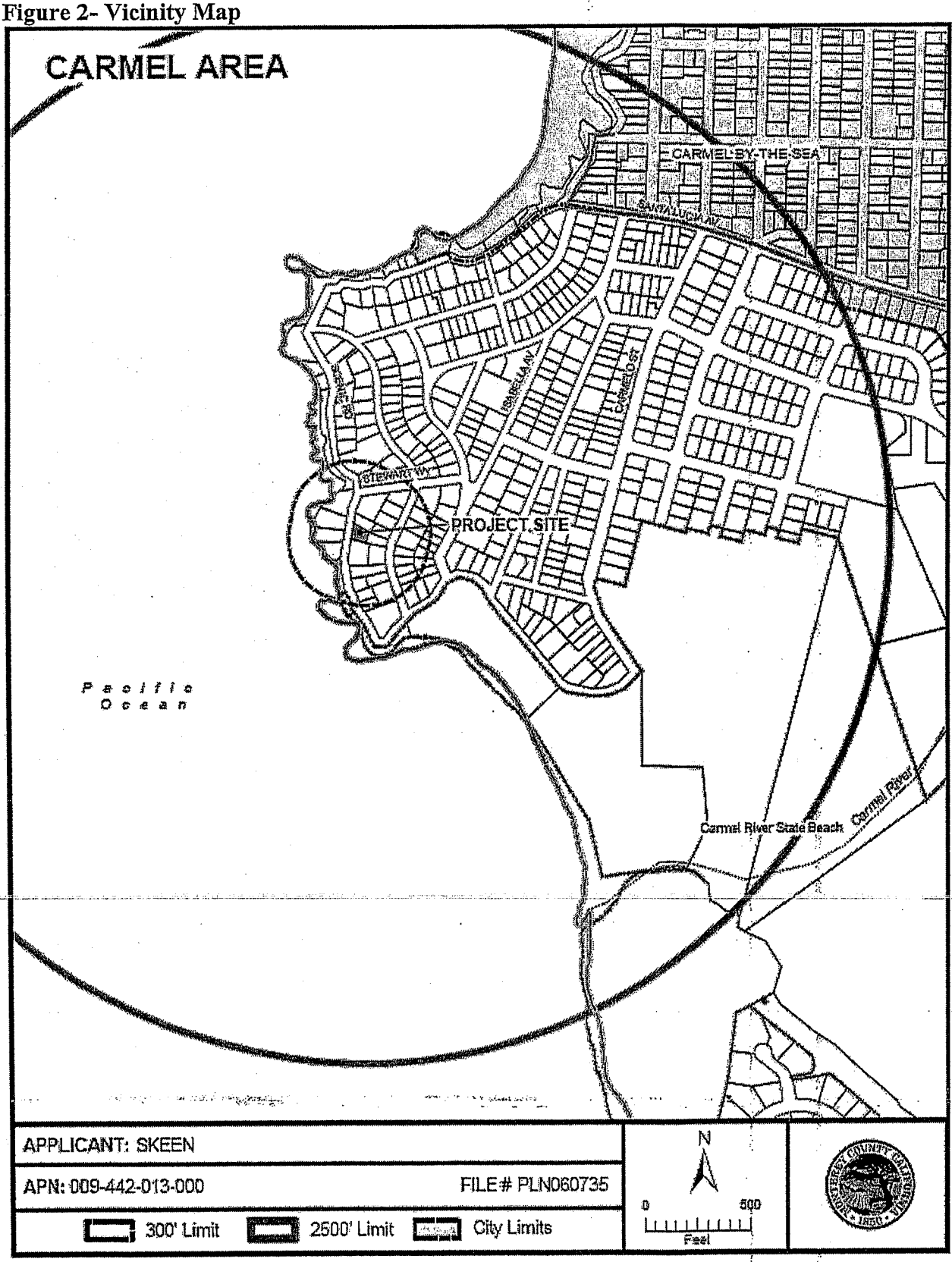
II. DESCRIPTION OF PROJECT AND ENVIRONMENTAL SETTING

A. Project Description: The proposed project entails the construction of a new 3,495 square foot, 3-story single family dwelling including an attached garage on the lower level/basement and approximately 280 linear feet of retaining walls. The project calls for an estimated 990 cubic yards of cut/excavation for the driveway access to the garage, basement, and finish grade elevations. Three to four feet high retaining walls are proposed to surround the property on the on the North, South, and East. A terrace is formed off the main floor, by the two tiered retaining walls at the rear. Another terrace is proposed at the front entry, connecting to the driveway. The colors and materials will consists of Spanish clay tile roof, copper gutters and down spouts, beige stucco with stone veneer and exposed wood details, dark green metal clad doors and windows, and painted wrought iron railings.

B. Environmental Setting and Surrounding Land Uses: The project site is located on Scenic Road between Stewart Road and Ocean View Avenue in Carmel. Scenic Road is a designated scenic corridor that runs from the city of Carmel by the Sea to Carmel River State Beach along the Pacific Ocean (Reference 4). To the west of Scenic Road are sandy beaches, rock outcroppings, and blue water views with a few single family dwellings. To the east of Scenic Road is a medium density residential neighborhood. The project site is a vacant 4,700 square feet in-fill lot, located to the east of Scenic Road, on the Carmel River State Beach (southern) end, approximately 200 feet inland from the Pacific Ocean (Reference 6). Located in the Carmel Point area the site is high in archeological sensitivity (Reference 4). Vegetation on the site is highly disturbed and consists of mowed grasses and brush (see Figure 2 below). The parcel is surrounded by single family dwellings on all but the Scenic Road (West) side of the lot. Required side setbacks in the area are five feet placing the dwellings in relatively close proximity, particularly in relationship to the neighbor to the south who has improved their lot with a structure within about one foot of the property line. Loose top soil and standing ground water at approximately 14 feet below grade provide potential erosion hazards if water is not properly controlled (Reference 8 & 13). The property will be served by public utilities including water, sewer and electric. Other characteristics not mentioned have little or no significance such as proximity to agricultural lands (See section IV below).

Figure 1- View from Scenic Road

Figure 2- Vicinity Map



III. PROJECT CONSISTENCY WITH OTHER APPLICABLE LOCAL AND STATE PLANS AND MANDATED LAWS

Use the list below to indicate plans applicable to the project and verify their consistency or non-consistency with project implementation.

General Plan/Area Plan	■	Air Quality Mgmt. Plan	☐
Specific Plan	☐	Airport Land Use Plans	☐
Water Quality Control Plan	☐	Local Coastal Program-LUP	■

General Plan / Local Coastal Program – LUP

The proposal was reviewed for consistency with the Carmel Land Use Plan and the Coastal Implementation Plan Parts 1 & 4. The property is located within the Medium Density Residential land use designation, which allows 2 units/acre and is suitable for the proposed use. The only policy area that is not addressed by the Local Coastal Program cited above is Noise Hazards. As such, the County considers consistency with General Plan noise policies for projects in the coastal zone. The project is consistent with these General Plan policies, as explained below in section IV.A.7. Potential Impacts were identified regarding aesthetics due to the visibility of the project from Scenic Road which is a designated scenic roadway in the Carmel Land Use Plan (see section VI.1 below), cultural resources due to the project location relative to known archeological resources (see section VI.5 below), and geology and soils due to the proximity to the Cypress Point Fault line, erodible soils, standing groundwater, and proposed grading excavation in proximity to adjacent properties (see section VI.6 below). The project was found to be consistent with other development standards and policies provided in the Local Coastal Program (LCP) (see section IV below).

IV. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED AND DETERMINATION

A. FACTORS

The environmental factors checked below would be potentially affected by this project, as discussed within the checklist on the following pages.

■ Aesthetics	☐ Agriculture Resources	■ Air Quality
☐ Biological Resources	■ Cultural Resources	■ Geology/Soils
☐ Hazards/Hazardous Materials	☐ Hydrology/Water Quality	☐ Land Use/Planning
☐ Mineral Resources	☐ Noise	☐ Population/Housing
☐ Public Services	☐ Recreation	☐ Transportation/Traffic
☐ Utilities/Service Systems		

Some proposed applications that are not exempt from CEQA review may have little or no potential for adverse environmental impact related to most of the topics in the Environmental Checklist; and/or potential impacts may involve only a few limited subject areas. These types of projects are generally minor in scope, located in a non-sensitive environment, and are easily identifiable and without public controversy. For the environmental issue areas where there is no potential for significant environmental impact (and not checked above), the following finding can be made using the project description, environmental setting, or other information as supporting evidence.

☐ Check here if this finding is not applicable

FINDING: For the above referenced topics that are not checked off, there is no potential for significant environmental impact to occur from either construction, operation or maintenance of the proposed project and no further discussion in the Environmental Checklist is necessary.

EVIDENCE: Many of the above topics on the checklist do not apply. Less than significant or potentially significant impacts are identified for cultural resources, aesthetics, geologic and soils. Mitigation measures are provided as warranted. The project will have no quantifiable adverse environmental effect on the categories not checked above, as follows:

1. Agricultural Resources. The project site is not designated as Prime, Unique or Farmland of Statewide or Local Importance and project construction would not result in conversion of prime agricultural lands to non-agricultural uses. The site is not under a Williamson Act Contract. The project site is located within an urban area and is not located adjacent to agriculturally designated lands. *Therefore, the proposed project would not result in impacts to agricultural resources.* (Source: IX.1, 2, 3, 4, 5, 6, & 7)

2. Biological Resources. The proposed site does not contain any environmentally sensitive habitat areas. In addition there are no trees proposed for removal. The project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a sensitive or special status species and would not have a substantial adverse effect on any riparian habitat or other sensitive natural community. (Sources II.B and IX.1, 4, 5, 6, & Figure 1 above). *Therefore, no impact on biological resources is anticipated as a result of the project.*

3. Hazards/Hazardous Materials. The proposal involves residential development where there would be no use of hazardous materials that would constitute a threat of explosion or other significant release that would pose a threat to neighboring properties. The project, given the nature of its proposed use (one single-family residence), would not involve the transport, use, or disposal of any hazardous materials. There are no known hazards or hazardous materials associated with this project. The proposed residence would not involve stationary operations, create hazardous emissions or handle hazardous materials. The site location and scale have no impact on emergency response or emergency evacuation. The site is not located near an airport or airstrip. The Carmel Highlands Fire Protection District reviewed the project application and recommended conditions of approval regarding fire safety, including a fire sprinkler system (Source: IX.1, 2, 3, 4, 5, 6, & 7). *Therefore, the proposed project would not result in impacts related to hazards/hazardous materials.*

4. Hydrology/Water Quality. The proposed project will not violate any water quality standards or waste discharge requirements. The Coastal Implementation Plan Part 4 Section 20.146.050E4 requires that an erosion control plan be prepared by a registered civil engineer for development in the Medium Density Residential areas of Carmel. The erosion control plan must contain detailed plans and measures to retain on site stormwater runoff resulting from a 20-year recurrence interval storm. Further discussion on erosion is contained in the Soils and Geology section below (VI 6). The erosion control and stormwater retention plan will ensure that the drainage pattern at the site will not be substantially altered. There is no water course, stream or river on site. The site is not located within the 100 year floodplain and the property is served by all public utilities, including public sewer (Carmel sanitary sewer district) and water (California American Water Co.). The Monterey County Water Resources Agency and Environmental Health Division have reviewed the project application and as conditioned deemed that the project complies with applicable ordinances and regulations. (Source: IX.1, 2, 4, & 5). *Therefore, the proposed project would not result in any negative impacts related to hydrology/water quality.*

5. Land Use/Planning The project will not disrupt, divide, or otherwise have a negative impact upon the existing neighborhood. The parcel is zoned for medium density residential use and the project as proposed meets all the site development standards including the 18 foot height limit. There is no evidence that the project would conflict with any applicable habitat or natural community plans. The project was reviewed by the Monterey County Resource Management Agency- Planning Department and found to be consistent with the Certified Local Coastal Plan.(Source: IX. 1, 2, 3, 4, 5, 6, &7). *Therefore, the proposed project will not have a negative impact to the neighborhood, adjacent properties or the County of Monterey.*

6. Mineral Resources. No mineral resources have been identified or would be affected by this project (Source: IX. 1, 4, 5, 6, & 7). *Therefore, the proposed project would not result in impacts to mineral resources.*

7. Noise. The construction of one single-family home within a residential area would not be exposed to noise levels that exceed standards and would not substantially increase ambient noise levels. The project site is not located in the vicinity of an airport or private airstrip. The project is located within a residential neighborhood and consists of the construction of one single family dwelling. The project is in compliance with Monterey County Division of Environmental Health noise standards. The Health Department has reviewed and approved the proposal without conditions. There is no evidence that the persons residing or working near the project site would be significantly impacted by noise related to this project. Temporary construction activities shall comply with the County's noise requirements, as required in the County Code, Chapter 10.60. (Source: IX.1, 2, 4, & 5). *Therefore, the proposed project would not result in impacts to noise.*

8. Population/Housing. The proposed project would not induce substantial population in the area, either directly through the construction of one single-family home within a residential area or indirectly as no new infrastructure would be extended to the site. The project would not alter the location, distribution, or density of human population in the area in any significant way, or create a demand for additional housing (Source: IX.1, 2, 4, & 6). *Therefore, the proposed project would not result in impacts related to population and housing.*

9. Public Services. The proposed project consists of the construction of one new single-family home which is being served by public services and utilities. The project would have no measurable effect on existing public services. The Monterey County Water Resources Agency, Monterey County Public Works Department, the Environmental Health Division, and the Carmel Highlands Fire Protection District have reviewed the project. These agencies provided comments on the project, which are incorporated into the project as conditions of approval. None of the County departments / service providers indicated that this project would result in potentially significant impacts

(Source: IX.1, 4, & 5). *Therefore, the proposed project would not result in impacts related to public services.*

10. Recreation. The proposed project would result in the construction of one new single-family home on a vacant lot. The project would not result in an increase in use of existing recreational facilities that would cause substantial physical deterioration. No parks, trail easements, or other recreational opportunities would be adversely impacted by the proposed project (Source: IX.1, 4, 5, & 7). *Therefore, the proposed project would not result in impacts related to recreation.*

11. Transportation/Traffic. The development of a single-family dwelling on an existing lot of record will not generate a significant increase in traffic movements. The County Department of Public Works has reviewed the project and has recommended only a standard condition of approval for encroachment of a new driveway onto Scenic Road, a County road. The project is not located along a proposed trail as mapped in the County's Carmel Area Trail Plan (Source IX. 1, 2, 4, & 5). *Therefore, the proposed project would not result in impacts related to traffic.*

12. Utilities/Services. The proposed project consists of the construction of a single family home with public utilities and services provided by California American Water Company and the Carmel Sanitary Sewer District. A new single family dwelling will not cause a significant increase nor exceed the capacity of the utilities and services being provided. The County Department of Public Works has reviewed the project and has recommended only a standard condition of approval for encroachment. Monterey County Water Resources agency recommended as a condition of approval that, prior to issuance of building permits proof of water availability on the property in the form of an approved Monterey Peninsula Water Management District Water Release Form must be obtained. This lot has been allocated one half (1/2) acre feet of water based on a purchase of water credits from Robles Del Rio in 1998. (Source IX. 1, 4, 5, & 12). *Therefore, the proposed project would not result in impacts related to utilities/services.*

B. DETERMINATION

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

■ I find that although the proposed project could have a significant effect on the environment there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature	12/5/07 Date
Craig W. Spencer Printed Name	Assistant Planner Title

V. EVALUATION OF ENVIRONMENTAL IMPACTS

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on project-specific screening analysis).

2) All answers must take into account the whole action involved, including offsite as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are

one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

   a) Earlier Analysis Used. Identify and state where they are available for review.
   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) The explanation of each issue should identify:

   a) The significance criteria or threshold, if any, used to evaluate each question; and
   b) The mitigation measure identified, if any, to reduce the impact to less than significance.

VI. ENVIRONMENTAL CHECKLIST

1. AESTHETICS Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista? (Source: 1,4,5,6)	☐	☐	☐	■
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? (Source:1,4,5,6)	☐	☐	☐	■
c) Substantially degrade the existing visual character or quality of the site and its surroundings? (Source:1,4,5,6)	☐	☐	■	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? (Source:1,4,5,6)	☐	☐	■	☐

Discussion:

Aesthetics

The existing parcel is a legal lot of record created by Addition Number 7 to Carmel-By-The-Sea in 1908. The proposed dwelling will be located in the viewshed because of its visibility from Scenic Road which is a designated scenic corridor and major public viewing area. The vacant parcel is located in a residential neighborhood with other dwellings of similar size and character making up much of the view on the eastern side of Scenic Road (Key Policies 2.2.2 and 4.1.1 Carmel LUP).

Conclusion:

Aesthetics 1(a) & (b) – No Impact

The project will not obstruct views form scenic vistas, blue water, and sandy beaches from major public viewing areas, nor will it damage scenic resources or significant landmarks. The project is surrounded by single family dwellings that are the dominant scenery to the east of Scenic Road. The views from Scenic Road are made up of 180 degree views of blue water, sandy beaches, and rock outcroppings with a small number of single family dwellings to the west of the road. To the east are residential neighborhoods with a variety of architectural designs, features, and materials. These views will not be affected by the proposed project. There is no indication that views of any significant landmarks or resources would be impacted. The design of and color scheme are consistent with the Carmel Coastal Implementation Plan and the surrounding neighborhood (Source IX. 1, 4, 5, 6, & 7). *Therefore the project will have no impact on scenic vistas or resources.*

Aesthetics 1(c), (d) - Less Than Significant Impact

The proposed building site is located on an existing parcel that is visible from Scenic Road, which is a designated scenic roadway. The project would result in the construction of a new single family residence. The height of the proposed residence meets the 18 foot height limit restriction required in the parcel's zoning district shown on Monterey County zoning maps. The 18 foot height is measured from the average natural grade determined by Haro, Kasunich, and Associates Inc. geotechnical engineers to be 38.89. The project is located in a residential neighborhood with other dwellings of similar size and character making up much of the view on the eastern side of Scenic Road. The project will harmonize with the existing character of the neighborhood and blend with the scenery using natural earth toned colors. The lighting will be required to meet the basic viewshed policy of minimum visibility required by LCP policies. The Coastal Implementation Plan Part 4 (CIP) 20.146.030C requires exterior lighting to be unobtrusive and harmonious with the local area, off site glare will be minimized using low wattage, down lit lighting that illuminates only the area intended. Implementation will be through Monterey County Planning Department's standard visually sensitive exterior lighting conditions. In addition all utilities will be required to be located underground per the CIP, visual standards 20.146.030B (also a standard condition). The project building site does not contain 30% slopes, is not on the crest of a hill and would not result in ridgeline development. The lot is 4,700 square feet and there is no alternative location on the lot that would minimize visibility. There are no trees or significant vegetation existing on the lot that would help screen the proposed dwelling and requiring screening of the proposed dwelling would not be consistent with the neighborhood (Source IX.1, 2, 3, 4, 5, & 6). *Thus, the project would have a less than significant impact related to aesthetics.*

2. AGRICULTURAL RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? (Source:1,2,4,5,6,7)	☐	☐	☐	■
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? (Source:1,2,3,4,5,6,7)	☐	☐	☐	■

2. AGRICULTURAL RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use? (Source:1,4,5,6,7)	☐	☐	☐	■

Discussion/Conclusion/Mitigation: See Section II and IV

3. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan? (Source:1,2,4,5,10)	☐	☐	☐	■
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? (Source:1,2,10)	☐	☐	☐	■
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? (Source:1,2,4,5,10)	☐	☐	■	☐
d) Result in significant construction-related air quality impacts? (Source:1,2,10)	☐	☐	■	☐
e) Expose sensitive receptors to substantial pollutant concentrations? (Source:1,2,10)	☐	☐	■	☐
f) Create objectionable odors affecting a substantial number of people? (Source:1,2,4,6)	☐	☐	■	☐

Discussion:

Air Quality

The Monterey Bay Unified Air Pollution Control District (MBUAPCD) prepared the Air Quality Management Plan (AQMP) for the Monterey Bay Region. The AQMP addresses the attainment and maintenance of State and federal ambient air quality standards within the North Central Coast Air Basin (NCCAB).

Conclusion:

Air Quality 3(a&b) – No Impact

The development on the project site for a single family home will be in accordance with the AMBAG population projections, which is accommodated in the AQMP. Most potentially significant air quality issues related to construction of single family homes involve the site grading activities (Source: 1, 4, & 10)

Air Quality 3 (c,d,e&f) – Less Than Significant

The CEQA Air Quality Guidelines outline a threshold for construction activities with potentially significant impacts for PM-10 to be 2.2 acres of disturbance a day. As less than 2.2 acres will be disturbed by this project it has been determined not to constitute a significant impact. Grading of the project site will result in minor increases in emissions from construction vehicles and dust generation. Generally, in the long-term, the primary source of air emissions is vehicular traffic.

4. BIOLOGICAL RESOURCES Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? (Source:1,4,5,6,7)	☐	☐	☐	■
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or US Fish and Wildlife Service? (Source:1,2,4,5,6,7)	☐	☐	☐	■
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? (Source:1,4,5,6,7)	☐	☐	☐	■

4. BIOLOGICAL RESOURCES Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? (Source:1,4,5,6,7)	☐	☐	☐	■
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? (Source:1,2,3,4,5,6)	☐	☐	☐	■
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? (Source:1,2,4,5,6,7)	☐	☐	☐	■

Discussion/Conclusion/Mitigation: See Sections II and IV

5. CULTURAL RESOURCES Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5? (Source:1,6,7)	☐	☐	☐	■
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5? (Source:1,4,5,7,9)	☐	■	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? (Source:1,4,5,7,9)	☐	☐	■	☐
d) Disturb any human remains, including those interred outside of formal cemeteries? (Source:1,4,5,7,9)	☐	■	☐	☐

Discussion:

Cultural Resources

The subject property is located within a "high" archaeological sensitivity zone. Pursuant to Section 20.146.090, an archaeological survey is required for a development within a high archaeological sensitivity zone as mapped on current county resource maps. A Preliminary Cultural Resources Reconnaissance prepared by Archaeological Consulting, dated March 25, 1999 concluded that the project area contains a potentially significant archaeological resource.

Staff requested an updated Archaeological Report for the current project. An updated report, dated January 17, 2007, by Archaeological Consulting, indicates, based on testing performed in 1999 that construction should be allowed to proceed without further archaeological investigation; however, a possibility still exists that, during construction, previously unidentified or unexpected resources may be discovered. Due to this potential, mitigation measures are recommended (Key Policies 2.8.2).

Conclusion:

Cultural Resources 5(a) - No Impact.

The proposed project includes construction of a new single family dwelling on a vacant lot. There are no identified historic resources on adjacent properties (Source IX. 1 & 6).

Cultural Resources 5(c)– Less than Significant Impact

Archaeological testing by Gary Breschini in 1999 discovered a few fragments of Mytilus (mussel) and Haliotis (abalone) shell. No other materials frequently associated with prehistoric cultural resources were found nor are likely to occur at the site (Reference 9). There is no indication that the project site contains any unique geological features (Reference 6, 8, & 9). While there are no significant impacts to paleontologic resources foreseen, recommended mitigation measures applied due to the potential archaeological impacts will provide a safeguard for unexpected paleontological resources encountered during construction (See 5(b) & 5(d) below)

Cultural Resources 5(b) & 5(d) – Less than Significant with Mitigation Incorporated

County records identify the project site as being high in archeological sensitivity (Reference 4 & 7). An archaeological reconnaissance conducted for the project indicated a previously recorded archaeological site in the vicinity of the proposed project. Archaeological testing was performed on the site in 1999 by Gary Breschini of Archaeological Consulting. Results of the testing consisted of modern day building materials and other "trash" at a depth of 10 to 20 centimeters; 20 to 30 centimeter depths were found to be "culturally sterile". Some evidence of was found that Native Americans may have once inhabited the area but none of the evidence found on this lot was determined to be significant and no resources suitable for radiocarbon dating were recovered. The most recent report concludes construction should not be delayed for archaeological reasons; however, the possibility exists that previously unidentified or unexpected resources may be discovered. For this reason mitigation measures are recommended to reduce potential impacts to resources to a less than significant level (Source IX. 1, 4, 5, 7, & 9).

Recommended Mitigation:

Mitigation Measure #1: Require the contractors to sign and record an agreement created by an Archaeologist informing them of the potential for incidental impacts and requirements to contract the archaeologist for monitoring during earth disturbing activities associated with new construction on the parcel, such as grading, foundation excavations, etc. The monitor should have the authority to temporarily halt work in order to examine any potentially significant cultural materials or features.

Monitoring Action #1A: Prior to issuance of a Building Permit, the applicant shall provide the Director of Planning with a copy of a recorded agreement containing recommendations for protection of incidental impacts to potentially significant resources and the requirement of an Archaeological monitor on site during earth disturbing activities. The applicant shall provide evidence of the presence of the Archaeologist on-site during demolition of existing structures and earth disturbing activities including any measures necessary to be in place and in good order through construction. The report shall be certified by the Archaeologist, and submitted on a monthly basis until all earth work has been completed.

Mitigation Measure #2 Because of the possibility of unidentified (e,g., buried) cultural resources being found during construction, a standard County condition of approval will be included for the project that requires construction to be halted if archaeological resources or human remains are accidentally discovered during construction with evaluation by a qualified professional archaeologist and the following steps shall be taken: There shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until (a) The coroner of the county in which the remains are discovered is contacted to determine that no investigation of the cause of death is required, and (b) if the coroner determines that remains to be Native American:

- The corner shall contact the Native American Heritage Commission and the RMA – Planning Department with 24 hours.
- The native American Heritage Commission shall identify the person or persons from a recognized local tribe of the Esselen, Salinan, Costonoans/Ohlone and Chumash tribal groups, as appropriate, to be the most likely descendent.
- The most likely descendent may make recommendations to the landowner of the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.9 and 5097.993, or
- Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American humans remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance:
  - (1) The Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission.
  - (2) The descendent identified fails to make a recommendation; or
  - (3) The landowner or his authorized representative rejects the recommendation of the descendent, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.

Monitoring Action #2A. During the course of construction the applicant shall provide the Director of Planning with a monthly report prepared by the Archaeologist confirming that no intact cultural features, potentially significant cultural materials or human remains were found on the subject property. If there is a find, no work shall continue until the find can be evaluated

and/or recovered for identification, possible analysis and curation, and appropriate mitigation measures formulated and implemented. The designated Most Likely Descendant of any found human remains will provide recommendations for mitigation of Native American human remains.

6. GEOLOGY AND SOILS Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Source:1,4,5,7,8) Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	■
ii) Strong seismic ground shaking? (Source:1,4,5,7,8)	☐	☐	■	☐
iii) Seismic-related ground failure, including liquefaction? (Source:1,4,5,7,8)	☐	☐	☐	■
iv) Landslides? (Source:1,6,7,8)	☐	☐	☐	■
b) Result in substantial soil erosion or the loss of topsoil? (Source:1,8,13)	☐	☐	■	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? (Source:1,4,5,7,8,13)	☐	■	☐	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? (Source:1,8)	☐	☐	☐	■
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? (Source:1,4,5,6,7)	☐	☐	☐	■

Discussion:

Geology and Soils

Located in the unincorporated area of Carmel near the City of Carmel, the project site is located near potentially active faults and is subject to seismic related shaking. The site soils are erodible needing drainage and erosion control measures to be incorporated in the project. Support of

adjacent properties during excavation must be addressed due to the proposed design requiring new, lower elevations for finish grades and a basement in combination with the small lot size and existing setbacks from neighboring properties (Key Policies 2.7.2).

Conclusion:

Geology and Soils 6(a-i, iii, & iv), (d), & (e) - No Impact

A Geotechnical and Geological Hazard Report, prepared by Grice Engineering and Geology Inc. in January 2007, was submitted for the proposed project. Based on site investigations by the engineer including visual inspection and boring indexes, the report states that "risks from ground rupture at the site are low." Liquefaction was determined to have a low potential of occurrence, due to the soils on the site not having properties normally associated with these situations. Since the site is relatively flat and not in close proximity to significant slopes there is no potential for adverse impacts from landslides. The project will be served by the Carmel Sanitary Sewer District so the adequacy of the soil for sewage disposal is irrelevant. (Source IX. 1, 6, 7, 8, & 13) *Therefore, the project will not be impacted, or have an impact to these categories of geology and soils.*

Geology and Soils 6(c) – Less Than Significant with Mitigation

The project includes excavation/cut slopes for proposed finish grade elevations and a basement of up to 16 vertical feet. Minimum required side setbacks in the area are five feet from the property line. The neighbor to the south has improved their lot with a structure that is within approximately one foot of the property line. Proximity of adjacent dwellings and the requirement for relatively large cut slopes to facilitate construction of the proposed project were identified as a potential hazard. This concern was addressed in the Geotechnical and Geologic Hazards report submitted for the proposed project prepared by Grice Engineering and Geology Inc. dated January 2007 stating, "Consideration in the design and construction of these walls will need to be taken relative to the support of adjacent property during construction." The Geotechnical Engineer was asked to revisit the potential impact at the request of the Planning Department and a follow up letter was prepared that states "As reviewed we find no reason for further site evaluation provided that Best Management Practices are utilized in the construction. Such methods will ensure that no significant impact will be incurred to adjacent properties due to the proposed construction." The meaning of Best Management Practices (BMP's) was clarified by Haro, Kasunich, & Associates, Inc. who prepared a letter, in response to questions surrounding the soils and geology impacts, dated November 27, 2007. BMP's will include the following; All recommendations contained in the geotechnical report including, observation and inspection from the geotechnical engineer, collaboration between structural, civil, and geotechnical engineer with the architect and contractor prior to grading activities, and temporary shoring. The Haro, Kasunich & Associates, Inc. report supported the Grice report conclusion, that if mitigations are incorporated and followed there will be no adverse impact to the neighboring structures. (Source IX. 1, 4, 5, 6, 7, 8, & 13).

Mitigation Measure #3 Prior to issuance of grading or building permits the owner/applicant shall submit temporary shoring plans designed by a licensed geotechnical engineer, to the Resource Management Agency (RMA) Building Department for review and approval. The temporary shoring shall be designed to provide adequate protection of the adjacent structures

from undercutting and settling. Once a shoring plan is approved, the construction and installation of the shoring shall be done under the supervision and direction of a licensed geotechnical engineer prior to excavation for the proposed project. The shoring shall be installed on the subject property only, shall compensate for loads needed to support adjacent structures and vegetation during construction, and adequately address the potential groundwater impacts as described in the Haro & Kasunich geotechnical letter dated November 27, 2007. Once installed the shoring shall be inspected by a licensed engineer for adequacy. Excavation for the poposed structure shall only commence upon approval of the RMA Planning and Building Department. All shoring and excavation shall be monitored by a registered archaeologist (reference Mitigation Measure #1).

Monitoring Action 3A Prior to issuance of grading or building permits the owner or applicant shall submit temporary shoring plans, designed by a licensed geotechnical engineer, to the RMA Building Department for review and approval. Additionally prior to issuance of permits the owner or applicant shall submit a contract between the owner, contractor, and a licensed engineer containing an agreement for an engineer to observe and certify temporary shoring construction.

Monitoring Action 3B During construction of the temporary shoring, a licensed engineer shall observe and make recommendations where necessary to ensure proper construction of the shoring and support of adjacent structures [combined with observation from a registered archaeologist (see mitigation measure 1)]. Upon completion of the shoring and prior to foundation excavation the owner or applicant shall submit a letter from the engineer certifying that the shoring has been adequately constructed.

Geology and Soils 6(a-ii)– Less Than Significant Impact

The Carmel Land Use Plan defines high hazard areas to include zones 1/8 mile each side of active or potentially active faults. The project parcel is located approximately 0.15 miles from the Cypress Point Fault. Due to the project consisting of a new, habitable structure and in accordance with the Carmel Land Use Plan (2.7.3.1), a geotechnical and geological report were requested. The report discussed the risk associated with the site location and characteristics including soils suitability, tendencies, and seismic effects. Located in a seismically active region, strong seismic ground shaking will undoubtedly occur at the site in the future. The engineer, having taken into account the applicable information, has recommended that structures be designed and built in accordance with the requirements of the Uniform Building Code's current edition, Seismic Zone IV, all buildings be founded on undisturbed native soils and/or accepted engineered fill, and that grading and foundation excavations be done under the direction of a qualified Soils Engineer or their representative with inspections done prior to form or reinforcement placement and again prior to placement of concrete. These are all standard construction techniques and do not result in potentially significant impacts. The recommendations for the report will be incorporated in the project through Monterey County Planning Department's standard conditions of approval. In addition it is the practice of the Monterey County Building Department to review designs for conformance with building codes, inspect work for compliance with codes and designs, and ensure compliance with geotechnical recommendations. The report concluded that the site is suitable, from a soil-engineering standpoint, for the proposed development provided the

recommendations in the report are implemented. (Source IX 1, 4, 5, 7, & 8) *Therefore, the project will have a less than significant impact relating to strong seismic ground shaking.*

Geology and Soils 6(b) – Less Than Significant Impact

According to the Geologic and Soils Engineering Report submitted for the proposed project, the site soils are erodible and groundwater can be found approximately 14 feet below grade. Recommendations to address surfical soils include processing unacceptable soils as engineered fill or that the structure be supported in firmer soils found at depth. Section _20.416.050E4_ of the Carmel Coastal Implementation Plan (CIP) requires that an erosion control plan prepared by a registered civil engineer containing detailed plans of all erosion control devices and measures to be implemented to provide retention of sediment during grading, and storm water runoff resulting from a 20-year recurrence interval storm, be submitted and approved by RMA-Planning and the Water Resources Agency. The Monterey County Building Department, Grading Division, requires erosion control plans and measures to be in place during the grading process when a grading permit is required. Runoff and water discharge will be controlled in accordance with the engineered drainage plans submitted for the proposed development, once they are approved by the RMA Building Department. The Engineered Drainage Plans submitted addresses excavation and foundation construction processes where ground water may be encountered as well as permanent roof and site drainage. Incorporating the soils report recommendations, the engineered erosion control and drainage plan, and general policies of the building and grading department throughout the project are standard conditions and practices required by County ordinances and will maintain potential erosion impacts to a less than significant level (Source IX 1, 8, & 13).

7. HAZARDS AND HAZARDOUS MATERIALS **Would the project:**	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? (Source:1,2,4,5,6)	☐	☐	☐	■
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? (Source:1,4,5)	☐	☐	☐	■
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? (Source:1)	☐	☐	☐	■
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? (Source:1,2,4,5,7)	☐	☐	☐	■

7. HAZARDS AND HAZARDOUS MATERIALS Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? (Source:1,4,5,6,7)	☐	☐	☐	■
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? (Source:1,4,5,6,7)	☐	☐	☐	■
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? (Source:1,2,4,5,6)	☐	☐	☐	■
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? (Source:1,4,5,6,7)	☐	☐	☐	■

Discussion/Conclusion/Mitigation: See Sections II and IV

8. HYDROLOGY AND WATER QUALITY Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements? (Source:1,4,5,7)	☐	☐	☐	■
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? (Source:1,4,5,7)	☐	☐	☐	■
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site? (Source:1,4,5,6,7,8,13)	☐	☐	☐	■

8. HYDROLOGY AND WATER QUALITY **Would the project:**	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? (Source:1,6,7,8,13)	☐	☐	☒	■
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? (Source:1,4,5)	☐	☐	☒	■
f) Otherwise substantially degrade water quality? (Source:1)	☐	☐	☒	■
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? (Source:1,4,5,7)	☐	☐	☒	■
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows? (Source:1,4,5,7)	☐	☐	☒	■
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? (Source:1,4,5,7)	☐	☐	☒	■
j) Inundation by seiche, tsunami, or mudflow? (Source:1,4,5,7,8)	☐	☐	☒	■

Discussion/Conclusion/Mitigation: See Section II and IV

9. LAND USE AND PLANNING **Would the project:**	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community? (Source:1, 2,4,5,6)	☐	☐	☒	■
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? (Source:1,2,3,4,5,6)	☐	☐	☒	■

9. LAND USE AND PLANNING Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Conflict with any applicable habitat conservation plan or natural community conservation plan? (Source:1,4,5,6,7)	☐	☐	☐	■

Discussion/Conclusion/Mitigation: See Sections II and IV

10. MINERAL RESOURCES Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? (Source:1,4,5,7,8)	☐	☐	☐	■
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? (Source:1,2,4,5,8)	☐	☐	☐	■

Discussion/Conclusion/Mitigation: See Sections II and IV

11. NOISE Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? (Source:1,2,4,5)	☐	☐	☐	■
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? (Source:1,2,4,5)	☐	☐	☐	■
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? (Source:1,2,4,5)	☐	☐	☐	■
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? (Source:1,2,4,5)	☐	☐	☐	■

11. NOISE Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? (Source:1,2,4,5,7)	☐	☐	☐	■
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? (Source:1,2,4,5,7)	☐	☐	☐	■

Discussion/Conclusion/Mitigation: See Sections II and IV

12. POPULATION AND HOUSING Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? (Source:1,4,5)	☐	☐	☐	■
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? (Source:1)	☐	☐	☐	■
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? (Source:1)	☐	☐	☐	■

Discussion/Conclusion/Mitigation: See Sections II and IV

13. PUBLIC SERVICES Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection? (Source:1)	☐	☐	☐	■
b) Police protection? (Source:1)	☐	☐	☐	■
c) Schools? (Source:1)	☐	☐	☐	■
d) Parks? (Source:1,4,5)	☐	☐	☐	■
e) Other public facilities? (Source:1,4,5)	☐	☐	☐	■

Discussion/Conclusion/Mitigation: See Sections II and IV

14. RECREATION Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? (Source:1,4,5)	☐	☐	☐	■
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? (Source:1,4,5)	☐	☐	☐	■

Discussion/Conclusion/Mitigation: See Sections II and IV

15. TRANSPORTATION/TRAFFIC **Would the project:**	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)? (Source:1,2)	☐	☐	☐	■
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways? (Source:1,2)	☐	☐	☐	■
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? (Source:1,2,6,7)	☐	☐	☐	■
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? (Source:1,6)	☐	☐	☐	■
e) Result in inadequate emergency access? (Source:1)	☐	☐	☐	■
f) Result in inadequate parking capacity? (Source:1,3,6)	☐	☐	☐	■
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)? (Source:1,2,4,5)	☐	☐	☐	■

Discussion/Conclusion/Mitigation: See Sections II and IV

16. UTILITIES AND SERVICE SYSTEMS **Would the project:**	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? (Source:1)	☐	☐	☐	■
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? (Source:1)	☐	☐	☐	■

16. UTILITIES AND SERVICE SYSTEMS Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? (Source:1,4,5)	☐	☐	☐	■
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? (Source:1)	☐	☐	☐	■
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? (Source:1)	☐	☐	☐	■
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? (Source: 1)	☐	☐	☐	■
g) Comply with federal, state, and local statutes and regulations related to solid waste? (Source: 1,2,4,5)	☐	☐	☐	■

Discussion/Conclusion/Mitigation: See Sections II and IV

VII. MANDATORY FINDINGS OF SIGNIFICANCE

NOTE: If there are significant environmental impacts which cannot be mitigated and no feasible project alternatives are available, then complete the mandatory findings of significance and attach to this initial study as an appendix. This is the first step for starting the environmental impact report (EIR) process.

Does the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife 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? (Source: 1,4,5,6,7,9)	☐	■	☐	☐
b) Have 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)? (Source: 1,2,4,5)	☐	☐	☐	■
c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? (Source: 1,4,5,6,8,13)	☐	☐	☐	■

Conclusion:

(a) Less Than Significant with Mitigation Incorporated

The proposed site does not contain any environmentally sensitive habitat areas. The project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species or have a substantial adverse effect on any riparian habitat or other sensitive natural community. The project as proposed, conditioned, and mitigated will not have the potential to degrade the environment. Any potential impacts from construction may be to Cultural and Soils and Geological Resources. Mitigations are recommended to reduce potential impacts to these resources to a less than significant level using archaeological monitoring during earth disturbing processes and temporary shoring prior to foundation excavation (See Section VI, Number 5, Cultural Resources and Number 6, Geology and Soils).

(b) No Impact

The project includes the placement of a single family dwelling on an existing legal lot of record, created through Carmel by the Sea addition number 7 subdivision in 1908. Development of this parcel was anticipated as the lot is within an approved subdivision and is zoned for residential use. Construction of the proposed project will not significantly increase population in the area, demand on utilities and services, increase in traffic and other cumulative subjects. The proposed project has been reviewed and found to be consistent with the Local Coastal Plan. There is no

foreseeable or observable cumulative impact to the environment (Source: Sections II and VI above).

(c) No Impact.
There is no evidence in the record that the project will cause substantial effects to the environment that either directly or indirectly affect human beings (Source: sections IV and VI above).

VIII. FISH AND GAME ENVIRONMENTAL DOCUMENT FEES

The State Legislature, through the enactment of Senate Bill (SB) 1535, revoked the authority of lead agencies to determine that a project subject to CEQA review had a "de minimis" (minimal) effect on fish and wildlife resources under the jurisdiction of the Department of Fish and Game. Projects that were determined to have a "de minimis" effect were exempt from payment of the filing fees.

SB 1535 has eliminated the provision for a determination of "de minimis" effect by the lead agency; consequently, all land development projects that are subject to environmental review are now subject to the filing fees, unless the Department of Fish and Game determines that the project will have no effect on fish and wildlife resources

The Department of Fish and Game (DFG) was asked to consider a determination of "no effect" on fish and wildlife resources for the proposed development on the form prescribed by DFG.

Conclusion: The project **would not** be required to pay the fee

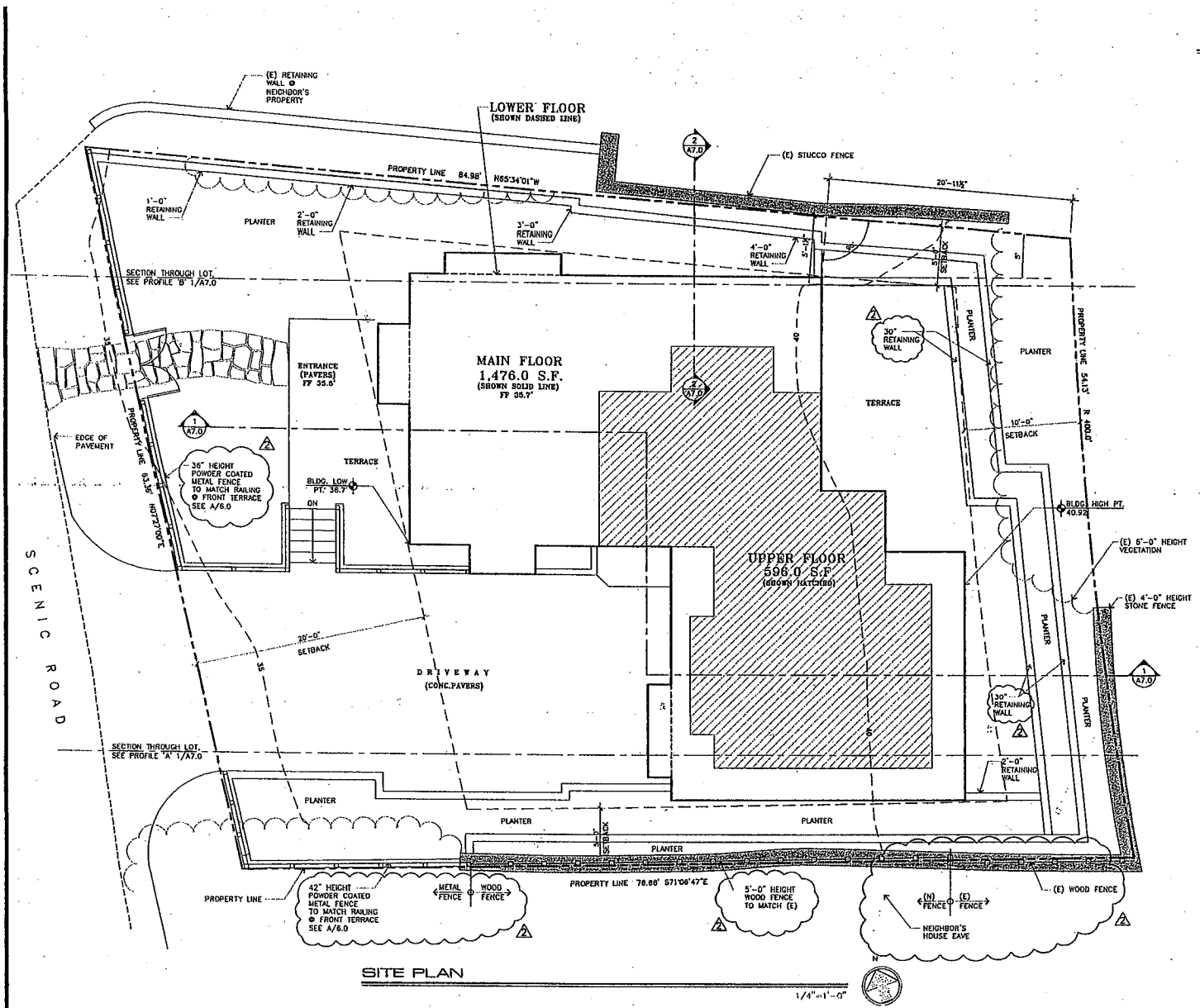
Evidence: The proposed site does not contain any environmentally sensitive habitat areas. The project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species or have a substantial adverse effect on any riparian habitat or other sensitive natural community. The project as proposed and conditioned will not have the potential to degrade the environment (Source: IV 3 above and reference 11).

IX. REFERENCES

1. Project Application and Plans (PLN060735)
2. Monterey County General Plan (1982 as amended)
3. Monterey County Coastal Implementation Plan Part 1 (Title 20)
4. Carmel Land Use Plan
5. Coastal Implementation Plan Part 4
6. Site visit by planner July 31, 2007
7. Monterey County Planning Department GIS system and selected property report for Assessor's Parcel Number 009-442-013-000
8. Geotechnical and Geological Hazards Report prepared by Grice Engineering (dated January 2007) and follow up letter dated July 24, 2007
9. Preliminary Cultural Resources Reconnaissance (March 25, 1999) Updated Archaeological Reports (September 29, 1999 and January 17, 2007)
10. "2004 Air Quality Management Plan" and "CEQA Air Quality Guidelines , July 2004" prepared by the Monterey Bay Unified Air Pollution Control District
11. No Effect Determination Letter from the Department of Fish and Game
12. Water Resources Agency water allocation procedures and records (verified via phone correspondence)
13. Geotechnical Response letter prepared by Haro, Kasunich and Associates, Inc. Dated November 27, 2007

X. ATTACHMENTS

1. Site Plan and Elevations (dated April 4, 2007)
2. Geotechnical and Geological Hazards Report prepared by Grice Engineering and Geology Inc dated January 2007
3. No Effect Determination Letter from the Department of Fish and Game
4. Geotechnical Response letter prepared by Haro, Kasunich and Associates, Inc. Dated November 27, 2007



SITE PLAN

1/4"=1'-0"

PLANNING INFO.

- PROPERTY OWNER:
  Dale Skeen & JoAnn Chong
  P.O. Box 7507
  Menlo Park, CA 94026
  (650) 323-8002
- PROJECT ADDRESS:
  26327 SCENIC ROAD
  CARMEL, CA.
- PROJECT SCOPE:
  NEW SINGLE FAMILY RESIDENCE WITH ATTACHED 2-CAR GARAGE
- OCCUPANCY: R3, U1
- CONST. TYPE: V, NR
- A.P.N. 009-442-013-000
- LEGAL DESC.: LOT: 10 BLOCK: B14
- ZONE: MDR/2 (18) (CZ)
- MAX BLDG. HT: 18 FT
- GRADING: 990 CY CUT
- TREE REMOVAL: NONE
- TOPOGRAPHY: SLOPE
- PROJECT CODE COMPLIANCE:
  1. 2001 – CBC, CMC, CPC, CFC.
  2. 2004 – California Electrical Code
  3. 2005 – California Energy Code
- LOT AREA: 4700 S.F.
- LOT COVERAGE CALCULATIONS:

	PROPOSED
BUILDING (FOOTPRINT)	1,456 S.F.
DRIVEWAY	780 S.F.
FRONT TERRACE	207 S.F.
TERRACE	412 S.F.
TOTAL COUNTABLE	1,456 S.F.

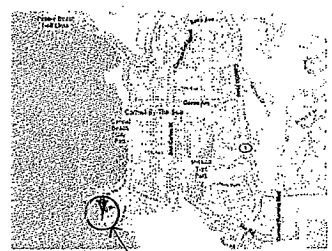
- LOT COVERAGE ALLOWED: 1,645 SF (35%)
- LOT COVERAGE PROPOSED: 1,456 SF (31%)
- F.A.R. CALCULATIONS

	PROPOSED	
MAIN FLOOR	1,476 S.F.	
UPPER FLOOR	596 S.F.	
LOWER FLOOR		878 S.F. (BELOW GROUND)
GARAGE & MECH.		545 S.F. (BELOW GROUND)
	2,072 S.F.	+1,423 S.F. (BELOW GROUND)
TOTAL	3,495 S.F.	

- F.A.R. ALLOWED: 2,115 SF (45%)
- F.A.R. PROPOSED: 2,072 SF (44%)

VICINITY MAP

N.T.S.



PROJECT SITE

PROPOSED NEW RESIDENCE AT
26327 SCENIC ROAD
CARMEL, CA.
26327 SCENIC ROAD

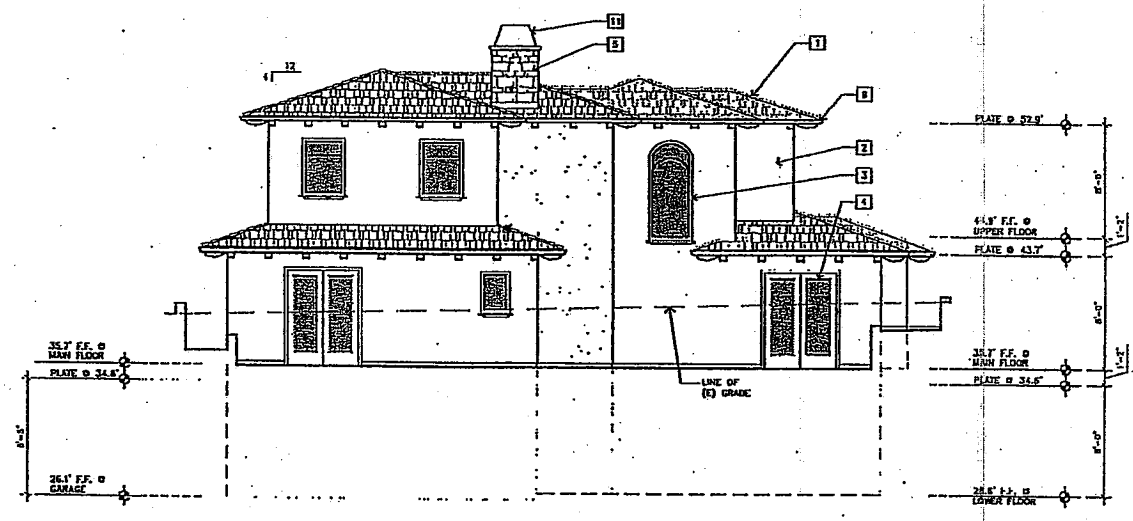
INTERNATIONAL DESIGN GROUP
ARCHITECTURE ■ INTERIOR DESIGN
JUAN A. BILLANO, AIA ■ JOHN E. MATTHAMS
721 LIGHTHOUSE AVE ■ PACIFIC GROVE CA ■ 93950
PH (831) 648-1081 ■ FAX (831) 648-1080 ■ E-MAIL: info@idgroup.com

PROJECT DATA
SITE PLAN

DATE: 05-20-07
CLIENT REVIEW

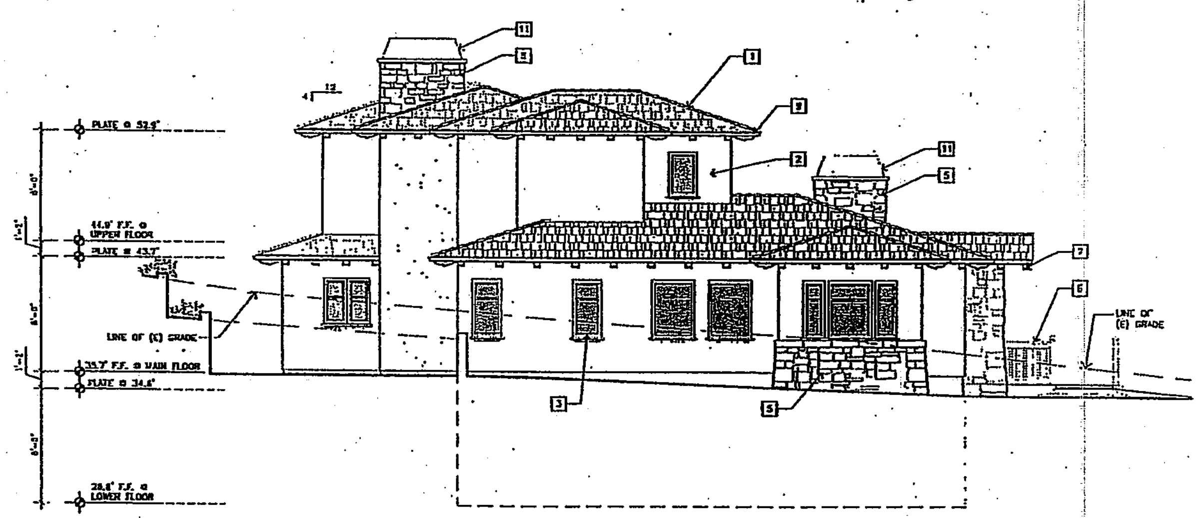
REVISIONS:
1. 07-24-07 Neighbor's request
2. 11-09-07 ZA Hearing
3.
4.
5.

SHEET NO.
A1.0



WEST ELEVATION

1/4"=1'-0"



NORTH ELEVATION

1/4"=1'-0"

EXTERIOR FINISH LEGEND

1. WOOD SHINGLE ROOF – CLASS 'A'
2. EXTERIOR STUCCO
3. METAL CLAD WOOD WINDOWS
4. METAL CLAD WOOD DOORS
5. STONE VENEER – CARMEL STONE
6. POWDER COATED METAL HANDRAILS W/ FAUX FINISH
7. STAINED WOOD RAFTERS
8. DECORATIVE WOOD PLANTER W/ COOPER LINING
9. COOPER GUTTER AND DOWNSPOUT
10. STAINED WOOD GARAGE DOOR
11. COOPER CHIMNEY CAP
12. LIGHT WELL

PROPOSED NEW RESIDENCE AT

26327 SCENIC ROAD

26327 SCENIC ROAD CARMEL, CA.

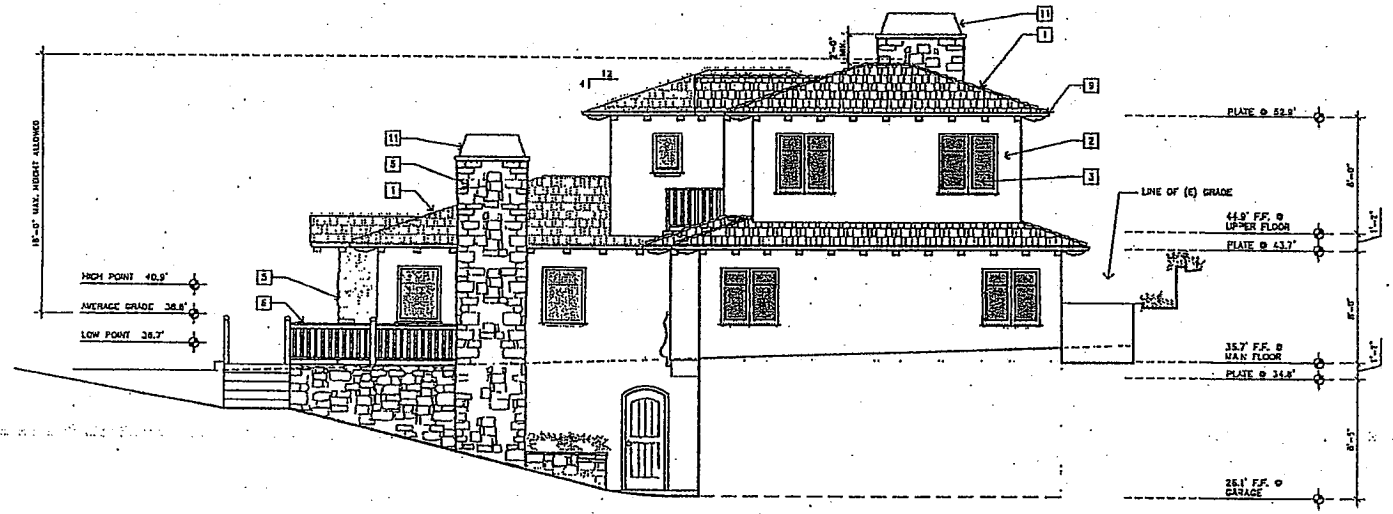
INTERNATIONAL DESIGN GROUP
ARCHITECTURE • INTERIOR DESIGN
JOHN S. MATTHAMS
731 LIGHTHOUSE AVE • PACIFIC GROVE CA • 93950

ELEVATIONS

DATE: 01-01-07
CLIENT REVIEW

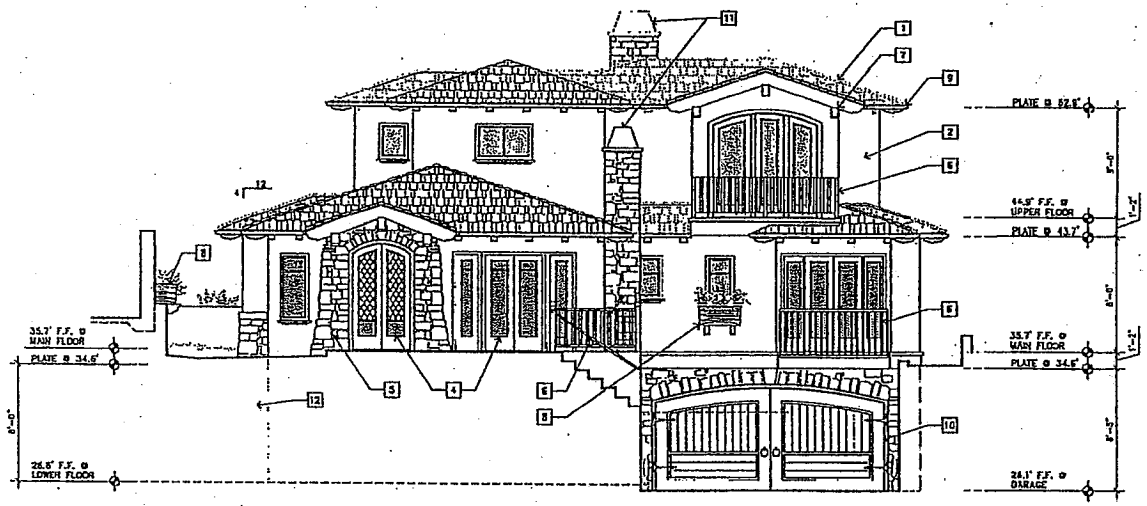
REVISIONS:

SHEET NO.
A6.1



SOUTH ELEVATION

1/4"=1'-0"



EAST ELEVATION

1/4"=1'-0"

EXTERIOR FINISH LEGEND

1	WOOD SHINGLE ROOF – CLASS 'A'
2	EXTERIOR STUCCO
3	METAL CLAD WOOD WINDOWS
4	METAL CLAD WOOD DOORS
5	STONE VENEER – CARMEL STONE
6	POWDER COATED METAL HANDRAILS W/ FAUX FINISH
7	STAINED WOOD RAFTERS
8	DECORATIVE WOOD PLANTER W/ COOPER LINING
9	COOPER GUTTER AND DOWNSPOUT
10	STAINED WOOD GARAGE DOOR
11	COOPER CHIMNEY CAP
12	LIGHT WELL

PROPOSED NEW RESIDENCE AT
26327 SCENIC ROAD
26327 SCENIC ROAD CARMEL, CA.

INTERNATIONAL DESIGN GROUP
ARCHITECTURE • INTERIOR DESIGN
JOHN A. WILLIAMS, AIA JOHN K. MATTHEWS
721 LIGHTHOUSE AVE • PACIFIC GROVE CA • 93950
PH (831) 649-1881 • FAX (831) 649-1882 • EMAIL

ELEVATIONS

DATE: 04-04-07
CLIENT REVIEW

REVISIONS:
1
2
3
4

SHEET NO.
A6.0

PLN060073
LIB070IE
SPENCER

REPORT
to
MR. ANATOLY OSTRETSOV
INTERNATIONAL DESIGN GROUP
721 LIGHTHOUSE AVENUE
PACIFIC GROVE, CALIFORNIA
93950

GEOTECHNICAL
and
GEOLOGICAL HAZARDS REPORT
for the proposed
RESIDENCE
26327 SCENIC ROAD
CARMEL-BY-THE-SEA, CALIFORNIA
A.P.N. 009-442-013

by

GRICE ENGINEERING, INC.
561-A BRUNKEN AVENUE
SALINAS, CALIFORNIA
JANUARY 2007

GRICE ENGINEERING AND GEOLOGY, INC.

ENGINEERING, GEOTECHNICS, HYDROLOGY, SOILS,
FOUNDATIONS, AND EARTH STRUCTURES

561A Brunken Avenue
Salinas, California 93901

Salinas: (831) 422-9619
Monterey: (831) 375-1198
FAX: (831) 422-1896

File No. 4943-07.01
January 24, 2007

Mr. Anatoly Ostretsov
International Design Group
721 Lighthouse Avenue
Pacific Grove, California 93950

Project: Proposed Residence
26327 Scenic Road
Carmel-by-the-Sea, California
A.P.N. 009-442-013

Subject: Geotechnical and Geological Hazards Report

Dear Mr. Ostretsov;

Pursuant to your request, we have completed our geotechnical investigation and evaluation of the above named site. It is our opinion that this site is suitable for the proposed development, provided the recommendations made herein are followed.

In general, the near surface soils are loose and will need to be taken into account during design and construction of the residence. In addition, consideration will need to be given to design and construction of the below grade retaining structures adjacent to the property boundaries. Recommendations are given relative to this and other characteristics within the report and especially under Special Recommendations.

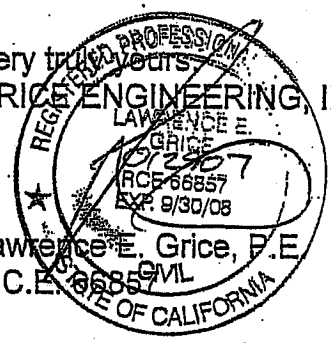
The report contained herein is made with our best efforts to evaluate the site, determine the site's geotechnical conditions and provide recommendations for these conditions. We submit this report with the understanding that it is the responsibility of the owner, or his representative, to ensure incorporation of these recommendations into the final plans, and their subsequent implementation in the field.

In addition, we recommend that GRICE ENGINEERING, INC., be retained to review the project plans and provide the construction supervision and testing required to document compliance with these recommendations. Should any site condition not mentioned in this report be observed, this office should be notified so that additional recommendations can be made, if necessary.

This report and the recommendations herein are made expressly for the above referenced project and may not be utilized for any other site without written permission of GRICE ENGINEERING, INC.

Please feel free to call this office should you have any questions regarding this report.

Very truly yours,
GRICE ENGINEERING, INC.



Lawrence E. Grice, P.E.
R.C.E. 66857

NOTICE TO OWNER

Any earthwork and grading performed without direct engineering supervision and materials testing by Grice Engineering and Geology Inc., will not be certified as complete and in accordance with the requirements set forth herein.

Foundations placed without observation of bearing conditions will not be certified as being in accordance with the requirements set forth herein.

Inspection of Work

It is recommended that all site work be inspected and tested during performance by this firm to establish compliance with these recommendations.

NOTIFY: GRICE ENGINEERING INC.
561-A Brunken Avenue
Salinas, California 93901

SALINAS (831) 422-9619
MONTEREY (831) 375-1198
FAX (831) 422-1896

A minimum of 48 hours (2 working days) notification is required prior to commencement of work so that scheduling for testing and inspections can be made.

Please be advised that costs incurred during inspection and testing of all site work is separate and not considered part of the fees as charged by Grice Engineering, Inc. for the report contained herein.

TABLE OF CONTENTS

GEOTECHNICAL
and
GEOLOGICAL HAZARDS REPORT
for the proposed
RESIDENCE
26327 SCENIC ROAD
CARMEL-BY-THE-SEA, CALIFORNIA
A.P.N. 009-442-013

Introduction, Method and Scope of Investigation

The purpose of this report is to evaluate the geotechnical properties of the site relative to the construction of a single family residence. From these findings recommendations are given for the design of the development and subsequent construction.

For this purpose, the site was investigated, and prior information concerning construction and subsurface exploration in this area was examined for soils and materials data. The investigation consisted of a detailed site evaluation, which included: a site inspection; a review of literature made available to GRICE ENGINEERING, INC., including Site Plans from International Design Group; geotechnical drilling and soil sampling; materials evaluation; and analysis of the geotechnical properties of the site soils. This report concludes the results of the investigation and provides recommendations based on that work.

The findings and recommendations contained in this report are applicable only to the above named site and its proposed development, and may not be utilized for any other site or purpose without written permission of GRICE ENGINEERING, INC.

Site Description

The project site, 26327 Scenic Road, is located to the northeast of Scenic Road, approximately 139 feet south of its intersection with Stewart Way, in Carmel-by-the-Sea, an un-incorporated area of Monterey County, California. Please refer to the Vicinity and Location Maps and the Site Map in Appendix A for details.

The approximately 4,700 square foot lot occupies a western facing marine terrace at an elevation of approximately 21 feet above mean sea level (USGS quad base). The lot is moderately sloped to the west and contains grasses and some bushes.

Currently the site is undeveloped. As planned a two story single family residence is to be placed centrally on the site, with a lower level including the garage with access to Scenic Drive by way of a concrete paver driveway. A light well/terrace for the lower floor is located to the north-northeast of the residence and will include the construction of a concrete retaining wall. As well, a series of terraces will be located to the rear of the residence. Due to the design of the residence a cut will have to be made to accommodate the construction of the lower floor including the driveway to the garage.

The residence with a foot print of approximately 1,440 square feet is to be of conventional wood construction above grade, masonry and concrete below grade, with raised wood floors and isolated and/or continuous spread footings. The approximately 545 square foot garage will have a slab-on-grade floor.

Field Investigation

Our field investigation consisted of a site inspection, along with drilling and sampling exploratory bores to establish the subsurface soil profile, and obtain sufficient soil specimens to determine the soil characteristics. Drilling was accomplished by continuous flight auger, with the spoil constantly examined, classified, and logged by field method in accordance with the Unified Soil Classification Chart[1].

In-situ samples were obtained by the penetration resistance method, (ASTM Method D1586), of driving a split barrel sampler a minimum of 18 inches into undisturbed materials by free dropping a 140 pound weight 30 inches. The number of blows required to drive the sampler were recorded in 6 inch increments, with the number of blows required to drive the sampler the last two increments taken as the penetration resistance. The split barrel sampler, with dimensions of 2.4" I.D. x 3.0" O.D., is provided with 1 inch tall brass ring liners for the purpose of returning the samples to the laboratory in as near *in-situ* condition as possible.

[1] Adopted 1952 by Corps of Engineers and Bureau of Reclamation

Laboratory Testing

Laboratory testing consisted of establishing the *in-situ* moisture content and dry density (ASTM D 2837-83) and unconfined penetration. Penetration Resistance values gained during the exploratory drilling are also included.

The following is a tabulation of the field and laboratory test result extremes:

TABLE 1

SUMMARY OF SOIL PROPERTIES

TEST	MAXIMUM	MINIMUM
Penetration Resistance	40 blows/foot	32 blows/foot
Unconfined Compression	9+ kips	6 kips
In-Situ Density	117.4 lbs/ft^3	108.4 lbs/ft^3
In-Situ Moisture	13.3 %	6.5 %

All data obtained is reported in Appendix B including the boring logs, with soil classified described at depth observed.

Site Soil Profile

As found in the exploratory drilling, the site soils are generally consistent between each of the bores.

The near surface native soils are fine to medium grained sands with trace to few amounts of silt. As observed they were loose and moist near the surface, increasing to damp and medium dense at depth.

At approximately five feet, the sands include a wider grain size with few amounts of gravel at depth. These deeper sands were observed generally damp to very damp with free water encountered in the first bore at 14 feet. These sands are considered medium dense to dense.

Weathered granitic bedrock was encountered at between 12 and 17 feet below grade. As observed in the first bore the granite is well weathered for the first several feet but becomes resistant with depth.

Complete soil characteristics and comments are reported on the boring logs at the depths observed. The logs are located in Appendix B.

Groundwater

Free groundwater was encountered in the first bore at a depth of 14 feet below grade. The bore is located at an elevation of approximately 39.5 placing the free water at an elevation of approximately 25.5 feet (as per elevations shown on the site plan). The other bores did not encountered free water.

GEOLOGIC AND GEOLOGICAL HAZARDS INVESTIGATION

Introduction

The purpose of this report section is to evaluate the site and surrounding areas to determine geologic characteristics and potential geologic hazards pertaining to site development and improvement.

In general this includes: the inspection and classification of local rock outcrops, a detailed site inspection for fault induced features or other potential hazards and a field evaluation of the local geology. A search of published and unpublished data was performed to collate geologic information as it pertains to this property. The literature review was extensive and consisted of comparing field observation with published data, analysis of site soil conditions, correlation of site observation with local hazard maps (ground failure, seismicity, dam failure and inundation, etc.) and an analysis of site seismicity.

The Vicinity and Location Map shows the location of interest, with the indication of the site.

Regional Geology

Geologically, the state of California can be separated into natural geomorphic provinces which reflect fundamental differences in both geography and geology. Monterey County is located in the Coast Range Province. This province consists of thick, folded, Cenozoic sedimentary rocks and a very distinctive triad of core rocks. The sediments are predominately sandstone, shale or mudstone and vary greatly depending on location. The core rocks of this province consist of three distinct late Mesozoic terrains: The Salinian Block, The Franciscan Series, and the Great Valley Sequence.

The Salinian Block is a complex of granite and high grade metamorphic rocks including: gneiss, schist, quartzite, marble and granulite. In this region the granite has been dated as early Cretaceous (C.O. Hutton, 1952). The Franciscan Complex is a heterogeneous assemblage of sandstone, siltstone, shale, volcanic greenstone and chert. It has undergone metamorphism, severe dislocation and pervasive shearing and is only exposed along the coast to the West of the Sur-Nacimiento Fault Zone and East of the San Andreas Fault Zone. The Great Valley Sequence extends along the East flank of the Coast Ranges near the margins of the Sacramento and San Joaquin Valleys and is a well ordered series of marine sandstone, shale, mudstone and conglomerate.

Site Geology

The site geology has been mapped by the California Division of Mines primarily Pleistocene-Holocene alluvium overlaying Mesozoic Grandiorite of the Salinian Block.

Our observation with the local geology is consistent with the above. Sediments are interpreted to be the result of alluvial outwash, shallow water deposits and eolian deposits. No rock outcrops were observed at the project site however bedrock was encountered in the exploratory bores.

The soils were observed medium dense to very dense and moist to wet. The granite was observed weathered at contact but resistant at depth.

Seismic History

Although no fault traces are thought to directly cross the building site, Monterey County is traversed by a number of both "active" and "potentially active" faults most of which are relatively minor hazards for the purposes of the site development. As such, this site will experience seismic activity of various magnitudes emanating from one or more of the numerous faults in the region.

Various maps presently exist, allowing observation on the site of distinctive geologic features. Some maps, such as that by Burkland and Associates (Reference 10) developed for Monterey County, are compilations from various sources detailing the locations of studied faults. Faults have inherit variances within their zones, and discoveries of new fault segments or entire faults is ongoing. There is also some difference in exact fault line location from source map to map, making precise location of said faults difficult. Therefore, relative to the information contained within this report, the following is considered to be as accurate as is currently possible from information made available to Grice Engineering Inc..

Active Fault Near-Source Zones

The Fault Maps as developed for the 1997 Uniform Building Code (California Department of Conservation, Division of Mines and Geology, February 1998) list faults and fault zones for the purpose of determining characteristics relative to seismic engineering. These maps indicate the position of active fault zones which are grouped in three categories, A, B & C, in decreasing influence. For this purpose an active fault is one which has tectonic movement in the last 11,000

years and as such is called a Holocene Fault. The following are the nearest listed zones.

The nearest A-type fault zone is that of the San Andreas Rift System (Pajaro), located approximately 30.2 miles (48.5 kilometers) to the northeast. It has the greatest potential for seismic activity with estimated intensities of VI-VII Mercalli in this location. This fault is listed as an A-type fault perpendicular to the site, however it is listed as B-type to the south.

The nearest B-type fault zones are the San Gregorio- Palo Colorado Fault Zone, the center of which is located approximately 3.8 miles (6.1 kilometers) to the southwest, the Monterey Bay-Tularcitos Fault Zone, approximately 4.7 miles (7.5 kilometers) to the northeast and the Rinconada Fault Zone, located approximately 13.4 miles (21.5 kilometers) to the northeast. These zones are not as liable to rupture as the San Andreas and a seismic event at either fault zone would likely produce earth movements of a lesser intensity at the site.

Local Faults

In addition to the fault zones as discussed above, the local fault as listed below, is as shown on the following maps, "Geologic Map of the Monterey Peninsula and Vicinity " (Reference No. 20), and "Faults and Earthquakes in the Monterey Bay Region, California" (Reference 26).

TABLE OF LOCAL FAULTS

FAULT, PERPENDICULAR TO SITE	APPROXIMATE DISTANCE FROM SITE	DIRECTION
Cypress Point Fault	0.15 miles	northeast

This fault is considered "potentially active" and can be expected to produce seismic events. As this fault is short and localized, however, the energy release will be considerably less significant than any of the previously mentioned faults.

Major Earthquakes

Earthquakes with the highest intensities experienced in the area are the result of the 1906 San Francisco (Olema) and the 1989 Loma Prieta Earthquakes along the San Andreas Fault.

The epicenter of the 1906, 8.3 (Richter) earthquake was at Olema, approximately 120 miles north-northwest of the site. The intensity in the vicinity of this site was estimated to be between VII and VIII, Modified Mercalli Scale.

The Loma Prieta Earthquake of October 17, 1989, was centered in the Santa Cruz Mountains, approximately 30 miles northeast of the site. This Magnitude 7.1 (Richter) earthquake also developed an intensity of VI-VII within the vicinity of this site.

Seismic Hazards

A: Ground Rupture; Surface rupture occurs during an earthquake when fault displacement breaks the ground surface along the historic trace of a fault. Our site investigation confirms there are no visible signs of fault induced features or indications to suggest that a fault directly crosses the site. In addition the granite basement was encountered in all bores indexing the site to the south of the Cypress Point Fault, the nearest known fault. Therefore, the risk from ground rupture at the site are low.

B: Ground Failures; Ground failures are related to the intensity and duration of the shaking caused by an earthquake, as well as local conditions. A search of historic ground failure documentation indicates that no historic ground failures have occurred at or in the vicinity of the project site. Therefore, the risk from ground failures at the site are low.

The California Division of Mines and Geology considers four types of ground failures: (1.) Liquefaction, (2.) Lurch Cracking and Lateral Spreading, (3.) Landslides, (4.) Differential Compaction.

1. Liquefaction:

Liquefaction is the loss of strength in saturated granular soils produced by seismic shaking and is often accompanied by the surface occurrence of free water produced by sand boils. For this to occur, the soils must be saturated, at a relatively shallow depth, of a granular (non-cohesive) nature, and be relatively loose.

General liquefaction susceptibility based on depth to groundwater is as follows; if less than 10 feet, maximum possible susceptibility for liquefaction to occur is very high, depths from 9-30 feet have a moderate possible susceptibility and groundwater depths greater than 30 feet, liquefaction susceptibility is low.

Because the soils at the site of the proposed development are mostly unsaturated and of relatively high density, the site has a low potential for liquefaction.

2. Lurch Cracking and Lateral Spreading:

Soils shaken by an earthquake may settle, become compacted or slide which may produce cracks and fissures, such effects are called lurch cracking. Lateral spreading is the horizontal movement of soil masses caused by seismic waves, usually such movement is toward an open face or steep slope and occurs along a weakened strata of saturated soils.

As the soils at the proposed site are of sufficient strength and density and basement bedrock underlays the site at a relatively shallow depth, the site has a low susceptibility to the effects and damage from lurch cracking.

3. Landslides:

Landslides are generally mass movements of loose rock and soil, either dry or water saturated and are usually gravity driven. Obviously, steep slopes enhance such movements.

As only gradual slopes exist adjacent to the site and the soils strengths are high, the site generally has minimal potential from the threat of landslides.

4. Differential Compaction:

Differential Compaction is a loss of volume resulting from seismic ground shaking. Generally, for this to happen the site soils must be of low relative density and dilatant. Differential Compaction is more likely in water saturated, low density alluvial material, such as paleo-swamps and/or marshes, or strata of low density and of fine grained silts and sands.

The dense un-saturated nature of the site soils make differential compaction unlikely.

C: Ground Shaking: Ground shaking is the soil columns response to seismic energy transmission. Intensity of ground shaking and the potential for structural damage is greatly influenced by local soil conditions. Therefore, it is important that all structures be designed and built in accordance with the requirements of the Uniform Building Code's current edition, Seismic Zone IV. All buildings should be founded on undisturbed native soils

and/or accepted engineered fill to prevent resonance amplification between soils and the structure.

D: Tsunamis and Seiches; Tsunamis and Seiches are inundations by oceanic or fresh water waves generated by seismic events. The highest recorded wave height in the Monterey Bay is 9 feet. Since the site is approximately 21 feet above sea level and there are no fresh water bodies in the immediate area, there is little potential for inundations due to Tsunamis or Seiches. As such, the property is deemed safe from either hazard.

E: Inundation Due to Dam Failures; The site is not within the inundation plane of any dam.

F: Inundation Due to Storm Flooding; The Federal Emergency Management Agency Flood Limits Map shows the nearest flooding to be associated with Carmel Estuary, approximately 1,500 feet south of the site and at elevations 20 feet below that of the site. As such inundation is of no concern

Seismicity

It is recommended that all structures be designed and built in accordance with the requirements of the Uniform Building Code's current edition, seismic zone IV, Soil Type S_d. All buildings should be founded on undisturbed native soils and/or tested and accepted engineering fill to prevent resonance amplification between soils and the structure.

CONCLUSIONS OF INVESTIGATION

In general, the undisturbed, *in-situ*, native soils and acceptable, certified, engineered fill are suitable for foundation purposes and display engineering properties adequate for the anticipated soil pressures, providing the recommendations in this report are followed.

Special Recommendations

As discussed, the surficial native soils located in the area of development are relatively loose to several feet. In addition free groundwater was encountered in the first bore at approximately 14 feet below grade.

To address the loose surficial soils, it is recommended that the these loose soils and any other unacceptable soils, be processed as engineered fill or that the structure be supported in the firmer soils, found at depth. This recommendation will apparently be most applicable to the exterior of the structure as the design provides a full basement. Support of on grade structures, such as interior or exterior concrete slabs cast on grade, should also be addressed in a similar manner.

In general, the depth of engineering should extend to a minimum of 2 feet from the existing site surface or to depth of disturbance plus six inches, whichever is greater. In areas where the grade is to be cut below this depth, the engineering should extend 0.5 feet below this depth. In all instances the exact depth of engineering shall be determined by a Registered Soils Engineer or his representative.

Due to the possible chance of subsurface water, it is imperative that all portions of the structure embedded below the site surface be fully waterproofed. In addition, it is important that all subsurface walls be back drained from the structure and the subsurface water be collected and pumped to the system discharge.

As designed, retaining walls are to be constructed to provide access to the basement, some of which will be near the property boundary. Consideration in the design and construction of these walls will need to be taken relative to the support of adjacent property during construction. A more detailed review should be made after planning approval and prior to construction.

Any further site activity, especially grading and foundation excavations, should be under the direction of a qualified Soils Engineer or their Representative. All foundation excavations are to be inspected prior to from or reinforcement placement and again prior to placement of concrete. Should the spectrum of development change, this office should be notified so that additional recommendations can be made, if necessary.

Uniform Building Code Geoseismic Classifications

The uniform building code, 1997 edition provides for seismic design values. These values are to be utilized when evaluating structural elements. The geoseismic character is as listed in the following table.

SUMMARY of UBC; 1997; DIV. 5; SOIL PROFILE TYPES; SECTION 1636; SITE CATEGORIZATION PROCEDURE				
Subsection/Table/Figure	Description	Properties		
1636.2	Soil Profile Type	S_d = Stiff Soil		
16.2	Seismic Zone	Zone # 4		
16-I	Seismic Zone Factor Z	0.40		
16-J	Determination of Soil Profile Type	Blow counts between 15 and 50		
16-Q	Seismic Coefficient C_a	0.44 N_a		
16-R	Seismic Coefficient C_v	0.64 N_v		
16-S	Near Source Factor N_a[1]	A: 1.0	B: 1.0	C: 1.0
16-T	Near Source Factor N_v[1]	A: 1.0	B: 1.16	C: 1.0

Foundations and Footings

Geotechnical evaluation indicates that square, round, and continuous spread footings are satisfactory types of support. The minimum embedment for shallow, spread foundations is 12 inches for single stories and 18 inches for two stories into acceptable, *in-situ,* native soils or tested and accepted engineered fill. Embedment depths do not take into account the loose upper top soils, disturbed soils or any other unacceptable soils which exist at the site, e.g., any un-engineered fill, landscaping soils, etc.

VERTICAL SOIL PRESSURES[1]		
FOOTING TYPE	DEAD LOAD, kips/ft^2	DEAD + LL, kips/ft^2
Spread & Isolated	1.80	2.25
LATERAL SOIL PRESSURES[1]		
TYPE	VALUE, lbs/ft^2	
Active Earth Pressure	35 lbs/ft^{3}xH^2 (Equivalent Fluid Pressure)	
Restrained Earth Pressure	62 lbs/ft^{3}xH^2 (Equivalent Fluid Pressure)	
Friction at Base	0.30 × Dead Load	
Passive Earth Pressure	275 lbs/ft^3 × H^2 NOTE2	
Uplift Friction	140 lbs/ft^2 × H	

Notes: LL = Live Load; DL = Dead Load; H = Vertical height of material retained.
One-third increase to be allowed for wind and seismic forces.
[1] For depths into acceptable native materials or engineered fill.
[2] Excludes near surface 0.5 feet of *in-situ* soils.
[3] B and D are zero for depths less than 2 feet into acceptable materials
Maximum value of 8 kips / sq. ft. without review.

Slabs-on-Grade

All slabs should be constructed over a prepared sub-grade placed on suitable *in-situ* native material or tested and accepted engineered fill. Slabs should be underlain as described below.

On-grade slabs which are to receive impervious cover should be placed over a moisture vapor barrier consisting of a waterproof membrane (Moist Stop, 10 mil Visqueen, or equal) with a 2 inch protective sand cover. The waterproof membrane should be placed over a capillarity break consisting of 4 inches of open graded rock; round and sub-round rock is recommended to prevent puncture of the membrane. Open graded crushed aggregate may be utilized, provided the vapor barrier is protected from puncture by a cushion of filter fabric (Mirafi 140N or equal) laid over the aggregate prior to placement of the membrane.

All care and practice required to prevent puncture of the membrane during placement and pouring of covering slabs should be utilized during construction. Unless otherwise required for structural purposes, all slabs should be reinforced with a minimum of No.4, Grade 40, deformed steel reinforcing bar, 24 inches o.c., each way, to prevent separation and displacement in cases of cracking.

Slope Ratio and Drainage

Analysis of test results indicate that cut and fill slope ratios of 2 horizontal to 1 vertical will be satisfactory provided they are landscaped with soil retaining ground covers and are protected against free flowing overlap drainage.

Surface Drainage

All concentrated roof and area drainage should be released to the street drainage. A sub-surface dispersal system MAY NOT be used.

General concentrated surface drainage should be retained at low velocity by [illegible] slope, sod or other energy reducing features sufficient to prevent erosion, with concentrated over-slope drainage carried in lined channels, flumes, pipe or other erosion-preventing installations.

Subsurface Drains

When placing subsurface drains we recommend that filter fabric not be used, as we have found that this type of drainage system may not be effective should the filter fabric become clogged. We would recommend placement of Caltrans Class 1, Type 'A" drain rock, and that any fabric only be place over the top of the trench.

CLASS 1		
SIEVE SIZES	PERCENTAGE PASSING	
	TYPE A	TYPE B
50.0-mm	—	100
37.5-mm	—	95-100
19.0-mm	100	50-100
12.5-mm	95-100	—
9.5-mm	70-100	15-55
4.75-mm	0-55	0-25
2.36-mm	0-10	0-5
75.0-µm	0-3	0-3

General Site Preparation

For those items not directly addressed, it is recommended that all earthwork be performed in accordance with the following, and the Recommended Grading Specifications as found in Appendix B.

Preparation: Site preparation will consist of clearing and grubbing any existing structures and deleterious materials from the site, and the earthwork required to shape the site to receive the intended improvements, in accordance with the recommended grading specifications and the recommendations as provided above.

General Fill: General fill shall be placed only on approved surfaces, as engineered fill, and shall be compacted to 90% Relative Density. Native soils accepted for fill or existing aggregate fill may be used

for fill purposes provided all aggregate larger than 6 inches are removed.

Imported Materials: Materials imported for fill purposes shall be classified as: SAND, group symbol SW, SP, SC or SM, as given in ASTM 2487, "The Classification of Soils For Engineering Purposes." In all cases the portion finer than the No. 200 sieve shall not contain any greatly expansive clays. All soils utilized for fill purposes must be approved by the Soils Engineer prior to placement.

Pavement Grades: All pavement grades shall be of uniform thickness, density and moisture prior to placement of the next grade. Flexure of each or all grades shall not exceed 0.25 inches in 5 feet under an axial load of 18.5 kip.

Aggregate Base Course: All aggregates used for specified base courses, shall be handled in a manner which prevents segregation and non-uniformity of gradation.

Structural Backfill: Trench, wall and structural backfill shall be placed only on approved surfaces, as engineered fill, and shall be compacted to 95% Relative Density. Materials imported for backfill purposes shall have a Sand Equivalent of no less than 30 and shall be classified as Clean Sands as designated in "The Classification of Soils For Engineering Purposes" (ASTM 2487).

Compaction: All re-compacted soils and/or engineered fill should be placed at a minimum 90% Relative Density or at the value required for that portion of the work. All pavement sections should be compacted to a minimum of 95% Relative Density.

Moisture: During compaction moisture content of native soils should be that consistent with the moisture relative to 95% Relative Density and in no case should these materials be placed at less than 3 percent above the specific optimum moisture content for the soil in question. The engineer may elect to accept high moisture compacted soils provided the materials are at 95% Relative Wet Density at that moisture content.

Tests: All materials placed should be tested in accordance with the Compaction Control Tests: "Density of Soil In-Place by Sand Cone Method" (ASTM D-1556), "Moisture-Density Relationship of Soils" (ASTM D-1557), and "Density of Soils In-Place by Nuclear Method" (ASTM D-2922).

Deleterious Materials: Materials containing an excess of 5% (by weight) of vegetative or other deleterious matter may be utilized in areas of landscaping or other non-structural fills. Deleterious material includes all vegetative and non-mineral material, and all non-reducible stone, rubble and/or mineral matter of greater than 6 inches.

Over-Excavations: Over-excavations should include the foundation and pavement envelopes. Such excavations should extend beyond edge of development a minimum of 5 feet and to an imaginary line extending away at a slope of 45 degrees from the edge of development. The process shall include the complete removal of the required soils and subsequent placement of engineered fill. After removal of the soils to the required depth, the base of the excavation shall be inspected and approved by the Soils Engineer or his representative prior to further soils processing or placement. Based on this inspection other recommendations may be made.

Key: The toe of all slopes should be supported by a key cut a minimum of 3 feet into undisturbed soils to the inside of the fills toe. This key should be a minimum of 8 feet in width and slope at no less than 10% into the slope. In addition, as the fill advances up slope benches 3 feet across should be scarified into the fill/undisturbed soil interface.

INSPECTION OF WORK

It is recommended that all site work be inspected and tested during performance by this firm to establish compliance with these recommendations.

NOTIFY:	GRICE ENGINEERING INC.	SALINAS	(831) 422-9619
	561-A Brunken Avenue	MONTEREY	(831) 375-1198
	Salinas, California 93901	FAX	(831) 422-1896

A minimum of 48 hours (2 working days) notification is required prior to commencement of work so that scheduling for testing and inspections can be made.

LIMITATIONS AND UNIFORMITY OF CONDITIONS

The recommendations of this report are based on our understanding of the project as represented by the plans, and the assumption that the soil conditions do not deviate from those represented in this site soils investigation. Therefore, should any variations or undesirable conditions be encountered during construction, or if the actual project will differ from that planned at this time, GRICE ENGINEERING INC. should be notified and provided the opportunity to make addendum recommendations if required.

NOTIFY:	GRICE ENGINEERING INC.	SALINAS	(831) 422-9619
	561-A Brunken Avenue	MONTEREY	(831) 375-1198
	Salinas, California 93901	FAX	(831) 422-1896

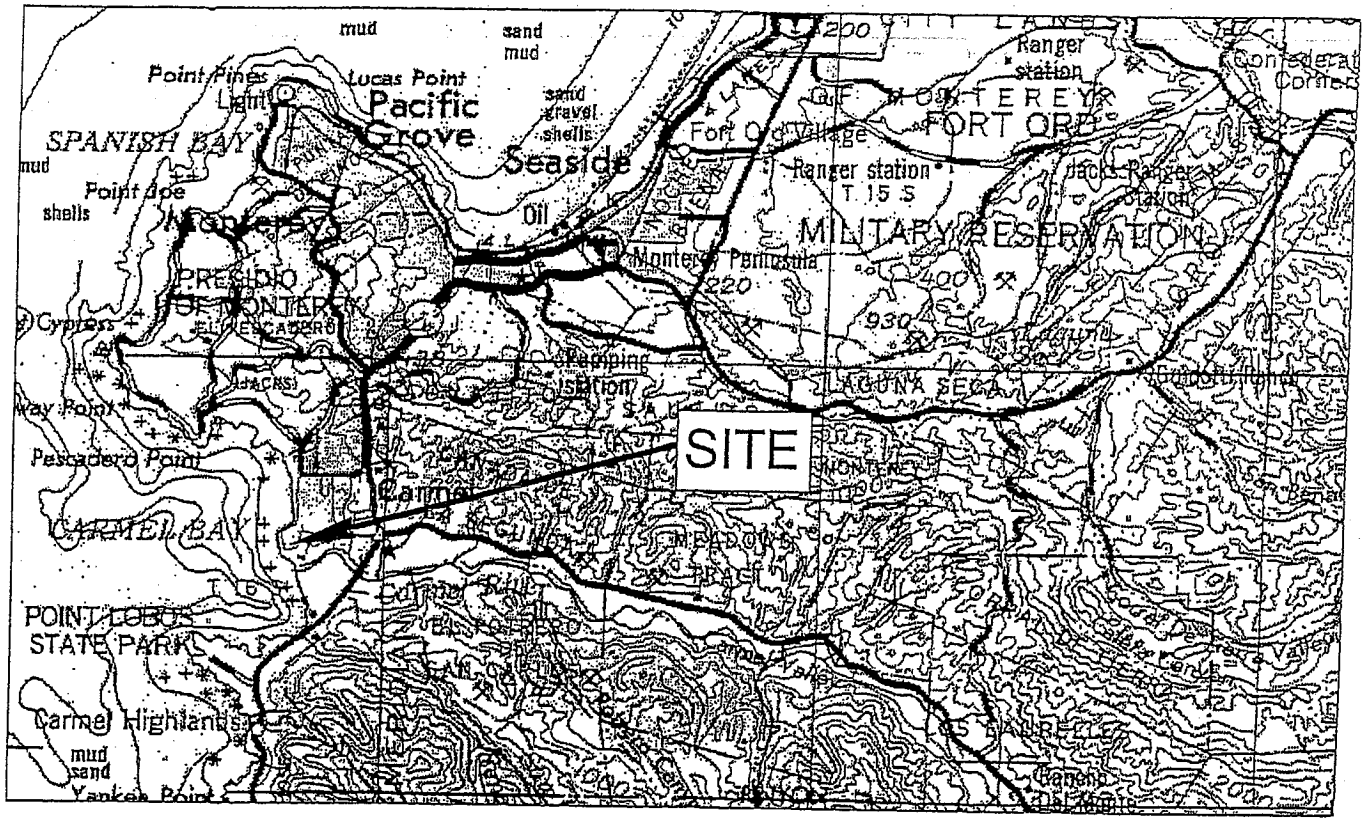
This report is issued with admonishment to the Owner and to his representative(s), that the information contained herein should be made available to the responsible project personnel including the architects, engineers, and contractors for the project. The recommendations contained herein should be incorporated into the plans, the specifications, and the final work.

It is requested that GRICE ENGINEERING INC. be retained to review the project grading and foundation plans to ensure compliance with these recommendations. Further, it is the position of GRICE ENGINEERING INC. that work performed without our knowledge and supervision, or the direction and supervision of a project responsible professional soils engineer renders this report invalid.

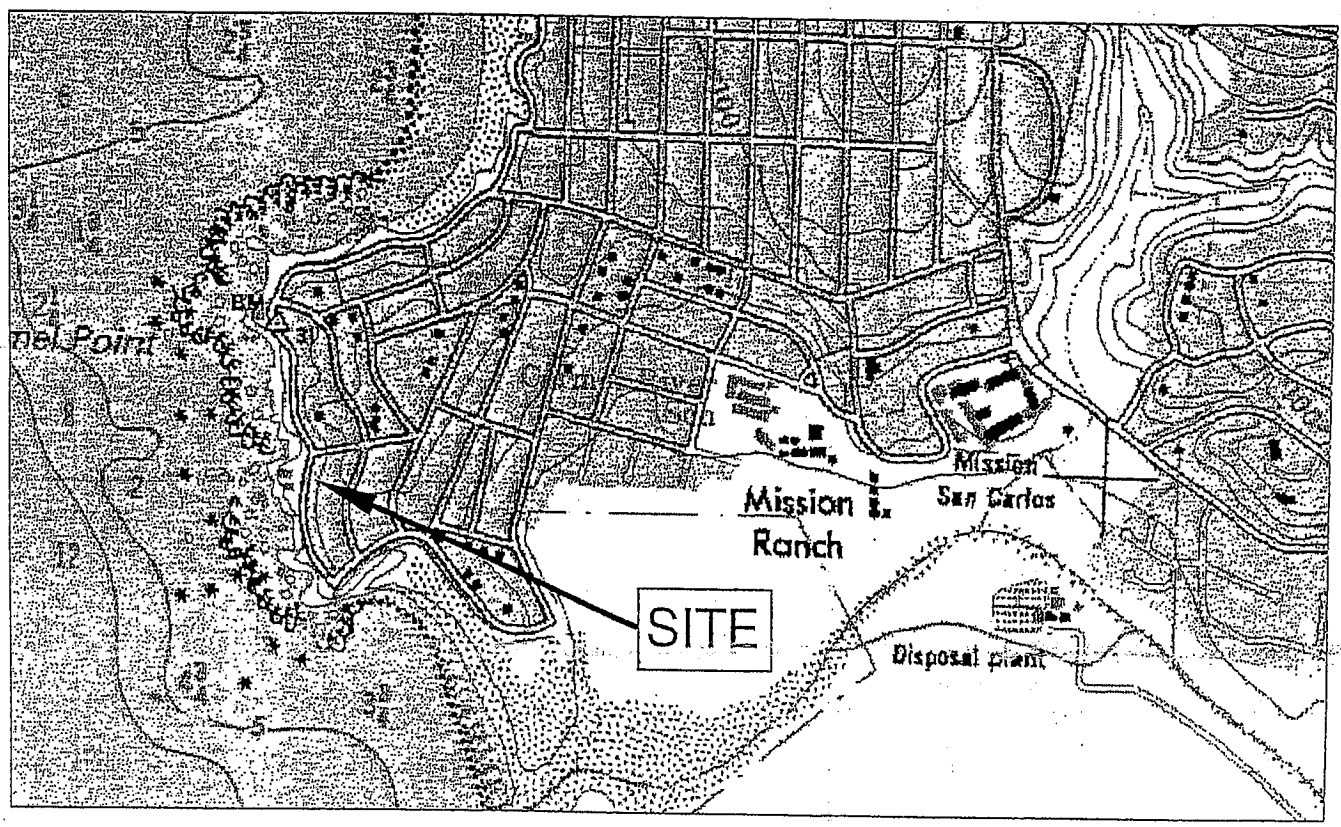
It is our opinion the findings of this report are valid as of the present date, however, changes in the conditions of a property can occur with the passage of time, due either to natural processes or to the works of man as may effect this property. In addition, changes in standards may occur as a result of legislation, or the broadening of knowledge, and these changes may require re-evaluation of the conditions stated herein. Accordingly, the findings of this report may be invalidated wholly, or partially, by changes beyond our control. Therefore, this report is subject to review and should not be relied upon after a period of three years.

REVISED 06-02-1993

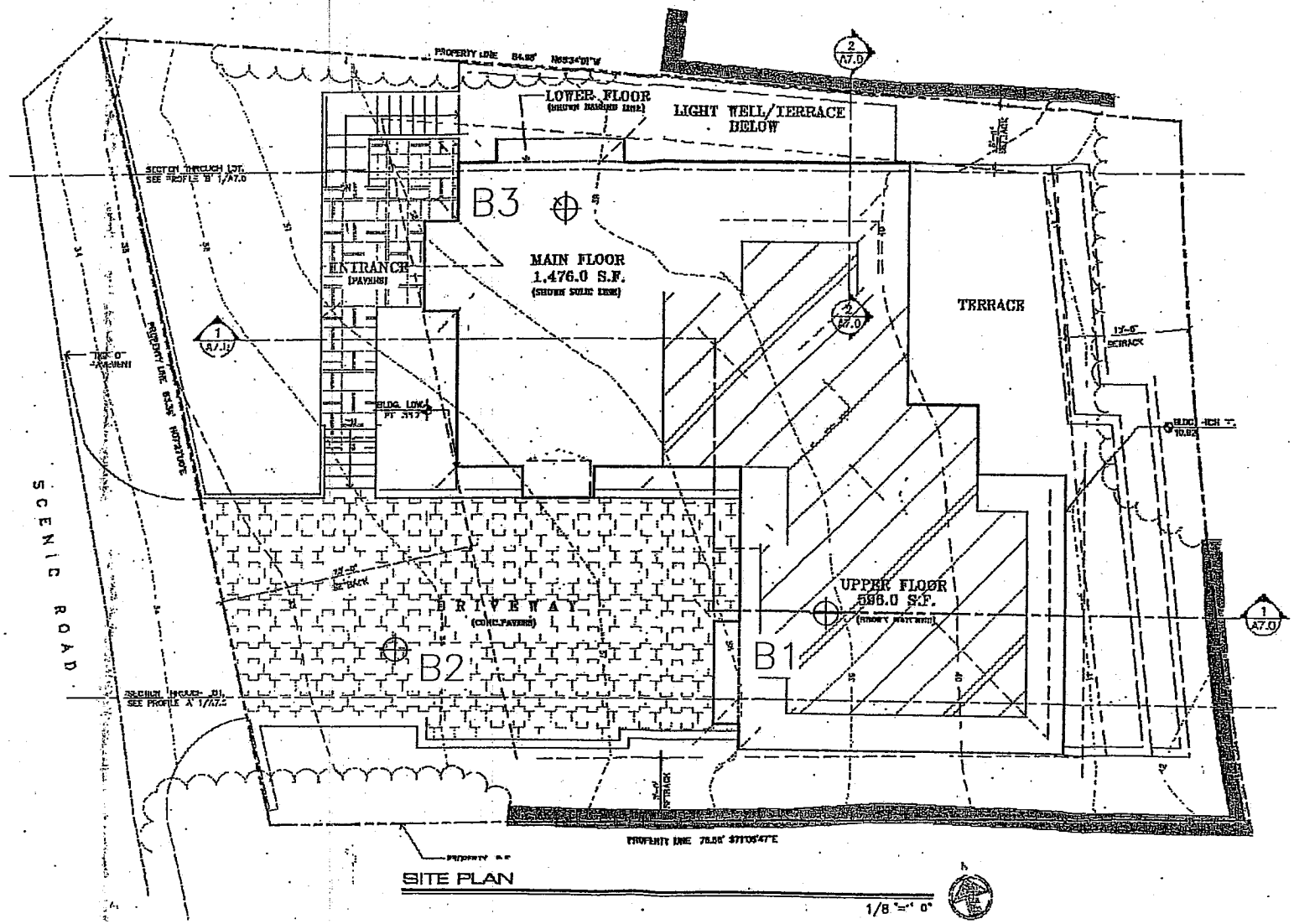
APPENDIX A



Vicinity Map



Location Map



GRICE ENGINEERING INC

ENGINEERING • GEOTECHNICS • HYDROLOGY • SOILS • FOUNDATIONS • EARTH STRUCTURES

501A Bronken Avenue Salinas, California Salinas: (831) 422-9619 Monterey: (831) 375-1196 FAX: (831) 422-1856

SITE PLAN with BORE LOCATIONS

NEW RESIDENCE, 26327 SCENIC ROAD, CARMEL, CALIFORNIA

APPENDIX B

26327 Scenic Road, Carmel, California

Boring No. 1 January 22, 2007

Depth	Symbol	Sample	Blow Count per 6 Inch	Description	Auger Pen.	Density	Moisture	Unconfined	Cohesion	Shear
1.00	SWm			(CUTTINGS) Dark brown | SAND; very fine to medium; few to coarse; granitic | trace-few: silt | slt moist; loose.						
2.00										
3.00		2.50	4.00							
	SWm		7.00	(CUTTINGS-sample) Pale brown | SAND; very fine to medium-fine; few to coarse; trace to med gravel; subround to subang -coarser; granitic | trace-few: slit | slt moist; medium dense..						
4.00			16.00			108.4	6.5	6		
5.00										
6.00	SWmc			(CUTTINGS-sample at 7.5) Yellowish brown | SAND; fine to medium; few to coarse; trace to mod gravel; subround to subang -coarser; granitic | trace-few: slit-clay | damp; medium dense-dense.						
7.00										
8.00		7.50	11.00							
			16.00							
9.00			16.00			111.5	8.1	9		
10.00										
				slt roughness						
11.00	SWmc			(CUTTINGS-sample at 13) Yellowish brown | SAND; fine-medium to coarse; few to coarse and vfine; trace=few to med gravel; subround to subang -coarser; granitic | trace-few: slit-clay; bit clotty, w/ light cement | damp-vdamp ,slt wet tip of sampler; dense..						
12.00										
13.00		13.00	15.00							
			16.00							
14.00				free water at 14 feet after several hours						
			20.00			117.4	13.3	9+		
15.00				drilling resistance slowly increasing						
16.00										
17.00										
				cuttings indicate this should be weathered granite						
18.00	SWcm HDRK			(CUTTINGS) Light olive brown | GRANITE; well weathered, tight | cuttings: SAND; very fine to medium-fine; trace to fine gravel; subang to ang; granitic | few: slit few veins of white clay | dry to moist (varies with fractures carrying water); dense..						
					free water at 18 after drilling					
19.00				very resistant	bottom hole 18.5 after drilling					
20.00										

26327 Scenic Road, Carmel, California

Boring No. 1 January 22, 2007

Depth	Symbol	Sample	Blow Count per 6 Inch	Description	Auger Pen.	Density	Moisture	Unconfined	Cohesion	Shear
21.00										
22.00										
23.00										
24.00				End of bore at 24.0 feet. Free water encountered 13 and in veins in granite Bore backfilled with cuttings						
25.00										
26.00										
27.00										
28.00										
29.00										
30.00										
31.00										
32.00										
33.00										
34.00										
35.00										
36.00										
37.00										
38.00										
39.00										
40.00										

26327 Scenic Road, Carmel, California

Boring No. 2 January 22, 2007

Depth	Symbol	Sample	Blow Count per 6 inch	Description	Auger Pen.	Density	Moisture	Unconfined	Cohesion	Shear
1.00	SWm			(CUTTINGS) Dark brown | SAND; very fine to medium; few to coarse; granitic | trace-few: silt | slt moist; loose.						
2.00										
3.00	SWm			(CUTTINGS-sample) Pale brown | SAND; very fine to medium-fine; few to coarse; trace to med gravel; subround to subang -coarser; granitic | trace-few: silt | slt moist; medium dense..						
4.00				drills very firm, free						
5.00										
6.00	SWm			(CUTTINGS) Yellowish brown | SAND; fine to medium; few to coarse; trace to med gravel; subround to subang -coarser; granitic | trace-few: silt -clay | damp; medium dense-dense.						
7.00										
8.00										
9.00										
10.00	SWm			(CUTTINGS) Yellowish brown | SAND; fine-medium to coarse; few to coarse and vfine; trace=few to med gravel; subround to subang -coarser; granitic | trace-few: slt-clay; bit clotty, w/ light cement | damp-vdamp, slt wet at contact with granite; dense..						
11.00										
12.00				roughness comes up						
13.00	HDRK			resistance WEATHERED GRANITE						
14.00				End of bore at 13.5 feet. No free water after drilling, only slight moisture increase on top of granite Bore backfilled with cuttings						
15.00										
16.00										
17.00										
18.00										
19.00										
20.00										

26327 Scenic Road, Carmel, California

Boring No. 3 January 22, 2007

Depth	Symbol	Sample	Blow Count per 6 inch	Description	Auger Pen.	Density	Moisture	Unconfined	Cohesion	Shear
1.00	SWm			(CUTTINGS) Dark brown | SAND; very fine to medium; few to coarse; granitic | trace-few: silt | slt moist; loose.						
2.00										
3.00	SWm			(CUTTINGS) Pale brown | SAND; very fine to medium-fine; few to coarse; trace to med gravel; subround to subang -coarser; granitic | trace-few: silt | slt moist; medium dense..						
5.00										
6.00	SWmo			(CUTTINGS) Yellowish brown | SAND; fine to medium; few to coarse; trace to med gravel; subround to subang -coarser; granitic | trace-few: silt -clay | damp; medium dense-dense.						
8.00										
9.00										
10.00				slt roughness						
11.00	SWm			(CUTTINGS) Yellowish brown | SAND; fine-medium to coarse; few to coarse and vfine; trace=few to med gravel; subround to subang -coarser; granitic | trace-few: slit-clay; bit clotty, w/ light cement | damp-vdamp; dense..						
12.00										
13.00										
14.00										
15.00				drilling resistance slowly increasing cuttings indicate this should be weathered granite						
16.00	SWm HDRK			(CUTTINGS) Light olive brown | GRANITE; well weathered, tight | cuttings: SAND; very fine to medium-fine; trace to fine gravel; subang to ang; granitic | few: silt few veins of white clay | dry to moist (varies with fractures carrying water); dense..						
17.00				End of bore at 17.0 feet. No free water after drilling, only slight moisture increase on top of granite Bore backfilled with cuttings						
18.00										
19.00										
20.00										

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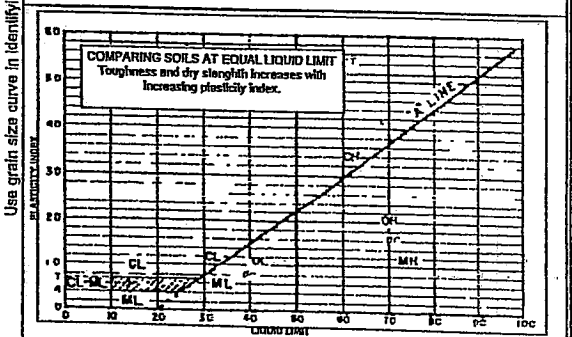
SOIL CLASSIFICATION CHART

UNIFIED SOIL CLASSIFICATION INCLUDING IDENTIFICATION AND DESCRIPTION

FIELD IDENTIFICATION PROCEDURES (Excluding particles larger than 3 inches and basing fractions on estimated weights)				GROUP SYMBOLS N.	TYPICAL NAMES	INFORMATION REQUIRED FOR DESCRIBING SOILS	LABORATORY CLASSIFICATION CRITERIA
COARSE GRAINED SOILS — More than half of material is larger than No. 200 sieve size[a]	GRAVELS — More than half of coarse fraction is larger than No. 4 sieve size	CLEAN GRAVELS (Little or no fines)	Wide range in grain size and substantial amounts of all intermediate particle sizes.	GW	Well graded gravels, gravel-sand mixtures, little or no fines.	Give typical name, indicate approximate percentages of sand and gravel, max. size; angularity, surface condition, and hardness of the coarse grains; local or geologic name and other pertinent descriptive information, and symbol in parentheses. For undisturbed soils add information on stratification, degree of compactness, cementation, moisture conditions and drainage characteristics. EXAMPLE: Silty Sand, gravelly; about 20 % hard, angular gravel particles ½ inch maximum size; rounded and subangular sand grains coarse to fine, about 15 % non-plastic fines with low dry strength, well compacted and moist in place, alluvial sand; (SM).	Determine percentages of gravel and sand from grain size curve. Depending on percentage of fines (fraction smaller than No. 200 sieve size) coarse grained soils are classified as follows: Less than 5%: GW,GP, SW, SP More than 12 %: GM, GC, SW, SC 5% to 12%: Borderline cases requiring use of dual symbols. Use grain size curve in identifying the fractions as given under field identification.
			Predominantly one size or a range of sizes with some intermediate sizes missing.	GP	Poorly graded gravels, gravel-sand mixtures, little or no fines.		
		GRAVELS WITH FINES (Appreciable amount of fines)	Non-plastic fines (for identification procedures see ML below).	GM	Silty gravels, poorly graded gravel-sand-silt mixtures.		
			Plastic fines (for identification procedures see CL below).	GC	Clayey gravels, poorly graded gravel-sand-clay mixtures.		
	SANDS — More than half of coarse fraction is smaller than No. 4 sieve size (For visual classifications, the ¼" size may be used as equivalent to the No. 4 sieve size.)	CLEAN SANDS (Little or no fines)	Wide range in grain sizes and substantial amounts of all intermediate particle sizes.	SW	Well graded sands, gravelly sands, little or no fines.		$C_u = \frac{D_{60}}{D_{10}}$ Greater than 6 $C_c = \frac{(D_{30})^2}{(D_{10} \times D_{60})}$ Between one and 3 Not meeting all gradation requirements for SW Atterberg limits below "A" line or PI less than 4 — Above "A" line with PI between 4 and 7 are borderline cases requiring use of dual symbols Atterberg limits above "A" line or PI greater than 7
			Predominantly one size or a range of sizes with some intermediate sizes missing.	SP	Poorly graded sands, gravelly sands, little or no fines.		
		SANDS WITH FINES (Appreciable amount of fines)	Non-plastic fines (for identification procedures see ML below).	SM	Silty sands, poorly graded sand-silt mixtures.		
			Plastic fines (for identification procedures see CL below).	SC	Clayey sands, poorly graded sand-clay mixtures.		$C_u = \frac{D_{60}}{D_{10}}$ Greater than 6 $C_c = \frac{(D_{30})^2}{(D_{10} \times D_{60})}$ Between one and 3 Not meeting all gradation requirements for SW Atterberg limits below "A" line or PI less than 4 — Above "A" line with PI between 4 and 7 are borderline cases requiring use of dual symbols Atterberg limits above "A" line or PI greater than 7
FINE GRAINED SOILS — More than half of material is smaller than No. 200 sieve size (The No. 200 sieve size is about the smallest particle visible to the naked eye)	IDENTIFICATION PROCEDURES ON FRACTION SMALLER THAN No. 40 SIEVE SIZE	DRY STRENGTH (CRUSHING CHARACTERISTICS)	DILATANCY (REACTION TO SHAKING)	TOUGHNESS (CONSISTENCY NEAR PLASTIC LIMIT)			
SILTS AND CLAYS — Liquid limit less than 50		None to slight	Quick to slow	None	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands with slight plasticity.	Give typical name, indicate degree and character of plasticity, amount and maximum size of coarse grains, color in wet conditions, odor if any, local or geologic name, and other pertinent descriptive information, and symbol in parentheses. For undisturbed soils add information on structure, stratification, consistency in undisturbed and remolded states, moisture and drainage conditions. EXAMPLE: Clayey silt, brown, slightly plastic, small percentage of fine sand, numerous vertical root holes, firm and dry in place, loess; (ML).
		Medium to high	None to very slow	Medium	CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays.	
		Slight to medium	Slow	Slight	OL	Organic silts and organic silt-clays of low plasticity.	
SILTS AND CLAYS — Liquid limit greater than 50		Slight to medium	Slow to none	Slight to medium	MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts.	
		High to very high	None	High	CH	Inorganic clays of high plasticity, fat clays.	
		Medium to high	None to very slow	Slight to medium	OH	Organic clays of medium to high plasticity.	
HIGHLY ORGANIC SOILS		Readily identified by color, odor, spongy feel and frequently by fibrous texture.			Pt	Peat and other highly organic soils.	



PLASTICITY CHART
FOR LABORATORY CLASSIFICATION OF FINE GRAINED SOILS

N. Boundary classifications: Soils possessing characteristics of two groups are designated by combinations of group symbols. For example GW-GC, well graded gravel-sand mixture with clay binder.
N. All sieve sizes on this chart are U.S. Standard.

FIELD IDENTIFICATION PROCEDURES FOR FINE GRAINED SOILS OR FRACTIONS

These procedures are to be performed on the minus No. 40 sieve size particles, approximately $\frac{1}{64}$ inches. For field classification purposes, screening is not intended; simply remove by hands the coarse particles that interfere with the test.

DILATANCY (Reaction to shaking)

After removing portions larger than No. 40 sieve size, prepare a pat of moist soil with a volume of about one-half cubic inch. Add enough water if necessary to make the soil soft but not sticky.

Place the pat in the open palm of one hand and shake horizontally, sticking vigorously against the other hand several times. A positive reaction consists of the appearance of water on the surface of the pat which changes to a livery consistency and becomes glossy. When the sample is squeezed between the fingers, the water and gloss disappear from the surface, the pat stiffens and finally it cracks or crumbles. The rapidity of appearance of water during shaking and of its disappearance during squeezing assist in identifying the character of the fines in a soil.

Very fine clean sands give the quickest and most distinct reaction whereas a plastic clay has no reaction. Inorganic silts, such as a typical rock flour, show a moderately quick reaction.

DRY STRENGTH (Crushing characteristics)

After removing particles larger than No. 40 sieve size, mold a pat of soil to the consistency of putty, adding water if necessary. Allow the pat to dry completely by oven, sun, or air drying, and then test its strength by breaking and crumbling between the fingers. This strength is a measure of the character and quality of the colloidal fraction contained in the soil. The dry strength increases with increasing plasticity.

High dry strength is characteristic for clays of the CH group. A typical inorganic silt possesses only very slight dry strength. Silty fine sand and silts have about the same slight dry strength, but can be distinguished by the feel when powdering the dried specimen. Fine sand feels gritty whereas a typical silt has the smooth feel of flour.

TOUGHNESS (Consistency near plastic limit)

After removing particles larger that the No. 40 sieve size, a specimen of soil about one-half inch cube in size is molded to the consistency of putty. If too dry, water must be added and if sticky, the specimen should be spread out in a thin layer and allowed to lose some moisture by evaporation. Then the specimen is rolled out by hand on a smooth surface of between the palms into a thread about one-eight inch in diameter. The thread is then folded and rerolled repeatedly. During this manipulation the moisture content is gradually reduced and the specimen stiffens, finally loses its plasticity, and crumbles when the plastic limit is reached.

After the thread crumbles, the pieces should be lumped together and a slight kneading action continued until the lump crumbles.

The tougher the thread near the plastic limit and the stiffer the lump when it finally crumbles, the more potent is the colloidal clay fraction in the soil. Weakness of the thread at the plastic limit and quick loss of coherence of the lump below the plastic limit indicate either inorganic clay of low plasticity, or materials such as kaolin-type clays and organic clays which occure below the A-line.

Highly organic clays have a very weak and spongy feel at the plastic limit.

ADOPTED BY: CORPS OF ENGINEERS AND BUREAU OF RECLAMATION-JANUARY 1952

103-D-347

APPENDIX C

EROSION CONTROL PLANNING

General Description

1. Design the project to fit the topographic and hydrologic features of the site. It is important to minimize grading of or near steep slopes. Disturbing native vegetation and natural soil structure allows runoff velocity and transport of sediments to increase.

2. Maintain runoff rates at or below pre-development levels. Runoff from post-development impervious structures should be retained on-site. The preferred method is to filter it back into the soil by means of percolation trenches intended for storm runoff only. Storm runoff should never be directed to septic tank system leachfields.

   If retention is not possible, post-development generated runoff should be detained on-site and released in a controlled fashion. Runoff flows should be directed into pipes or lined ditches and then onto an energy dissipater to remove sediment before discharging the runoff into streams or drainage ways. De-silting the runoff may take form of stilling basins, gravel berms, reforested vegetation screens, etc.

3. During construction, never store cut and fill material where it may wash into streams or drainage ways. Keep all culverts and drainage facilities free of silt and debris. Keep emergency erosion control materials such as straw mulch, plastic sheeting, and sandbags on-site and install these at the end of each day as necessary.

4. Re-vegetate and protect exposed soils by October 15. Use appropriate grass/legume seed mixes and/or straw mulch for temporary cover. Plan permanent vegetation to include native and drought tolerant plants. Seeding and re-vegetation may require special soil preparation, fertilizing, irrigation, and mulching.

RECOMMENDED EARTHWORK GRADING SPECIFICATIONS

E:1 General Description:

1.1 This item shall consist of all clearing and grubbing; preparation of land to be filled; excavation and fill of the land; spreading, compaction and control of the fill; and all subsidiary work necessary to complete the graded area to conform with the lines, grades and slopes as shown on the approved plans.

1.2 The Contractor shall provide all equipment and labor necessary to complete the work as specified herein, as shown on the approved plans as stated in the project specifications.

E:2 Tests:

2.1 The standard test used to define maximum densities of all compaction work shall be the A.S.T.M. D-1557, Moisture Density of Soils, using a 10-pound ram and 18-inch drop. All densities shall be expressed as a relative density in terms of the maximum density obtained in the laboratory by the foregoing standard procedure.

2.2 In-place density shall be determined by Test Methods A.S.T.M. D-1556, Density of Soil In-Place by Sand Cone Method and D-2922, Density of Soil In-Place by Nuclear Method.

E:3 Clearing, Grubbing and Preparing Areas To Be Excavated Or Filled:

3.1 All vegetable matter, irreducible material greater than 4 inches and other deleterious materials shall be removed from the areas in which grading is to be done. Such materials not suitable for reuse shall be disposed of as directed.

3.2 After the foundation for fill has been cleared, it shall be brought to the proper moisture content by adding water or aerating and compacting to a Relative Density of not less than 90% or as specified. The soils shall be tested to a depth sufficient to determine quality and shall be approved by the Soils Engineer for foundation purposes prior to placing engineered fill.

E:4 Materials:

4.1 The material for engineered fill shall be approved by the Soils Engineer before commencement of grading operations. Any imported material must be approved for use before being brought to the site. The material used shall be free from vegetable matter and other deleterious materials.

4.2 Imported materials for engineered fill shall consist of non-expansive soil with maximum aggregate size of 4 inches, a PI less than 15 and/or a Cu greater than 4 and shall be approved by the Engineer.

E:5 Placing, Spreading and Compacting Fill Material:

5.1 The selected fill material shall be placed in layers which, when compacted, shall not exceed 6 inches in thickness. Each layer shall be spread evenly and shall be thoroughly mixed during the spreading to ensure uniformity of material in each layer. Fill shall be placed such that cross fall does not exceed 1 foot in 20 unless otherwise directed.

5.2 All fills on slopes greater than 1 vertical to 6 horizontal shall be keyed into the adjacent soil.

5.3 When fill material includes rock or concrete rubble, no irreducible material larger than 4 inches in greatest dimension will be allowed except under the direction of the Soils Engineer.

5.4 The moisture content of the fill material shall be maintained in a suitable range to permit efficient compaction. The Soils Engineer may require adding moisture, aerating, or blending of wet and dry soils.

5.5 Each layer shall be compacted to a relative density of not less than 90% relative density or as specified in the soils report and on the accepted plans. Compaction shall be continuous over the entire area of each layer.

5.6 Field density test shall be made by the Soils Engineer of each compacted layer. At least one test shall be made for each 500 cubic yards or fraction thereof, placed with a minimum of two tests per layer in isolated areas. Where a sheeps'-foot roller is used, the soil may be disturbed to a depth of several inches. Density tests shall be taken in compacted materials below the disturbed surface. When these tests indicate that the density of any layer of fill or portion thereof, is below the required density, that particular layer or portion shall be reworked until the required density has been obtained.

5.7 All earth moving and work operations shall be controlled to prevent water from running into excavated areas. All such water shall be promptly removed and the site kept dry.

E:6 Seasonal Limits:

6.1 When the work is interrupted by rain, fill operations shall not be resumed until field tests by the Soils Engineer indicate that the moisture content and density of the fill is as previously specified and soils to be placed are in suitable condition.

E:7 Unusual Conditions:

7.1 In the event that any unusual conditions are encountered during grading operations which are not covered by the soil investigation or the specifications, the Soils Engineer shall be immediately notified such that additional recommendations may be made.

SPECIFICATIONS FOR ROCK UNDER FLOOR SLABS

Definition

Graded gravel of crushed rock for use under floor slabs shall consist of a minimum thickness of mineral aggregate placed in accordance with these specifications and in conformance with the dimensions shown on the project plans. The minimum thickness is specified in the accompanying report.

Material

The mineral aggregate for use under floor slabs shall consist of broken stone, crushed or uncrushed gravel, quarry waste, or a combination thereof. The aggregate shall be free from adobe, vegetable matter, loam, volcanic tuff, and other deleterious substances. It shall be of such quality that the absorption of water in a saturated dry condition does not exceed 3 percent of the oven dry weight of the sample.

Grading

The mineral aggregate shall be of such size that the percentage composition by dry weight as determined by the use of laboratory sieves, U.S. Standard, in compliance with ASTM C 136, Standard Method for Sieve Analysis of Fine and Coarse Aggregates, will conform to the following grading specification:

SIEVE SIZE	PERCENTAGE PASSING SIEVE
3/4 inch	100 %
No. 4	0 - 10 %
No. 200	0 - 2 %

Placing

Sub-grade upon which gravel or crushed rock is to be placed shall be prepared as outlined in the Recommended Grading Specifications. In addition, the Sub-grade shall be kept moist so that no drying cracks appear prior to pouring slabs. If cracks appear, Sub-grade shall be moistened until cracks close.

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GRICE ENGINEERING AND GEOLOGY INC

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File No. 4943-07.01
July 24, 2007

Mr. Anatoly Ostretsov
International Design Group
721 Lighthouse Avenue
Pacific Grove, California 93950

Project: Proposed Residence
26327 Scenic Road
Carmel-by-the-Sea, California
A.P.N. 009-442-013

Subject: Temporary Shoring and Permanent Retention for Basement Construction

Dear Mr. Ostretsov;

Pursuant to your request and discussion with Mr. Craig Spenser of the Monterey County Planning Department, we have again reviewed the project and our given recommendations relative to the temporary shoring and permanent retaining structures for the basement. As discussed the Monterey County Planning and Building Department is concerned about the recommendation given to perform a detailed review after planning approval and prior to construction relative to this topic.

As reviewed we find no reason for further site evaluation provided that Best Management Practices are utilized in the construction. Such methods will ensure that no significant impact will be incurred to adjacent properties due to the proposed construction.

This report and the recommendations herein are made expressly for the above referenced project and may not be utilized for any other site without written permission of GRICE ENGINEERING, INC. Please feel free to call this office should you have any questions regarding this report.

Very truly yours,
GRICE ENGINEERING, INC.

REGISTERED PROFESSIONAL ENGINEER
LAWRENCE E. GRICE
No. 66857
EXP. 9/30/08
CIVIL
STATE OF CALIFORNIA

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The Resources Agency
DEPARTMENT OF FISH AND GAME
http://www.dfg.ca.gov
Environmental Review and Permitting
1416 Ninth Street, Suite 1260
Sacramento, California 95814

ARNOLD SCHWARZENEGGER, Governor

CEQA Filing Fee No Effect Determination Form

Applicant Name: Skeen & Chang **Date Submitted: August 28, 2007**

Applicant Address: P. O. Box 7505, Menlo Park, CAA 94026

Project Name: Skeen & Chang, Single Family Dwelling

CEQA Lead Agency: County of Monterey
CEQA Document Type: (ND, MND, EIR)
SCH Number and/or local agency ID number: PLN060735

Project Location: 26327 Scenic Road, Carmel, CA

Brief Project Description: The proposed project entails the construction of a new 2,072 square foot, 3-story single family dwelling including an attached garage.

Determination: Based on a review of the Project as proposed, the Department of Fish and Game has determined that for purposes of the assessment of CEQA filing fees [F&G Code 711.4(c)] the project has no potential effect on fish, wildlife and habitat and the project as described does not require payment of a CEQA filing fee. This determination does not in any way imply that the project is exempt from CEQA and does not determine the significance of any potential project effects evaluated pursuant to CEQA.

Please retain this original determination for your records; you are required to file a copy of this determination with the County Clerk after your project is approved and at the time of filing of the CEQA lead agency's Notice of Determination (NOD). If you do not file a copy of this determination with the County Clerk at the time of filing of the NOD, the appropriate CEQA filing fee will be due and payable.

Without a valid No Effect Determination Form or proof of fee payment, the project will not be operative, vested, or final and any local permits issued for the project will be invalid, pursuant to Fish and Game Code Section 711.4(c)(3).

DFG Approval By: _____

Title: Staff Environmental Scientist Date: 08/28/07

Project No. M9589
27 November 2007

IDG
International Design Group
721 Lighthouse Avenue
Pacific Grove, California 93950

Attention: Mr. Anatoly Ostretsov

Subject: Geotechnical Response to Four Specific County Questions

Reference: Proposed Single-Family-Residence
Skeen/Chang - Owners
26327 Scenic Road
Carmel, Monterey County, California

Dear Mr. Ostretsov:

At your request, Haro, Kasunich & Associates is pleased to present this letter summarizing our geotechnical response to four specific county questions for the proposed Skeen/Chang single family residence which will consist of a main house, basement and related site improvements, located at 26327 Scenic Road in Carmel, Monterey County, California.

Scope of Work
The purpose of our work was to analyze the available documentation and explore the surficial soils at the site in order to locate the original buried topsoil horizon, as a 'marker bed', and determine the original average natural grade and develop written general text responses to the following four specific questions posed by Craig Spencer, Assistant Planner, County of Monterey Resource Management Agency-Planning Department, County of Monterey Zoning Department.

1. What constitutes Best Management Practices in this case? Is temporary shoring required? How is that done?
2. Will ground water be encountered during excavation? If so, how would it impact construction?
3. What is the average natural grade?
4. Address the concern regarding whether or not the retaining walls for the project will be structurally supporting loads from adjacent properties structures, soils, and vegetation and to what degree.

Our Specific Scope of Services was as follows:

1. Site visit with you on November 16, 2007.

2. Review the preliminary data including the following:

   - site plan, elevations and sections prepared by IDG dated 6-20-07 (latest rev. 11-09-07)
   - Geologic Report for the lot by Foxx, Nielsen and Associates dated June 1999.
   - Recent Topographic Survey by Baseline, undated.
   - Google earth images (3) current
   - Archeology reports dated 3-25-07, 9-29-07 and 1-17-07.
   - County documents dated 4 April 2000 and Board of Supervisors Documents dated 6 June 2000 for an earlier approved proposed single-family-residential development at the property
   - Geology/Geotechnical Report by Grice Engineering dated 1-24-06
   - Erosion Control Report by Neill Engineers dated 11-10-07 for the earlier project.
   - Letter written by Ray Parks dated 11-7-07 to Zan Hensen at neighbor's (David Sabih) behalf.
   - Letter written by Zan Hensen to Monterey County Resource agency dated 10-24-07 at neighbor's (David Sabih) behalf.

3. Excavation of 2 shallow hand dug pits up to 22 inches deep on 20 November 2007. The pits were located at the high and low points of the proposed structure as marked on the plans. Four inch diameter borings were hand drilled in the bottom of the pits up to about 6 1/2 feet below existing grade. A third boring was drilled in the southeast corner of the lot. Soil encountered was logged continuously.

4. Engineering analysis of collected data.

5. Discussion with you regarding the results of our investigation.

6. Prepare general written response to the four specific questions indicated above.

Site Description

The vacant lot is 4,700 s.f. is size and consists of a relatively gentle uniform slope descending westerly to Scenic Road. The topographic contours curve slightly inward of the lot on the south side suggesting possible cutting and they also curve slightly outward of the lot suggesting possible filling on the north side. The lot is currently covered with about 8-inch high, green grassy vegetation and few bushes and ivy toward the inboard end of the lot. The lot is surrounded by house developments with improvements located on or proximal to the property boundaries.

The home to the north of the subject lot has a basement/garage excavation proximal to the north property line as well as other patio and site wall improvements. The grade on either side of the north property line is mostly the same with up to 20 inches higher on the subject lot near the back (east) end of the lot. We understand the structure to the north was constructed about 4 or 5 years ago and included a garage/basement excavation of which the spoils generated were temporarily piled on the subject property and then most fill was subsequently removed. The current Google Earth image of the subject lot shows bare soil dominating the lot and is interpreted as the remnants of the grading operation performed in removal and spreading of the fill pile.

The home to the south of subject contains a retaining wall, positioned nearly along the south property line. The wall varies in height. The grade on the subject lot near the south property line varies and was measured approximately 3 ¾ feet higher than the southern property grade at approximately the midpoint of the south property line. Likewise, the lot to the south has improvements and structures proximal to the south property line.

The home on the east side of the lot is also improved but is further setback from the property line. A rock wall/fence is positioned along half of the east property line. The grade on the east lot is approximately 2 feet higher than the subject lot. It is unclear whether the grade on the property to the east is fill or native material.

The lot is bordered by Scenic Road the west side.

Document Review

The two older archeology reports and the geology report, all of 1999, were prepared prior to construction of the home to the north and prior to the placing of fill on the subject lot. The description in the archeology report indicates the site was overgrown with vegetation and the color of the upper soil was described in the reports as dark brown and dark grey brown. The latter archeology report describes the upper 20 cm (about 7

½ inches) as highly disturbed with modern building materials such as concrete, nails and 'other modern trash'.

The 1999 geology report does not go into detail regarding site soil, however, it describes the site as densely vegetated and describes the general geology at the site as terrace deposit overlying weathered granitic material. The report suggests perched water may be encountered on the weathered granitic bedrock.

The recent geotechnical/geology hazard report by Grice, 2006, was performed after the grading operation to remove the fill pile on the subject site. They drilled three exploratory borings on the subject lot up to 24 feet deep. The logs indicate resistance was encountered between 12 ½ and 15 feet in all borings and a 'very resistant' indication was logged at 18 1/2 feet in Boring 1. No indication of drilling refusal was indicated. Blow counts of 36 with the 3-inch o.d. sampler were obtained at about 14 feet, which we interpret as only medium dense but is described in the logs as dense. In their report, the boring logs indicate the color of the upper soil as dark brown in all borings and indicate color change at 3 and 6 feet in all borings. The soil is described as yellow brown at 6 feet. The report summarizes that weathered granitic bedrock was encountered between 12 and 17 feet below grade and is well weathered for the first several feet but becomes resistant with depth. The report indicates water was encountered in the first boring at 14 feet below grade.

Field Investigation

On 20 November 2007 we excavated three exploratory pits and/or borings. A 1-foot square pit was hand dug with shovel to 17 inches below existing grade in Pit 1 located at the "low point" of the structure as marked on the plan. Likewise, a pit was excavated to 22 inches at the "high point". A 4-inch diameter boring was drilled with hand auger equipment at the bottom of the pits to about 6 ½ feet in P-1 and 6 ¼ feet in P-2. P-3 consisted of a hand augured boring from the surface to about 6 ¼ feet below grade.

Below a 1-inch thick dark brown, organic, grass root zone, we encountered 7 inches of yellow brown, orange clayey granitic fill in Pit 1. The fill is the exact description of what would be expected to be encountered in the excavated garage soils from the neighboring property. Below this, we encountered a sharp contrasting contact with a 4-inch thick, native, organic, loose, dark brown silty sandy, **lightly-laden root hair zone**. Based on the "heavy or densely' adjectives used in previous descriptions of the vegetation one would expect a deeper and heavier-laden root zone here. We then encountered a 5-inch thick zone of slightly lighter, dark (slight reddish) brown silty sand with a trace amount of root hairs. Then, medium brown sand was encountered to about

4 feet. The last visible root hair was at 36 inches below grade. Yellow brown, silty sand was encountered from about 4 to about 6 feet below grade. Then, yellow brown, orange clayey sand (d.g.-like) was encountered to depth explored, 80 inches. We found a small chunk of old concrete at two inches and an old twisty tie and an old opaque white glass bottle shard at 9 inches and several abalone shell fragments in the dark brown soil zones. We interpret the debris as old trash that penetrates from the original surface into the subsoil by the soil mixing and bioturbation disturbance processes. We interpret the fill to be left over from the neighbors excavation fill pile placed on the subject site. We interpret the buried lightly-laden rooty dark brown soil as part of the original topsoil horizon. Based on the relatively thin 4-inch section of light root hairs in P-1, as compared to Pit 2, located beyond the grading removal operation, an upper more heavily laden root horizon is expected but appears to be missing or cut down.

Below the thick grassy vegetation, In Pit 2, located at the "high point", the yellow brown fill was not encountered. Native, organic, **heavily rooted**, dark brown loose, silty sand was encountered from the surface to 9 inches deep. We interpret this to be the original grade of the topsoil horizon. Below this, we encountered dark brown **light root hair zone** to about 13 inches, which appears to correlate with 4-inch thick zone in P-1. The soil profile then transitioned into a trace root zone with a lighter dark brown (reddish) soil to 24 inches. Medium brown soil was then encountered to 3½ feet. Yellow brown sand was encountered to 5½ feet then the yellow brown, very moist, orange clayey granitic sand to the depth explored 76 inches below grade. The last visible root hair was observed to be about 36 inches below grade. We found abalone shards at 3, 10 and 18 inches and a clear glass shard at 16 inches. Again, we interpret the debris as material that penetrates from the surface into the subsoil by the soil mixing and bioturbation disturbance processes.

In P-3 we encountered nearly an identical soil profile as P-2. An abalone fragment was encountered at 3½ feet below grade.

The last observed root hair in all three borings was consistently at 36 inches below existing grade.

Best Management Practices and Shoring

Best Management Practices for temporary and permanent runoff, erosion and sediment control at the subject site can satisfactorily be accommodated by following the requirements in the Monterey County Grading and Erosion Control Ordinances and the Erosion Control Report by Neill Engineers Corp. dated 1999. Specific products typically used to control sediment are sediment traps wrapped with sediment control waddles.

Clean water should be discharged to street gutter system and not on property as it would be counterproductive for basement drainage efforts. Erosion control plans prepared in accordance with the recommended practices, can be produced at the design stage by a licensed civil engineer.

Temporary shoring will absolutely be necessary for construction of the basement and any cut excavations of the proposed development that are proximal to existing improvements. The design must consider adjacent surcharge loads of existing improvements. The shoring must be constructed so that it actively applies pressure up against a smooth wall of the excavation, via tight-fitting wood lagging or steel plates, or hydraulics or tight-fitting lateral bracing. The lateral pressure should be equivalent to the lateral earth pressured removed in the excavation plus seepage and adjacent structure surcharge load. The pressure should not be greater or buckling may occur in the neighboring property. There must not be a void space between the shoring and the excavation wall. Seepage could be allowed to weep through a pencil-width gap in lagging or plates and collected at a low point beyond the excavation and pumped out to a sediment trap. Shoring design is often an interdisciplinary effort between the contractor and structural engineer. Pile driving is not recommended due to potential damaging vibration distress to neighboring developments. Tiebacks and shotcrete walls are an effective way to hold back excavations, however they may infringe on subterranean structures on adjacent property and permission from neighboring lot owners may be difficult. Walls with kickers are a viable option however can be cumbersome in the work area and hamper construction. A drilled solider beam and wood lagging (or steel plating) wall, constructed 'top-down', possibly braced at the top, may be most conducive to the site. A braced box structure is also an option. Typically, the temporary shoring design is submitted to the architect by the contractor for approval or a structural engineer could develop temporary shoring plans during design stage as part of the design plans.

For example a drilled soldier beam and wood lagging wall is constructed prior to any excavation by drilling holes typically spaced 6 to 12 feet apart at a diameter slightly less than the width of the I beam flange. The beam is pushed down the hole. The void space between the flange and the side wall of the drill hole is backfilled with pea gravel, grout or control-density fill (to the top on the excavation side) in order to apply constant lateral support of the sidewall of the hole. The excavation begins from the top to a width just shy of the full width of the steel web then wood lagging or steel plates are placed into the web tight up against the smooth sidewall of the excavation. The lagging/plating is then pushed down with successive excavation depths, keeping tight up against the wall, allowing for weeping between the lagging/plating. Water is collected and diverted

to an appropriate low point and pumped to a sediment trap. If the contractor and designers follow the Best Management Practices the neighboring properties will not be impacted.

Groundwater and Construction Implications

Groundwater will likely be encountered during the basement excavation. It may weep out from anywhere in the cut face especially at the contact with the weathered granite. Water infiltration into the construction site from surface and subsurface will hamper construction and must be anticipated and accommodated in shoring design as well as permanent foundation and basement drainage design. Grading to a low point or grading of a perimeter trench surrounding the basement excavation could be considered. Basement slab and retaining wall drainage systems such as a gravel blanket and pipe manifold system should be independent and thoroughly waterproofed. Basement foundations could consist of a structural mat slab situated on a piped gravel drainage blanket system. Temporary and permanent drainage plans could be developed at design stage. If water is encountered in foundation excavations, concrete can still be poured via the tremmie process, which being heavier, displaces and purges the water out of the excavation. As per common practice, the displaced water is channeled to the sediment trap at a low point and pumped to a temporary on-site detention basin located down slope from the construction activity.

Original Average Natural Grade

It appears our subsurface investigation correlates well with the collection of previous investigations. Based on our subsurface investigation, part of the original topsoil is buried under 7 inches of fill at the 'low point' location. The fill description matches the earth material that must have been encountered in the neighboring garage excavation. The existing grade at the highpoint is the original native grade as seen in the thick, surficial 9 inch-thick **heavy rooty topsoil horizon**. Heavy roots are expected in the topsoil due to the previous descriptions of "dense and heavy" vegetation. At the 'low point' the 9 inch heavy rooty topsoil horizon is missing, and only 4 inches the light rooty zone remains. Based on our exploration, "heavily vegetated" descriptions in the older reports, and the contour lines of the topographic survey, we surmise that the expected **heavy rooty zone** must have been cut out (stripped) at the low point during the grading fill removal process; and, that during the removal, remnant fill was spread out creating the 7 inch thick fill veneer. The original grade at the low point should be located at the equivalent elevation that corresponds to at least a 9 inch heavy root topsoil horizon.

Therefore, if the 7 inch fill zone was removed from the 'low point" location and a 9 inch (minimum) heavy root topsoil horizon was replaced the resulting original natural grade at the low point would be 2 inches higher resulting in an original average natural grade to be ((36.70' + 2/12') + 40.92')/2 = 38.89'.

Retaining Wall Surcharge

Temporary and permanent retaining and basement walls and all foundations, must structurally accommodate and support loads from structures, soils, and vegetation on adjacent properties. Accommodate adjacent surcharge loads situated within the Coulomb Failure Wedge Zone (or other approved theory) behind the proposed walls, at a minimum, or situated within an imaginary 1.5:1 plane projected upward from the bottom edge of retaining wall footings, at a maximum. Walls will be designed by a structural engineer according to current practices. Degree of lateral pressures will be equivalent to the Coulomb or Rankine lateral earth pressure ratio applied to the vertical surcharge loads, at the discretion of the structural engineer.

Respectfully submitted,

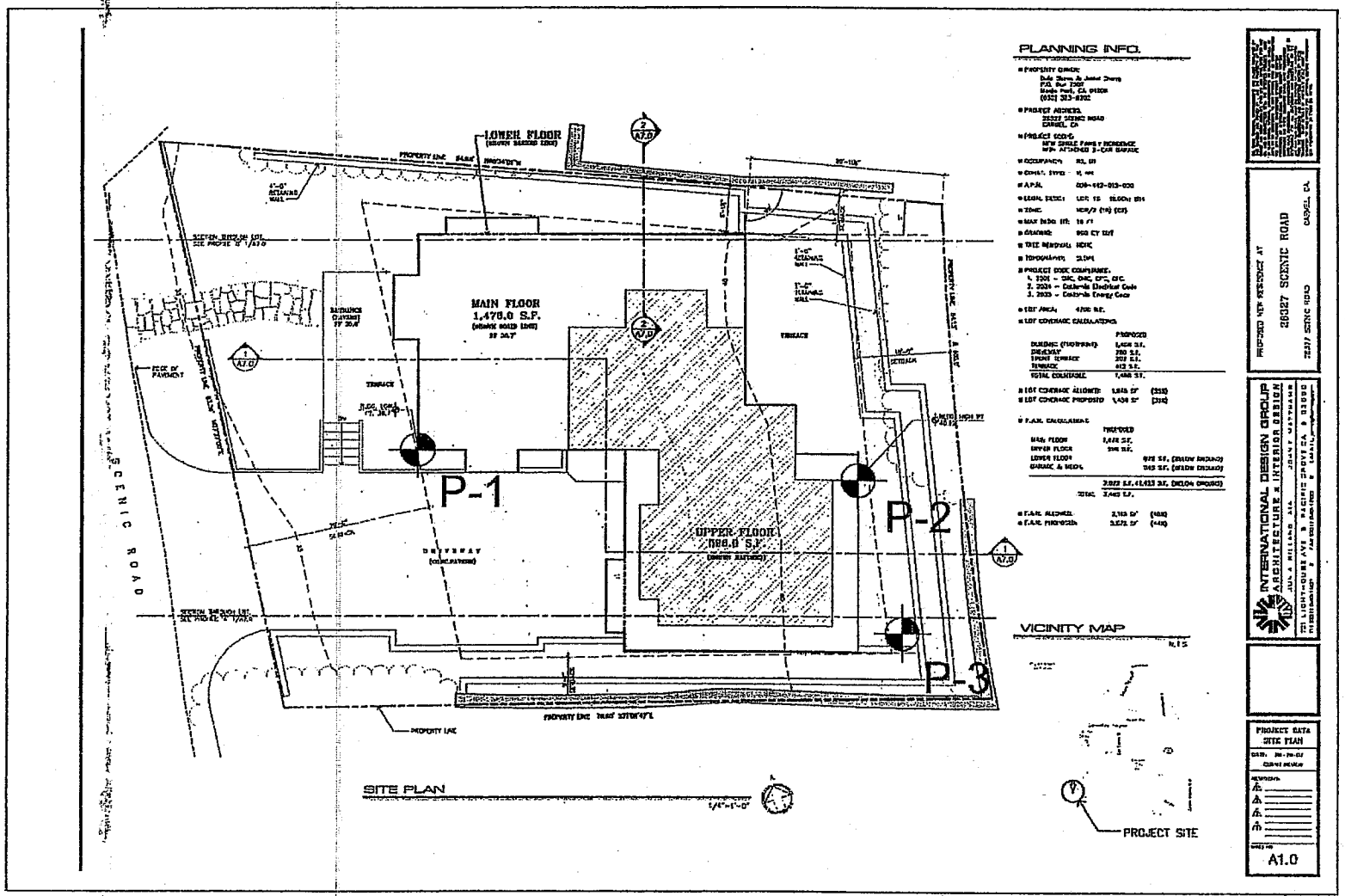
HARO, KASUNICH & ASSOCIATES, INC.

Vicki Odello
C.E. 52651

VO/sq

Enclosures

Copies: 4 to Addressee

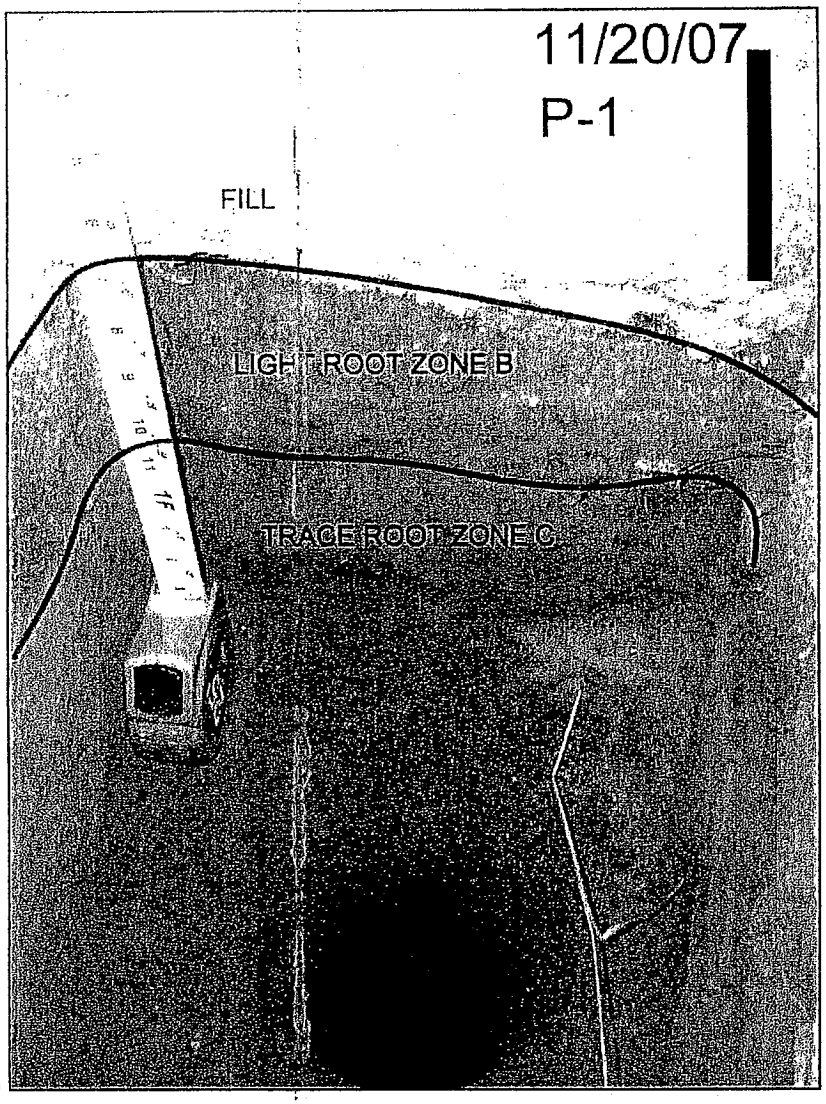


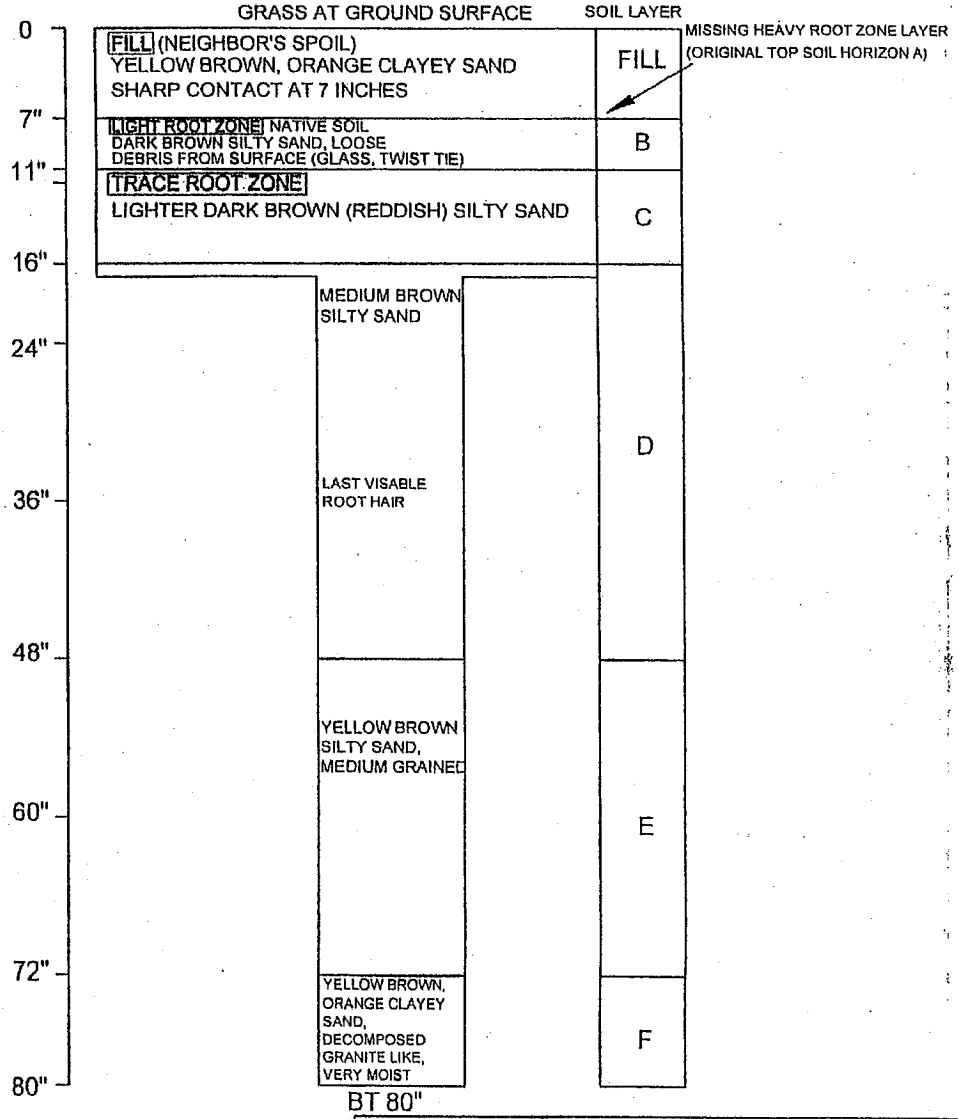
BORING SITE PLAN
26327 Scenic Road
Carmel, Monterey County, California

SCALE: NTS	Site Plan From International Design Group, Pacific Grove
DRAWN BY: JD	
DATE: NOVEMBER 2007	HARO, KASUNICH & ASSOCIATES, INC.
REVISED:	GEOTECHNICAL AND COASTAL ENGINEERS
JOB NO. M9589	116 E. LAKE AVENUE, WATSONVILLE, CA 95076
	(831) 722-4175

FIGURE NO.

OF 1





SOIL DESCRIPTION

26327 Scenic Road
Carmel, Monterey County, California

SCALE	NTS
DRAWN BY	JD
DATE:	NOVEMBER 2007
REVISED:	
JOB NO	M9589

HARO, KASUNICH & ASSOCIATES, INC.
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116 E. LAKE AVENUE, WATSONVILLE, CA 95076
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FIGURE NO.

SHEET NO. OF 1

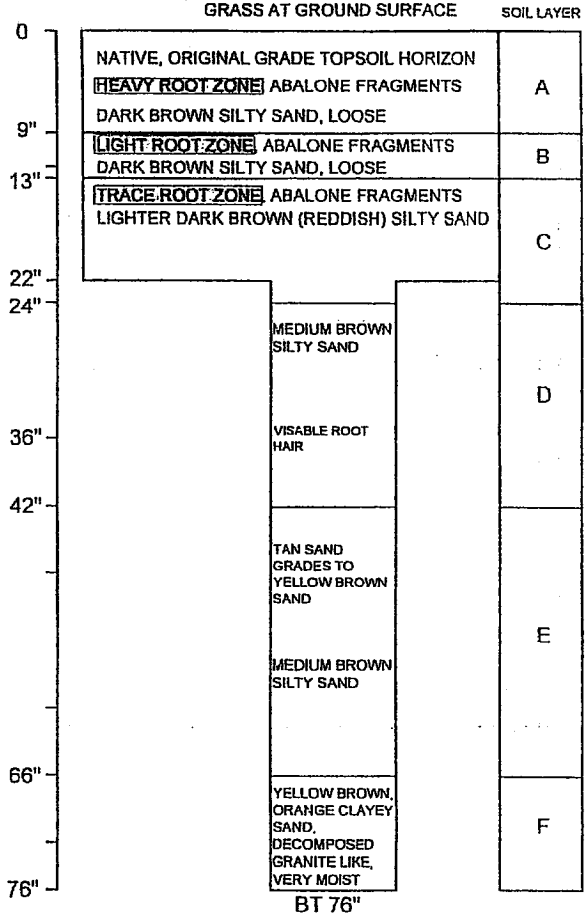

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FIGURE NO.

SHEET NO OF 1

GRASS AT GROUND SURFACE

		SOIL LAYER
0	NATIVE, ORIGINAL GRADE TOPSOIL HORIZON HEAVY ROOT ZONE, ABALONE FRAGMENTS DARK BROWN SILTY SAND	A
12"	LIGHT ROOT ZONE, ABALONE FRAGMENTS DARK BROWN SILTY SAND	B
16"	TRACE ROOT ZONE LIGHTER DARK BROWN (REDDISH) SILTY SAND	C
24"	MEDIUM LIGHT BROWN SILTY SAND LAST VISABLE ROOT HAIR ABALONE FRAGMENTS	D
36" / 42"	TAN YELLOW, BROWN SILTY SAND GRADES INTO:	E
60"	YELLOW ORANGE, BROWN CLAYEY SAND DECOMPOSED GRANITE LIKE DAMP	F
72" / 75"		

BT 75"

11/20/07

P-3

SOIL DESCRIPTION

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FIGURE NO.