CALIFORNIA COASTAL COMMISSION

SOUTH CENTRAL COAST AREA 89 SOUTH CALIFORNIA ST., SUITE 200 VENTURA, CA 93001 (805) 641 - 0142



Filed: 10/27/02 49th Day: 12/15/02 180th Day: Waived 270th Day: 6/19/03 Staff: CAREY

Staff: CAREY
Staff Report: 5/22/03
Hearing Date: 6/10-13/03



STAFF REPORT: REGULAR CALENDAR

APPLICATION NO.: 4-02-226

APPLICANT: Scott Morgan AGENT: Steven Kent

PROJECT LOCATION: 21812 Castlewood Drive, Santa Monica Mountains, Los

Angeles County

PROJECT DESCRIPTION: Installation of 10 subsurface soldier piles to a depth of approximately 30 feet just downslope of an existing single family residence to reduce the risk of damage from the headward migration of the active Lamplighter Landslide.

Lot area: 0.75 acres
Building coverage: 2,800 sq. ft.
Pavement coverage: 1,000 sq. ft.
Landscape coverage: 5,000 sq. ft.
Parking spaces: 2

LOCAL APPROVALS RECEIVED: Los Angeles County Regional Planning Approval in Concept

SUBSTANTIVE FILE DOCUMENTS: Permit Applications 4-94-160 (Ernst); 4-95-141 (Ernst); Engineering Geologic Update Report, dated June 4, 2002, and Engineering Geologic Memorandum, dated May 1, 2003, both prepared by Mountain Geology, Inc. County of Los Angeles Approval in Concept, Building and Safety and Development Division Approval

STAFF NOTE

This application was filed on October 27, 2002. Under the provisions of the Permit Streamlining Act, the 180th day for action on the application was April 25, 2003. The applicant's agent agreed to extend the time for decision by the Commission in order to allow additional time for review of the proposal by the County of Los Angeles. The extended time period will end on June 19, 2003. Accordingly, the Commission must act on Application 4-02-226 at the June 10-13, 2003 hearing.

SUMMARY OF STAFF RECOMMENDATION

Staff recommends **approval** of the proposed project with special conditions relating to assumption of risk, conformance to geologic recommendations, and landscaping disturbed areas. The proposed project site is located just upslope of a head scarp of the Lamplighter Landslide, an identified active landslide. The soldier piles are proposed to reduce the risk of damage to the residence, not to remediate the existing landslide or to stabilize the project site. Based on the consultant's investigation, the proposed soldier piles will not adversely affect the stability of surrounding properties or the Lamplighter Landslide. As conditioned, the proposed project will be consistent with Section 30253 of the Coastal Act.

STAFF RECOMMENDATION:

I. Approval with Conditions

MOTION: I move that the Commission approve Coastal Development

Permit No 4-02-226 pursuant to the staff recommendation.

STAFF RECOMMENDATION OF APPROVAL:

Staff recommends a **YES** vote. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

RESOLUTION TO APPROVE THE PERMIT:

The Commission hereby approves the Coastal Development Permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act and will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. Standard Conditions

1. <u>Notice of Receipt and Acknowledgment</u>. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

- **2.** Expiration. If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
- 3. <u>Interpretation</u>. Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.
- **4.** <u>Assignment</u>. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
- **5.** Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

III. Special Conditions

1. Assumption of Risk

By acceptance of this permit, the applicant acknowledges and agrees to the following:

- 1. The applicant acknowledges and agrees that the site may be subject to hazards from erosion, landslide and flooding.
- 2. The applicant acknowledges and agrees to assume the risks to the applicant and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development.
- The applicant unconditionally waives any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards.
- 4. The applicant agrees to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.

2. Plans Conforming to Geologic Recommendations

All recommendations contained in the Engineering Geologic Update Report, dated June 4, 2002, and the Engineering Geologic Memorandum, dated May 1, 2003, both prepared by Mountain Geology, Inc. as well as in all reports referenced therein shall be incorporated into all final design and construction including <u>construction</u>, <u>grading</u>, and <u>drainage</u>. Final plans must be reviewed and approved by the project's consulting

geotechnical engineer. Prior to issuance of a coastal development permit, the applicants shall submit, for review and approval by the Executive Director, evidence of the consultant's review and approval of all project plans.

The final plans approved by the consultant shall be in substantial conformance with the plans approved by the Commission relative to construction, grading, and drainage. Any substantial changes in the proposed development approved by the Commission that may be required by the consultant shall require an amendment to the permit or a new Coastal Development Permit.

3. Landscaping and Erosion Control Plans

Prior to the issuance of the coastal development permit, the applicant shall submit landscaping and erosion control plans, prepared by a licensed landscape architect or qualified resource specialist, for review and approval by the Executive Director. The plans shall incorporate the following criteria:

A) Landscaping Plan

1) All graded and disturbed areas on the subject site shall be planted and maintained for erosion control purposes within thirty (30) days of completion of the proposed development. To minimize the need for irrigation and to screen and soften the visual impact of development, landscaping shall consist of primarily native/drought resistant plants as listed by the California Native Plant Society, Santa Monica Mountains Chapter, in their document entitled Recommended List of Plants for Landscaping in the Santa Monica Mountains, dated February 5, 1996, and shall be compatible with the character of the surrounding native environment. Invasive, non-indigenous plant species that tend to supplant native species shall not be used. The plan shall specify the erosion control measures to be implemented and the materials necessary to accomplish short-term stabilization, as needed on the site.

All cut and fill slopes shall be stabilized with planting at the completion of final grading. Planting should be of native plant species indigenous to the Santa Monica Mountains, compatible with the surrounding environment, using accepted planting procedures, and consistent with fire safety requirements. Such planting shall be adequate to provide ninety (90) percent coverage within two (2) years, and this requirement shall apply to all disturbed and graded soils:

- 2) Plantings shall be maintained in good growing condition throughout the life of the project and, whenever necessary, shall be replaced with new plant materials to ensure continued compliance with applicable landscape requirements;
- 3) The Permittee shall undertake development in accordance with the final approved plan. Any proposed changes to the approved final plan shall be reported to the Executive Director. No changes to the approved final plan shall occur without a

Coastal Commission - approved amendment(s) to the Coastal Development Permit(s), unless the Executive Director determines that no amendment is required.

B) Interim Erosion Control Plan

- The plan shall delineate the areas to be disturbed by grading or construction activities and shall include any temporary access roads, staging areas, and stockpile areas. The natural areas on the sites shall be clearly delineated on the project site with fencing or survey flags.
- 2) The plan shall specify that grading shall take place only during the dry season (April 1 October 31). This period may be extended for a limited period of time if the situation warrants such a limited extension, if approved by the Executive Director. The applicant shall install or construct temporary sediment basins (including debris basins, desilting basins, or silt traps), temporary drains and swales, sand bag barriers, silt fencing, and shall stabilize any stockpiled fill with geofabric covers or other appropriate cover, install geotextiles or mats on all cut or fill slopes, and close and stabilize open trenches as soon as possible. These erosion control measures shall be required on the project site prior to or concurrent with the initial grading operations and maintained throughout the development process to minimize erosion and sediment from runoff waters during construction. All sediment should be retained on-site, unless removed to an appropriate, approved dumping location either outside of the coastal zone or within the coastal zone to a site permitted to receive fill.
- 3) The plan shall also include temporary erosion control measures should grading or site preparation cease for a period of more than thirty (30) days, including but not limited to: stabilization of all stockpiled fill, access roads, disturbed soils, and cut and fill slopes with geotextiles and/or mats, sand bag barriers, silt fencing; temporary drains and swales and sediment basins. The plans shall also specify that all disturbed areas shall be seeded with native grass species and include the technical specifications for seeding the disturbed areas. These temporary erosion control measures shall be monitored and maintained until grading or construction operations resume.

C. Monitoring

Five (5) years from the date of completion of the proposed development, the applicant shall submit for the review and approval of the Executive Director a landscape monitoring report, prepared by a licensed Landscape Architect or qualified Resource Specialist, that assesses the on-site landscaping and certifies whether it is in conformance with the landscape plan approved pursuant to this special condition. The monitoring report shall include photographic documentation of plant species and plant coverage.

If the landscape monitoring report indicates the landscaping is not in conformance with or has failed to meet the performance standards specified in the landscaping plan approved pursuant to these permits, the applicant, or successors in interest, shall submit a revised or supplemental landscape plan for the review and approval of the Executive Director. The supplemental landscaping plan must be prepared by a licensed landscape architect or qualified resource specialist and shall specify measures to remediate those portions of the original plan that have failed or are not in conformance with the original approved plan. The permittee shall implement the remedial measures specified in the approved supplemental landscape plan.

4. Deed Restriction Condition

Prior to the issuance of the coastal development permit, the applicant shall submit to the Executive Director for review and approval documentation demonstrating that the applicant has executed and recorded against the parcel(s) governed by this permit a deed restriction, in a form and content acceptable to the Executive Director: (1) indicating that, pursuant to this permit, the California Coastal Commission has authorized development on the subject property, subject to terms and conditions that restrict the use and enjoyment of that property; and (2) imposing the Special Conditions of this permit as covenants, conditions and restrictions on the use and enjoyment of the Property. The deed restriction shall include a legal description of the entire parcel or parcels governed by this permit. The deed restriction shall also indicate that, in the event of an extinguishment or termination of the deed restriction for any reason, the terms and conditions of this permit shall continue to restrict the use and enjoyment of the subject property so long as either this permit or the development it authorizes, or any part, modification, or amendment thereof, remains in existence on or with respect to the subject property.

IV. Findings and Declarations

The Commission hereby finds and declares:

A. Project Description and Background.

The applicant proposes the installation of 10 subsurface soldier piles to a depth of approximately 30 feet downslope of an existing single family residence. The soldier piles are proposed in order to minimize the risk of damage to the house from the headward migration of the active Lamplighter landslide. The location of this landslide complex relative to the proposed project site is shown in Exhibit 4.

The Commission has previously considered permit applications for development on the proposed project site. Permit 4-94-160 (Ernst) was approved for the construction of a new 4,960 sq. ft. single family residence to replace the previously existing 2,450 sq. ft. house that was destroyed in the 1993 fire. Although not specifically included in the project description for this application, the project geologic consultant recommended the installation of a pile-supported retaining beam downslope of the proposed house to address the risk presented by the Lamplighter Landslide. The geology report (9/20/94)

states that: "...it is noted that an active landslide is present downslope to the southwest which is adversely effecting the public street and other properties. Headward migration of the landslide should be anticipated". Despite the geologic consultant's recommendations, the permit did not include any condition to require the installation of soldier piles. The applicant did not satisfy the special conditions on this permit and it has expired.

The Commission also considered Permit Application 5-95-141 (Ernst) for a lot line adjustment between the two parcels that make up the project site. The original home (destroyed in the fire) on the property occupied a portion of both parcels. This application was to move the lot line to the east, thereby allowing for the future construction of a second home on the property. The Commission had serious concerns regarding the geologic stability of the property given the Lamplighter landslide, as well as the steepness of the easternmost of the two adjusted parcels. The Commission found that the lot line adjustment could be approved subject to special conditions that required: 1) the applicant to assume the risk of developing on a site subject to landslide, and erosion hazards; 2) the recordation of a future improvements deed restriction to ensure that any development on the site would be considered by the Commission in a permit application; and 3) the submittal of a grading plan for any future home on the eastern parcel that included provisions for a garage at street level, a structure built at grade without pad grading, and minimization of site grading. The applicant did not satisfy the special conditions on this permit and it has expired.

The applicant (Ernst) subsequently requested, and was granted an exemption determination (pursuant to the provisions of Section 30610(g) of the Coastal Act) on August 22, 1997, for the construction of a 2,373 sq. ft. residence to replace the home previously destroyed. The replacement residence has been constructed, but no soldier piles were part of the project.

B. Geologic Stability.

The proposed development is located in the Malibu/Santa Monica Mountains area, an area that is generally considered to be subject to an unusually high amount of natural hazards. Geologic hazards common to the Santa Monica Mountains area include landslides, erosion, and flooding. In addition, fire is an inherent threat to the indigenous chaparral community of the coastal mountains. Wildfires often denude hillsides in the Santa Monica Mountains of all existing vegetation, thereby contributing to an increased potential for erosion and landslides on property.

Section 30253 of the Coastal Act states, in pertinent part, that new development shall:

- (1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.
- (2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, instability, or destruction of the site or surrounding area

or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

The proposed project site is located on Castlewood Drive, between Las Flores Canyon Road and Rambla Pacifico. The project site slopes down from Castlewood Drive. There is a flat, graded pad area created when a home was first developed on the site in the early 1970's. The site slopes down rather steeply from this flat pad area. Downslope of the pad and existing residence to the southwest and off of the property, there is a headscarp of a slide that is part of the Lamplighter Lane Landslide Complex. This slide complex has been identified as an active landslide that has affected roads and residences in the area.

As described above, the 1970's residence was destroyed by wildfire in 1993. The Commission considered and approved Permit 4-94-160 (Ernst) for the construction of a new 4,960 sq. ft. single-family residence to replace the previously existing 2,450 sq. ft. house. The geology report for the project, prepared by Mountain Geology, Inc., and dated 9/20/94 identifies that:

An active landslide is present immediately downslope to the southwest of the residence pad. The landslide has adversely effected (sic) the public street, improvements, and offsite residences. The landslide is a large bedrock failure which is moving down towards Carbon Canyon to the west.

The geology report notes that: "Headward migration of the landslide should be anticipated" and that: "In order to contain the residence pad and reduce the potential for the active landslide to adversely effect (sic) the residence, a pile-supported retaining beam may be installed immediately downslope and southwest of the residence". The geologic cross-section shows the "Recommended Soldier Piles" just downslope of the proposed residence. The piles are shown reaching a depth of approximately 90 feet. Final engineered plans for these soldier piles or the residence foundations were not provided because the applicant did not comply with the conditions of approval for Permit 4-94-160. That permit has since expired.

The applicant (Ernst) subsequently requested an exemption determination (pursuant to the provisions of Section 30610(g) of the Coastal Act) for the construction of a 2,373 sq. ft. residence in the same location of the project site to replace the home previously destroyed by fire. Commission staff made the determination that the proposed residence was exempt as a disaster replacement structure in 1997. The replacement residence was constructed, but soldier piles were not installed for slope protection and the residence was not constructed on a caisson or other deepened foundation system.

The subsequent owner is now proposing to install ten soldier piles just downslope of the existing residence. The piles are proposed to be 30 inches in diameter and will be drilled and poured in place concrete. The piles will extend to a depth of 30 feet from existing grade. The applicant has submitted an Engineering Geologic Update Report, dated June 4, 2002, and an Engineering Geologic Memorandum, dated May 1, 2003,

both prepared by Mountain Geology, Inc. that address the proposed soldier pile installation. The Engineering Geologic Memorandum (Exhibit 5) states that:

The proposed installation of solider piles is intended to reduce the risk of damage to the residence as a result of potential headward migration of the active Lamplighter Landslide. The installation of soldier piles is and will be considered a remedial measure to improve site conditions as potential headward migration of the Lamplighter Landslide could result in damage to the existing residence which is supported upon a conventional type foundation system. Installation of soldier piles may now be accomplished easier than after landslide movement during a winter storm on an emergency basis. Installation of soldier piles is not intended to eliminate the "Waiver" which was issued for the rebuilding of the burnout residence. Installation of the soldier piles will not adversely effect the stability of the surrounding properties or the performance of the adjacent Lamplighter Landslide.

Los Angeles County has not approved a Geologic/Geotechnical Review Sheet for the project. However, the project has been approved by the Building and Safety and Development Division. This approval (Exhibit 6) states that:

This approval pertains to the installation of a soldier pile system proposed to reduce potential damage due to headward movement of an offsite landslide scarp. The property is subject to potential landslide movement due to the presence of a mapped active landslide ("lamplighter landslide"). This improvement is not intended to remediate said slide.

Based on the geologic consultant's reports and the County's approval of the project, it is clear that the soldier piles may potentially reduce the risk of damage to the residence, but will not remediate the existing landslide or stabilize the project site. Based on the consultant's investigation, the proposed soldier piles will not adversely affect the stability of surrounding properties or the Lamplighter Landslide. As such, the Commission finds that the proposed soldier piles will reduce risks from landsliding and will not create instability on the site or surrounding area.

To ensure that the recommendations of the consultant have been incorporated into all proposed development, the Commission, as specified in **Special Condition 2**, requires the applicant to submit project plans certified by the consulting geologist and geotechnical engineer as conforming to all structural and site stability recommendations for the proposed projects. Final plans approved by the consultant shall be in substantial conformance with the plans approved by the Commission. Any substantial changes to the proposed developments, as approved by the Commission, which may be recommended by the consultant shall require an amendment to the permit or a new coastal development permit.

The Commission finds that landscaping of graded and disturbed areas on the subject site will serve to stabilize disturbed soils, reduce erosion and enhance the geologic stability of the site. Therefore, **Special Condition 3** requires the applicant to submit landscaping plans that utilize and maintain native and noninvasive plant species compatible with the surrounding area for landscaping all disturbed areas. Invasive and

non-native plant species are generally characterized as having a shallow root structure in comparison with their high surface/foliage weight. The Commission notes that non-native and invasive plant species with high surface/foliage weight and shallow root structures do not serve to stabilize slopes and that such vegetation results in potential adverse effects to the stability of the project site. Native species, alternatively, tend to have a deeper root structure than non-native and invasive species, and once established aid in preventing erosion.

Finally, the Commission finds that due to the possibility of erosion, landslide, and flooding, the applicant shall assume these risks as conditions of approval. Because this risk of harm cannot be completely eliminated, the Commission requires the applicant to waive any claim of liability against the Commission for damage to life or property that may occur as a result of the permitted development. The applicant's assumption of risk, as required by **Special Condition No. 1**, when executed and recorded on the property deed (as required by **Special Condition No. 4**), will show that the applicant is aware of and appreciates the nature of the hazards which exist on the site, and that may adversely affect the stability or safety of the proposed development.

In conclusion, the Commission finds that the proposed project will reduce risks from landsliding and will not create instability on the site or surrounding area. As conditioned to conform to the recommendations of the geologic consultants, revegetate all disturbed areas, and to assume the risk of developing on a site with known geologic hazards, the proposed project is consistent with the requirements of Section 30253 of the Coastal Act.

C. Local Coastal Program

Section 30604 of the Coastal Act states:

a) Prior to certification of the local coastal program, a coastal development permit shall be issued if the issuing agency, or the commission on appeal, finds that the proposed development is in conformity with the provisions of Chapter 3 (commencing with Section 30200) of this division and that the permitted development will not prejudice the ability of the local government to prepare a local program that is in conformity with the provisions of Chapter 3 (commencing with Section 30200).

Section 30604(a) of the Coastal Act provides that the Commission shall issue a Coastal Development Permit only if the project will not prejudice the ability of the local government having jurisdiction to prepare a Local Coastal Program which conforms with Chapter 3 policies of the Coastal Act. The preceding sections provide findings that the proposed project will be in conformity with the provisions of Chapter 3 if certain conditions are incorporated into the projects and are accepted by the applicant. As conditioned, the proposed developments will not create adverse impacts and is found to be consistent with the applicable policies contained in Chapter 3. Therefore, the Commission finds that approval of the proposed developments, as conditioned, will not prejudice the County of Los Angeles' ability to prepare a Local Coastal Program for this

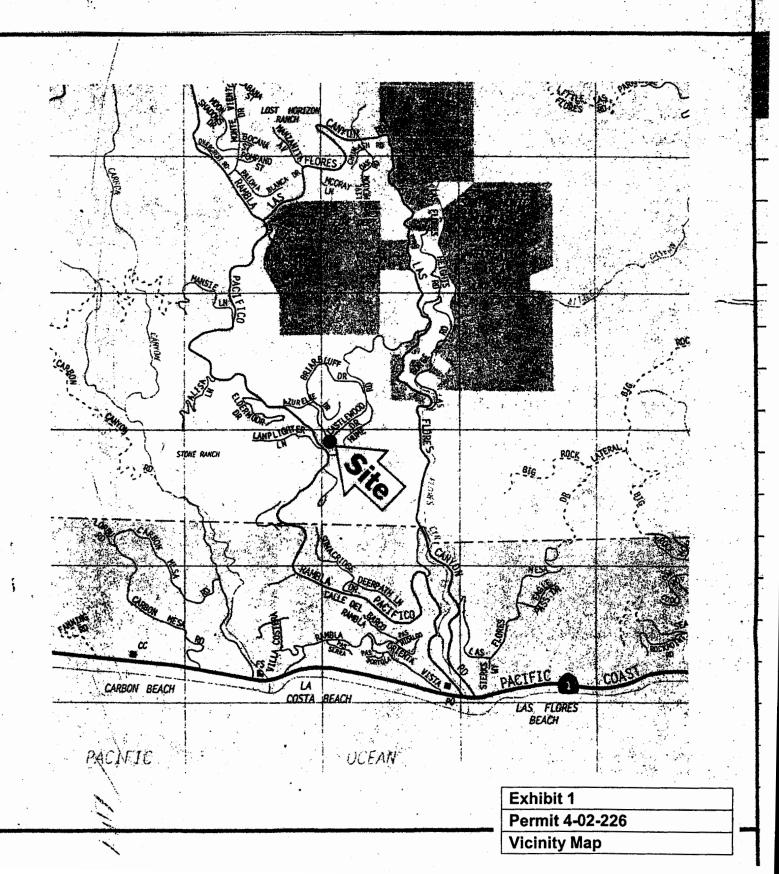
area which is also consistent with the policies of Chapter 3 of the Coastal Act, as required by Section 30604(a).

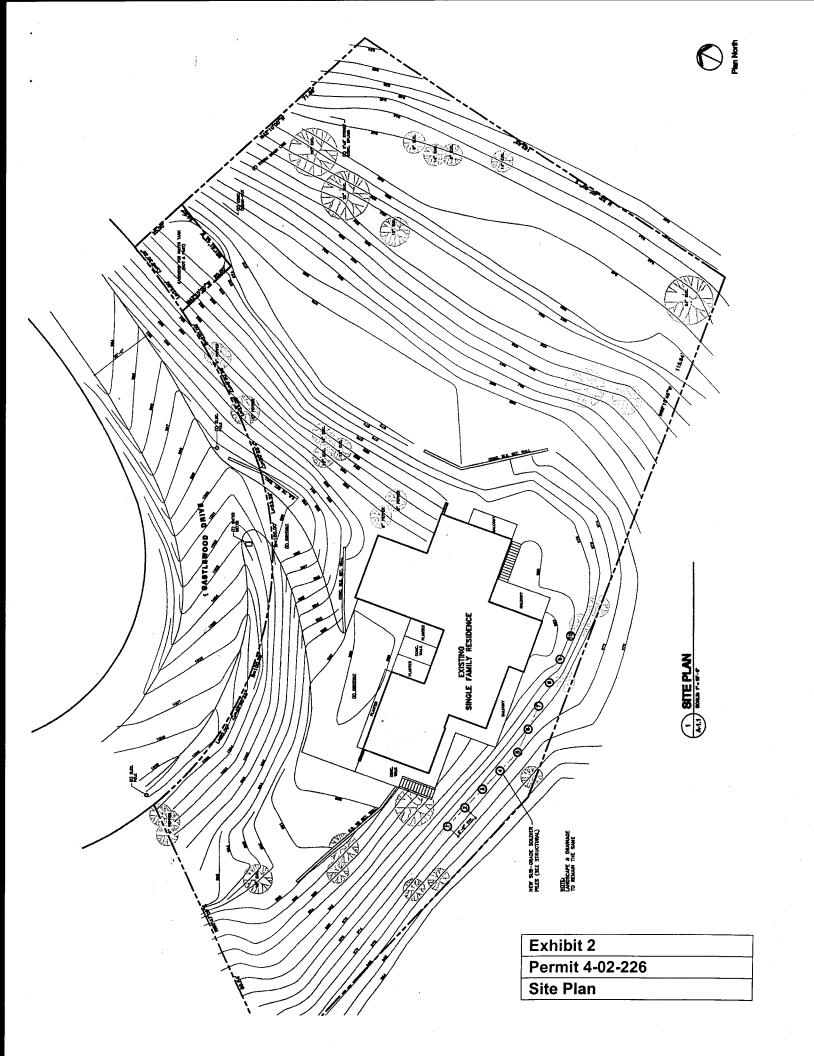
D. CEQA

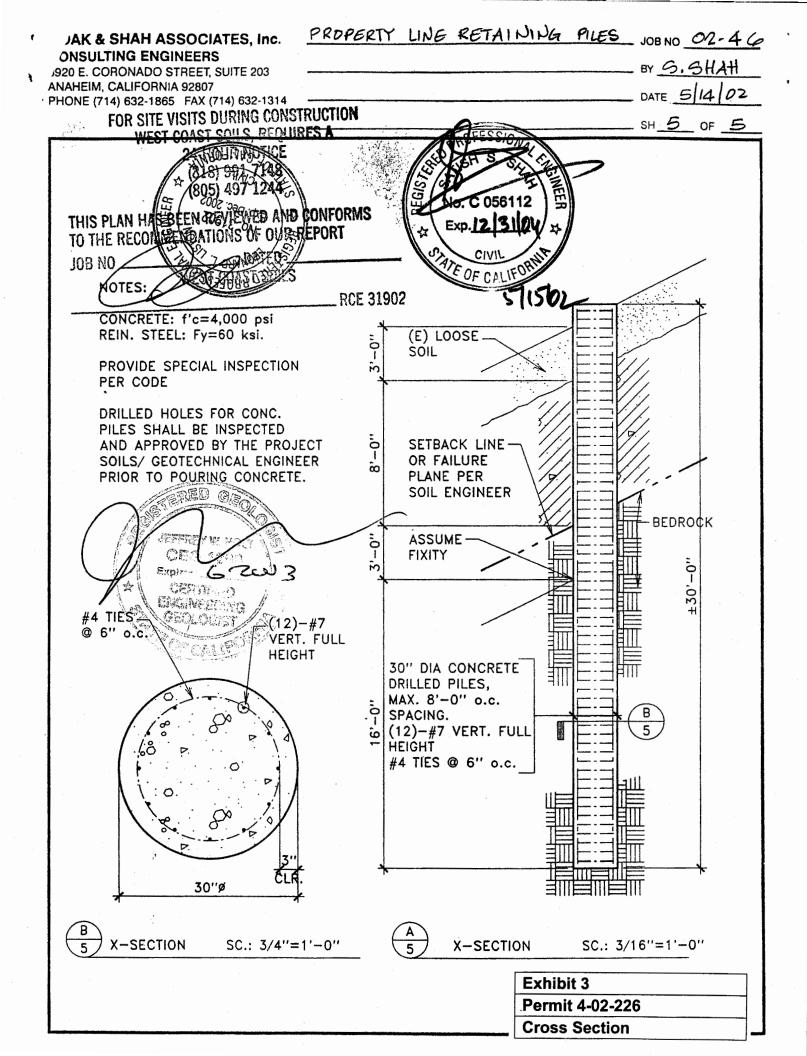
Section 13096(a) of the Commission's administrative regulations requires Commission approval of a Coastal Development Permit application to be supported by a finding showing the application, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect that the activity may have on the environment.

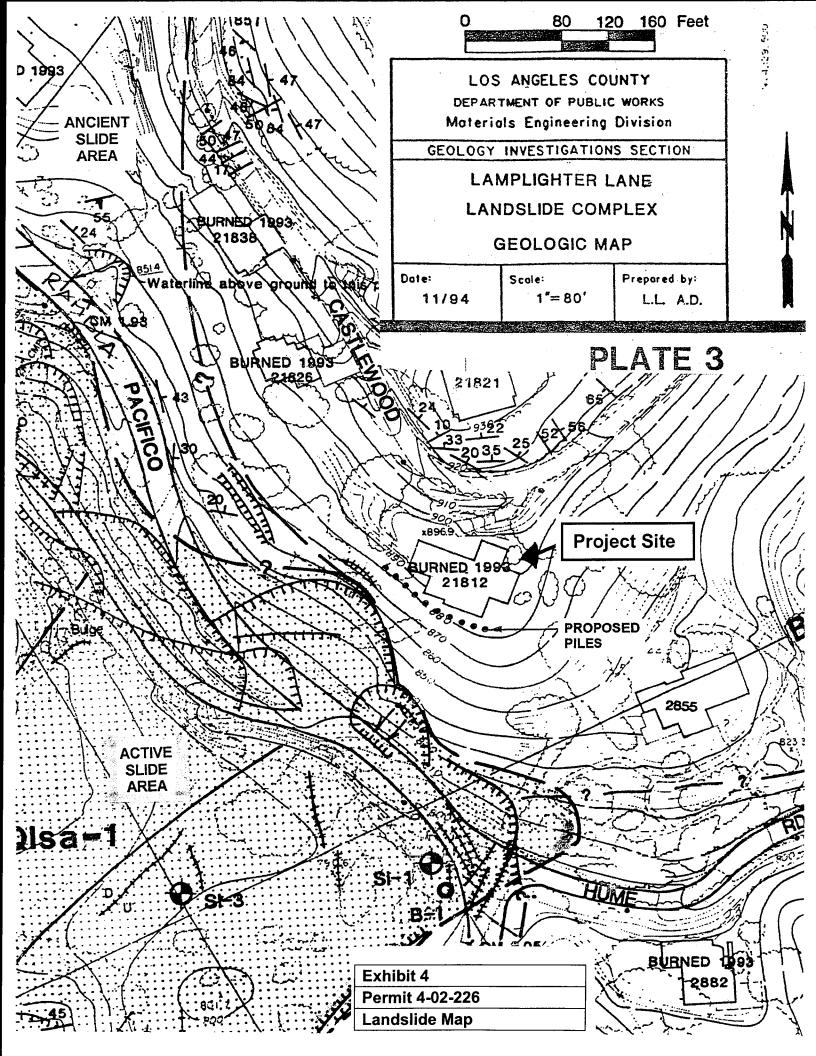
The Commission finds that the proposed projects, as conditioned, will not have significant adverse effects on the environment within the meaning of the California Environmental Quality Act of 1970. Therefore, the proposed project, as conditioned, has been adequately mitigated and is determined to be consistent with CEQA and the policies of the Coastal Act.

VICINITY MAP











CONSULTING ENGINEERING GEOLOGISTS

ENGINEERING GEOLOGIC MEMORANDUM

PROPOSED SOLDIER PILES EXISTING RESIDENCE

21812 CASTLEWOOD DRIVE MALIBU, CALIFORNIA

PREPARED FOR STEVEN KENT, ARCHITECT

MAY 1, 2003

JH5133g

Exhibit 5 (6 Pages)

Permit 4-02-226

Engineering Geologic Memorandum



CONSULTING ENGINEERING GEOLOGISTS

May 1, 2003

JH5133g

Steven Kent, Architect 2878 Hume Road Malibu, CA 90265

SUBJECT: ENGINEERING GEOLOGIC MEMORANDUM, PROPOSED SOLDIER PILES, EXISTING RESIDENCE, 21812 CASTLEWOOD DRIVE, MALIBU, CALIFORNIA

REFERENCE: MISC. GEOLOGIC REVIEW SHEET, LACO3773, PREPARED BY THE COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS, DATED JULY 28, 1971

GEOLOGIC REVIEW SHEET, PREPARED BY THE COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS, DATED JULY 30, 1971

PRELIMINARY SOILS ENGINEERING REPORT, GSC 594, PREPARED BY GEOLOGY AND SOILS CONSULTANTS, INC., DATED JANUARY 3, 1973

PERMIT FOR RETAINING WALL, LACO9415, DATED JANUARY 22, 1973

PERMIT FOR GRADING, LACO9416, DATED JANUARY 22, 1973

PERMIT FOR RESIDENCE, LACO9539, DATED JANUARY 26, 1973

PERMIT FOR PRIVATE SEWERAGE DISPOSAL SYSTEM, LACO3234, DATED DECEMBER 17, 1973

PERMIT FOR PRIVATE SEWERAGE DISPOSAL SYSTEM, LACO1667, DATED DECEMBER 6, 1976

ENGINEERING GEOLOGIC REPORT DATED SEPTEMBER 20, 1994 PREPARED BY MOUNTAIN GEOLOGY, INC.

GEOTECHNICAL REPORTS DATED SEPTEMBER 27, 1994, FEBRUARY 9, 1995, AND MAY 30, 1995 PREPARED BY WEST GEOTECHNICAL CONSULTANTS, INC.

LOT LINE ADJUSTMENT, APRIL 20, 1995, FINAL ON APRIL 21, 1995

GEOLOGIC REVIEW SHEET DATED AUGUST 9, 1995 PREPARED BY THE COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS

BUILDING PLAN CHECK NO. 9507130009/13

LAMPLIGHTER LANE LANDSLIDE COMPLEX REPORT, MALIBU, CALIFORNIA DATED MARCH, 1995 PREPARED BY THE COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS-MATERIALS ENGINEERING DIVISION

ADDENDUM ENGINEERING GEOLOGIC REPORT DATED SEPTEMBER 29, 1995 (REVISED OCTOBER 24, 1995) PREPARED BY MOUNTAIN GEOLOGY, INC.

GEOLOGIC REVIEW SHEET DATED NOVEMBER 13, 1995 PREPARED BY THE COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS

GEOTECHNICAL ENGINEERING REVIEW SHEET DATED NOVEMBER 22, 1995 PREPARED BY THE COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS

ADDENDUM ENGINEERING GEOLOGY REPORT DATED DECEMBER 6, 1995 PREPARED BY MOUNTAIN GEOLOGY, INC.

GEOLOGIC REVIEW SHEET DATED JANUARY 18, 1996 PREPARED BY THE COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS

ADDENDUM ENGINEERING GEOLOGIC REPORT DATED FEBRUARY 16, 1996 PREPARED BY MOUNTAIN GEOLOGY, INC.

GEOLOGIC AND GEOTECHNICAL REVIEW LETTERS DATED FEBRUARY 22, 1996 PREPARED BY THE COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS

ADDENDUM ENGINEERING GEOLOGIC REPORT DATED FEBRUARY 29, 1996 PREPARED BY MOUNTAIN GEOLOGY, INC.

GEOLOGIC AND GEOTECHNICAL ENGINEERING REVIEW LETTERS DATED APRIL 15 AND 16, 1996 PREPARED BY THE COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS

ENGINEERING GEOLOGIC MEMORANDUM DATED APRIL 30, 1996 PREPARED BY MOUNTAIN GEOLOGY, INC.

ENGINEERING GEOLOGIC MEMORANDUM DATED AUGUST 13, 1996 PREPARED BY MOUNTAIN GEOLOGY, INC.

ADDENDUM ENGINEERING GEOLOGIC REPORT DATED NOVEMBER 8, 1996 PREPARED BY MOUNTAIN GEOLOGY, INC.

REVIEW LETTER DATED DECEMBER 31, 1996 PREPARED BY THE COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS

PERMIT OR PRIVATE SEWERAGE DISPOSAL SYSTEM, AUGUST 6, 1997

APPROVAL OF "SLIDE WAIVER", DATED SEPTEMBER 30, 1997

PERMIT FOR REBUILDING OF BURNOUT RESIDENCE, DATED OCTOBER 6, 1997, FINAL ON JUNE 17, 1998

ENGINEERING GEOLOGIC APPRAISAL REPORT, PREPARED BY MOUNTAIN GEOLOGY, INC., DATED APRIL 2, 2002

UPDATE ENGINEERING GEOLOGIC REPORT, PROPOSED SOLDIER PILES, PREPARED BY MOUNTAIN GEOLOGY, INC., DATED JUNE 4, 2002

UPDATE GEOTECHNICAL REPORT, PREPARED BY WEST COAST GEOTECHNICAL, DATED MAY 21, 2002

GEOLOGIC REVIEW SHEET, PLAN CHECK 0205210046, PREPARED BY THE COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS, DATED JUNE 27, 2002

SOILS ENGINEERING REVIEW SHEET, PLAN CHECK 0205210046, PREPARED BY THE COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS, DATED JULY 9, 2002

ADDENDUM ENGINEERING GEOLOGIC REPORT, PREPARED BY MOUNTAIN GEOLOGY, INC., DATED AUGUST 20, 2002

GEOLOGIC REVIEW SHEET, PREPARED BY THE COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS, DATED SEPTEMER 30, 2002

SOILS ENGINEERING REVIEW SHEET, PREPARED BY THE COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS, DATED OCTOBER 17, 2002

ADDENDUM ENGINEERING GEOLOGIC REPORT, PREPARED BY MOUNTAIN GEOLOGY, INC., DATED OCTOBER 31, 2002

GEOLOGIC REVIEW SHEET, PREPARED BY THE COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS, DATED JANUARY 14, 2003

ADDENDUM ENGINEERING GEOLOGIC REPORT, PREPARED BY MOUNTAIN GEOLOGY, INC., DATED FEBRUARY 5, 2003

Gentlemen:

As requested, we have prepared this engineering geologic memorandum with respect to proposed installation of soldier piles on the subject property located at 21812 Castlewood Drive, Malibu, California.

This memorandum follows consultation with Mr. Mark Pestrella, with the County of Los Angeles Department of Public Works.

The proposed installation of soldier piles is intended to reduce the risk of damage to the residence as a result of potential headward migration of the active Lamplighter Landslide.

05/19/2003 12:59 FAX 310 456 7514

The installation of soldier piles is and will be considered a remedial measure to improve site conditions as potential heardward migration of the Lamplighter Landslide could result in damage to the existing residence which is supported upon a conventional type foundation system.

Installation of soldier piles may now be accomplished easier than after landslide movement during a winter storm on an emergency basis.

Installation of soldier piles is not intended to eliminate the "Waiver" which was issued for the rebuilding of the burnout residence.

Installation of the soldier piles will not adversely effect the stability of the surrounding properties or the performance of the adjacent Lamplighter Landslide.

Should you have any questions, please call.

Respectfully,

Jeffrey W. Holt Engineering Geologist CEG 1200 exp 6-'05

Mountain Geology, Inc.

JWH:ibmpc

xc: (4) Addressee

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