

## CALIFORNIA COASTAL COMMISSION

SOUTH CENTRAL COAST AREA  
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# W 15c

Filed: 8/18/06  
270th Day: 5/15/07  
Staff: James Johnson  
Staff Report: 4/19/07  
Hearing Date: 5/9/07



## **STAFF REPORT: REGULAR CALENDAR**

**APPLICATION NO:** 4-06-042

**APPLICANT:** Gwen & Michael Sadler    **AGENT:** Clive Dawson, Erin Anderson

**PROJECT LOCATION:** 24641 Dry Canyon Cold Creek Road, Calabasas, Los Angeles County

**PROJECT DESCRIPTION:** Construct a 571 sq. ft. addition to an existing 3,681 sq. ft., 19 ft. high, one-story single family residence, interior remodeling, 1,867 sq. ft. of new patios, a new 1,733 sq. ft., 21 foot high, attached pool enclosure with indoor pool and spa, a new 250 sq. ft. trellis, a new attached 577 sq. ft. guest/pool house, remove approximately 105 feet of two existing retaining walls and a drainage swale, construct two new retaining walls approximately 115 ft. and 36 ft. in respective length ranging from 3 – 10 ft. in height, and a new drainage swale approximately 115 ft. in length, a new fire access stairway, and 370 cu. yds. of grading (350 cubic yards of cut and 20 cu. yds. of fill).

<b>Lot area:</b>	<b>57,337 sq. ft.</b>
<b>Proposed building coverage:</b>	<b>6,562 sq. ft.</b>
<b>Existing building coverage:</b>	<b>3,901 sq. ft.</b>
<b>Pavement coverage:</b>	<b>3,360 sq. ft.</b>
<b>Ht above fin grade:</b>	<b>21 ft. 10 in.</b>

### **SUMMARY OF STAFF RECOMMENDATION**

This application was initially scheduled for the Commission's January 10, 2007 meeting. On January 8, 2007, the applicant requested a postponement and agreed to an extension of time for a decision on this application under the Permit Streamlining Act. On April 3, 2007, the applicant submitted a revised fuel modification plan that demonstrated that the proposed additions would not result in any expansion of the existing Fuel Modification Zone C beyond that approved for the original residence in 1999 (Exhibit 11). In fact, the new revised irrigated Fuel Modification Zones A and B have been reduced in size from the 1999 approved 39,680 sq. ft. to 30,050 sq. ft.

Staff recommends **Approval** of the proposed project with twelve special conditions relating to plans conforming to geotechnical engineer's recommendations, landscaping and erosion control fuel modification plans, wildfire waiver of liability, drainage and polluted runoff control, structural appearance, lighting restriction, future development restriction, deed restriction, pool drainage and maintenance, habitat impact mitigation, open space restriction, and removal of excavated material. The proposed project is

located on the western slope of the Mulholland Highway and approximately 100 feet from Dry Canyon Creek.

The existing residence on site was approved by Coastal Permit (CDP) No. 4-99-194 with a large flat pad providing a vacant yard area adjacent to the residence. As previously approved pursuant to CDP 4-99-194, the existing development area on the project site, including the cut and fill graded slopes for the approximately 13,500 sq. ft. existing flat pad, is approximately 30,000 sq. ft. in total area. The development proposed as part of this pending application will be located entirely within the previously approved 30,000 sq. ft. development area on site and will not result in any expansion of the graded/developed area. In addition, the new proposed structures will be attached to the existing residence and will serve to cluster all structures on site within an approximately 10,000 sq. ft. structural development envelope area. The subject property includes chaparral environmentally sensitive habitat area (ESHA) and is surrounded by undisturbed ESHA on three sides. However, the proposed additions, including all necessary fuel modification will be located in previously developed/disturbed areas & will not result in any new impacts to ESHA. Riparian ESHA is located east across Dry Canyon Cold Creek Road along Dry Canyon Creek. The standard of review for this project is the Chapter 3 policies of the Coastal Act. As conditioned, the proposed project will be consistent with the applicable policies of the Coastal Act.

**LOCAL APPROVALS RECEIVED:** Los Angeles County Department of Regional Planning approval in concept; Los Angeles County Department of Health Services approval in concept; Los Angeles County Fire Department, Fire Prevention Bureau, Revised Final Fuel Modification Plan Approved.

**SUBSTANTIVE FILE DOCUMENTS:** Report of Engineering Geologic Study, prepared by Mountain Geology, dated October 12, 2005; Geotechnical Engineering Investigation Report Proposed Pool, Pool House, Retaining Wall and Residential Addition, 24641 Dry Canyon Cold Creek Road, Calabasas, CA, prepared by Coastline Geotechnical Consultants, dated December 29, 2005.

## **I. Approval with Conditions**

### **A. STAFF RECOMMENDATION**

**MOTION:**        *I move that the Commission approve Coastal Development Permit No 4-06-042 pursuant to the staff recommendation.*

**STAFF RECOMMENDATION OF APPROVAL:**

Staff recommends a **YES** vote. Passage of this motion will result in approval of the permits 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 a 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. **Notice of Receipt and Acknowledgment.** 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. **Interpretation.** Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.
4. **Assignment.** 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. Plans Conforming to Geotechnical Engineer's Recommendations.**

By acceptance of this permit, the applicant agrees to comply with the recommendations contained in the Report of Engineering Geologic Study, prepared by Mountain Geology, dated October 12, 2005; Geotechnical Engineering Investigation Report Proposed Pool, Pool House, Retaining Wall and Residential Addition, 24641 Dry Canyon Cold Creek Road, Calabasas, CA, prepared by Coastline Geotechnical Consultants, dated December 29, 2005. These recommendations include recommendations concerning grading, foundations, slabs on grade, retaining walls, swimming pool and spa, foundation setback distances, rear yard setbacks, drainage, slope maintenance, temporary excavations, site observations and testing, responsibilities and site control, plan review, UBC Structural Design Criteria, foundations, foundation settlement, excavation characteristics, retaining walls, temporary cut slope stability, floor slabs, waterproofing, drainage control, monitoring, plan review, site observations, and construction site maintenance, which must be reviewed and approved by the consultant prior to commencement of development.

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 amendment(s) to the permit(s) or new Coastal Development Permit(s).

## **2. Landscaping, Erosion Control, and Fuel Modification Plans**

**Prior to the Issuance of the Coastal Development Permit**, the applicant shall submit revised landscaping and erosion control plans, prepared by a licensed landscape architect or a qualified resource specialist, for review and approval by the Executive Director. The revised landscaping and erosion control plans shall be reviewed and approved by the consulting engineering geologist to ensure that the plans are in conformance with the consultants' recommendations. The revised plans shall incorporate the criteria set forth below. All development shall conform to the approved landscaping and erosion control plans:

### **A) Landscaping and Erosion Control Plans**

1) All graded & disturbed areas on the project site for the proposed project shall be planted and maintained for erosion control purposes within (60) days of receipt of the certificate of occupancy for the pool/guest house or certificate of completion of the residential addition. To minimize the need for irrigation all landscaping shall consist primarily of 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. All native plant species shall be of local genetic stock. No plant species listed as problematic and/or invasive by the California Native Plant Society, the California Exotic

Pest Plant Council, or as may be identified from time to time by the State of California shall be employed or allowed to naturalize or persist on the site. No plant species listed as a 'noxious weed' by the State of California or the U.S. Federal Government shall be utilized within the property.

2). 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 using accepted planting procedures, consistent with fire safety requirements. All native plant species shall be of local genetic stock. Such planting shall be adequate to provide 90 percent coverage within two (2) years, and this requirement shall apply to all disturbed soils.

3) Plantings will 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.

4) 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 to the coastal development permit, unless the Executive Director determines that no amendment is required.

5) Vegetation within 20 feet of the existing residence and new proposed pool enclosure and pool/guest house may be removed to mineral earth, vegetation within a 200-foot radius of the structure may be selectively thinned in order to reduce fire hazard. However, such thinning shall only occur in accordance with an approved long-term fuel modification plan submitted pursuant to this special condition. The fuel modification plan shall include details regarding the types, sizes and location of plant materials to be removed, and how often thinning is to occur. The applicant has submitted on April 3, 2007 evidence that the Final Fuel Modification Plan has been reviewed and approved by the Forestry Department of Los Angeles County. Irrigated lawn, turf and ground cover planted within the twenty foot radius of the proposed house shall be selected from the most drought tolerant species or subspecies, or varieties suited to the Mediterranean climate of the Santa Monica Mountains.

6) Rodenticides containing any anticoagulant compounds (including, but not limited to, Warfarin, Brodifacoum, Bromadiolone or Diphacinone) shall not be used.

7) Fencing of the entire property is prohibited. Any new fencing allowed on the property shall be within 50 feet of the structure and along the driveway and Dry Canyon Cold Creek Road on the subject lot only and a pedestrian entry gate from Dry Canyon Cold Creek Road. The fencing type and location shall be illustrated on the landscape plan. Fencing shall also be subject to the color requirements outlined in Special Condition No. Five (5) below.

**B) Interim Erosion Control Plan**

1) 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 site shall be clearly delineated on the project site with fencing or survey flags.

2) The plan shall specify that should grading within the proposed development area in the vicinity of the existing flat pad take place during the rainy season (November 1 - March 31) the applicant shall install or construct temporary sediment basins (including debris basins, de-silting basins or silt traps), temporary drains and swales, sand bag barriers, silt fencing, stabilize any stockpiled fill with geo-fabric covers or other appropriate cover, install geo-textiles or mats on all cut or fill slopes and close and stabilize open trenches as soon as possible. These erosion measures shall be required on the project site prior to or concurrent with the initial grading operations and maintained through out 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 the coastal zone or to a site within the coastal zone 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 30 days, including but not limited to: stabilization of all stockpiled fill, access roads, disturbed soils and cut and fill slopes with geo-textiles 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 the receipt of the Certificate of Occupancy for the pool/guest house or certificate of completion of the addition for the residential additions or the pool enclosure, 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.

### **3. Assumption of Risk**

By acceptance of this permit, the applicant acknowledges and agrees (i) that the site may be subject to hazards from wildfire; (ii) 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; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) 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.

### **4. Drainage and Polluted Runoff Control Plan**

**Prior to the issuance of the coastal development permit**, the applicant shall submit for the review and approval of the Executive Director, final drainage and runoff control plans, including supporting calculations. The plan shall be prepared by a licensed engineer and shall incorporate structural and non-structural Best Management Practices (BMPs) designed to control the volume, velocity and pollutant load of stormwater leaving the developed site. The plan shall be reviewed and approved by the consulting engineering geologist to ensure the plan is in conformance with geologist's recommendations. In addition to the specifications above, the plan shall be in substantial conformance with the following requirements:

- (a) Selected BMPs (or suites of BMPs) shall be designed to treat, infiltrate or filter the amount of stormwater runoff produced by all storms up to and including the 85<sup>th</sup> percentile, 24-hour runoff event for volume-based BMPs, and/or the 85th percentile, 1-hour runoff event, with an appropriate safety factor (i.e., 2 or greater), for flow-based BMPs.
- (b) Runoff shall be conveyed off site in a non-erosive manner.
- (c) Energy dissipating measures shall be installed at the terminus of outflow drains.
- (d) The plan shall include provisions for maintaining the drainage system, including structural BMPs, in a functional condition throughout the life of the approved development. Such maintenance shall include the following: (1) BMPs shall be inspected, cleaned and repaired when necessary prior to the onset of the storm season, no later than September 30<sup>th</sup> each year and (2) should any of the project's surface or subsurface drainage/filtration structures or other BMPs fail or result in increased erosion, the applicant/landowner or successor-in-interest

shall be responsible for any necessary repairs to the drainage/filtration system or BMPs and restoration of the eroded area. Should repairs or restoration become necessary, prior to the commencement of such repair or restoration work, the applicant shall submit a repair and restoration plan to the Executive Director to determine if an amendment or new coastal development permit is required to authorize such work.

- (e) The permittee shall undertake development in accordance with the approved final plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved final plans shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

## **5. Structural Appearance**

**Prior to the issuance of the coastal development permit**, the applicant shall submit for the review and approval of the Executive Director, a color palette and material specifications for the outer surface of: (1) all existing structures on site (including, but not limited to, the residence, garage, driveway, fencing, and walls) and (2) all new structures (including, but not limited to, the pool enclosure, pool/guest house, and all retaining walls). The palette samples shall be presented in a format not to exceed 8½" x 11" x ½" in size. The palette shall include the colors proposed for the roof, trim, exterior surfaces, retaining walls, or other structures authorized by this permit. Acceptable colors shall be limited to colors compatible with the surrounding environment (earth tones) including shades of green, brown and gray with no white or light shades and no bright tones. All windows shall be comprised of non-glare glass.

The approved structures shall be colored with only the colors and window materials authorized pursuant to this special condition. Alternative colors or materials for future repainting or resurfacing or new windows may only be applied to the structures authorized by coastal development permit 4-06-042 if such changes are specifically authorized by the Executive Director as complying with this special condition.

The applicant shall submit evidence, for the review and approval of the Executive Director, within 30 days of the Los Angeles County Public Works Department, Building Department's issuance of the certificate of occupancy for the pool enclosure or the pool/guest house, whichever occurs first, that all surfaces of existing structures on site have been replaced or re-colored/re-textured in compliance with the approved color palette. The Executive Director may grant additional time for good cause.

## **6. Lighting Restriction**

**A.** The only outdoor night lighting allowed on the subject parcel are limited to the following to minimize night time intrusion of light and disruption of wildlife traversing this area at night within this rural area:



1. The minimum necessary to light walkways used for entry and exit to the structures, including building pad areas, on the site. This lighting shall be limited to fixtures that do not exceed two feet in height, that are directed downward, and use incandescent bulbs that do not exceed 60 watts, or energy efficient bulbs such as compact florescent that do not exceed a 12 watt rating, or bulbs generating the equivalent amount of lumens, unless a higher wattage is authorized by the Executive Director.
  2. Security lighting attached to the residence, pool enclosure, and pool/guest house that are controlled by motion detectors is limited to incandescent bulbs that do not exceed 60 watts, or energy efficient bulbs such as compact florescent that do not exceed a 12 watt rating, or bulbs generating the equivalent amount of Lumens, unless a higher wattage is authorized by the Executive Director.
  3. The minimum lighting necessary for safe use of the pool, within the pool enclosure, and along the side yards on the building pad. That lighting shall be limited to incandescent bulbs that do not exceed 60 wafts, or energy efficient bulbs such as compact florescent that do not exceed a 12-watt rating, or bulbs generating the equivalent amount of lumens, unless a higher wattage is authorized by the Executive Director.
- B.** No lighting on the remainder of the lot, including the slopes and other areas, and no lighting for aesthetic purposes is allowed.

**7. Future Development Restriction**

This permit is only for the development described in Coastal Development Permit No.4-06-042. Pursuant to Title 14 California Code of Regulations Section 13250(b)(6) and 13253(b)(6), the exemptions otherwise provided in Public Resources Code Section 30610 (a) and (b) shall **not** apply to any future development on any portion of the parcel. Accordingly, any future improvements to any portion of the property, including but not limited to the single family residence, patios, the 1,733 sq. ft., 21 foot high, attached pool enclosure with indoor pool and spa, the 250 sq. ft. trellis, the attached 577 sq. ft. guest/pool house, a drainage swale, retaining walls approximately 115 ft. and 36 ft. in respective length ranging from 3 – 10 ft. in height, the fire access stairway, landscaping, and removal of vegetation or grading other than as provided for in the approved fuel modification/landscape plan prepared pursuant to Special Condition 2, shall require an amendment to Coastal Development Permit No. 4-06-042 from the Commission or shall require an additional coastal development permit from the Commission or from the applicable certified local government.

**8. Deed Restriction**

**Prior to 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 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 (hereinafter referred to as the "Standard and Special Conditions"); and (2) imposing all Standard and 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 applicant's entire parcel or parcels. 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.

#### **9. Pool and Spa Drainage and Maintenance**

**Prior to issuance of the Coastal Development Permit**, the applicant shall submit, for review and approval of the Executive Director, a written pool and spa maintenance plan, that contains an agreement to install and use a no chlorine or low chlorine purification system and a program to maintain proper pH, calcium and alkalinity balance in a manner that any runoff or drainage from the pool and spa will not include excessive amounts of chemicals that may adversely affect water quality or environmentally sensitive habitat area. In addition, the plan shall, at a minimum: 1) prohibit discharge of chlorinated pool or spa and 2) prohibit discharge of chlorinated or non-chlorinated pool or spa water into a street, storm drain, creek, canyon, drainage channel, or other location where it could enter receiving waters. The Permittee shall undertake development and maintenance in compliance with this pool and spa maintenance agreement and program approved by the Executive Director. No changes shall be made to the agreement or plan unless they are approved by the Executive Director.

#### **10. Open Space Restriction**

No development, as defined in Section 30106 of the Coastal Act, grazing, or agricultural activities shall occur in the Open Space Area as described and depicted in an Exhibit attached to the Notice of Intent to Issue Permit (NOI) that the Executive Director issues for this permit except for:

- a. Fuel modification required by the Los Angeles county Fire Department undertaken in accordance with the final approved fuel modification plan required by Special Condition Two (2) and included as a conceptual draft plan in Exhibit 12;
- b. Drainage and polluted runoff control activities pursuant to Special Condition Two (2) and Special Condition Four (4);
- c. Planting of native vegetation and other restoration activities as required by Special Condition No. Two (2), and if additional plantings or other restoration

- activities are approved by the Commission as an amendment to this coastal development permit or a new coastal development permit; and
- d. Existing easements for roads, trails, and utilities.

**PRIOR TO THE ISSUANCE BY THE EXECUTIVE DIRECTOR OF THE NOI FOR THIS PERMIT**, the applicant shall submit for the review and approval of the Executive Director, and upon such approval, for attachment as an Exhibit to the NOI, a formal legal description and graphic depiction, prepared by a licensed surveyor, of the portion of the subject property affected by this condition, as generally described on Exhibit 10 attached to the findings in support of approval of this permit.

**11. Removal of Excess Excavated Material**

**Prior to the issuance of the Coastal Development Permit**, the applicant shall provide evidence to the Executive Director of the location of the disposal site for all excess excavated material from the site. If the disposal site is located in the Coastal Zone, the disposal site must have a valid coastal development permit for the disposal of fill material. If the disposal site does not have a coastal permit, such a permit will be required prior to the disposal of material.

**IV. Findings and Declarations**

The Commission hereby finds and declares:

**A. Project Description and History**

The applicant is proposing to construct a 571 sq ft. addition to an existing 3,681 sq. ft., 19 ft. high, one-story single family residence, interior remodeling, a new 1,733 sq. ft., 21 ft. high, attached pool enclosure with indoor pool and spa, approximately 1,867 sq. ft. of new patios, a new 250 sq. ft. trellis, and a new attached 577 sq. ft. guest/pool house. In addition, the project includes the removal of approximately 105 feet of two existing retaining walls and a drainage swale and the construction of two new retaining walls approximately 115 ft. and 36 ft. in respective length ranging from 3 – 10 ft. in height, a new drainage swale approximately 115 ft. in length, a new fire access stairway, and approximately 370 cu. yds. of grading (200 cubic yards of cut, 20 cu. yds. of fill, and 150 cu. yds. of excavation for pool). (Exhibits 1 – 7, 11 - 15).

The proposed project site is located on the steep uphill west side of Dry Creek Cold Canyon Road within approximately 100 to 125 feet of the centerline of Dry Canyon Creek. Dry Creek Cold Canyon Road is located between the project site and Dry Canyon Creek. Dry Canyon Creek is a USGS designated blue line stream and is also designated as a disturbed sensitive resource area in the certified Malibu/Santa Monica Mountains Land Use Plan (LUP). Surrounding development along the creek and within the canyon area is single family residential in character. Lands to northwest and west

on the west side of Dry Creek Cold Canyon Road are vacant and include chaparral vegetation that is considered environmentally sensitive habitat (ESHA).

In 1999, the Commission approved Coastal Development Permit (CDP) No. 4-99-194 (Kasco, LP) to construct a new two-story single family residence with an attached three car garage, septic system and 3,180 cubic yards of grading on the subject site. The existing driveway extends over a portion of an adjoining parcel for which the applicant has an easement. As previously approved pursuant to CDP 4-99-194, the existing development area on the project site, including the cut and fill graded slopes for the large existing flat pad, is approximately 30,000 sq. ft. in total area. The development proposed as part of this pending application will be located entirely within the previously approved 30,000 sq. ft. development area on site and will not result in any expansion of the graded/developed area. In addition, the new proposed structures (including both the pool enclosure and guest/pool house will be attached to the existing residence and will serve to cluster all structures on site within an approximately 10,000 sq. ft. structural development envelope within the existing approximately 30,000 sq. ft. development area. Further, On April 3, 2007, the applicant submitted a revised fuel modification plan demonstrates that the development proposed by this amendment will not result in any expansion of the existing Fuel Modification Zone C beyond that approved for the original residence in 1999 (Exhibit 11). In fact, the irrigated Fuel Modification Zones A and B have been reduced in size from the 1999 approved 39,680 sq. ft. to 30,050 sq. ft. Therefore, the development proposed as part of this amendment, including all necessary fuel modification, will not result in any new adverse impacts to any ESHA.

## **B. Hazards and 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.***

## **Geology**

The prominent geomorphic features in the area are Calabasas Peak and Dry Canyon Creek to the east and Stokes Canyon to the west. The site is on a steep slope above Dry Canyon Creek on the uphill side of the roadway, opposite the creek. The existing residence was constructed using cut and fill material to construct a flat building pad of about 13,500 sq. feet accessed by a new driveway from Dry Canyon Cold Creek Road. Physical relief across the site is about 85 feet from Dry Canyon Cold Creek Road at the base to the top of a small hill located to the northwest of the residence. Slope drainage is by sheet flow runoff directed towards Dry Canyon Creek Road and then to Dry Canyon Creek.

The applicant is proposing to construct a 571 sq ft. addition to an existing 3,681 sq. ft., 19 ft. high, one-story single family residence, interior remodeling, a new 1,733 sq. ft., 21 ft. high, attached pool enclosure with indoor pool and spa, approximately 1,867 sq. ft. of new patios, a new 250 sq. ft. trellis, and a new attached 577 sq. ft. guest/pool house. In addition, the project includes the removal of approximately 105 feet of two existing retaining walls and a drainage swale and the construction of two new retaining walls approximately 115 ft. and 36 ft. in respective length ranging from 3 – 10 ft. in height, a new drainage swale approximately 115 ft. in length, a new fire access stairway, and approximately 370 cu. yds. of grading (200 cubic yards of cut, 20 cu. yds. of fill, and 150 cu. yds. of excavation for pool). (Exhibits 1 – 7, 11 - 15).

The applicant has submitted the Report of Engineering Geologic Study, prepared by Mountain Geology, dated October 12, 2005 which addresses the geologic conditions on the site. The geologic consultants have found the geology of the proposed project site to be suitable for the construction of the proposed residential additions, pool and pool enclosure and pool/guest house on the site. They have identified no landslides or other geologic hazards on the site. The report states that:

“Based upon the findings of our engineering geologic study, it is anticipated that the proposed site improvements will be free from geologic hazards such as landslides, slippage, active faults, and excessive settlement. The proposed site improvements will have no adverse effect upon the stability of the site or adjacent properties provided the recommendations of the Project Engineering Geologist, Project Geotechnical Engineer, and Project Environmental Health Specialist are properly incorporated in the plans and implemented during construction.”

The applicant also submitted the Geotechnical Engineering Investigation Report Proposed Pool, Pool House, Retaining Wall and Residential Addition, 24641 Dry Canyon Cold Creek Road, Calabasas, CA, prepared by Coastline Geotechnical Consultants, dated December 29, 2005 which addresses the foundation design for the proposed swimming pool, pool/guest house, retaining wall and residential addition.

The geologic and geotechnical engineering consultants conclude that the proposed developments are feasible and will be free from geologic hazard provided their recommendations are incorporated into the proposed development. The Geotechnical Engineering Report contains several recommendations to be incorporated into the

project including UBC Structural Design Criteria, foundations, foundation settlement, excavation characteristics, retaining walls, temporary cut slope stability, floor slabs, waterproofing, drainage control, monitoring, plan review, site observations, and construction site maintenance. To ensure that the recommendations of the consultants have been incorporated into all proposed development, the Commission, as specified in **Special Condition No. One (1)**, requires the applicant to incorporate the recommendations cited in the Geology and Geotechnical Reports into all final design and construction plans. 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 applicant's consultants shall require an amendment to the permit or a new coastal development permit.

In addition, the applicant is proposing approximately 370 cu. yds. of grading (200 cubic yards of cut, 20 cu. yds. of fill, and 150 cu. yds. of pool excavation). The Commission notes that, as proposed, the project will result in excess excavated material. Thus, to ensure that excess excavated material is moved off site so as not to contribute to unnecessary landform alteration and to minimize erosion and sedimentation from stockpiled excavated soil, the Commission finds it necessary to require the applicant to dispose of the material at an appropriate disposal site or to a site that has been approved to accept fill material, as specified in **Special Condition No. Eleven (11)**.

The Commission finds that controlling and diverting run-off in a non-erosive manner from the proposed structure, impervious surfaces, and building pad will minimize erosion and add to the geologic stability of the project sites. To ensure that adequate drainage and erosion control are included in the proposed development, the Commission requires the applicant to submit drainage and interim erosion control plans, as specified in **Special Conditions Nos. Two (2) and Four (4)**. **Special Condition No. Four (4)** requires the applicants to maintain a functional drainage system at the subject site to insure that run-off from the project site is diverted in a non-erosive manner to minimize erosion at the site for the life of the proposed development. Should the drainage system of the project site fail at any time, the applicant will be responsible for any repairs or restoration of eroded areas as consistent with the terms of **Special Condition No. Four (4)**.

The Commission also finds that landscaping of graded and disturbed areas on the subject site, as a result of the proposed residential additions, will serve to stabilize disturbed soils, reduce erosion and thus enhance and maintain the geologic stability of the site. Therefore, **Special Condition No. Two (2)** requires the applicant to submit and implement revised landscaping plans. **Special Condition No. Two (2)** also requires the applicant to utilize and maintain native and noninvasive plant species of genetic plant stock compatible with the surrounding area for landscaping the project sites.

Invasive and non-native plant species are generally characterized as having a shallow root structure in comparison with their high surface/foilage 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.

The Commission finds that the proposed project, as conditioned, will minimize potential geologic hazards of the project site and adjacent properties.

### **Wild Fire**

The proposed project is located in the Santa Monica Mountains, an area subject to an extraordinary potential for damage or destruction from wild fire. Typical vegetation in the Santa Monica Mountains consists mostly of coastal sage scrub and chaparral. Many plant species common to these communities produce and store terpenes, which are highly flammable substances (Mooney in Barbour, Terrestrial Vegetation of California, 1988). Chaparral and sage scrub communities have evolved in concert with, and continue to produce the potential for, frequent wild fires. The typical warm, dry summer conditions of the Mediterranean climate combine with the natural characteristics of the native vegetation to pose a risk of wild fire damage to development that cannot be completely avoided or mitigated.

Due to the fact that the proposed project is located in an area subject to an extraordinary potential for damage or destruction from wild fire, the Commission can only approve the project if the applicant assumes the liability from these associated risks. Through **Special Condition No. Three (3)**, the wildfire waiver of liability, the applicant acknowledges the nature of the fire hazard which exists on the site and which may affect the safety of the proposed development. Moreover, through acceptance of **Special Condition No. Three (3)**, the applicant also agrees to indemnify the Commission, its officers, agents and employees against any and all expenses or liability arising out of the acquisition, design, construction, operation, maintenance, existence, or failure of the permitted project.

For the reasons set forth above, the Commission finds that, as conditioned, the proposed project is consistent with Section 30253 of the Coastal Act.

### **C. Visual Resources**

Section 30251 of the Coastal Act states:

*The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline reservation and Recreation Plan*

***prepared by the Department of Parks and Recreation and by local government  
shall be subordinate to the character of its setting.***

Section 30251 of the Coastal Act requires scenic and visual qualities to be considered and preserved. The subject site is located within a rural area characterized by expansive, naturally vegetated mountains and hillsides. The Malibu/Santa Monica Mountains Land Use Plan (LUP) protects visual resources in the Santa Monica Mountains. Mulholland Highway is recognized as a priority scenic highway, while Stunt Road is also recognized as a scenic highway as well (Exhibit 1). The existing residence and proposed development will be visible from Dry Canyon Cold Creek Road, which fronts the project site; although this road is not a designated scenic highway pursuant to the LUP. The proposed project is not visible from Mulholland Highway. In addition, the subject site would also be visible from the planned "Stokes Ridge Trail", a future public trail identified by the Los Angeles County Department of Parks and Recreation, Malibu/Santa Monica Mountains Trail System Map adopted by the Commission in June 1983, which traverses Dry Canyon Cold Creek immediately adjacent to the project site in a north-south direction (Exhibit 8). A portion of this planned Stokes Ridge Trail, traverses north along Dry Canyon Cold Creek Road and then continues both west within the Thousand Peaks subdivision and east across Dry Canyon Creek and Mulholland Highway and then climbs east to the ridge joining the existing Calabasas Cold Creek Trail (follows the Calabasas Peak Motorway) that traverses north-south across the ridge top to Calabasas Peak.

In addition, to the south of the subject site (south of the intersection of Mulholland Highway and Stunt Road) are three trails (two of these trails are planned future trails and one trail is an existing trail currently used by hikers) all identified on the adopted Malibu/Santa Monica Mountains Trail System Map. The two future planned trails include another portion of the Calabasas Cold Creek that traverses west – east and the Stunt High Trail that connects near Stunt Road on the east to the existing Backbone Trail on the west. The third identified trail is the existing Backbone Trail that crosses east – west across the top of the Santa Monica Mountains. Public Lands owned by the Santa Monica Mountains Conservancy (SMMC) are located to the east of the subject site at Calabasas Peak, and along Stunt Road which includes an existing Upper Stunt High Trail leading to the existing Backbone Trail (Exhibit 9). Additional public lands are located south of the intersection of Mulholland Highway and Stunt Road near Saddle Peak that include the Malibu Creek State Park, and various properties owned by the Mountains Restoration Trust.

The applicant proposes to construct a 571 sq. ft. addition to one story, 19 foot high, 3,681 sq. ft., single family residence, remodel residence, new 1,733 sq. ft., 21 foot high, attached pool enclosure with indoor pool and spa, new attached 577 sq. ft. guest/pool house, remove approximate 105 feet of a retaining wall and drainage swale, construct new approximate 115 foot long, 3 – 10 foot high retaining wall, new 36 foot long retaining wall and approximate 115 foot long drainage swale, new fire access stairway, 350 cubic yards of cut, expand two existing paved patios to 809 and 1,058 sq. ft. and construct 250 sq. ft. trellis, 20 cubic yards of fill, 330 cubic yards of export to disposal



site located outside the coastal zone. The proposed project may be completed in phases. (Exhibits 1 – 7, 11 - 15).

This proposed development is located within the Mulholland Corridor near its intersection with Stunt Road. There are numerous existing residences located to the northeast, east, and southeast along Dry Canyon Creek. Adjacent to the subject parcel to the northwest and west are vacant lands with chaparral vegetation. In the review of this project, the Commission reviews the publicly accessible locations where the proposed development is visible to assess potential visual impacts to the public.

In addition, to assess potential impacts to public views where new development will be visible from public areas, the Commission examines the building site, the proposed grading, and the size of the building pad and structures. The construction of the proposed residential additions, including the pool enclosure and pool/guest house raises, two issues regarding the siting and design: one, whether or not public views from public roadways will be adversely impacted, or two, whether or not public views from public lands and trails will be impacted.

The project site is developed with an existing residence approved by the Commission pursuant to CDP 4-99-194 (Kasco, LP) for the construction of a new two-story single family residence with an attached three car garage, septic system and 3,180 cubic yards of grading. As previously approved pursuant to CDP 4-99-194, the existing development area on the project site, including the graded cut and fill slopes for the approximately 13,500 sq. ft. flat pad, is approximately 30,000 sq. ft. in total size. The development proposed as part of this pending application will be located entirely within the previously approved 30,000 sq. ft. development area on site and will not result in any expansion of the graded/developed area. Further, the new proposed structures (including both the pool enclosure and guest/pool house) will be attached to the existing residence and will be clustered on site within an approximately 10,000 sq. ft. structural development envelope on the existing larger flat pad. The remaining areas of the existing large flat pad have been previously developed with backyard improvements, patios, and landscaping.

The proposed project will include approximately 370 cubic yards of additional grading (200 cu. yds. of cut, 20 cu. yds. of fill, and 150 cu. yds. of excavation for the pool) and the replacement of two existing retaining walls; however, all proposed grading will occur within the existing graded/developed area and will not result in any new significant impacts to public views. The relocation/reconstruction of the existing retaining walls are proposed in order to enlarge the existing flat patio areas on site and will include the addition of approximately 1,200 sq. ft. of additional flat pad area; however, these new outdoor patio areas will consist of non-flammable improvements located entirely within the previously approved graded areas on site and will not result in the expansion of the previously approved development area on site or result in additional vegetation removal as a result of Los Angeles County fuel modification requirements.

In addition, the proposed retaining walls, cut grading, and the majority of the new proposed patio area will not be readily visible from any public viewing locations (including Dry Canyon Cold Creek Road) due to their location behind the residence and will not result in any significant adverse impacts to public views. Further, the replacement retaining walls will be approximately the same size and in the same approximate location as the existing walls on site to be removed. In addition, approximately 150 cu yds of proposed grading will occur for the excavation of the proposed pool; however, this excavation will not result in any additional landform alteration on site since the pool will be located entirely on the existing flat pad. In addition, no additional grading is needed to construct the proposed structural additions to the existing residence (including the pool/guest house and the pool enclosure) which will be located on the existing flat pad.

Thus, the Commission finds that the majority of the cut grading and landform alteration on the hillside and the proposed replacement retaining wall will be located behind the existing 21 foot high residence and the new proposed pool enclosure and pool/guest house and will not be visible from the adjacent road, Dry Canyon Cold Creek Road. However the proposed 21 foot high pool enclosure and 14 foot high pool/guest house will be visible from Dry Canyon Cold Creek Road as an expansion to the northwest of the existing 21 foot high residence. The visibility of both this minor landform alteration and the proposed pool enclosure and pool/guest house from the adjacent road, Dry Canyon Cold Creek Road which is also a portion of the planned Stokes Ridge Trail, will be limited to only along the immediate section of this road and trail adjacent to the proposed development due to the sharp and blind curves located just beyond the length of the subject lot.

More importantly, the proposed residential additions, pool enclosure and pool/guest house will not be visible from Mulholland Highway, a designated scenic highway, in both the northbound and southbound directions due to substantial intervening mature riparian vegetation, sycamores and oak trees located along Dry Canyon Creek. The existing residence and the proposed residential addition, pool enclosure, and pool/guest house will be visible from the portion of the planned future Stokes Ridge Trail (Exhibit 8) which leads to the top of the ridge about one third to one half mile to the east connecting to the existing Calabasas – Cold Creek Trail that traverses an area also about one half mile to the east along the ridgeline. The proposed project will also be visible from SMMC public lands at the top of Calabasas Peak also located about one half of a mile to the east. This public view from a distance between one third to one half of a mile of the existing residence and the proposed project is against the backdrop of a chaparral vegetated hillside adjacent to the project site. All development will be located within the previously approved graded/disturbed areas on site and there are no feasible alternative building locations on the subject lot that would significantly reduce visual impacts of the proposed project additions.

As viewed from the planned and existing public trails to the south (a portion of the planned Calabasas – Cold Creek Trail, the existing Stunt High Trail, and the existing

Backbone Trail) and the public lands located to the south, the existing residence and the proposed residential addition, pool enclosure, and pool/guest house will either not be visible or its visibility will be extremely limited due to the fact the additions are located on the north side of the existing 21 foot high residence on the building pad. Since the proposed project additions to the existing residence will be visible from the planned Stokes Ridge Trail, the special conditions of approval recommended below are necessary to ensure consistency with Coastal Act Section 30251.

In previous permit actions, the Commission has found it is necessary to require mitigation measures to minimize visual impacts associated with new proposed residential addition that include finishing the exterior of the residential additions and retaining walls with a color consistent with the surrounding environment and, by incorporating windows for the residential addition, pool enclosure and pool/guest house of a non-reflective glass type to minimize impacts on public views. In this case, in its approval of Coastal Permit No. 4-99-194, the Commission specifically required the recordation of a deed restriction that required that limited the color of the residence and driveway to earth tone colors only and prohibited the use of white tones or bright colors. However, during the processing of this application, staff discovered that the portions of the residence (including the trim), the concrete driveway, two garage doors, and the wrought iron fence consist of, or were painted, with "white" colors, and thus, are not consistent with Special Condition No. Five (5) required by Coastal Permit No. 4-99-194 and with the recorded deed restriction (Exhibit 14). At staff's request, the applicant has since revised this pending application to specifically propose to replace or re-color all portions of the structure in compliance with the Special Condition Five of CPD 4-99-194 (including the driveway).

Therefore, in order to adequately implement the applicant's proposal regarding the existing development on site and in order to ensure visual impacts associated with the colors of the new structures and the potential glare of the window glass in the new structures (including the new proposed pool/guest house and pool enclosure) are minimized, **Special Condition No. Five (5)** requires that prior to the issuance of the coastal development permit, the applicant shall submit for the review and approval of the Executive Director, a color palette and material specifications for the outer surface of: (1) all existing structures on site (including, but not limited to, the residence, driveway, and walls) and (2) all new structures (including, but not limited to, the pool enclosure, pool/guest house, and all retaining walls). The palette samples shall be presented in a format not to exceed 8½" x 11" x ½" in size. The palette shall include the colors proposed for the roof, trim, exterior surfaces, retaining walls, or other structures authorized by this permit. Acceptable colors shall be limited to colors compatible with the surrounding environment (earth tones) including shades of green, brown and gray with no white or light shades and no bright tones. All windows shall be comprised of non-glare glass.

In addition, to ensure that the applicant's proposal to re-color/re-texture all existing structures (including the residence, driveway, and fencing on site), Special Condition

No. Five (5) also requires the applicant to submit evidence, for the review and approval of the Executive Director, within 30 days of the Los Angeles County Public Works Department, Building Department's issuance of the certificate of occupancy for the pool enclosure or the pool/guest house that all existing structures on site have been replaced or re-colored/re-textured in compliance with the approved color palette. The Executive Director may grant additional time for good cause.

Visual impacts associated with proposed grading, and the structure itself, can be further reduced by the use of appropriate and adequate landscaping. As such, **Special Condition No. Two (2)** requires the applicant to prepare a revised landscape plan relying on native, non-invasive plant species to ensure that the vegetation on site remains visually compatible with the native flora of surrounding areas. Implementation of **Special Condition No. Two (2)** will partially screen the proposed residential structure additions, pool enclosure, and pool/guest house and soften the visual impact of the development from public views from portion of the planned Stokes Ridge Trail located adjacent to the subject property, the eastern portion of this planned trail located to the east about one third to one half mile, the existing Calabasas Cold Creek Trail, and the SMMC public lands located one half mile. To ensure that the final approved landscaping plans are successfully implemented, **Special Condition No. Two (2)** also requires the applicant to revegetate all disturbed areas in a timely manner and includes a monitoring component to ensure the successful establishment of all newly planted and landscaped areas over time.

The Commission has found that night lighting of areas in the Malibu / Santa Monica Mountains area creates a visual impact to nearby scenic beaches, scenic roads, parks, and trails. In addition, night lighting may alter or disrupt feeding, nesting, and roosting activities of native wildlife species. Therefore, in order to protect the night time rural character of this portion of the Santa Monica Mountains, consistent with the scenic and visual qualities of this coastal area, the Commission limits the nighttime lighting of the property, pool, pool enclosure, residence, and pool/guest house to that necessary for safety as outlined in **Special Condition No. Six (6)**.

In addition, regarding future developments or improvements, certain types of development to the property, normally associated with the pool/guest house, which might otherwise be exempt, have the potential to impact scenic and visual resources in this area. Although the pool/guest house is proposed to be attached to the pool enclosure which, in turn, will be attached to the existing residence, the applicant has indicated that may construct the proposed developments over time in a phased manner. As a result, the Commission notes that in the event that the pool/guest house is constructed prior to or without the attached pool enclosure, then the pool/guest house would constitute a detached structure. In past permit actions, the Commission has found that future additions to or expansion of detached accessory structures may result in adverse impacts to coastal resources, including public views. Therefore, **Special Condition No. Seven (7)** has been required to ensure that any future development or improvements normally associated with the proposed residential additions, pool

enclosure, and pool/guest house, which might otherwise be exempt, are reviewed by the Commission for compliance with the scenic resource policy, Section 30251 of the Coastal Act. Finally, **Special Condition No. Eight (8)** requires the applicant to record a deed restriction that imposes the terms and conditions of this permit as restrictions on use and enjoyment of the subject property and provides any prospective purchaser with recorded notice that the restrictions are imposed on the subject property.

The proposed project, as conditioned, will not result in a significant adverse impact to scenic public views or character of the surrounding area. Therefore the Commission finds that, as conditioned, the proposed development is consistent with section 30251 of the Coastal Act.

#### **D. Environmentally Sensitive Resource Areas**

Section 30250(a) of the Coastal Act provides that new development be located within or near existing developed areas able to accommodate it, or in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources:

***New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources.***

Section 30105.5 of the Coastal Act defines the term "cumulatively," as it is used in Section 30250(a), to mean that:

***[T]he incremental effects of an individual project shall be reviewed in conjunction with the effects of past projects, the effects of other current projects, and the effects of probable future projects.***

Sections 30230 and 30231 of the Coastal Act are designed to protect and enhance, or restore where feasible, marine resources and the biologic productivity and quality of coastal waters, including streams.

Section 30230 of the Coastal Act states that:

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

Section 30231 of the Coastal Act states that:

***The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.***

In addition, Section 30240 of the Coastal Act states that environmentally sensitive habitat areas must be protected against disruption of habitat values:

***(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas.***

***(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.***

Sections 30230 and 30231 of the Coastal Act require that the biological productivity and the quality of coastal waters and streams be maintained and, where feasible, restored through among other means, minimizing adverse effects of waste water discharge and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flows, maintaining natural buffer areas that protect riparian habitats, and minimizing alteration of natural streams. In addition, Sections 30107.5 and 30240 of the Coastal Act state that environmentally sensitive habitat areas must be protected against disruption of habitat values. Therefore, when considering any area, such as the Santa Monica Mountains, with regard to an ESHA determination one must focus on three main questions:

- 1) Is a habitat or species rare or especially valuable?
- 2) Does the habitat or species have a special nature or role in the ecosystem?
- 3) Is the habitat or species easily disturbed or degraded by human activities and developments?

The Coastal Commission has found that the Mediterranean Ecosystem in the Santa Monica Mountains is itself rare, and valuable because of its relatively pristine character, physical complexity, and resultant biological diversity. Therefore, habitat areas that provide important roles in that ecosystem are especially valuable and meet the second criterion for the ESHA designation. In the Santa Monica Mountains, coastal sage scrub

and chaparral have many important roles in the ecosystem, including the provision of critical linkages between riparian corridors, the provision of essential habitat for species that require several habitat types during the course of their life histories, the provision of essential habitat for local endemics, the support of rare species, and the reduction of erosion, thereby protecting the water quality of coastal streams. For these and other reasons discussed in Exhibit 10, which is incorporated herein, the Commission finds that large contiguous, relatively pristine stands of coastal sage scrub and chaparral in the Santa Monica Mountains meet the definition of ESHA. This is consistent with the Commission's past findings on the Malibu LCP<sup>1</sup>.

In addition, the certified Malibu/Santa Monica Mountains Land Use Plan (LUP) includes policies that provide useful guidance in evaluating the consistency of the proposed development with the resource protection policies of the Coastal Act. Policy 69 of the LUP Development provides that new development in areas adjacent to environmentally sensitive habitat areas (ESHA) shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas. In addition, Policy 74 provides that new development shall be located as close as feasible to existing roadways, services, and existing development to minimize the effects on sensitive environmental resources. In addition, Policy 86 provides that drainage control systems be incorporated in new developments to minimize effects of runoff and erosion and Policy 91 requires that new development be designed to minimize impacts and alterations of physical features, such as ravines and hillsides, and processes of the site.

For any specific property within the Santa Monica Mountains, it is necessary to meet three tests in order to assign the ESHA designation. First, is the habitat properly identified, for example as coastal sage scrub or chaparral? Second, is the habitat undeveloped and otherwise relatively pristine? Third, is the habitat part of a large, contiguous block of relatively pristine native vegetation?

The applicant is proposing to construct a 571 sq. ft. addition to an existing 3,681 sq. ft., 19 ft. high, one-story single family residence, interior remodeling, a new 1,733 sq. ft., 21 ft. high, attached pool enclosure with indoor pool and spa, approximately 1,867 sq. ft. of new patios, a new 250 sq. ft. trellis, and a new attached 577 sq. ft. guest/pool house. In addition, the project includes the removal of approximately 105 feet of two existing retaining walls and a drainage swale and the construction of two new retaining walls approximately 115 ft. and 36 ft. in respective length ranging from 3 – 10 ft. in height, a new drainage swale approximately 115 ft. in length, a new fire access stairway, and approximately 370 cu. yds. of grading (200 cubic yards of cut, 20 cu. yds. of fill, and 150 cu. yds. of excavation for pool). (Exhibits 1 – 7, 11 - 17).

The proposed additions to the existing residence area located about 100 feet from the centerline of Dry Canyon Cold Creek Road and therefore are located as close to the

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<sup>1</sup> Revised Findings for the City of Malibu Local Coastal Program (as adopted on September 13, 2002) adopted on February 6, 2003.

existing roads as feasible. The existing residence and proposed additions are located approximately 150 feet west of Dry Canyon Cold Creek Road. The existing and proposed revisions to the onsite drainage control systems include a drainage swale and energy dissipators to minimize effects of runoff from the hillside and erosion. The drainage system drains to Dry Canyon Cold Creek Road which then sheet flows into Dry Canyon Creek.

The project site at the time it was graded in 2001, is identified in the aerial photograph on Exhibit 13. This exhibit shows the vacant lands located to the northwest, west and south of the project site; residentially developed property is located to the northeast, east, and southeast. These vacant properties consist of "mixed chaparral", primarily consisting of large evergreen shrubs that grow to six feet or higher and form a closed canopy and other less dense "mixed chaparral". Commission staff visited the subject property on December 12, 2006, confirming that the chaparral vegetation on the project site to the north and northwest and the surrounding properties are "mixed chaparral". In addition, staff notes that the remaining chaparral habitat on the subject site was part of a larger unfragmented block of relatively undisturbed chaparral habitat that extends onto neighboring properties to the northwest, west and south. A portion of this chaparral vegetation was removed or thinned in the area within the 200 foot fuel modification area surrounding the existing residence and garage. In past Commission permit actions and in its adoption of the Malibu Local Coastal Program, the Commission has found that areas in the Santa Monica Mountains that are vegetated with relatively undisturbed coastal sage scrub and chaparral, where such vegetated areas are part of a larger unfragmented block of habitat, constitute ESHA under the Coastal Act.

Within areas of the Santa Monica Mountains with chaparral and coastal sage scrub, which is considered ESHA, the Commission has required, through recent past permit actions, that development be clustered on a lot within a total development area that does not exceed 10,000 sq. ft. (including the flat pad area and all cut/fill slope areas but excluding the driveway and required fire truck hammerhead turnaround areas) in order to minimize impacts on this sensitive habitat and the surrounding watershed resulting from both landform alteration and vegetation clearance. In this case, the project site is already developed with an existing residence approved by the Commission pursuant to CDP 4-99-194 (Kasco, LP) for the construction of a new two-story single family residence with an attached three car garage, septic system and 3,180 cubic yards of grading. As previously approved pursuant to CDP 4-99-194, the existing development area on the project site, including the graded cut and fill slopes for the approximately 13,500 sq. ft. flat pad, is approximately 30,000 sq. ft. in total size.

However, in this case, the development proposed as part of this pending application will be located entirely within the previously approved approximately 30,000 sq. ft. development area on site and will not result in any expansion of the existing graded/developed area. Further, although the total existing development area (including all graded areas on site) is significantly larger than 10,000 sq. ft. in area, the Commission finds that the existing residence and the new proposed structural additions



(including both the attached pool enclosure and guest/pool house) will be clustered on site within an area less than 10,000 sq. ft. in area on the existing larger flat pad. The remaining areas of the existing large flat pad have been previously developed with backyard improvements, patios, and landscaping.

In addition, the proposed project will include approximately 370 cubic yards of additional grading (200 cu. yds. of cut, 20 cu. yds. of fill, and 150 cu. yds. of excavation for the pool) and the replacement of two existing retaining walls; however, all proposed grading will occur within the existing graded/developed area on site and will not result in any new significant impacts to public views. The relocation/reconstruction of the existing retaining walls are proposed in order to enlarge the existing flat patio areas on site and will include the addition of approximately 1,200 sq. ft. of additional flat pad area; however, these new outdoor patio areas will not require significant grading or any removal of any native vegetation on site since the patio areas will consist of non-flammable improvements located entirely within the previously approved graded areas on site and will not result any additional vegetation removal as a result of Los Angeles County fuel modification requirements.

As explained above, the slope to the northwest and west beyond the existing graded area and the 200 ft. fuel modification zone around the existing residence constitutes an environmentally sensitive habitat area (ESHA) pursuant to Section 30107.5 and 30240. Section 30240 requires that "environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas." Section 30240 restricts development on the parcel to only those uses that are dependent on the resource. The applicant proposes to construct additions to the existing residence, a pool with a pool enclosure, and a pool/guest house with expansions of the existing patios along the sides of the residence. All proposed development will be located entirely within the existing developed/disturbed area on site. As identified in the revised final Fuel Modification Plan submitted by the applicant on April 3, 2007, the additions/development proposed as part of this amendment will not result in any expansion of the existing Fuel Modification Zone C as approved for the original residence in 1999 (Exhibit 11). In fact, the irrigated Fuel Modification Zones A and B will actually be reduced in size from the 1999 approved 39,680 sq. ft. to 30,050 sq. ft. of total area. Therefore, there will be no further loss of ESHA as a result of the construction of the proposed additions to the existing residence since the original 1999 Fuel Modification required a 200 ft. fuel modification zone (as measured from the existing residence) which will not be expanded in this case.

Therefore, in this situation, the Commission finds that this proposed project with the revised final fuel modification complies with Section 30240 by avoiding any further impacts that would disrupt and/or degrade the surrounding environmentally sensitive habitat and thus, no ESHA mitigation is needed.

The Commission has determined that in conjunction with siting new development to minimize impacts to ESHA, additional actions can be taken to minimize existing adverse impacts to ESHA. The Commission finds that the use of non-native and/or invasive plant species for residential landscaping results in both direct and indirect adverse effects to native plants species indigenous to the Malibu/Santa Monica Mountains area. Adverse effects from such landscaping result from the direct occupation or displacement of native plant communities by new development and associated non-native landscaping. Indirect adverse effects include offsite migration and colonization of native plant habitat by non-native/invasive plant species (which tend to outcompete native species) adjacent to new development. The Commission notes that the use of exotic plant species for residential landscaping has already resulted in significant adverse effects to native plant communities in the Malibu/Santa Monica Mountains area. Therefore, in order to minimize adverse effects to the indigenous plant communities of the Malibu/Santa Monica Mountains area, **Special Condition No. Two (2)** requires that all landscaping consist primarily of native plant species of local genetic stock and that invasive plant species shall not be used.

In addition, the Commission has found that night lighting of areas in the Malibu/Santa Monica Mountains area creates a visual impact to nearby scenic beaches, scenic roads, parks, and trails. In addition, night lighting may alter or disrupt feeding, nesting, and roosting activities of native wildlife species. The subject site contains environmentally sensitive habitat. Therefore, **Special Condition No. Six (6)**, the Lighting Restriction, limits night lighting of the site in general; limits lighting to the developed area of the site; and specifies that lighting be shielded downward. The restriction on night lighting is necessary to protect the night time rural character of this portion of the Santa Monica Mountains consistent with the scenic and visual qualities of this coastal area. In addition, low intensity security lighting will assist in minimizing the disruption of wildlife traversing this area at night that are commonly found in this rural and relatively undisturbed area. Thus, the lighting restrictions will attenuate the impacts of unnatural light sources and reduce impacts to sensitive wildlife species.

Furthermore, fencing of the site would adversely impact the movement of wildlife through the chaparral ESHA on this over 1.2 acre lot. Therefore, the Commission finds it is necessary to limit fencing to the building pad area within fifty (50) feet of the structure and along the access driveway and Dry Canyon Cold Creek Road as required in **Special Condition No. Two (2)**.

Also, the Commission finds that the amount and location of any new development that may be proposed in the future on the subject site is significantly limited by the unique nature of the site and the environmental constraints discussed above. Therefore, to ensure that any future additions or changes to the development proposed by this application (including the pool/guest house and pool enclosure) change in landscaping or intensity of use at the project site, that may otherwise be exempt from coastal permit requirements, are reviewed by the Commission for consistency with the resource protection policies of the Coastal Act, **Special Condition No. Seven (7)**, the future

development restriction, has been required. Finally, **Special Condition No. Eight (8)** requires the applicant to record a deed restriction that imposes the terms and conditions of this permit as restrictions on use and enjoyment of the property and provides any prospective purchaser of the site with recorded notice that the restrictions are imposed on the subject property.

In addition, to permanently ensure that no further development occurs on the site outside of the proposed development area and that any potential purchasers of the subject property are aware of the restriction on open space and future development, **Special Condition No. Ten (10)** prohibits all development outside of the existing development area and beyond Zone B of the approved revised Fuel Modification Plan submitted on April 3, 2007 as shown in Exhibit 12, with the exception of fuel modification; proposed roadway regarding and restoration; drainage systems, septic lines & seepage pits; or the planting of native vegetation and other restoration activities and construction and maintenance of public hiking trails if approved by the Commission as an amendment to this coastal development permit, or as a new coastal development permit.

The Commission recognizes that new development in the Santa Monica Mountains has the potential to adversely impact coastal water quality through the removal of native vegetation, increase of impervious surfaces, increase of runoff, erosion, and sedimentation, and introduction of pollutants such as petroleum, cleaning products, pesticides, and other pollutant sources, as well as effluent from septic systems.

Therefore, in order for the proposed development to be consistent with the water and marine resource policies of the Coastal Act, the Commission finds it necessary to require the incorporation of Best Management Practices designed to control the volume, velocity and pollutant load of stormwater leaving the developed site. Critical to the successful function of post-construction structural BMPs in removing pollutants in stormwater to the Maximum Extent Practicable (MEP), is the application of appropriate design standards for sizing BMPs. The majority of runoff is generated from small storms because most storms are small. Additionally, storm water runoff typically conveys a disproportionate amount of pollutants in the initial period that runoff is generated during a storm event. Designing BMPs for the small, more frequent storms, rather than for the large infrequent storms, results in improved BMP performance at lower cost.

However, in previous permit actions, the Commission has found that potential adverse effects of new proposed development on riparian habitat of these streams may be further minimized through the implementation of a drainage and polluted runoff control plan, which will ensure that erosion is minimized and polluted run-off from the site is controlled and filtered before it reaches natural drainage courses within the watershed. **Special Condition No. Four (4)** requires a drainage and polluted runoff control plan, which will ensure that drainage will be conducted in a non-erosive manner. The Commission finds that a drainage system will serve to minimize the environmental and

sensitive habitat degradation associated with erosion. In order to further ensure that adverse impacts to coastal water quality do not result from the proposed project, the Commission finds it necessary to require the applicant to incorporate filter elements that intercept and infiltrate or treat the runoff from the subject site, as is also required by **Special Condition No. Four (4)**. Such a plan will allow for the infiltration and filtration of runoff from the developed areas of the site and will capture the initial “first flush” flows that occur as a result of the first storms of the season. This flow carries with it the highest concentration of pollutants that have been deposited on impervious surfaces during the dry season, making the capture of the “first flush” flow a vital component of the drainage and polluted runoff control plan.

The Commission finds that sizing post-construction structural BMPs to accommodate (infiltrate, filter, or treat) the runoff from the 85<sup>th</sup> percentile storm runoff event, in this case, is equivalent to sizing BMPs based on the point of diminishing returns (i.e., the BMP capacity beyond which, insignificant increases in pollutants removal (and hence water quality protection) will occur, relative to the additional costs. Therefore, the Commission requires the selected post-construction structural BMPs be sized based on design criteria specified in **Special Condition No. Four (4)**, and finds this will ensure the proposed development will be designed to minimize adverse impacts to coastal resources, in a manner consistent with the water and marine policies of the Coastal Act.

In addition, the proposed project is conditioned to also implement a pool drainage and maintenance plan to prevent uncontrolled drainage of the proposed swimming pool such that drainage of water does not result in discharge of chemically treated water to coastal streams and drainages. The pool drainage and maintenance plan, as detailed in **Special Condition No. Nine (9)** requires the applicant to submit a written pool maintenance plan that contains an agreement to install and use a no chlorine or low chlorine purification system and a program to maintain proper pH, calcium and alkalinity balance in a manner such that any runoff or drainage from the pool will not include excessive amounts of chemicals that may adversely affect water quality or environmentally sensitive habitat area. In addition, **Special Condition No. Nine (9)** prohibits discharge of pool water into a street, storm drain, creek, canyon, drainage channel, or other location where it could enter receiving waters.

Furthermore, interim erosion control measures implemented during construction and post construction landscaping will serve to minimize the potential for adverse impacts to water quality resulting from drainage runoff during construction and in the post-development stage. Therefore, the Commission finds that **Special Condition No. Two (2)** is necessary to ensure the proposed development will not adversely impact water quality or coastal resources. Finally, the Commission notes that the use of rodenticides containing anticoagulant compounds have been linked to the death of sensitive predator species including mountain lions and raptors. These species are a key component of chaparral and coastal sage scrub communities in the Santa Monica Mountains. Therefore, in order to avoid adverse impacts to sensitive predator species, **Special**

**Condition No. Two (2)** prohibits the use of any rodenticides containing anticoagulant compounds on the subject property.

Therefore for the reasons set forth above, the Commission finds that the proposed project, as conditioned, is consistent with Coastal Act Sections 30230, 30231, and 30240.

## **E. Cumulative Impacts**

**Section 30250(a) of the Coastal Act** provides that new development be located within or near existing developed areas able to accommodate it, with adequate public services, where it will not have significant adverse effects, either individually or cumulatively, on coastal resources:

**New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources.**

**Section 30105.5 of the Coastal Act** defines the term “cumulatively,” as it is used in Section 30250(a), to mean that:

**the incremental effects of an individual project shall be reviewed in conjunction with the effects of past projects, the effects of other current projects, and the effects of probable future projects.**

**Section 30252 of the Coastal Act** states:

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

New development raises coastal issues related to cumulative impacts on coastal resources. The construction of a second unit on the site where a primary residence exists intensifies the use of a parcel raising potential impacts on public services, such

as water, sewage, electricity and roads. New development also raises issues regarding the location and amount of new development maintaining and enhancing public access to the coast.

Based on these policies, the Commission has limited the development of second dwelling units on residential parcels in the Malibu and Santa Monica Mountain areas. In addition, the issue of second units on lots with primary residences has been the subject of past Commission action in certifying the Los Angeles County Malibu Santa Monica Mountains Land Use Plan (LUP). In its review and action on the Malibu LUP, the Commission found that placing an upper limit on the size of second units (750 sq. ft.) was necessary given the traffic and infrastructure constraints which exist in Malibu and the Santa Monica Mountains and given the abundance of existing vacant residential lots. Furthermore, in allowing these small units, the Commission found that the small size of units (750 sq. ft.) and the fact that they are likely to be occupied by one or at most two people, such units would have less impact on the limited capacity of Pacific Coast Highway and other roads (as well as infrastructure constraints such as water, sewage, electricity) than an ordinary single family residence (certified Malibu Santa Monica Mountains Land Use Plan 1986, page 29 and P.C.H. (ACR), 12/83 page V-1 - VI-1).

The second unit issue has also been raised by the Commission with respect to statewide consistency of both coastal development permits and Local Coastal Programs (LCPs). Statewide, additional dwelling units on single family parcels take on a variety of different functions which in large part consist of: 1) a second unit with kitchen facilities including a granny unit, caretaker's unit, and farm labor unit; and 2) a guesthouse, without separate kitchen facilities. Past Commission action has consistently found that both second units and guest houses inherently have the potential to cumulatively impact coastal resources. As such, conditions on coastal development permits and standards within LCP's have been required to limit the size and number of such units to ensure consistency with Chapter 3 policies of the Coastal Act (Certified Malibu Santa Monica Mountains Land Use Plan 1986, page 29). Therefore as a result, the Commission has found that guest houses and second units can intensify the use of a site and impact public services, such as water, sewage, electricity, and roads.

The applicants propose to construct a new 577 sq. ft. guest/pool house. Although this guest/pool house is proposed to be attached to the proposed glass pool enclosure which in turn is proposed to be attached to the existing residence, the Commission also notes that the applicant has stated that this entire project may be completed in phases over time. As a result, the Commission finds that in the event that the pool/guest house is constructed prior to or without the attached pool enclosure, then the pool/guest house would constitute a detached structure. In past permit actions, the Commission has found that future additions to or expansion of detached accessory structures may result in adverse impacts to coastal resources, including public views. In this case, the guest/pool house is proposed to include 577 sq. ft. of habitable space. The proposed

577 sq. ft. second residential unit complies with the Commission's size limit of 750 sq. ft of habitable space.

The Commission has approved many similar projects that have established a maximum size of 750 sq. ft. habitable space for development which may be considered a secondary dwelling unit such as the proposed unit. However, to ensure that no additions, improvements, or a change of use to the second unit are made that may further intensify the use without due consideration of the potential cumulative impacts, the Commission finds it necessary to require the applicant to record a future development deed restriction, which will require the applicant to obtain an amended or new coastal permit if additions or improvements to the attached 577 sq. ft. second residential unit (and entire property including the residence, garage, pool enclosure, and vegetation removal as noted in Section IV. D, above) are proposed in the future as required by **Special Condition No. Seven (7)**. In addition, **Special Condition No. Eight (8)** requires the applicant to record a deed restriction that imposes the terms and conditions of this permit as restrictions on use and enjoyment of the subject property and provides any prospective purchaser with recorded notice that the restrictions are imposed on the subject property. For these reasons, the Commission finds that, as conditioned, the proposed project is consistent with Section 30250 and 30252 of the Coastal Act.

## **F. Violation**

Development not in compliance with the conditions of Coastal Development Permit No. 4-99-194 (Kasco, LP) has occurred on the subject site, including but not limited to, white coloration of the existing concrete driveway and of two garage doors and wrought iron fencing in violation of a Special Condition required in Coastal Permit No. 4-99-194 (Kasco LP). The applicant proposes to replace or re-color these existing components noted above. In order to ensure that the applicant's proposal to replace or re-color/re-texture all existing structures (including the residence, driveway, and fencing on site) takes place in a timely manner, and in order to resolve the violation, **Special Condition No. Five (5)** also requires the applicant to submit evidence, for the review and approval of the Executive Director, within 30 days of the Los Angeles County Public Works Department, Building Department's issuance of the certificate of occupancy for the pool enclosure or the pool/guest house, whichever ever occurs first, that all existing structures on site have been re-colored/re-textured in compliance with the approved color palette. The Executive Director may grant additional time for good cause. Only as conditioned, is the proposed development consistent with the Coastal Act.

Although development has taken place prior to submission of this permit application, consideration of this application by the Commission has been based solely upon the Chapter 3 policies of the Coastal Act. Approval of this permit does not constitute a waiver of any legal action with regard to any alleged violations nor does it constitute an admission as to the legality of any development undertaken on the subject site without a coastal permit.

## **G. 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 that 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 development 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 development, 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).

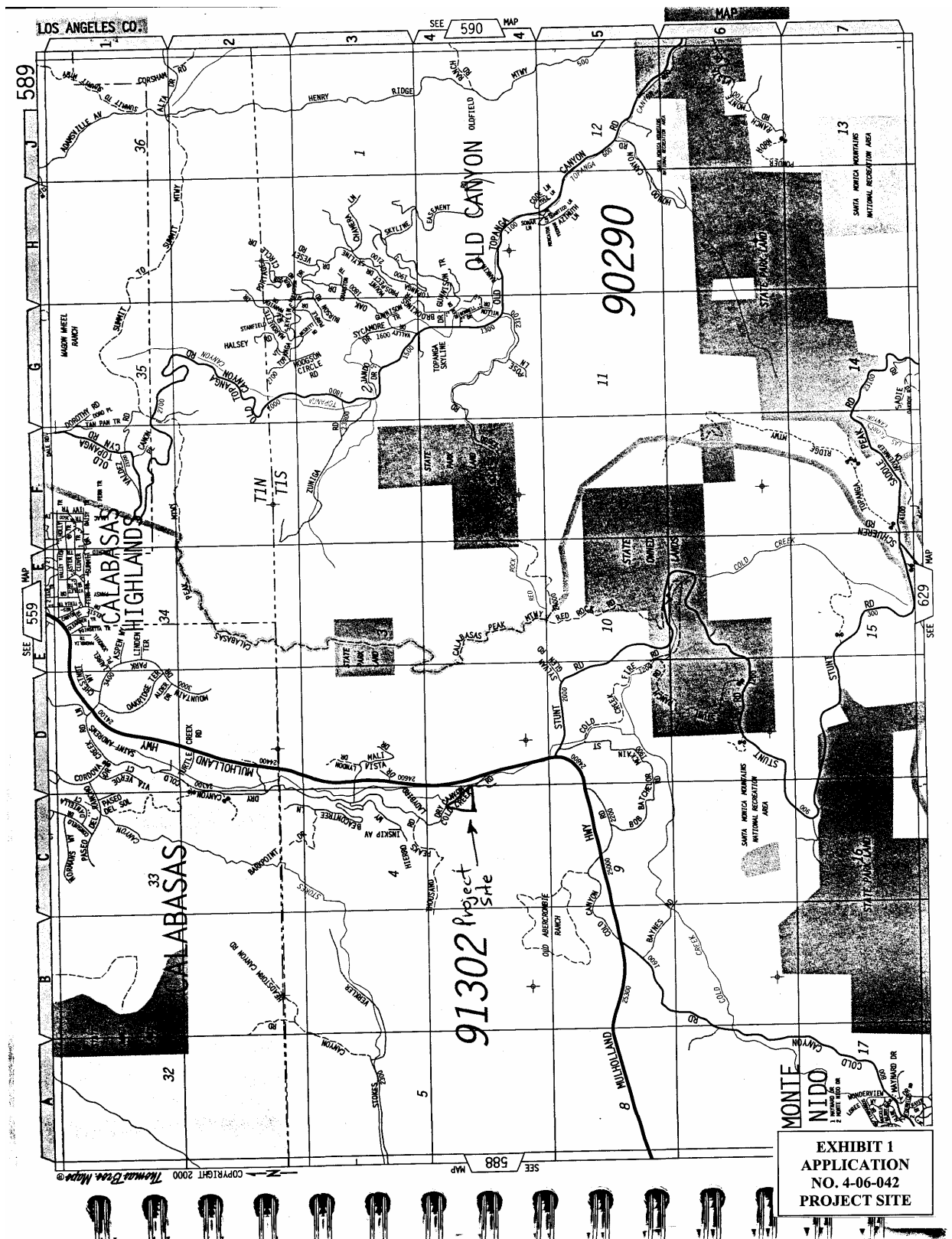
## **H. CEQA**

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 incorporates its findings on Coastal Act consistency at this point as if set forth in full. These findings address and respond to all public comments regarding potential significant adverse environmental effects of the project that were received prior to preparation of the staff report. As discussed in detail above, project alternatives and mitigation measures have been considered and incorporated into the project. Five types of mitigation actions include those that are intended to avoid, minimize, rectify, reduce, or compensate for significant impacts of development. Mitigation measures required as



part of this coastal development permit include the avoidance of impacts to ESHA through clustering structures, prohibiting development outside of the approved development area as required by the granting of an open space and conservation easement, and identifying an appropriate location for disposal of excess cut material. Mitigation measures required to minimize impacts include requiring drainage best management practices (water quality), interim erosion control (water quality and ESHA), limiting lighting (ESHA), restricting structure color (visual resources), requiring future improvements to be considered through a CDP, and employing non-chlorine water purification for the swimming pool (water quality). As conditioned, there are no feasible alternatives or feasible mitigation measures available, beyond those required, which would substantially lessen any significant adverse impact that the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, can be found to be consistent with the requirements of the Coastal Act to conform to CEQA.



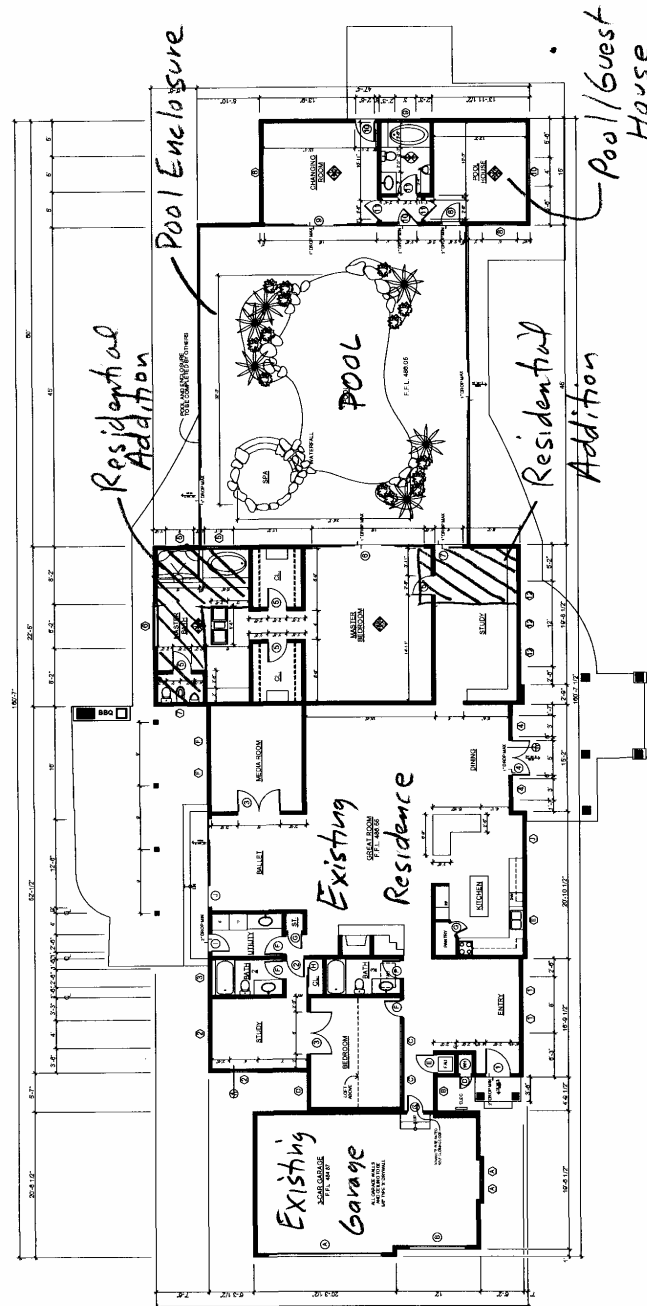


REVISIONS	BY
JAN 2005	LS
NOV 2005	EA

PROPOSED REMODEL AND ADDITION FOR:  
MICHAEL AND GWEN SADLER  
24641 DRY CYN. COLD CREEK ROAD  
CALABASAS, CA 91302

**CLIVE DAWSON A.I.A.**  
architect and planning  
29925 Pacific Coast Highway, Malibu, California 90265 310 589 1921

LOGNAME	DATE	TIME
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CHECKED	SCALE	
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**EXHIBIT 3  
APPLICATION  
NO. 4-06-042  
FLOOR PLAN**

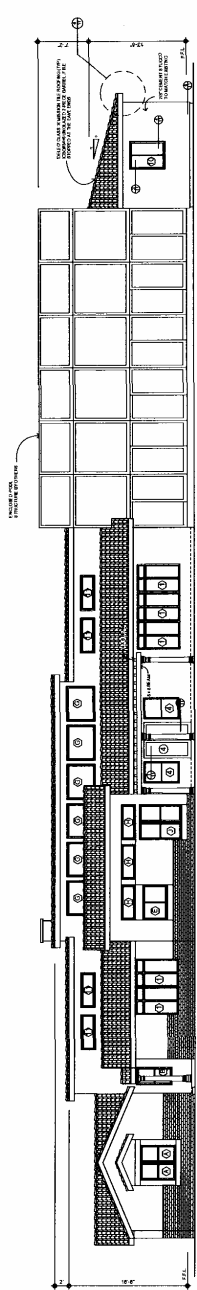
**FLOOR PLAN** 6,562 SQ. FT.

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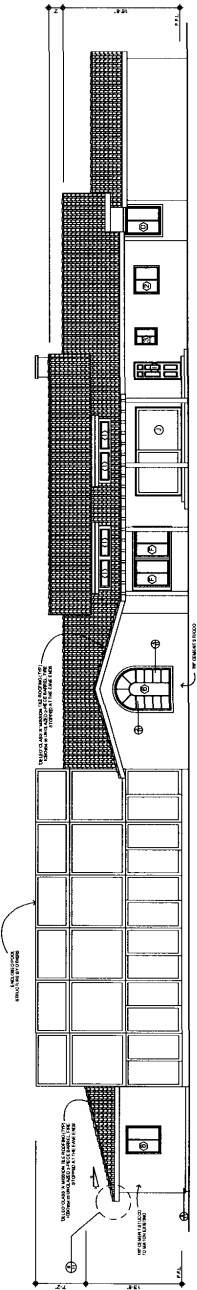
PROPOSED REMODEL AND ADDITION FOR:  
MICHAEL AND GWEN SADLER  
24641 DRY CYN. COLD CREEK ROAD  
CALABASAS, CA 91302

**CLIVE DAWSON A.I.A.**  
architecture and planning  
28925 Pacific Coast Highway, Malibu, California 90265 310.589.1921

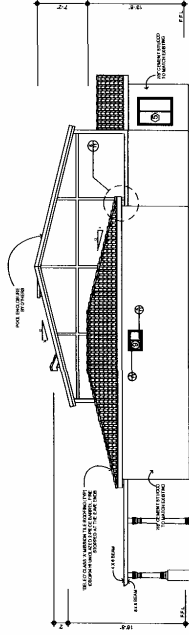
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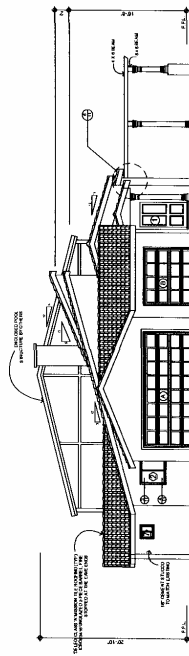
SOUTH ELEVATION



NORTH ELEVATION

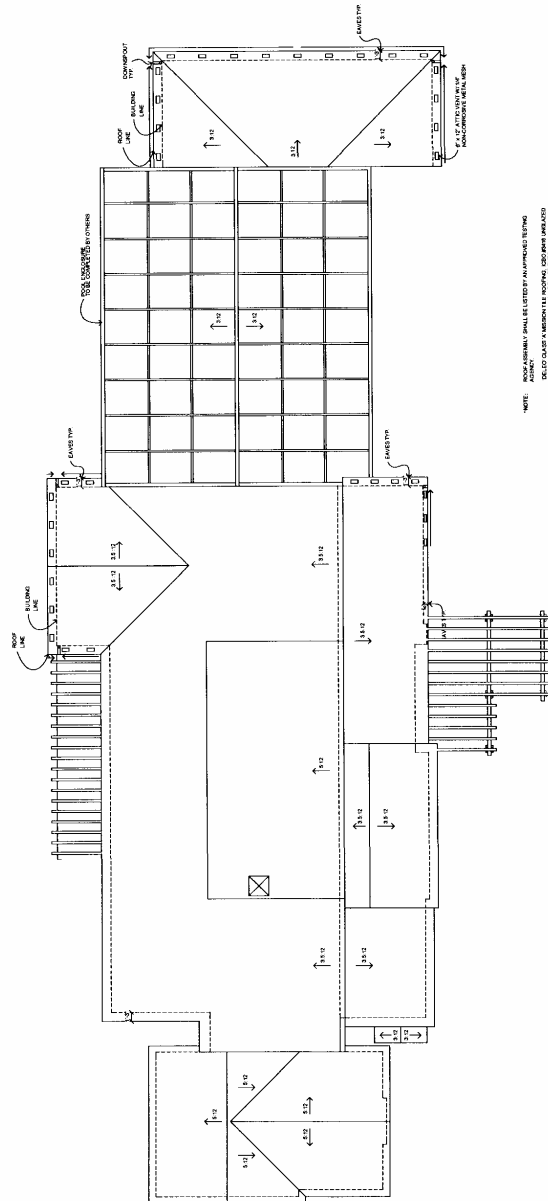


EAST ELEVATION



WEST ELEVATION

EXHIBIT 4  
APPLICATION  
NO. 4-06-042  
ELEVATIONS



NOTE: ROOF ASSEMBLY SHALL BE LISTED BY AN APPROVED TESTING AGENCY.

DOF PLAN

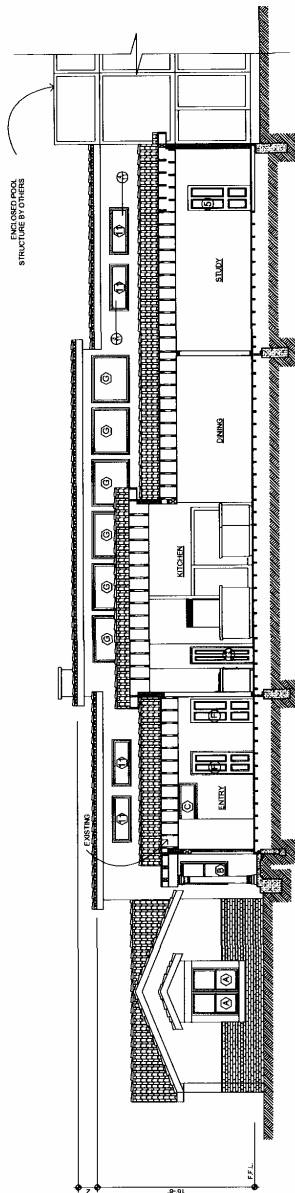
**EXHIBIT 5  
APPLICATION  
NO. 4-06-042  
ROOF PLAN**

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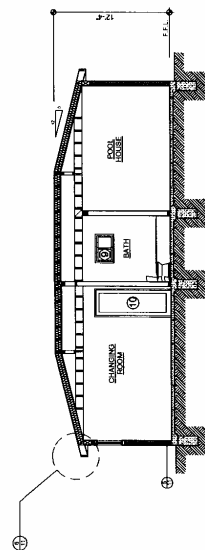
PROPOSED REMODEL AND ADDITION FOR:  
MICHAEL AND GWEN SADLER  
24641 DRY CYN. COLD CREEK ROAD  
CALABASAS, CA 91302

**CLIVE DAWSON A.I.A.**  
architecture and planning  
28925 Pacific Coast Highway, Malibu, California 90263 310.589.1921

6	OF 19 SHEETS
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CHECKED BY	
DATE	



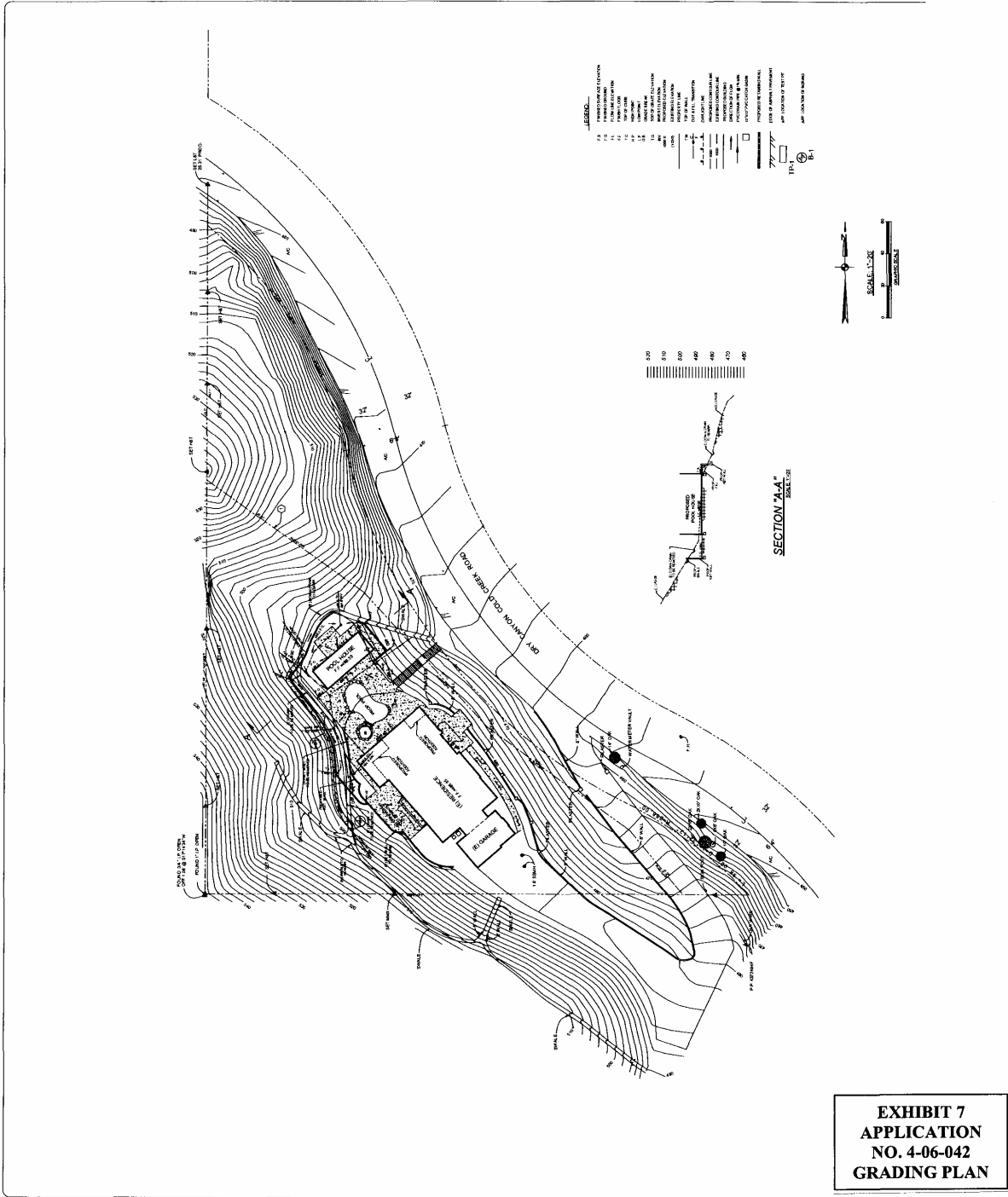
**SECTION A-A**



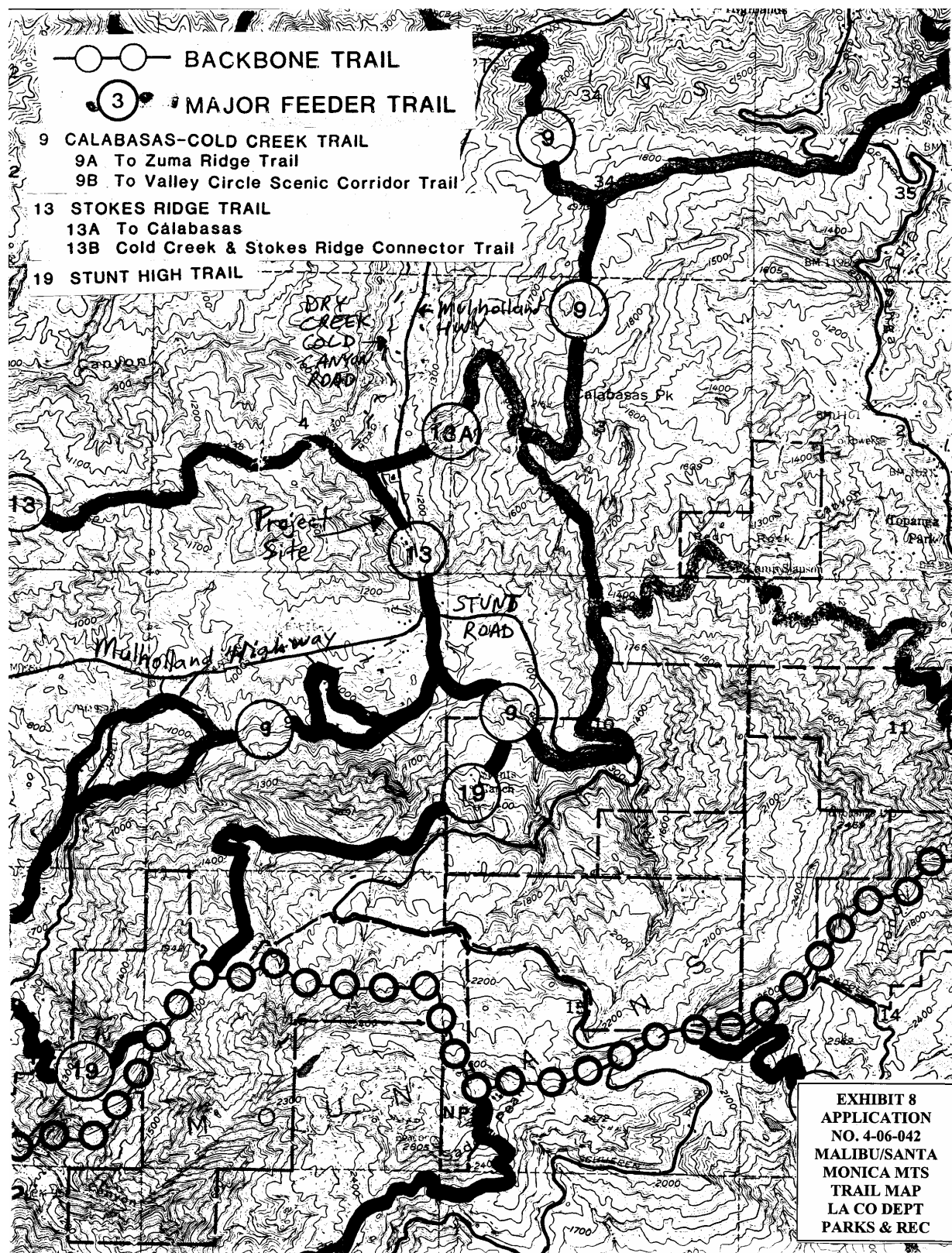
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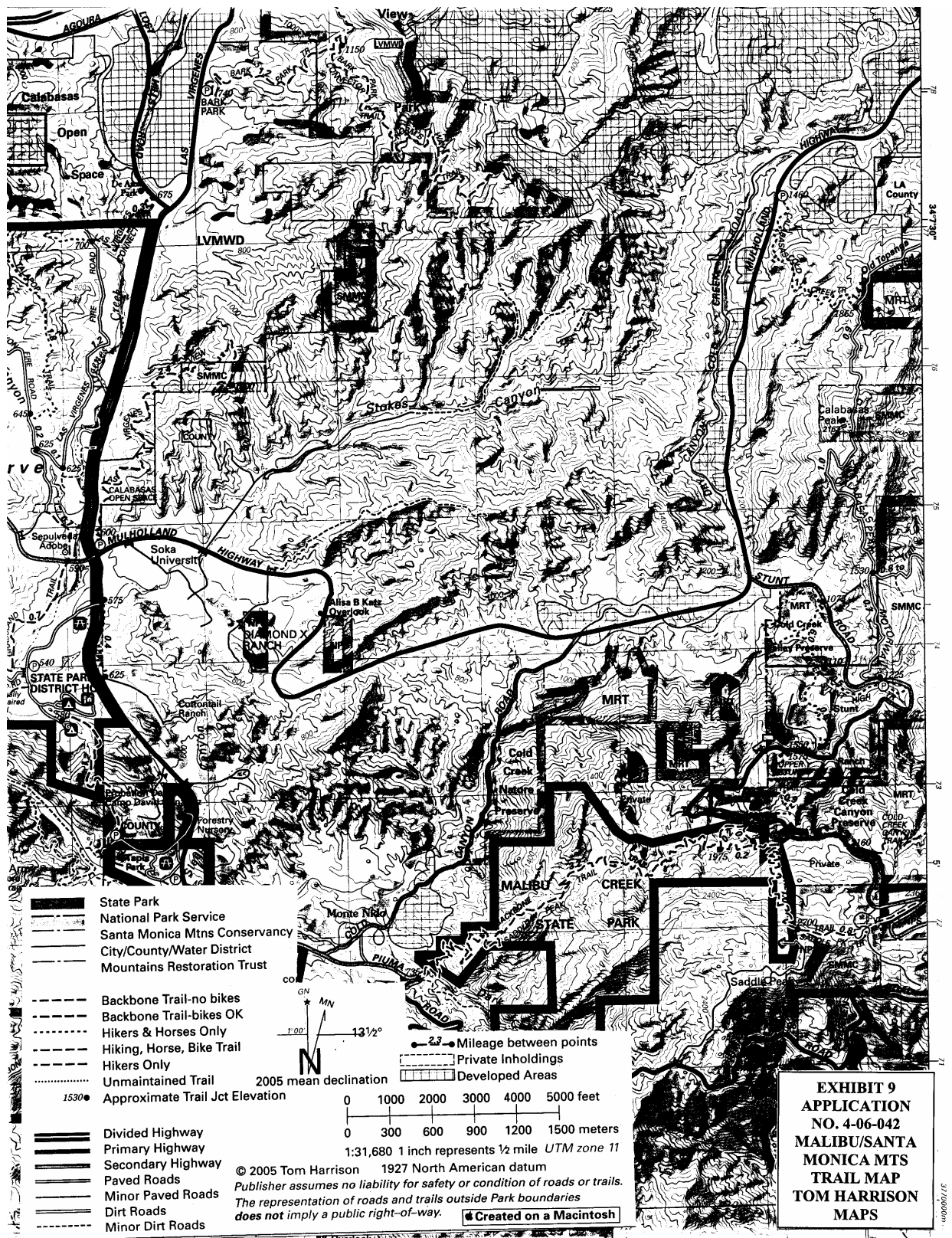
**EXHIBIT 6  
APPLICATION  
NO. 4-06-042  
SECTIONS**

DRAWN CHECKED DATE 06-07-04 06-07-04 06-07-04	23 06-07-04 06-07-04 06-07-04
	PROJECT ENGINEERING GROUP PEG Civil and Structural Engi 1535 MORRISON ST. OAKLAND, CA 94612 (415) 764-8118 FAX (415) 764-8118
	GRADING & DRAINAGE PLAN ADDRESS: 24641 DRY CANYON CREEK RD. CALABASAS, CA 91302 OWNER: SADLER RESIDENCE
	REVISIONS NO. DESCRIPTION BY









CALIFORNIA COASTAL COMMISSION

45 FREMONT, SUITE 2000  
SAN FRANCISCO, CA 94105-2219  
VOICE AND TDD (415) 904-5200  
FAX (415) 904-5400



MEMORANDUM

FROM: John Dixon, Ph.D.  
Ecologist / Wetland Coordinator

TO: Ventura Staff

SUBJECT: Designation of ESHA in the Santa Monica Mountains

DATE: March 25, 2003

In the context of the Malibu LCP, the Commission found that the Mediterranean Ecosystem in the Santa Mountains is rare, and especially valuable because of its relatively pristine character, physical complexity, and resultant biological diversity. Therefore, areas of undeveloped native habitat in the Santa Monica Mountains that are large and relatively unfragmented may meet the definition of ESHA by virtue of their valuable roles in that ecosystem, regardless of their relative rarity throughout the state. This is the only place in the coastal zone where the Commission has recognized chaparral as meeting the definition of ESHA. The scientific background presented herein for ESHA analysis in the Santa Monica Mountains is adapted from the Revised Findings for the Malibu LCP that the Commission adopted on February 6, 2003.

For habitats in the Santa Monica Mountains, particularly coastal sage scrub and chaparral, there are three site-specific tests to determine whether an area is ESHA because of its especially valuable role in the ecosystem. First, is the habitat properly identified, for example as coastal sage scrub or chaparral? The requisite information for this test generally should be provided by a site-specific biological assessment. Second, is the habitat largely undeveloped and otherwise relatively pristine? Third, is the habitat part of a large, contiguous block of relatively pristine native vegetation? This should be documented with an aerial photograph from our mapping unit (with the site delineated) and should be attached as an exhibit to the staff report. For those habitats that are absolutely rare or that support individual rare species, it is not necessary to find that they are relatively pristine, and are neither isolated nor fragmented.

**Designation of Environmentally Sensitive Habitat in the  
Santa Monica Mountains**

The Coastal Act provides a definition of "environmentally sensitive area" as: "Any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments" (Section 30107.5).

EXHIBIT 10  
APP NO. 4-06-042  
ESHA Memo

There are three important elements to the definition of ESHA. First, a geographic area can be designated ESHA either because of the presence of individual species of plants or animals or because of the presence of a particular habitat. Second, in order for an area to be designated as ESHA, the species or habitat must be either rare or it must be especially valuable. Finally, the area must be easily disturbed or degraded by human activities.

The first test of ESHA is whether a habitat or species is rare. Rarity can take several forms, each of which is important. Within the Santa Monica Mountains, rare species and habitats often fall within one of two common categories. Many rare species or habitats are globally rare, but locally abundant. They have suffered severe historical declines in overall abundance and currently are reduced to a small fraction of their original range, but where present may occur in relatively large numbers or cover large local areas. This is probably the most common form of rarity for both species and habitats in California and is characteristic of coastal sage scrub, for example. Some other habitats are geographically widespread, but occur everywhere in low abundance. California's native perennial grasslands fall within this category.

A second test for ESHA is whether a habitat or species is especially valuable. Areas may be valuable because of their "special nature," such as being an unusually pristine example of a habitat type, containing an unusual mix of species, supporting species at the edge of their range, or containing species with extreme variation. For example, reproducing populations of valley oaks are not only increasingly rare, but their southernmost occurrence is in the Santa Monica Mountains. Generally, however, habitats or species are considered valuable because of their special "role in the ecosystem." For example, many areas within the Santa Monica Mountains may meet this test because they provide habitat for endangered species, protect water quality, provide essential corridors linking one sensitive habitat to another, or provide critical ecological linkages such as the provision of pollinators or crucial trophic connections. Of course, all species play a role in their ecosystem that is arguably "special." However, the Coastal Act requires that this role be "especially valuable." This test is met for relatively pristine areas that are integral parts of the Santa Monica Mountains Mediterranean ecosystem because of the demonstrably rare and extraordinarily special nature of that ecosystem as detailed below.

Finally, ESHAs are those areas that could be easily disturbed or degraded by human activities and developments. Within the Santa Monica Mountains, as in most areas of southern California affected by urbanization, all natural habitats are in grave danger of direct loss or significant degradation as a result of many factors related to anthropogenic changes.

### **Ecosystem Context of the Habitats of the Santa Monica Mountains**

The Santa Monica Mountains comprise the largest, most pristine, and ecologically complex example of a Mediterranean ecosystem in coastal southern California.

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California's coastal sage scrub, chaparral, oak woodlands, and associated riparian areas have analogues in just a few areas of the world with similar climate. Mediterranean ecosystems with their wet winters and warm dry summers are only found in five localities (the Mediterranean coast, California, Chile, South Africa, and south and southwest Australia). Throughout the world, this ecosystem with its specially adapted vegetation and wildlife has suffered severe loss and degradation from human development. Worldwide, only 18 percent of the Mediterranean community type remains undisturbed<sup>1</sup>. However, within the Santa Monica Mountains, this ecosystem is remarkably intact despite the fact that it is closely surrounded by some 17 million people. For example, the 150,000 acres of the Santa Monica Mountains National Recreation Area, which encompasses most of the Santa Monica Mountains, was estimated to be 90 percent free of development in 2000<sup>2</sup>. Therefore, this relatively pristine area is both large and mostly unfragmented, which fulfills a fundamental tenet of conservation biology<sup>3</sup>. The need for large contiguous areas of natural habitat in order to maintain critical ecological processes has been emphasized by many conservation biologists<sup>4</sup>.

In addition to being a large single expanse of land, the Santa Monica Mountains ecosystem is still connected, albeit somewhat tenuously, to adjacent, more inland ecosystems<sup>5</sup>. Connectivity among habitats within an ecosystem and connectivity among ecosystems is very important for the preservation of species and ecosystem integrity. In a recent statewide report, the California Resources Agency<sup>6</sup> identified wildlife corridors and habitat connectivity as the top conservation priority. In a letter to governor Gray Davis, sixty leading environmental scientists have endorsed the

<sup>1</sup> National Park Service. 2000. Draft general management plan & environmental impact statement. Santa Monica Mountains National Recreation Area – California.

<sup>2</sup> Ibid.

<sup>3</sup> Harris, L. D. 1988. Edge effects and conservation of biotic diversity. *Conserv. Biol.* 330-332. Soule, M. E., D. T. Bolger, A. C. Alberts, J. Wright, M. Sorce and S. Hill. 1988. Reconstructed dynamics of rapid extinctions of chaparral-requiring birds in urban habitat islands. *Conserv. Biol.* 2: 75-92. Yahner, R. H. 1988. Changes in wildlife communities near edges. *Conserv. Biol.* 2:333-339. Murphy, D. D. 1989. Conservation and confusion: Wrong species, wrong scale, wrong conclusions. *Conservation Biol.* 3:82-84.

<sup>4</sup> Crooks, K. 2000. Mammalian carnivores as target species for conservation in Southern California. p. 105-112 in: Keeley, J. E., M. Baer-Keeley and C. J. Fotheringham (eds), 2<sup>nd</sup> Interface Between Ecology and Land Development in California, U.S. Geological Survey Open-File Report 00-62. Sauvajot, R. M., E. C. York, T. K. Fuller, H. Sharon Kim, D. A. Kamradt and R. K. Wayne. 2000. Distribution and status of carnivores in the Santa Monica Mountains, California: Preliminary results from radio telemetry and remote camera surveys. p 113-123 in: Keeley, J. E., M. Baer-Keeley and C. J. Fotheringham (eds), 2<sup>nd</sup> Interface Between Ecology and Land Development in California, U.S. Geological Survey Open-File Report 00-62. Beier, P. and R. F. Noss. 1998. Do habitat corridors provide connectivity? *Conserv. Biol.* 12:1241-1252. Beier, P. 1996. Metapopulation models, tenacious tracking and cougar conservation. In: *Metapopulations and Wildlife Conservation*, ed. D. R. McCullough. Island Press, Covelo, California, 429p.

<sup>5</sup> The SMM area is linked to larger natural inland areas to the north through two narrow corridors: 1) the Conejo Grade connection at the west end of the Mountains and 2) the Simi Hills connection in the central region of the SMM (from Malibu Creek State Park to the Santa Susanna Mountains).

<sup>6</sup> California Resources Agency. 2001. Missing Linkages: Restoring Connectivity to the California Landscape. California Wilderness Coalition, Calif. Dept of Parks & Recreation, USGS, San Diego Zoo and The Nature Conservancy. Available at: <http://www.calwild.org/pubs/reports/linkages/index.htm>

conclusions of that report<sup>7</sup>. The chief of natural resources at the California Department of Parks and Recreation has identified the Santa Monica Mountains as an area where maintaining connectivity is particularly important<sup>8</sup>.

The species most directly affected by large scale connectivity are those that require large areas or a variety of habitats, e.g., gray fox, cougar, bobcat, badger, steelhead trout, and mule deer<sup>9</sup>. Large terrestrial predators are particularly good indicators of habitat connectivity and of the general health of the ecosystem<sup>10</sup>. Recent studies show that the mountain lion, or cougar, is the most sensitive indicator species of habitat fragmentation, followed by the spotted skunk and the bobcat<sup>11</sup>. Sightings of cougars in both inland and coastal areas of the Santa Monica Mountains<sup>12</sup> demonstrate their continued presence. Like the "canary in the mineshaft," an indicator species like this is good evidence that habitat connectivity and large scale ecological function remains in the Santa Monica Mountains ecosystem.

The habitat integrity and connectivity that is still evident within the Santa Monica Mountains is extremely important to maintain, because both theory and experiments over 75 years in ecology confirm that large spatially connected habitats tend to be more stable and have less frequent extinctions than habitats without extended spatial structure<sup>13</sup>. Beyond simply destabilizing the ecosystem, fragmentation and disturbance

<sup>7</sup> Letters received and included in the September 2002 staff report for the Malibu LCP.

<sup>8</sup> Schoch, D. 2001. Survey lists 300 pathways as vital to state wildlife. Los Angeles Times. August 7, 2001.

<sup>9</sup> Martin, G. 2001. Linking habitat areas called vital for survival of state's wildlife Scientists map main migration corridors. San Francisco Chronicle, August 7, 2001.

<sup>10</sup> Noss, R. F., H. B. Quigley, M. G. Hornocker, T. Merrill and P. C. Paquet. 1996. Conservation biology and carnivore conservation in the Rocky Mountains. *Conserv. Biol.* 10: 949-963. Noss, R. F. 1995. Maintaining ecological integrity in representative reserve networks. World Wildlife Fund Canada.

<sup>11</sup> Sauvajot, R. M., E. C. York, T. K. Fuller, H. Sharon Kim, D. A. Kamradt and R. K. Wayne. 2000. Distribution and status of carnivores in the Santa Monica Mountains, California: Preliminary results from radio telemetry and remote camera surveys. p 113-123 in: Keeley, J. E., M. Baer-Keeley and C. J. Fotheringham (eds), 2nd Interface Between Ecology and Land Development in California, U.S. Geological Survey Open-File Report 00-62. Beier, P. 1996. Metapopulation models, tenacious tracking and cougar conservation. In: *Metapopulations and Wildlife Conservation*, ed. D. R. McCullough. Island Press, Covelo, California, 429p.

<sup>12</sup> Recent sightings of mountain lions include: Temescal Canyon (pers. com., Peter Brown, Facilities Manager, Calvary Church), Topanga Canyon (pers. com., Marti Witter, NPS), Encinal and Trancas Canyons (pers. com., Pat Healy), Stump Ranch Research Center (pers. com., Dr. Robert Wayne, Dept. of Biology, UCLA). In May of 2002, the NPS *photographed* a mountain lion at a trip camera on the Back Bone Trail near Castro Crest – Seth Riley, Eric York and Dr. Ray Sauvajot, National Park Service, SMMNRA.

<sup>13</sup> Gause, G. F. 1934. The struggle for existence. Baltimore, William and Wilkins 163 p. (also reprinted by Hafner, N.Y. 1964). Gause, G. F., N. P. Smaragdova and A. A. Witt. 1936. Further studies of interaction between predators and their prey. *J. Anim. Ecol.* 5:1-18. Huffaker, C. B. 1958. Experimental studies on predation: dispersion factors and predator-prey oscillations. *Hilgardia* 27:343-383. Luckinbill, L. S. 1973. Coexistence in laboratory populations of *Paramecium aurelia* and its predator *Didinium nasutum*. *Ecology* 54:1320-1327. Allen, J. C., C. C. Brewster and D. H. Slone. 2001. Spatially explicit ecological models: A spatial convolution approach. *Chaos, Solitons and Fractals*. 12:333-347.

can even cause unexpected and irreversible changes to new and completely different kinds of ecosystems (habitat conversion)<sup>14</sup>.

As a result of the pristine nature of large areas of the Santa Monica Mountains and the existence of large, unfragmented and interconnected blocks of habitat, this ecosystem continues to support an extremely diverse flora and fauna. The observed diversity is probably a function of the diversity of physical habitats. The Santa Monica Mountains have the greatest geological diversity of all major mountain ranges within the transverse range province. According to the National Park Service, the Santa Monica Mountains contain 40 separate watersheds and over 170 major streams with 49 coastal outlets<sup>15</sup>. These streams are somewhat unique along the California coast because of their topographic setting. As a "transverse" range, the Santa Monica Mountains are oriented in an east-west direction. As a result, the south-facing riparian habitats have more variable sun exposure than the east-west riparian corridors of other sections of the coast. This creates a more diverse moisture environment and contributes to the higher biodiversity of the region. The many different physical habitats of the Santa Monica Mountains support at least 17 native vegetation types<sup>16</sup> including the following habitats considered sensitive by the California Department of Fish and Game: native perennial grassland, coastal sage scrub, red-shank chaparral, valley oak woodland, walnut woodland, southern willow scrub, southern cottonwood-willow riparian forest, sycamore-alder woodland, oak riparian forest, coastal salt marsh, and freshwater marsh. Over 400 species of birds, 35 species of reptiles and amphibians, and more than 40 species of mammals have been documented in this diverse ecosystem. More than 80 sensitive species of plants and animals (listed, proposed for listing, or species of concern) are known to occur or have the potential to occur within the Santa Monica Mountains Mediterranean ecosystem.

The Santa Monica Mountains are also important in a larger regional context. Several recent studies have concluded that the area of southern California that includes the Santa Monica Mountains is among the most sensitive in the world in terms of the number of rare endemic species, endangered species and habitat loss. These studies have designated the area to be a local hot-spot of endangerment in need of special protection<sup>17</sup>.

Therefore, the Commission finds that the Santa Monica Mountains ecosystem is itself rare and especially valuable because of its special nature as the largest, most pristine,

<sup>14</sup> Scheffer, M., S. Carpenter, J. A. Foley, C. Folke and B. Walker. 2001. Catastrophic shifts in ecosystems. *Nature* 413:591-596.

<sup>15</sup> NPS. 2000. op.cit.

<sup>16</sup> From the NPS report (2000 op. cit.) that is based on the older Holland system of subjective classification. The data-driven system of Sawyer and Keeler-Wolf results in a much larger number of distinct "alliances" or vegetation types.

<sup>17</sup> Myers, N. 1990. The biodiversity challenge: Expanded hot-spots analysis. *Environmentalist* 10:243-256. Myers, N., R. A. Mittermeier, C. G. Mittermeier, G. A. B. da Fonseca and J. A. Kent. 2000. Biodiversity hot-spots for conservation priorities. *Nature* 403:853-858. Dobson, A. P., J. P. Rodriguez, W. M. Roberts and D. S. Wilcove. 1997. Geographic distribution of endangered species in the United States. *Science* 275:550-553.

physically complex, and biologically diverse example of a Mediterranean ecosystem in coastal southern California. The Commission further finds that because of the rare and special nature of the Santa Monica Mountains ecosystem, the ecosystem roles of substantially intact areas of the constituent plant communities discussed below are "especially valuable" under the Coastal Act.

### **Major Habitats within the Santa Monica Mountains**

The most recent vegetation map that is available for the Santa Monica Mountains is the map that was produced for the National Park Service in the mid-1990s using 1993 satellite imagery supplemented with color and color infrared aerial imagery from 1984, 1988, and 1994 and field review<sup>18</sup>. The minimum mapping unit was 5 acres. For that map, the vegetation was mapped in very broad categories, generally following a vegetation classification scheme developed by Holland<sup>19</sup>. Because of the mapping methods used the degree of plant community complexity in the landscape is not represented. For example, the various types of "ceanothus chaparral" that have been documented were lumped under one vegetation type referred to as "northern mixed chaparral." Dr. Todd Keeler-Wolf of the California Department of Fish and Game is currently conducting a more detailed, quantitative vegetation survey of the Santa Monica Mountains.

The National Park Service map can be used to characterize broadly the types of plant communities present. The main generic plant communities present in the Santa Monica Mountains<sup>20</sup> are: coastal sage scrub, chaparral, riparian woodland, coast live oak woodland, and grasslands.

### **Riparian Woodland**

Some 49 streams connect inland areas with the coast, and there are many smaller drainages as well, many of which are "blue line." Riparian woodlands occur along both perennial and intermittent streams in nutrient-rich soils. Partly because of its multi-layered vegetation, the riparian community contains the greatest overall biodiversity of all the plant communities in the area<sup>21</sup>. At least four types of riparian communities are discernable in the Santa Monica Mountains: walnut riparian areas, mulefat-dominated riparian areas, willow riparian areas and sycamore riparian woodlands. Of these, the

<sup>18</sup> Franklin, J. 1997. Forest Service Southern California Mapping Project, Santa Monica Mountains National Recreation Area, Task 11 Description and Results, Final Report. June 13, 1997, Dept. of Geography, San Diego State University, USFS Contract No. 53-91S8-3-TM45.

<sup>19</sup> Holland R. F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. State of California, The Resources Agency, Dept. of Fish and Game, Natural Heritage Division, Sacramento, CA. 95814.

<sup>20</sup> National Park Service. 2000. Draft: General Management Plan & Environmental Impact Statement, Santa Monica Mountains National Recreation Area, US Dept. of Interior, National Park Service, December 2000. (Fig. 11 in this document.)

<sup>21</sup> Ibid.



sycamore riparian woodland is the most diverse riparian community in the area. In these habitats, the dominant plant species include arroyo willow, California black walnut, sycamore, coast live oak, Mexican elderberry, California bay laurel, and mule fat. Wildlife species that have been observed in this community include least Bell's vireo (a State and federally listed species), American goldfinches, black phoebes, warbling vireos, bank swallows (State listed threatened species), song sparrows, belted kingfishers, raccoons, and California and Pacific tree frogs.

Riparian communities are the most species-rich to be found in the Santa Monica Mountains. Because of their multi-layered vegetation, available water supply, vegetative cover and adjacency to shrubland habitats, they are attractive to many native wildlife species, and provide essential functions in their lifecycles<sup>22</sup>. During the long dry summers in this Mediterranean climate, these communities are an essential refuge and oasis for much of the areas' wildlife.

Riparian habitats and their associated streams form important connecting links in the Santa Monica Mountains. These habitats connect all of the biological communities from the highest elevation chaparral to the sea with a unidirectional flowing water system, one function of which is to carry nutrients through the ecosystem to the benefit of many different species along the way.

The streams themselves provide refuge for sensitive species including: the coast range newt, the Pacific pond turtle, and the steelhead trout. The coast range newt and the Pacific pond turtle are California Species of Special Concern and are proposed for federal listing<sup>23</sup>, and the steelhead trout is federally endangered. The health of the streams is dependent on the ecological functions provided by the associated riparian woodlands. These functions include the provision of large woody debris for habitat, shading that controls water temperature, and input of leaves that provide the foundation of the stream-based trophic structure.

The importance of the connectivity between riparian areas and adjacent habitats is illustrated by the Pacific pond turtle and the coast range newt, both of which are sensitive and both of which require this connectivity for their survival. The life history of the Pacific pond turtle demonstrates the importance of riparian areas and their associated watersheds for this species. These turtles require the stream habitat during the wet season. However, recent radio tracking work<sup>24</sup> has found that although the Pacific pond turtle spends the wet season in streams, it also requires upland habitat for refuge during the dry season. Thus, in coastal southern California, the Pacific pond turtle requires both streams and intact adjacent upland habitats such as coastal sage

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<sup>22</sup> Walter, Hartmut. Bird use of Mediterranean habitats in the Santa Monica Mountains, Coastal Commission Workshop on the Significance of Native Habitats in the Santa Monica Mountains. CCC Hearing, June 13, 2002, Queen Mary Hotel.

<sup>23</sup> USFWS. 1989. Endangered and threatened wildlife and plants; animal notice of review. Fed. Reg. 54:554-579. USFWS. 1993. Endangered and threatened wildlife and plants; notice of 1-year petition finding on the western pond turtle. Fed. Reg. 58:42717-42718.

<sup>24</sup> Rathbun, G.B., N.J. Scott and T.G. Murphy. 2002. Terrestrial habitat use by Pacific pond turtle in a Mediterranean climate. *Southwestern Naturalist*. (in Press).

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scrub, woodlands or chaparral as part of their normal life cycle. The turtles spend about four months of the year in upland refuge sites located an average distance of 50 m (but up to 280 m) from the edge of the creek bed. Similarly, nesting sites where the females lay eggs are also located in upland habitats an average of 30 m (but up to 170 m) from the creek. Occasionally, these turtles move up to 2 miles across upland habitat<sup>25</sup>. Like many species, the pond turtle requires both stream habitats and the upland habitats of the watershed to complete its normal annual cycle of behavior. Similarly, the coast range newt has been observed to travel hundreds of meters into upland habitat and spend about ten months of the year far from the riparian streambed<sup>26</sup>. They return to the stream to breed in the wet season, and they are therefore another species that requires both riparian habitat and adjacent uplands for their survival.

Riparian habitats in California have suffered serious losses and such habitats in southern California are currently very rare and seriously threatened. In 1989, Faber estimated that 95-97% of riparian habitat in southern California was already lost<sup>27</sup>. Writing at the same time as Faber, Bowler asserted that, "[t]here is no question that riparian habitat in southern California is endangered."<sup>28</sup> In the intervening 13 years, there have been continuing losses of the small amount of riparian woodlands that remain. Today these habitats are, along with native grasslands and wetlands, among the most threatened in California.

In addition to direct habitat loss, streams and riparian areas have been degraded by the effects of development. For example, the coast range newt, a California Species of Special Concern has suffered a variety of impacts from human-related disturbances<sup>29</sup>. Human-caused increased fire frequency has resulted in increased sedimentation rates, which exacerbates the cannibalistic predation of adult newts on the larval stages.<sup>30</sup> In addition impacts from non-native species of crayfish and mosquito fish have also been documented. When these non-native predators are introduced, native prey organisms are exposed to new mortality pressures for which they are not adapted. Coast range newts that breed in the Santa Monica Mountain streams do not appear to have adaptations that permit co-occurrence with introduced mosquito fish and crayfish<sup>31</sup>. These introduced predators have eliminated the newts from streams where they previously occurred by both direct predation and suppression of breeding.

<sup>25</sup> Testimony by R. Dagit, Resource Conservation District of the Santa Monica Mountains at the CCC Habitat Workshop on June 13, 2002.

<sup>26</sup> Dr. Lee Kats, Pepperdine University, personal communication to Dr J. Allen, CCC.

<sup>27</sup> Faber, P.A., E. Keller, A. Sands and B.M. Massey. 1989. The ecology of riparian habitats of the southern California coastal region: a community profile. U.S. Fish and Wildlife Service Biological Report 85(7.27) 152pp.

<sup>28</sup> Bowler, P.A. 1989. Riparian woodland: An endangered habitat in southern California. Pp 80-97 in Schoenherr, A.A. (ed.) Endangered plant communities of southern California. Botanists Special Publication No. 3.

<sup>29</sup> Gamradt, S.C., L.B. Kats and C.B. Anzalone. 1997. Aggression by non-native crayfish deters breeding in California newts. Conservation Biology 11(3):793-796.

<sup>30</sup> Kerby, L.J., and L.B. Kats. 1998. Modified interactions between salamander life stages caused by wildfire-induced sedimentation. Ecology 79(2):740-745.

<sup>31</sup> Gamradt, S.C. and L.B. Kats. 1996. Effect of introduced crayfish and mosquitofish on California newts. Conservation Biology 10(4):1155-1162.

Therefore, because of the essential role that riparian plant communities play in maintaining the biodiversity of the Santa Monica Mountains, because of the historical losses and current rarity of these habitats in southern California, and because of their extreme sensitivity to disturbance, the native riparian habitats in the Santa Monica Mountains meet the definition of ESHA under the Coastal Act.

Coastal Sage Scrub and Chaparral

Coastal sage scrub and chaparral are often lumped together as "shrublands" because of their roughly similar appearance and occurrence in similar and often adjacent physical habitats. In earlier literature, these vegetation associations were often called soft chaparral and hard chaparral, respectively. "Soft" and "hard" refers to differences in their foliage associated with different adaptations to summer drought. Coastal sage scrub is dominated by soft-leaved, generally low-growing aromatic shrubs that die back and drop their leaves in response to drought. Chaparral is dominated by taller, deeper-rooted evergreen shrubs with hard, waxy leaves that minimize water loss during drought.

The two vegetation types are often found interspersed with each other. Under some circumstances, coastal sage scrub may even be successional to chaparral, meaning that after disturbance, a site may first be covered by coastal sage scrub, which is then replaced with chaparral over long periods of time.<sup>32</sup> The existing mosaic of coastal sage scrub and chaparral is the result of a dynamic process that is a function of fire history, recent climatic conditions, soil differences, slope, aspect and moisture regime, and the two habitats should not be thought of as completely separate and unrelated entities but as different phases of the same process<sup>33</sup>. The spatial pattern of these vegetation stands at any given time thus depends on both local site conditions and on history (e.g., fire), and is influenced by both natural and human factors.

In lower elevation areas with high fire frequency, chaparral and coastal sage scrub may be in a state of flux, leading one researcher to describe the mix as a "coastal sage-chaparral subclimax."<sup>34</sup> Several other researchers have noted the replacement of chaparral by coastal sage scrub, or coastal sage scrub by chaparral depending on fire history.<sup>35</sup> In transitional and other settings, the mosaic of chaparral and coastal sage

<sup>32</sup> Cooper, W.S. 1922. The broad-sclerophyll vegetation of California. Carnegie Institution of Washington Publication 319. 124 pp.

<sup>33</sup> Longcore, T and C. Rich. 2002. Protection of environmentally sensitive habitat areas in proposed local coastal plan for the Santa Monica Mountains. The Urban Wildlands Group, Inc., P.O. Box 24020 Los Angeles, CA 90024. (See attached comment document in Appendix).

<sup>34</sup> Hanes, T.L. 1965. Ecological studies on two closely related chaparral shrubs in southern California. Ecological Monographs 41:27-52.

<sup>35</sup> Gray, K.L. 1983. Competition for light and dynamic boundary between chaparral and coastal sage scrub. Madrono 30(1):43-49. Zedler, P.H., C.R. Gautier and G.S. McMaster. 1983. Vegetation change in response to extreme events: The effect of a short interval between fires in California chaparral and coastal sage scrub. Ecology 64(4): 809-818.

scrub enriches the seasonal plant resource base and provides additional habitat variability and seasonality for the many species that inhabit the area.

*Relationships Among Coastal Sage Scrub, Chaparral and Riparian Communities*

Although the constituent communities of the Santa Monica Mountains Mediterranean ecosystem can be defined and distinguished based on species composition, growth habits, and the physical habitats they characteristically occupy, they are not independent entities ecologically. Many species of plants, such as black sage, and laurel sumac, occur in more than one plant community and many animals rely on the predictable mix of communities found in undisturbed Mediterranean ecosystems to sustain them through the seasons and during different portions of their life histories.

Strong evidence for the interconnectedness between chaparral, coastal scrub and other habitats is provided by "opportunistic foragers" (animals that follow the growth and flowering cycles across these habitats). Coastal scrub and chaparral flowering and growth cycles differ in a complimentary and sequential way that many animals have evolved to exploit. Whereas coastal sage scrub is shallow-rooted and responds quickly to seasonal rains, chaparral plants are typically deep-rooted having most of their flowering and growth later in the rainy season after the deeper soil layers have been saturated<sup>36</sup>. New growth of chaparral evergreen shrubs takes place about four months later than coastal sage scrub plants and it continues later into the summer<sup>37</sup>. For example, in coastal sage scrub, California sagebrush flowers and grows from August to February and coyote bush flowers from August to November<sup>38</sup>. In contrast, chamise chaparral and bigpod ceanothus flower from April to June, buck brush ceanothus flowers from February to April, and hoaryleaf ceanothus flowers from March to April.

Many groups of animals exploit these seasonal differences in growth and blooming period. The opportunistic foraging insect community (e.g., honeybees, butterflies and moths) tends to follow these cycles of flowering and new growth, moving from coastal sage scrub in the early rainy season to chaparral in the spring<sup>39</sup>. The insects in turn are followed by insectivorous birds such as the blue-gray gnatcatcher<sup>40</sup>, bushtit, cactus wren, Bewick's wren and California towhee. At night bats take over the role of daytime insectivores. At least 12 species of bats (all of which are considered sensitive) occur in

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<sup>36</sup> DeSimone, S. 2000. California's coastal sage scrub. *Fremontia* 23(4):3-8. Mooney, H.A. 1988. Southern coastal scrub. Chap. 13 in Barbour, M.G. and J. Majors; Eds. 1988. *Terrestrial vegetation of California*, 2<sup>nd</sup> Edition. Calif. Native Plant Soc. Spec. Publ. #9.

<sup>37</sup> Schoenherr, A. A. 1992. *A natural history of California*. University of California Press, Berkeley. 772p.

<sup>38</sup> Dale, N. 2000. Flowering plants of the Santa Monica Mountains. California Native Plant Society, 1722 J Street, Suite 17, Sacramento, CA 95814.

<sup>39</sup> Ballmer, G. R. 1995. What's bugging coastal sage scrub. *Fremontia* 23(4):17-26.

<sup>40</sup> Root, R. B. 1967. The niche exploitation pattern of the blue-gray gnatcatcher. *Ecol. Monog.* 37:317-350.

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the Santa Monica Mountains<sup>41</sup>. Five species of hummingbirds also follow the flowering cycle<sup>42</sup>.

Many species of 'opportunistic foragers', which utilize several different community types, perform important ecological roles during their seasonal movements. The scrub jay is a good example of such a species. The scrub jay is an omnivore and forages in coastal sage scrub, chaparral, and oak woodlands for insects, berries and notably acorns. Its foraging behavior includes the habit of burying acorns, usually at sites away from the parent tree canopy. Buried acorns have a much better chance of successful germination (about two-fold) than exposed acorns because they are protected from desiccation and predators. One scrub jay will bury approximately 5000 acorns in a year. The scrub jay therefore performs the function of greatly increasing recruitment and regeneration of oak woodland, a valuable and sensitive habitat type<sup>43</sup>.

Like the scrub jay, most of the species of birds that inhabit the Mediterranean ecosystem in the Santa Monica Mountains require more than one community type in order to flourish. Many species include several community types in their daily activities. Other species tend to move from one community to another seasonally. The importance of maintaining the integrity of the multi-community ecosystem is clear in the following observations of Dr. Hartmut Walter of the University of California at Los Angeles:

"Bird diversity is directly related to the habitat mosaic and topographic diversity of the Santa Monicas. Most bird species in this bio-landscape require more than one habitat for survival and reproduction." "A significant proportion of the avifauna breeds in the wooded canyons of the Santa Monicas. Most of the canyon breeders forage every day in the brush- and grass-covered slopes, ridges and mesas. They would not breed in the canyons in the absence of the surrounding shrublands. Hawks, owls, falcons, orioles, flycatchers, woodpeckers, warblers, hummingbirds, etc. belong to this group. Conversely, some of the characteristic chaparral birds such as thrashers, quails, and wrentits need the canyons for access to shelter, protection from fire, and water. The regular and massive movement of birds between riparian corridors and adjacent shrublands has been demonstrated by qualitative and quantitative observations by several UCLA students<sup>44</sup>."

Thus, the Mediterranean ecosystem of the Santa Monica Mountains is a mosaic of vegetation types linked together ecologically. The high biodiversity of the area results

<sup>41</sup> Letter from Dr. Marti Witter, NPS, dated Sept. 13, 2001, in letters received and included in the September 2002 staff report for the Malibu LCP.

<sup>42</sup> National Park Service. 1993. A checklist of the birds of the Santa Monica Mountains National Recreation Area. Southwest Parks and Monuments Assoc., 221 N. Court, Tucson, AZ. 85701

<sup>43</sup> Borchert, M. I., F. W. Davis, J. Michaelsen and L. D. Oyler. 1989. Interactions of factors affecting seedling recruitment of blue oak (*Quercus douglasii*) in California. *Ecology* 70:389-404. Bossema, I. 1979. Jays and oaks: An eco-ethological study of a symbiosis. *Behavior* 70:1-118. Schoenherr, A. A. 1992. A natural history of California. University of California Press, Berkeley. 772p.

<sup>44</sup> Walter, Hartmut. Bird use of Mediterranean habitats in the Santa Monica Mountains, Coastal Commission Workshop on the Significance of Native Habitats in the Santa Monica Mountains. CCC Hearing, June 13, 2002, Queen Mary Hotel.

from both the diversity and the interconnected nature of this mosaic. Most raptor species, for example, require large areas and will often require different habitats for perching, nesting and foraging. Fourteen species of raptors (13 of which are considered sensitive) are reported from the Santa Monica Mountains. These species utilize a variety of habitats including rock outcrops, oak woodlands, riparian areas, grasslands, chaparral, coastal sage scrub, estuaries and freshwater lakes<sup>45</sup>.

When the community mosaic is disrupted and fragmented by development, many chaparral-associated native bird species are impacted. In a study of landscape-level fragmentation in the Santa Monica Mountains, Stralberg<sup>46</sup> found that the ash-throated flycatcher, Bewick's wren, wrentit, blue-gray gnatcatcher, California thrasher, orange-crowned warbler, rufous-crowned sparrow, spotted towhee, and California towhee all decreased in numbers as a result of urbanization. Soule<sup>47</sup> observed similar effects of fragmentation on chaparral and coastal sage scrub birds in the San Diego area.

In summary, all of the vegetation types in this ecosystem are strongly linked by animal movement and foraging. Whereas classification and mapping of vegetation types may suggest a snapshot view of the system, the seasonal movements and foraging of animals across these habitats illustrates the dynamic nature and vital connections that are crucial to the survival of this ecosystem.

#### Coastal Sage Scrub

"Coastal sage scrub" is a generic vegetation type that is inclusive of several subtypes<sup>48</sup>. In the Santa Monica Mountains, coastal sage scrub is mostly of the type termed "Venturan Coastal Sage Scrub." In general, coastal sage scrub is comprised of dominant species that are semi-woody and low-growing, with shallow, dense roots that enable them to respond quickly to rainfall. Under the moist conditions of winter and spring, they grow quickly, flower, and produce light, wind-dispersed seeds, making them good colonizers following disturbance. These species cope with summer drought by dying back, dropping their leaves or producing a smaller summer leaf in order to reduce water loss. Stands of coastal sage scrub are much more open than chaparral and contain a greater admixture of herbaceous species. Coastal sage scrub is generally restricted to drier sites, such as low foothills, south-facing slopes, and shallow soils at higher elevations.

<sup>45</sup> National Park Service. 1993. A checklist of the birds of the Santa Monica Mountains National Recreation Area. Southwest Parks and Monuments Assoc., 221 N. Court, Tucson, AZ. 85701. and Letter from Dr. Marti Witter, NPS, Dated Sept. 13, 2001, in letters received and included in the September 2002 staff report for the Malibu LCP.

<sup>46</sup> Stralberg, D. 2000. Landscape-level urbanization effects on chaparral birds: A Santa Monica Mountains case study. p 125-136 in: Keeley, J. E., M. Baer-Keeley and C. J. Fotheringham (eds), 2<sup>nd</sup> Interface Between Ecology and Land Development in California, U.S. Geological Survey Open-File Report 00-62.

<sup>47</sup> Soule, M. E., D. T. Bolger, A. C. Alberts, J. Wright, M. Sorice and S. Hill. 1988. Reconstructed dynamics of rapid extinctions of chaparral-requiring birds in urban habitat islands. *Conserv. Biol.* 2: 75-92.

<sup>48</sup> Kirkpatrick, J.B. and C.F. Hutchinson. 1977. The community composition of Californian coastal sage scrub. *Vegetatio* 35:21-33; Holland, 1986. op.cit.; Sawyer and Keeler-Wolf, 1995, op.cit.

The species composition and structure of individual stands of coastal sage scrub depend on moisture conditions that derive from slope, aspect, elevation and soil type. Drier sites are dominated by more drought-resistant species (e.g., California sagebrush, coast buckwheat, and *Opuntia* cactus). Where more moisture is available (e.g., north-facing slopes), larger evergreen species such as toyon, laurel sumac, lemonade berry, and sugar bush are common. As a result, there is more cover for wildlife, and movement of large animals from chaparral into coastal sage scrub is facilitated in these areas. Characteristic wildlife in this community includes Anna's hummingbirds, rufous-sided towhees, California quail, greater roadrunners, Bewick's wrens, coyotes, and coast horned lizards<sup>49</sup>, but most of these species move between coastal sage scrub and chaparral during their daily activities or on a seasonal basis.

Of the many important ecosystem roles performed by the coastal sage scrub community, five are particularly important in the Santa Monica Mountains. Coastal sage scrub provides critical linkages between riparian corridors, provides essential habitat for species that require several habitat types during the course of their life histories, provides essential habitat for local endemics, supports rare species that are in danger of extinction, and reduces erosion, thereby protecting the water quality of coastal streams.

Riparian woodlands are primary contributors to the high biodiversity of the Santa Monica Mountains. The ecological integrity of those riparian habitats not only requires wildlife dispersal along the streams, but also depends on the ability of animals to move from one riparian area to another. Such movement requires that the riparian corridors be connected by suitable habitat. In the Santa Monica Mountains, coastal sage scrub and chaparral provide that function. Significant development in coastal sage scrub would reduce the riparian corridors to linear islands of habitat with severe edge effects<sup>50</sup>, reduced diversity, and lower productivity.

Most wildlife species and many species of plants utilize several types of habitat. Many species of animals endemic to Mediterranean habitats move among several plant communities during their daily activities and many are reliant on different communities either seasonally or during different stages of their life cycle. Without an intact mosaic of coastal sage scrub, chaparral, and riparian community types, many species will not thrive. Specific examples of the importance of interconnected communities, or habitats, were provided in the discussion above. This is an essential ecosystem role of coastal sage scrub.

A characteristic of the coastal sage scrub vegetation type is a high degree of endemism. This is consonant with Westman's observation that 44 percent of the species he sampled in coastal sage scrub occurred at only one of his 67 sites, which were

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<sup>49</sup> National Park Service. 2000. Draft: General Management Plan & Environmental Impact Statement, Santa Monica Mountains National Recreation Area, US Dept. of Interior, National Park Service, December 2000.

<sup>50</sup> Environmental impacts are particularly severe at the interface between development and natural habitats. The greater the amount of this "edge" relative to the area of natural habitat, the worse the impact.

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distributed from the San Francisco Bay area to Mexico<sup>51</sup>. Species with restricted distributions are by nature more susceptible to loss or degradation of their habitat. Westman said of this unique and local aspect of coastal sage scrub species in California:

"While there are about 50 widespread sage scrub species, more than half of the 375 species encountered in the present study of the sage scrub flora are rare in occurrence within the habitat range. In view of the reduction of the area of coastal sage scrub in California to 10-15% of its former extent and the limited extent of preserves, measures to conserve the diversity of the flora are needed."<sup>52</sup>

Coastal sage scrub in southern California provides habitat for about 100 rare species<sup>53</sup>, many of which are also endemic to limited geographic regions<sup>54</sup>. In the Santa Monica Mountains, rare animals that inhabit coastal sage scrub<sup>55</sup> include the Santa Monica shieldback katydid, silvery legless lizard, coastal cactus wren, Bell's sparrow, San Diego desert woodrat, southern California rufous-crowned sparrow, coastal western whiptail, and San Diego horned lizard. Some of these species are also found in chaparral<sup>56</sup>. Rare plants found in coastal sage scrub in the Santa Monica Mountains include Santa Susana tarplant, Coulter's saltbush, Blockman's dudleya, Braunton's milkvetch, Parry's spineflower, and Plummer's mariposa lily<sup>57</sup>. A total of 32 sensitive species of reptiles, birds and mammals have been identified in this community by the National Park Service.<sup>58</sup>

One of the most important ecological functions of coastal sage scrub in the Santa Monica Mountains is to protect water quality in coastal streams by reducing erosion in the watershed. Although shallow rooted, the shrubs that define coastal sage scrub have dense root masses that hold the surface soils much more effectively than the exotic annual grasses and forbs that tend to dominate in disturbed areas. The native shrubs of this community are resistant not only to drought, as discussed above, but well adapted to fire. Most of the semi-woody shrubs have some ability to crown sprout after

<sup>51</sup> Westman, W.E. 1981. Diversity relations and succession in Californian coastal sage scrub. *Ecology* 62:170-184.

<sup>52</sup> Ibid.

<sup>53</sup> Atwood, J. L. 1993. California gnatcatchers and coastal sage scrub: The biological basis for endangered species listing. pp.149-166 *In: Interface Between Ecology and Land Development in California*. Ed. J. E. Keeley, So. Calif. Acad. of Sci., Los Angeles. California Department of Fish and Game (CDFG). 1993. The Southern California Coastal Sage Scrub (CSS) Natural Communities Conservation Plan (NCCP). CDFG and Calif. Resources Agency, 1416 9<sup>th</sup> St., Sacramento, CA 95814.

<sup>54</sup> Westman, W.E. 1981. *op. cit.*

<sup>55</sup> Biological Resources Assessment of the Proposed Santa Monica Mountains Significant Ecological Area. Nov. 2000. Los Angeles Co., Dept. of Regional Planning, 320 West Temple St., Rm. 1383, Los Angeles, CA 90012.

<sup>56</sup> O'Leary J.F., S.A. DeSimone, D.D. Murphy, P.F. Brussard, M.S. Gilpin, and R.F. Noss. 1994. Bibliographies on coastal sage scrub and related malacophyllous shrublands of other Mediterranean-type climates. *California Wildlife Conservation Bulletin* 10:1-51.

<sup>57</sup> Biological Resources Assessment of the Proposed Santa Monica Mountains Significant Ecological Area. Nov. 2000. Los Angeles Co., Dept. of Regional Planning, 320 West Temple St., Rm. 1383, Los Angeles, CA 90012.

<sup>58</sup> NPS, 2000, *op. cit.*



fire. Several CSS species (e.g., *Eriogonum cinereum*) in the Santa Monica Mountains and adjacent areas resprout vigorously and other species growing near the coast demonstrate this characteristic more strongly than do individuals of the same species growing at inland sites in Riverside County.<sup>59</sup> These shrub species also tend to recolonize rapidly from seed following fire. As a result they provide persistent cover that reduces erosion.

In addition to performing extremely important roles in the Mediterranean ecosystem, the coastal sage scrub community type has been drastically reduced in area by habitat loss to development. In the early 1980's it was estimated that 85 to 90 percent of the original extent of coastal sage scrub in California had already been destroyed.<sup>60</sup> Losses since that time have been significant and particularly severe in the coastal zone.

Therefore, because of its increasing rarity, its important role in the functioning of the Santa Monica Mountains Mediterranean ecosystem, and its extreme vulnerability to development, coastal sage scrub within the Santa Monica Mountains meets the definition of ESHA under the Coastal Act.

#### Chaparral

Another shrub community in the Santa Monica Mountain Mediterranean ecosystem is chaparral. Like "coastal sage scrub," this is a generic category of vegetation. Chaparral species have deep roots (10s of ft) and hard waxy leaves, adaptations to drought that increase water supply and decrease water loss at the leaf surface. Some chaparral species cope more effectively with drought conditions than do desert plants<sup>61</sup>. Chaparral plants vary from about one to four meters tall and form dense, intertwining stands with nearly 100 percent ground cover. As a result, there are few herbaceous species present in mature stands. Chaparral is well adapted to fire. Many species regenerate mainly by crown sprouting; others rely on seeds which are stimulated to germinate by the heat and ash from fires. Over 100 evergreen shrubs may be found in chaparral<sup>62</sup>. On average, chaparral is found in wetter habitats than coastal sage scrub, being more common at higher elevations and on north facing slopes.

The broad category "northern mixed chaparral" is the major type of chaparral shown in the National Park Service map of the Santa Monica Mountains. However, northern mixed chaparral can be variously dominated by chamise, scrub oak or one of several species of manzanita or by ceanothus. In addition, it commonly contains woody vines and large shrubs such as mountain mahogany, toyon, hollyleaf redberry, and sugarbush<sup>63</sup>. The rare red shank chaparral plant community also occurs in the Santa Monica Mountains. Although included within the category "northern mixed chaparral" in

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<sup>59</sup> Dr. John O'Leary, SDSU, personal communication to Dr. John Dixon, CCC, July 2, 2002

<sup>60</sup> Westman, W.E. 1981. op. cit.

<sup>61</sup> Dr. Stephen Davis, Pepperdine University. Presentation at the CCC workshop on the significance of native habitats in the Santa Monica Mountains. June 13, 2002.

<sup>62</sup> Keely, J.E. and S.C. Keeley. Chaparral. Pages 166-207 in M.G. Barbour and W.D. Billings, eds. North American Terrestrial Vegetation. New York, Cambridge University Press.

<sup>63</sup> Ibid.

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the vegetation map, several types of ceanothus chaparral are reported in the Santa Monica Mountains. Ceanothus chaparral occurs on stable slopes and ridges, and may be dominated by bigpod ceanothus, buck brush ceanothus, hoaryleaf ceanothus, or greenbark ceanothus. In addition to ceanothus, other species that are usually present in varying amounts are chamise, black sage, holly-leaf redberry, sugarbush, and coast golden bush<sup>64</sup>.

Several sensitive plant species that occur in the chaparral of the Santa Monica Mountains area are: Santa Susana tarplant, Lyon's pentachaeta, marcescent dudleya, Santa Monica Mountains dudleya, Branton's milk vetch and salt spring checkerbloom<sup>65</sup>. Several occurring or potentially occurring sensitive animal species in chaparral from the area are: Santa Monica shieldback katydid, western spadefoot toad, silvery legless lizard, San Bernardino ring-neck snake, San Diego mountain kingsnake, coast patch-nosed snake, sharp-shinned hawk, southern California rufous-crowned sparrow, Bell's sparrow, yellow warbler, pallid bat, long-legged myotis bat, western mastiff bat, and San Diego desert woodrat.<sup>66</sup>

Coastal sage scrub and chaparral are the predominant generic community types of the Santa Monica Mountains and provide the living matrix within which rarer habitats like riparian woodlands exist. These two shrub communities share many important ecosystem roles. Like coastal sage scrub, chaparral within the Santa Monica Mountains provides critical linkages among riparian corridors, provides essential habitat for species that require several habitat types during the course of their life histories, provides essential habitat for sensitive species, and stabilizes steep slopes and reduces erosion, thereby protecting the water quality of coastal streams.

Many species of animals in Mediterranean habitats characteristically move among several plant communities during their daily activities, and many are reliant on different communities either seasonally or during different stages of their life cycle. The importance of an intact mosaic of coastal sage scrub, chaparral, and riparian community types is perhaps most critical for birds. However, the same principles apply to other taxonomic groups. For example, whereas coastal sage scrub supports a higher diversity of native ant species than chaparral, chaparral habitat is necessary for the coast horned lizard, an ant specialist<sup>67</sup>. Additional examples of the importance of an interconnected communities, or habitats, were provided in the discussion of coastal sage scrub above. This is an extremely important ecosystem role of chaparral in the Santa Monica Mountains.

Chaparral is also remarkably adapted to control erosion, especially on steep slopes. The root systems of chaparral plants are very deep, extending far below the surface and

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<sup>64</sup> Ibid.

<sup>65</sup> Biological Resources Assessment of the Proposed Santa Monica Mountains Significant Ecological Area. Nov. 2000. Los Angeles Co., Dept. of Regional Planning, 320 West Temple St., Rm. 1383, Los Angeles, CA 90012.

<sup>66</sup> Ibid.

<sup>67</sup> A.V. Suarez. Ants and lizards in coastal sage scrub and chaparral. A presentation at the CCC workshop on the significance of native habitats in the Santa Monica Mountains. June 13, 2002.

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penetrating the bedrock below<sup>68</sup>, so chaparral literally holds the hillsides together and prevents slippage.<sup>69</sup> In addition, the direct soil erosion from precipitation is also greatly reduced by 1) water interception on the leaves and above ground foliage and plant structures, and 2) slowing the runoff of water across the soil surface and providing greater soil infiltration. Chaparral plants are extremely resistant to drought, which enables them to persist on steep slopes even during long periods of adverse conditions. Many other species die under such conditions, leaving the slopes unprotected when rains return. Since chaparral plants recover rapidly from fire, they quickly re-exert their ground stabilizing influence following burns. The effectiveness of chaparral for erosion control after fire increases rapidly with time<sup>70</sup>. Thus, the erosion from a 2-inch rain-day event drops from 5 yd<sup>3</sup>/acre of soil one year after a fire to 1 yd<sup>3</sup>/acre after 4 years.<sup>71</sup> The following table illustrates the strong protective effect of chaparral in preventing erosion.

Soil erosion as a function of 24-hour precipitation and chaparral age.

Years Since Fire	Erosion (yd <sup>3</sup> /acre) at Maximum 24-hr Precipitation of:		
	2 inches	5 inches	11 inches
1	5	20	180
4	1	12	140
17	0	1	28
50+	0	0	3

Therefore, because of its important roles in the functioning of the Santa Monica Mountains Mediterranean ecosystem, and its extreme vulnerability to development, chaparral within the Santa Monica Mountains meets the definition of ESHA under the Coastal Act.

#### Oak Woodland and Savanna

Coast live oak woodland occurs mostly on north slopes, shaded ravines and canyon bottoms. Besides the coast live oak, this plant community includes hollyleaf cherry, California bay laurel, coffeeberry, and poison oak. Coast live oak woodland is more

<sup>68</sup> Helmers, H., J.S. Horton, G. Juhren and J. O'Keefe. 1955. Root systems of some chaparral plants in southern California. *Ecology* 36(4):667-678. Kummerow, J. and W. Jow. 1977. Root systems of chaparral shrubs. *Oecologia* 29:163-177.

<sup>69</sup> Radtke, K. 1983. *Living more safely in the chaparral-urban interface*. General Technical Report PSW-67. U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station, Berkeley, California. 51 pp.

<sup>70</sup> Kittredge, J. 1973. *Forest influences — the effects of woody vegetation on climate, water, and soil*. Dover Publications, New York. 394 pp. Longcore, T and C. Rich. 2002. Protection of environmentally sensitive habitat areas in proposed local coastal plan for the Santa Monica Mountains. (Table 1). The Urban Wildlands Group, Inc., P.O. Box 24020 Los Angeles, CA 90024. Vicars, M. (ed.) 1999. *FireSmart: protecting your community from wildfire*. Partners in Protection, Edmonton, Alberta.

<sup>71</sup> Ibid.

tolerant of salt-laden fog than other oaks and is generally found nearer the coast<sup>72</sup>. Coast live oak also occurs as a riparian corridor species within the Santa Monica Mountains.

Valley oaks are endemic to California and reach their southern most extent in the Santa Monica Mountains. Valley oaks were once widely distributed throughout California's perennial grasslands in central and coastal valleys. Individuals of this species may survive 400-600 years. Over the past 150 years, valley oak savanna habitat has been drastically reduced and altered due to agricultural and residential development. The understory is now dominated by annual grasses and recruitment of seedlings is generally poor. This is a very threatened habitat.

The important ecosystem functions of oak woodlands and savanna are widely recognized<sup>73</sup>. These habitats support a high diversity of birds<sup>74</sup>, and provide refuge for many species of sensitive bats<sup>75</sup>. Typical wildlife in this habitat includes acorn woodpeckers, scrub jays, plain titmice, northern flickers, cooper's hawks, western screech owls, mule deer, gray foxes, ground squirrels, jackrabbits and several species of sensitive bats.

Therefore, because of their important ecosystem functions and vulnerability to development, oak woodlands and savanna within the Santa Monica Mountains met the definition of ESHA under the Coastal Act.

#### Grasslands

Grasslands consist of low herbaceous vegetation that is dominated by grass species but may also harbor native or non-native forbs.

#### California Perennial Grassland

Native grassland within the Santa Monica Mountains consists of perennial native needlegrasses: purple needlegrass, (*Nassella pulchra*), foothills needlegrass, (*Nassella lepida*) and nodding needlegrass (*Nassella cernua*). These grasses may occur in the same general area but they do not typically mix, tending to segregate based on slope

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<sup>72</sup> NPS 2000. op. cit.

<sup>73</sup> Block, W.M., M.L. Morrison, and J. Verner. 1990. Wildlife and oak-woodland interdependency. *Fremontia* 18(3):72-76. Pavlik, B.M., P.C. Muick, S. Johnson, and M. Popper. 1991. *Oaks of California*. Cachuma Press and California Oak Foundation, Los Olivos, California. 184 pp.

<sup>74</sup> Cody, M.L. 1977. Birds. Pp. 223-231 in Thrower, N.J.W., and D.E. Bradbury (eds.). *Chile-California Mediterranean scrub atlas*. US/IBP Synthesis Series 2. Dowden, Hutchinson & Ross, Stroudsburg, Pennsylvania. National Park Service. 1993. A checklist of the birds of the Santa Monica Mountains National Recreation Area. Southwest Parks and Monuments Assoc., 221 N. Court, Tucson, AZ. 85701

<sup>75</sup> Miner, K.L., and D.C. Stokes. 2000. Status, conservation issues, and research needs for bats in the south coast bioregion. Paper presented at *Planning for biodiversity: bringing research and management together*, February 29, California State University, Pomona, California.

and substrate factors<sup>76</sup>. Mixed with these native needlegrasses are many non-native annual species that are characteristic of California annual grassland<sup>77</sup>. Native perennial grasslands are now exceedingly rare<sup>78</sup>. In California, native grasslands once covered nearly 20 percent of the land area, but today are reduced to less than 0.1 percent<sup>79</sup>. The California Natural Diversity Database (CNDDDB) lists purple needlegrass habitat as a community needing priority monitoring and restoration. The CNDDDB considers grasslands with 10 percent or more cover by purple needlegrass to be significant, and recommends that these be protected as remnants of original California prairie. Patches of this sensitive habitat occur throughout the Santa Monica Mountains where they are intermingled with coastal sage scrub, chaparral and oak woodlands.

Many of the raptors that inhabit the Santa Monica Mountains make use of grasslands for foraging because they provide essential habitat for small mammals and other prey. Grasslands adjacent to woodlands are particularly attractive to these birds of prey since they simultaneously offer perching and foraging habitat. Particularly noteworthy in this regard are the white-tailed kite, northern harrier, sharp-shinned hawk, Cooper's hawk, red-shouldered hawk, red-tailed hawk, golden eagle, American kestrel, merlin, and prairie falcon<sup>80</sup>.

Therefore, because of their extreme rarity, important ecosystem functions, and vulnerability to development, California native perennial grasslands within the Santa Monica Mountains meet the definition of ESHA under the Coastal Act.

#### California Annual Grassland

The term "California annual grassland" has been proposed to recognize the fact that non-native annual grasses should now be considered naturalized and a permanent feature of the California landscape and should be acknowledged as providing important ecological functions. These habitats support large populations of small mammals and provide essential foraging habitat for many species of birds of prey. California annual grassland generally consists of dominant invasive annual grasses that are primarily of Mediterranean origin. The dominant species in this community include common wild oats (*Avena fatua*), slender oat (*Avena barbata*), red brome (*Bromus madritensis* ssp. *Rubens*), ripgut brome, (*Bromus diandrus*), and herbs such as black mustard (*Brassica nigra*), wild radish (*Raphanus sativus*) and sweet fennel (*Foeniculum vulgare*). Annual grasslands are located in patches throughout the Santa Monica Mountains in previously disturbed areas, cattle pastures, valley bottoms and along roadsides. While many of

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<sup>76</sup> Sawyer, J. O. and T. Keeler-Wolf. 1995. A manual of California vegetation. California Native Plant Society, 1722 J St., Suite 17, Sacramento, CA 95814.

<sup>77</sup> Biological Resources Assessment of the Proposed Santa Monica Mountains Significant Ecological Area. Nov. 2000. Los Angeles Co., Dept. of Regional Planning, 320 West Temple St., Rm. 1383, Los Angeles, CA 90012.

<sup>78</sup> Noss, R.F., E.T. LaRoe III and J.M. Scott. 1995. Endangered ecosystems of the United States: a preliminary assessment of loss and degradation. Biological Report 28. National Biological Service, U.S. Dept. of Interior.

<sup>79</sup> NPS 2000. op. cit.

<sup>80</sup> NPS 2000. op. cit.

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these patches are dominated by invasive non-native species, it would be premature to say that they are never sensitive or do not harbor valuable annual native species. A large number of native forbs also may be present in these habitats<sup>81</sup>, and many native wildflowers occur primarily in annual grasslands. In addition, annual grasslands are primary foraging areas for many sensitive raptor species in the area.

Inspection of California annual grasslands should be done prior to any impacts to determine if any rare native species are present or if any rare wildlife rely on the habitat and to determine if the site meets the Coastal Act ESHA criteria.

### **Effects of Human Activities and Development on Habitats within the Santa Monica Mountains**

The natural habitats of the Santa Monica Mountains are highly threatened by current development pressure, fragmentation and impacts from the surrounding megalopolis. The developed portions of the Santa Monica Mountains represents the extension of this urbanization into natural areas. About 54% of the undeveloped Santa Monica Mountains are in private ownership<sup>82</sup>, and computer simulation studies of the development patterns over the next 25 years predict a serious increase in habitat fragmentation<sup>83</sup>. Development and associated human activities have many well-documented deleterious effects on natural communities. These environmental impacts may be both direct and indirect and include the effects of increased fire frequency, of fire clearance, of introduction of exotic species, and of night lighting.

#### **Increased Fire Frequency**

Since 1925, all the major fires in the Santa Monica Mountains have been caused by human activities<sup>84</sup>. Increased fire frequency alters plant communities by creating conditions that select for some species over others. Strong resprouting plant species such as laurel sumac, are favored while non-sprouters like bigpod ceanothus, are at a disadvantage. Frequent fire recurrence before the non-sprouters can develop and reestablish a seed bank is detrimental, so that with each fire their chances for propagation are further reduced. Resprouters can be sending up new shoots quickly, and so they are favored in an increased fire frequency regime. Also favored are weedy and invasive species. Dr. Steven Davis in his abstract for a Coastal Commission

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<sup>81</sup> Holstein, G. 2001. Pre-agricultural grassland in Central California. *Madrono* 48(4):253-264. Stromberg, M.R., P. Kephart and V. Yadon. 2001. Composition, invasibility and diversity of coastal California grasslands. *Madrono* 48(4):236-252.

<sup>82</sup> National Park Service. 2000. Draft: General Management Plan & Environmental Impact Statement, Santa Monica Mountains National Recreation Area, US Dept. of Interior, National Park Service, December 2000.

<sup>83</sup> Swenson, J. J., and J. Franklin. 2000. The effects of future urban development on habitat fragmentation in the Santa Monica Mountains. *Landscape Ecol.* 15:713-730.

<sup>84</sup> NPS, 2000, op. cit.

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Workshop stated<sup>85</sup> *"We have evidence that recent increases in fire frequency has eliminated drought-hardy non-sprouters from chaparral communities near Malibu, facilitating the invasion of exotic grasses and forbs that further exacerbate fire frequency."* Thus, simply increasing fire frequency from about once every 22 years (the historical frequency) to about once every 12 years (the current frequency) can completely change the vegetation community. This has cascading effects throughout the ecosystem.

#### Fuel Clearance

The removal of vegetation for fire protection in the Santa Monica Mountains is required by law in "Very High Fire Hazard Severity Zones"<sup>86</sup>. Fuel removal is reinforced by insurance carriers<sup>87</sup>. Generally, the Santa Monica Mountains are considered to be a high fire hazard severity zone. In such high fire hazard areas, homeowners must often resort to the California FAIR Plan to obtain insurance. Because of the high risk, all homes in "brush areas" are assessed an insurance surcharge if they have less than the recommended 200-foot fuel modification zone<sup>88</sup> around the home. The combination of insurance incentives and regulation assures that the 200-foot clearance zone will be applied universally<sup>89</sup>. While it is not required that all of this zone be cleared of vegetation, the common practice is simply to disk this zone, essentially removing or highly modifying all native vegetation. For a new structure not adjacent to existing structures, this results in the removal or modification of a minimum of three acres of vegetation<sup>90</sup>. While the directly impacted area is large, the effects of fuel modification extend beyond the 200-foot clearance area.

#### Effects of Fuel Clearance on Bird Communities

The impacts of fuel clearance on bird communities was studied by Stralberg who identified three ecological categories of birds in the Santa Monica Mountains: 1) local and long distance migrators (ash-throated flycatcher, Pacific-slope flycatcher, phainopepla, black-headed grosbeak), 2) chaparral-associated species (Bewick's wren, wrentit, blue-gray gnatcatcher, California thrasher, orange-crowned warbler, rufous-crowned sparrow, spotted towhee, California towhee) and 3) urban-associated species

<sup>85</sup> Davis, Steven. Effects of fire and other factors on patterns of chaparral in the Santa Monica Mountains, Coastal Commission Workshop on the Significance of Native Habitats in the Santa Monica Mountains. CCC Hearing, June 13, 2002, Queen Mary Hotel.

<sup>86</sup> 1996 Los Angeles County Fire Code Section 1117.2.1

<sup>87</sup> Longcore, T and C. Rich. 2002. Protection of environmentally sensitive habitat areas in proposed local coastal plan for the Santa Monica Mountains. The Urban Wildlands Group, Inc., P.O. Box 24020 Los Angeles, CA 90024. Vicars, M. (ed.) 1999. FireSmart: protecting your community from wildfire. Partners in Protection, Edmonton, Alberta.

<sup>88</sup> Fuel Modification Plan Guidelines. Co. of Los Angeles Fire Department, Fuel Modification Unit, Prevention Bureau, Forestry Division, Brush Clearance Section, January 1998.

<sup>89</sup> Longcore, T and C. Rich. 2002. Protection of environmentally sensitive habitat areas in proposed local coastal plan for the Santa Monica Mountains. The Urban Wildlands Group, Inc., P.O. Box 24020 Los Angeles, CA 90024.

<sup>90</sup> Ibid.

(mourning dove, American crow, Western scrub-jay, Northern mockingbird)<sup>91</sup>. It was found in this study that the number of migrators and chaparral-associated species decreased due to habitat fragmentation while the abundance of urban-associated species increased. The impact of fuel clearance is to greatly increase this edge-effect of fragmentation by expanding the amount of cleared area and "edge" many-fold. Similar results of decreases in fragmentation-sensitive bird species are reported from the work of Bolger et al. in southern California chaparral<sup>92</sup>.

#### Effects of Fuel Clearance on Arthropod Communities

Fuel clearance and habitat modification may also disrupt native arthropod communities, and this can have surprising effects far beyond the cleared area on species seemingly unrelated to the direct impacts. A particularly interesting and well-documented example with ants and lizards illustrates this point. When non-native landscaping with intensive irrigation is introduced, the area becomes favorable for the invasive and non-native Argentine ant. This ant forms "super colonies" that can forage more than 650 feet out into the surrounding native chaparral or coastal sage scrub around the landscaped area<sup>93</sup>. The Argentine ant competes with native harvester ants and carpenter ants displacing them from the habitat<sup>94</sup>. These native ants are the primary food resource for the native coast horned lizard, a California "Species of Special Concern." As a result of Argentine ant invasion, the coast horned lizard and its native ant food resources are diminished in areas near landscaped and irrigated developments<sup>95</sup>. In addition to specific effects on the coast horned lizard, there are other Mediterranean habitat ecosystem processes that are impacted by Argentine ant invasion through impacts on long-evolved native ant-plant mutualisms<sup>96</sup>. The composition of the whole arthropod community changes and biodiversity decreases when habitats are subjected to fuel modification. In coastal sage scrub disturbed by fuel modification, fewer arthropod

<sup>91</sup> Stralberg, D. 2000. Landscape-level urbanization effects on chaparral birds: a Santa Monica Mountains case study. Pp. 125-136 in Keeley, J.E., M. Baer-Keeley, and C.J. Fotheringham (eds.). *2nd interface between ecology and land development in California*. U.S. Geological Survey, Sacramento, California.

<sup>92</sup> Bolger, D. T., T. A. Scott and J. T. Rotenberry. 1997. Breeding bird abundance in an urbanizing landscape in coastal Southern California. *Conserv. Biol.* 11:406-421.

<sup>93</sup> Suarez, A.V., D.T. Bolger and T.J. Case. 1998. Effects of fragmentation and invasion on native ant communities in coastal southern California. *Ecology* 79(6):2041-2056.

<sup>94</sup> Holway, D.A. 1995. The distribution of the Argentine ant (*Linepithema humile*) in central California: a twenty-year record of invasion. *Conservation Biology* 9:1634-1637. Human, K.G. and D.M. Gordon. 1996. Exploitation and interference competition between the invasive Argentine ant, (*Linepithema humile*), and native ant species. *Oecologia* 105:405-412.

<sup>95</sup> Fisher, R.N., A.V. Suarez and T.J. Case. 2002. Spatial patterns in the abundance of the coastal horned lizard. *Conservation Biology* 16(1):205-215. Suarez, A.V. J.Q. Richmond and T.J. Case. 2000. Prey selection in horned lizards following the invasion of Argentine ants in southern California. *Ecological Applications* 10(3):711-725.

<sup>96</sup> Suarez, A.V., D.T. Bolger and T.J. Case. 1998. Effects of fragmentation and invasion on native ant communities in coastal southern California. *Ecology* 79(6):2041-2056. Bond, W. and P. Slingsby. Collapse of an Ant-Plant Mutualism: The Argentine Ant (*Iridomyrmex humilis*) and Myrmecochorous Proteaceae. *Ecology* 65(4):1031-1037.



predator species are seen and more exotic arthropod species are present than in undisturbed habitats<sup>97</sup>.

Studies in the Mediterranean vegetation of South Africa (equivalent to California shrubland with similar plant species) have shown how the invasive Argentine ant can disrupt the whole ecosystem.<sup>98</sup> In South Africa the Argentine ant displaces native ants as they do in California. Because the native ants are no longer present to collect and bury seeds, the seeds of the native plants are exposed to predation, and consumed by seed eating insects, birds and mammals. When this habitat burns after Argentine ant invasion the large-seeded plants that were protected by the native ants all but disappear. So the invasion of a non-native ant species drives out native ants, and this can cause a dramatic change in the species composition of the plant community by disrupting long-established seed dispersal mutualisms. In California, some insect eggs are adapted to being buried by native ants in a manner similar to plant seeds<sup>99</sup>.

#### Artificial Night Lighting

One of the more recently recognized human impacts on ecosystem function is that of artificial night lighting as it effects the behavior and function of many different types of organisms<sup>100</sup>. For literally billions of years the only nighttime sources of light were the moon and stars, and living things have adapted to this previously immutable standard and often depend upon it for their survival. A review of lighting impacts suggests that whereas some species are unaffected by artificial night lighting, many others are severely impacted. Overall, most impacts are negative ones or ones whose outcome is unknown. Research to date has found negative impacts to plants, aquatic and terrestrial invertebrates, amphibians, fish, birds and mammals, and a detailed literature review can be found in the report by Longcore and Rich<sup>101</sup>.

#### **Summary**

In a past action, the Coastal Commission found<sup>102</sup> that the Santa Monica Mountains Mediterranean Ecosystem, which includes the undeveloped native habitats of the Santa Monica Mountains, is rare and especially valuable because of its relatively pristine

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<sup>97</sup> Longcore, T.R. 1999. Terrestrial arthropods as indicators of restoration success in coastal sage scrub. Ph.D. Dissertation, University of California, Los Angeles.

<sup>98</sup> Christian, C. 2001. Consequences of a biological invasion reveal the importance of mutualism for plant communities. *Nature* 413:635-639.

<sup>99</sup> Hughes, L. and M. Westoby. 1992. *Capitula* on stick insect eggs and elaiosomes on seeds: convergent adaptations for burial by ants. *Functional Ecology* 6:642-648.

<sup>100</sup> Longcore, T and C. Rich. 2002. Protection of environmentally sensitive habitat areas in proposed local coastal plan for the Santa Monica Mountains. The Urban Wildlands Group, Inc., P.O. Box 24020 Los Angeles, CA 90024.

<sup>101</sup> Ibid, and Ecological Consequences of Artificial Night Lighting, Conference, February 23-24, 2002, UCLA Los Angeles, California.

<sup>102</sup> Revised Findings for the City of Malibu Local Coastal Program (as adopted on September 13, 2002) adopted on February 6, 2003.

character, physical complexity, and resultant biological diversity. The undeveloped native habitats within the Santa Monica Mountains that are discussed above are ESHA because of their valuable roles in that ecosystem, including providing a critical mosaic of habitats required by many species of birds, mammals and other groups of wildlife, providing the opportunity for unrestricted wildlife movement among habitats, supporting populations of rare species, and preventing the erosion of steep slopes and thereby protecting riparian corridors, streams and, ultimately, shallow marine waters.

The importance the native habitats in the Santa Monica Mountains was emphasized nearly 20 years ago by the California Department of Fish and Game<sup>103</sup>. Commenting on a Draft Land Use Plan for the City of Malibu, the Regional Manager wrote that, "It is essential that large areas of land be reclassified to reflect their true status as ESHAs. One of the major needs of the Malibu LUP is that it should provide protection for entire drainages and not just stream bottoms." These conclusions were supported by the following observations:

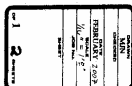
"It is a fact that many of the wildlife species of the Santa Monica Mountains, such as mountain lion, deer, and raccoon, have established access routes through the mountains. They often travel to and from riparian zones and development such as high density residential may adversely affect a wildlife corridor.

Most animal species that exist in riparian areas will, as part of their life histories, also be found in other habitat types, including chaparral (sic) or grassland. For example, hawks nest and roost in riparian areas, but are dependent on large open areas for foraging. For the survival of many species, particularly those high on the food chain, survival will depend upon the presence of such areas. Such areas in the Santa Monica Mountains include grassland and coastal sage scrub communities, which have been documented in the SEA studies as supporting a wide diversity of plant and animal life."

This analysis by the Department of Fish and Game is consonant with the findings of the Commission in the case of the Malibu LCP, and with the conclusion that large contiguous areas of relatively pristine native habitat in the Santa Monica Mountains meet the definition of ESHA under the Coastal Act.

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<sup>103</sup> Letter from F. A. Worthley, Jr. (CDFG) to N. Lucast (CCC) re Land Use Plan for Malibu dated March 22, 1983.



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**EXHIBIT 11  
APPLICATION NO.  
4-06-042  
REVISED FINAL  
LA CO FIRE DEPT.  
APPROVED FUEL  
MODIFICATION**



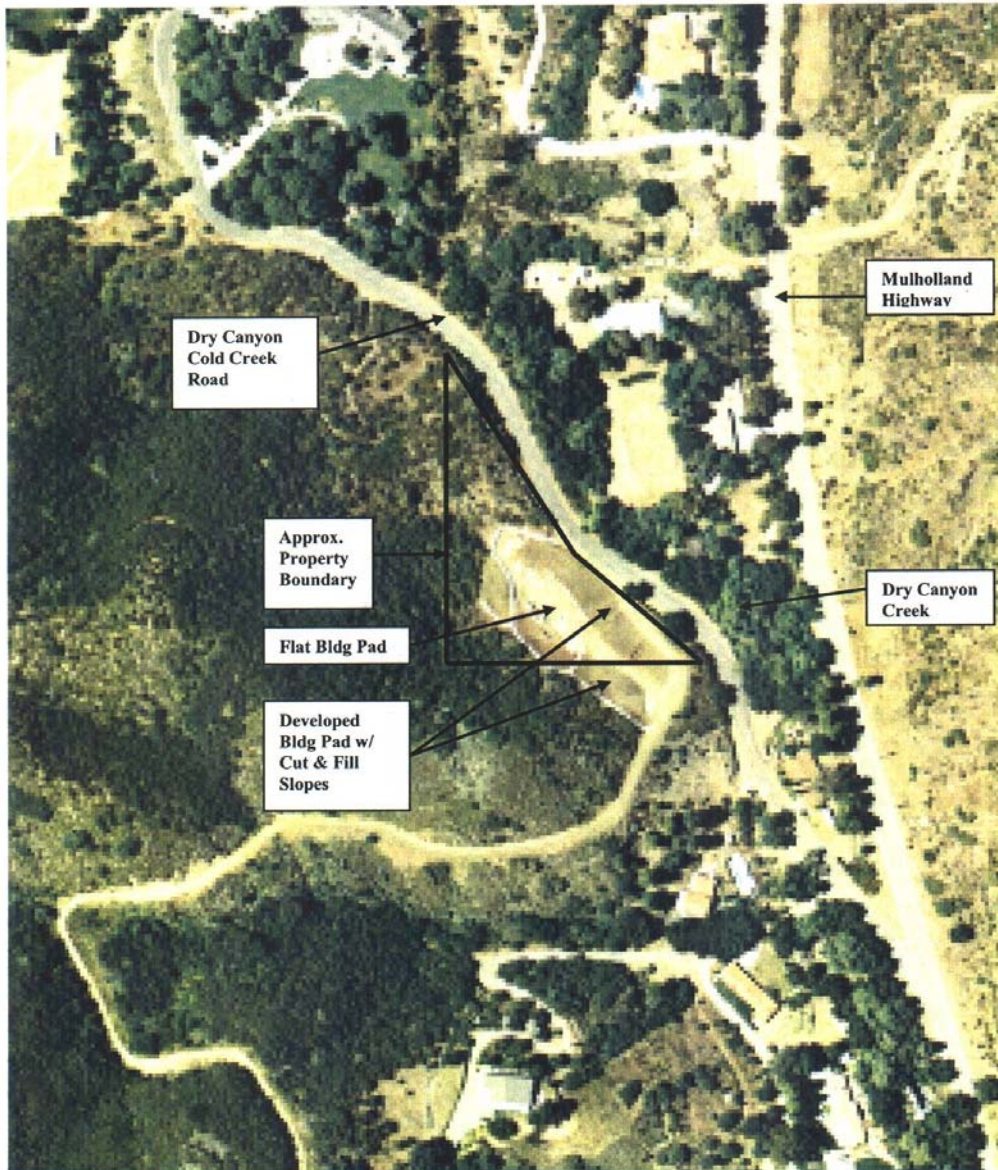
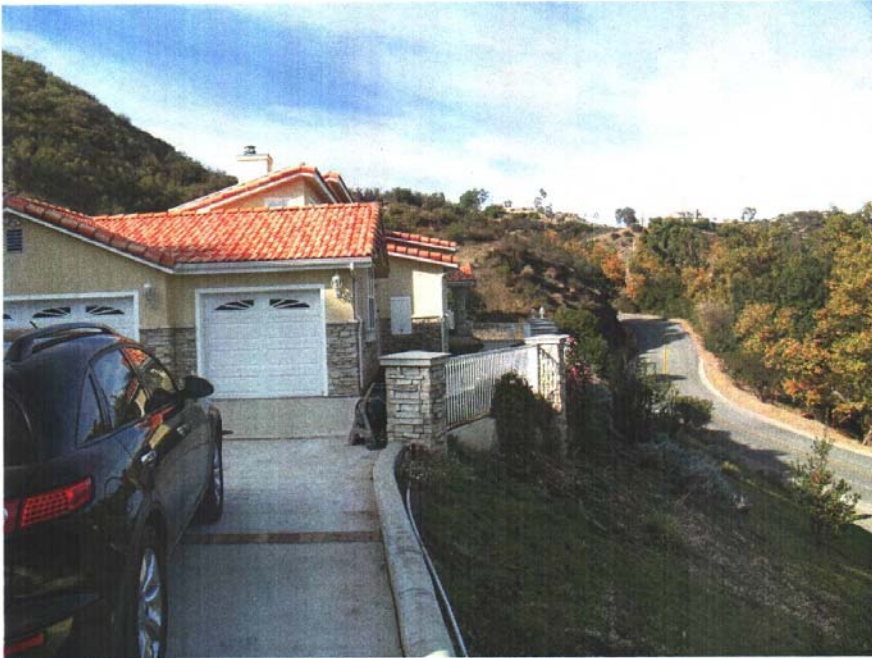


EXHIBIT 13  
APPLICATION  
NO. 4-06-042  
AERIAL PHOTO  
JUNE 28, 2001





View to Northwest of Existing Residence, Garage & Driveway. Proposed Project Located on Opposite Side of Residence. Note White Color of Concrete, Garage Doors and Metal Fence.



View to Northwest of Flat Pad Area Behind Residence Where Pool, Pool Enclosure and Pool/Guest House are Proposed. Existing Retaining Wall to be Removed & New Retaining Wall to be Constructed to Left.

Exhibit 14  
Application No.  
4-06-042  
Existing  
Development

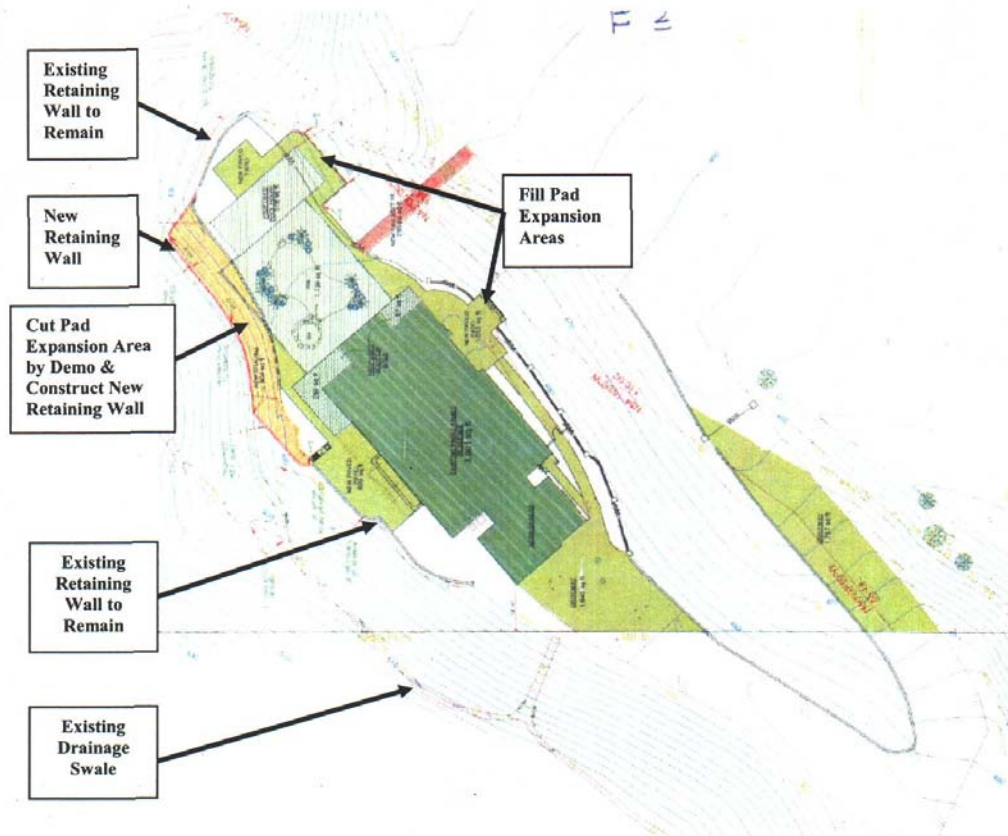


EXHIBIT 15  
APPLICATION  
NO. 4-06-042  
FLAT BUILDING  
PAD 1,206 sq. ft.  
EXPANSION