



August 20, 2010

File No.: SL-16330-GA

Mr. Troy White, AICP
Dudek
621 Chapala Street
Santa Barbara, CA 93101

PROJECT: MALIBU PARKS PUBLIC ACCESS ENHANCEMENT PLAN
PUBLIC WORKS PLAN
PACIFIC COAST HIGHWAY
MALIBU, CALIFORNIA

SUBJECT: Peer Review of Geology, Soils and Seismic Hazards Section of FEIR

Dear Mr. White:

Earth Systems Pacific was contracted to review portions of the draft and final Environmental Impact Report (EIR) for the Malibu Parks Public Access Enhancement Plan Public Works Plan (Proposed Plan) prepared by Dudek for the Santa Monica Mountains Conservancy (Conservancy) and the Mountains Recreation & Conservation Authority (MRCA). This letter contains the results of the review related to the assessment of potential impacts to Geology, Soils, and Seismic Hazards.

Earth Systems Pacific reviewed the relevant portions of the following documents:

- Draft EIR, Section 2.0 PROJECT DESCRIPTION (February 2010)
- Draft EIR, Section 5.7 GEOLOGY, SOILS, AND SEISMIC HAZARDS (February 2010)
- Draft EIR, Final EIR, Section 1.0 MODIFIED REDESIGN ALTERNATIVE PROJECT DESCRIPTION (August 2010)
- Final EIR, Section 14.0 MODIFIED REDESIGN ALTERNATIVE (MRA) Item 3.7 Geology, Soils, and Seismic Hazards (August 2010)
- Final EIR, Section 15.0 ALTERNATIVES (INCLUDING THE MODIFIED REDESIGN ALTERNATIVE) (August 2010)
- Final EIR, Sections 16.1 through 16.4 (August 2010)

In addition to reviewing these documents, the undersigned also conducted a site visit on August 19, 2010 to confirm the geologic site conditions and Project Impacts as described in the DEIR and FEIR.



Discussions

The five park sites comprising the Proposed Plan are situated in undeveloped or sparsely developed residential areas, and access to the interior portions of the Proposed Plan is largely limited to foot traffic; consequently, the potential for impacts related to geology and seismic hazards is considered to be low.

The MRA involves an overall reduction in the scope of the Proposed Plan, but does not affect the original Project Description as it applies to geology and seismic hazards issues. Therefore, the methodology employed in Section 5.7 of the DEIR remains applicable to the FEIR.

Public comments for the Proposed Plan focused primarily on the subject of fire danger. No comments were made with respect to geology, soils and seismic hazards. As a result, no modifications to the FEIR are indicated in response to public comments related to geology, soils and seismic hazards.

Setting

- The Geography and Land Use descriptions, and the Existing Setting, which includes geologic, soil and seismic conditions of the area, contained in the DEIR and the subsequent revisions in the MRA appear to be complete, and no comments are offered.
- The Regulatory Framework described in the DEIR appears complete, and no comments are offered.

Project Impacts and Mitigation Measures

- The project impacts identified with respect to geology and seismic hazards are in accordance with California Geological Survey guidelines.
- Project Impacts appear to be complete, and no additions or modifications of the FEIR are offered.
- Mitigation Measures presented in the DEIR and FEIR are appropriate to mitigate the identified potential geology and seismic hazard impacts. Prior to final design of the proposed plan, site-specific geotechnical investigations, including subsurface investigation, laboratory analysis of soil samples and geologic mapping with respect to slope stability should be performed.

Conclusions

Based on my review, the Geology, Soils, and Seismic Hazards analysis and discussion is consistent with published guidelines for analyzing issues pertaining to geology, soils, and seismic hazards under the California Environmental Quality Act (CEQA). The analysis was generally performed in accordance with industry standards. The EIR utilizes the significance criteria suggested by the CEQA Guidelines Appendix G, which is appropriate for a land use project such as this. The methodology utilized to identify potential impacts associated with



implementation of the Proposed Plan and other alternatives is appropriate, reasonable, technically sound, and generally consistent with standard industry practices. The Geology, Soils, and Seismic Hazards mitigation measures presented in the EIR are appropriate, feasible, and effective. The discussion of impacts is consistent with the results of the analyses. Responses to public comments are reasonable and consistent with the analyses and discussions.

Professional Qualifications

A résumé for Richard Gorman is attached with this letter.

We appreciate this opportunity to be of service. If you have any questions or comments regarding this document, please contact me at your convenience.

Sincerely,

Earth Systems Pacific

Richard T. Gorman, P.G., C.E.G.



Attachment: Résumé

Doc. No.: 1008-113.LTR/sak



RICHARD T. GORMAN

Certified Engineering Geologist

As Chief Geologist with Earth Systems Pacific, Mr. Gorman is in charge of geologic hazards investigations, bluff stability studies, and landslide analyses. A Certified Engineering Geologist, Mr. Gorman has conducted major geologic studies such as the City of Hollister fault investigation and the City of Pismo Beach bluff erosion study. Mr. Gorman has over 30 years of experience in his field.

HIGHLIGHTS OF RESPONSIBILITIES

- Conducts geologic fault investigations that include the excavation and logging of exploratory trenches, reviews of regional and local geologic structure and stratigraphy, reviews of stereo photographs to observe topographic and geomorphic features related to faulting, analyses of resulting data, development of conclusions, and recommendations related to geologic considerations.
- Conducts geologic bluff studies consisting of site reconnaissance, geologic mapping, research of available reports, survey maps, and photographs, estimation of historic, current, and future bluff erosion retreat rates, evaluation of bluff stratigraphy including structural characteristics such as bedding, jointing, and folding, evaluation of bluff stability, evaluation of the effects of sea wave erosion, and development of conclusions and recommendations such as appropriate building setbacks and rip-rap placement.
- Provides analyses of landslide areas (including computer-generated slope stability analysis).
- Performs computer-generated seismicity analyses and historical earthquake analyses using geologic technical software.
- Performs geologic inspections of mass grading operations.

REGISTRATIONS AND CERTIFICATIONS

Certified Engineering Geologist, State of California, 1986 (No. 1325)

Registered Geologist, State of California, 1985 (No. 4065)

PROFESSIONAL BACKGROUND

1999 to present	Chief Geologist	Earth Systems Pacific San Luis Obispo, CA
1989 to 1999	Chief Geologist	Earth Systems Consultants Northern California
1987 to 1989	Senior Engineering Geologist Geology Department Manager	Buena Engineers San Luis Obispo, CA
1978 to 1987	Project Geologist	Irvine Soils Engineering Irvine, CA
1976 to 1978	Soils Technician	Le Roy Crandall & Associates Los Angeles, CA

EDUCATION

California Polytechnic State University, Pomona
B.S., Geology, 1974

PROFESSIONAL AFFILIATIONS

Member – Inland Geologic Society, Association of Engineering Geologists and
Geologic Society of America

**SELECTED MAJOR PROJECT EXPERIENCE**

Cayucos Elementary School - New Multipurpose Building, Classroom Building and Kindergarten, 301 Cayucos Drive, Cayucos, California. The Cayucos Elementary School will be expanded by the construction of a new multipurpose building, a classroom building and a Kindergarten building, measuring approximately 3,800 square feet and 1,500 square feet, respectively. Mr. Gorman performed a geologic hazards study which involved earthquake fault and seismic hazards evaluations as they related to the project site.

Delta High School New Classroom Buildings, Orcutt area of Santa Barbara County, California. Mr. Gorman performed a geologic hazards study, in which he addressed geological concerns such as faulting and seismically induced ground shaking, for the new classroom buildings planned at Delta High School. Four new classroom buildings will be constructed at the campus. The buildings will be one-story, of wood and steel framed construction. They will utilize concrete slabs-on-grade and will be supported by a shallow foundation system.

Paso Robles Public Safety Center, Paso Robles, California. The Paso Robles Public Safety Center is an Essential Services Facility that provides a central location for police, fire, and emergency services in the City of El Paso de Robles. The main structure is L-shaped and approximately 31,000 square feet in plan. The northern portion of the building is two-story, and the central and southern portions is single-story. Apparatus bays for fire fighting equipment are located in the southern portion. The masonry, wood- and steel-frame structures are founded on conventional continuous and spread foundations with concrete slabs-on-grade. Initially, our personnel performed a Phase 1 environmental assessment of the property. Mr. Gorman conducted a geologic hazards study to evaluate and define the geologic conditions and potential geologic hazards associated with the site development.

California Water Project, Coastal Branch. This 11.5 mile section of the California water project traverses areas of steep hazardous terrain before reaching the coastal plain. The 16-inch diameter pipeline has depths of 4 to 15 feet below grade, spans several streams, and a number of underground vaults are incorporated in the project. Our firm performed a geotechnical engineering investigation in which we provided preliminary recommendations for pipeline design, trench backfill, and foundations for a future hydroelectric plant. We also provided mitigation measures related to fill soils; springs, seeps, and surface water; erosion /scour of creek channels; zones of hard rock; landslides and faulting. As Chief Geologist, Mr. Gorman mapped the geology along the pipeline alignment. He identified several landslides and located traces of the Serrano and Cambria Faults.

Pipeline Realignment at Highway 101 at Cuesta Grade, San Luis Obispo County, California. This project involved the realignment of an oil pipeline over the Cuesta Grade, which has an elevation of approximately 1,500 feet. Mr. Gorman provided recommendations for the realignment project which included slope inclinometer placement and monitoring over a period of 5 years.

Pismo Beach Bluff Study, Pismo Beach, California. This study encompassed the entire bluff area of Pismo Beach, approximately seven miles of coastline. The purpose of the study was to provide an overview of the geologic conditions along the coastline and their associated erosion characteristics. Mr. Gorman mapped the geology of the area and conducted maximum wave run-up analyses to determine areas that would be at risk during severe storms. Protection measures such as sheetpile walls, rock rip-rap, and timber piles with lagging were recommended for several areas with erosional hazards.