CALIFORNIA COASTAL COMMISSION
SOUTH CENTRAL COAST AREA
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Staff:	M. Ahrens
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STAFF REPORT: REGULAR CALENDAR

Application No.:	**4-12-026**
Applicant:	**Daniel and Judith Goldin**
Agent:	**Andrew Ferguson**
Project Location:	**26349 Ingleside Way, Santa Monica Mountains, Los Angeles County**
Project Description:	Development of a 1.4 acre parcel with a two story 3,139 sq. ft. single family residence, a detached two story accessory structure with a750 sq. ft. guest house and 750 sq. ft. garage, 212 cubic yards cut grading and 161 cubic yards of fill grading with 51 cubic yards to be exported offsite outside of the Coastal Zone, and associated site improvements consisting of a swimming pool and spa, a paved access driveway, landscaping, drainage systems and retaining walls and an Advanced Onsite Wastewater Treatment System.

SUMMARY OF STAFF RECOMMENDATION

Staff recommends **approval** of the proposed development with conditions.

The standard of review for the proposed project is the Chapter Three policies of the Coastal Act. In addition, the policies of the certified Malibu – Santa Monica Mountains Land Use Plan (LUP) serve as guidance. Following is a summary of the main issues raised by the project and how they are resolved by staff's recommendation:

Staff recommends that the Commission approve the proposed project, as proposed and conditioned with seventeen (16) Special Conditions. The subject site is a 1.4 acre undeveloped parcel of land bordered by the Malibu Bowl small lot subdivision to the southwest, two other undeveloped lots similar in size to the subject site to the east and west, and state parkland to the north. The project site contains habitat that meets the definition of ESHA and the project will have adverse impacts on ESHA. The proposed residence is not a resource dependent use, but will be approved to permit the applicant a reasonable economic use of the property. The single family residence and detached accessory structure are sited to minimize significant disruption of habitat values and the development area will be less than 10,000 square feet. The project is conditioned to require the grant of an open space easement in order to ensure that the remaining ESHA on the site will be preserved. Mitigation is required for the loss of ESHA due to the development and the required fuel modification around structures. The project site contains several oak trees. The proposed development is sited to avoid tree removal or the encroachment of development within the protected zone of any oak tree. Additionally, the project is conditioned to require the implementation of oak tree protection measures during construction. The proposed structure will be visible at a distance from public lands and has the potential to adversely impact visual resources, however, no public trails are located within close proximity to the subject site and any existing trails are sited at least one or two miles away on a ridgeline to the north east. To ensure that any potential impacts to visual resources are avoided and minimized to the greatest extent feasible, staff is recommending Special Conditions requiring that the applicants utilize exterior colors consistent with the surrounding natural landscape; that windows on the development be made of non-reflective glass; that appropriate, adequate, and timely planting of native landscaping is used to soften the visual impact of the development from public view areas; and that a limit on night lighting of the site is incorporated to protect the nighttime rural character of this portion of the Santa Monica Mountains.

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LOCAL APPROVALS RECEIVED: County of Los Angeles Department of Regional Planning, Approval in Concept, dated 3/19/12; County of Los Angeles Environmental Health Services, Sewage Disposal System Conceptual Approval, dated 8/2/11; County of Los Angeles Fire Department, Preliminary Fuel Modification Plan Approval, dated 5/1/12.

I. MOTION AND RESOLUTION

The staff recommends that the Commission adopt the following resolution:

Motion:

*I move that the Commission **approve** Coastal Development Permit No 4-12-026 pursuant to the staff recommendation.*

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

Resolution:

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 all of the geology, geotechnical, and/or soils reports referenced as Substantive File Documents. These recommendations, including recommendations concerning foundations, sewage disposal, and drainage, shall be incorporated into all final design and construction plans, 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. Assumption of Risk, Waiver of Liability and Indemnity

By acceptance of this permit, the applicant acknowledges and agrees (i) that the site may be subject to hazards from wildfire and erosion; (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.

3. Permanent Drainage and Polluted Runoff Control Plan

A. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit to the Executive Director, two (2) copies of a final Drainage and Runoff Control Plan for the post-construction project site, prepared by a qualified licensed professional. The Plan shall include detailed drainage and runoff control plans with supporting calculations. The plans shall incorporate long-term post-construction Best Management Practices (BMPs) that protect water quality and minimize increases in runoff volume and rate in the project design of developments in the following order of priority:

a. Site Design BMPs: Project design features that reduce the creation or severity of potential pollutant sources, or reduce the alteration of the project site's natural stormwater flow regime. Examples are minimizing impervious surfaces, preserving native vegetation, and minimizing grading.

b. Source Control BMPs: Methods that reduce potential pollutants at their sources and/or avoid entrainment of pollutants in runoff, including schedules of activities, prohibitions of practices, maintenance procedures, managerial practices, or operational practices. Examples are covering outdoor storage areas, use of efficient irrigation, and minimizing the use of landscaping chemicals.

c. Treatment Control BMPs: Systems designed to remove pollutants from stormwater, by gravity settling of particulate pollutants, filtration, biological uptake, media adsorption, or any other physical, biological, or chemical process. Examples are vegetated swales, detention basins, and storm drain inlet filters. Where post-construction treatment of stormwater runoff is required, treatment control BMPs (or suites of BMPs) shall, at a minimum, be sized and designed to treat, infiltrate, or filter stormwater runoff from each storm event, up to and including the 85th percentile, 24-hour storm event for volume-based BMPs, or the 85th percentile, 1-hour storm event (with an appropriate safety factor of 2 or greater) for flow-based BMPs.

The qualified licensed professional shall certify in writing that the final Drainage and Runoff Control Plan is in substantial conformance with the following minimum requirements:

(1) Projects shall incorporate Low Impact Development (LID) techniques in order to minimize stormwater quality and quantity impacts from development, unless a credible and compelling explanation is provided as to why such features are not feasible and/or appropriate. LID strategies use small-scale integrated and distributed management practices, including minimizing impervious surfaces, infiltrating stormwater close to its source, and preservation of permeable soils and native vegetation.
(2) Post-development runoff rates from the site shall be maintained at levels similar to pre-development conditions.
(3) Selected BMPs shall consist, or primarily consist, of site design elements and/or landscape based systems or features that serve to maintain site permeability, avoid directly connected impervious area and/or retain, infiltrate, or filter runoff from rooftops, driveways and other hardscape areas, where feasible. Examples of such

features include but are not limited to porous pavement, pavers, rain gardens, vegetated swales, infiltration trenches, cisterns.

(4) Landscape plants shall have low water and chemical treatment demands and be consistent with **Special Condition 5, Landscaping and Fuel Modification Plans**. An efficient irrigation system designed based on hydrozones and utilizing drip emitters or micro-sprays or other efficient design shall be utilized for any landscaping requiring water application.

(5) All slopes shall be stabilized in accordance with provisions contained in the Landscaping and/or Interim Erosion and Sediment Control Condition for this Coastal Development Permit and, if applicable, in accordance with engineered plans prepared by a qualified licensed professional.

(6) Runoff shall be discharged from the developed site in a non-erosive manner. Energy dissipating measures shall be installed where needed to prevent erosion. Plan details and cross sections for any rock rip-rap and/or other energy dissipating devices or structures associated with the drainage system shall be prepared by a qualified licensed professional. The drainage plans shall specify, the location, dimensions, cubic yards of rock, etc. for the any velocity reducing structure with the supporting calculations showing the sizing requirements and how the device meets those sizing requirements. The qualified, licensed professional shall ensure that all energy dissipaters use the minimum amount of rock and/or other hardscape necessary to protect the site from erosion.

(7) All BMPs shall be operated, monitored, and maintained in accordance with manufacturer's specifications where applicable, or in accordance with well recognized technical specifications appropriate to the BMP for the life of the project and at a minimum, all structural BMPs shall be inspected, cleaned-out, and where necessary, repaired prior to the onset of the storm season (October 15th each year) and at regular intervals as necessary between October 15th and April 15th of each year. Debris and other water pollutants removed from structural BMP(s) during clean-out shall be contained and disposed of in a proper manner.

(9) For projects located on a hillside, slope, or which may otherwise be prone to geologic instability, site drainage and BMP selection shall be developed concurrent with the preliminary development design and grading plan, and final drainage plans shall be approved by a licensed geotechnical engineer or engineering geologist.

(10) 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 affected 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.

B. The final Drainage and Runoff Control Plan shall be in conformance with the site/ development plans approved by the Coastal Commission. Any necessary changes to the Coastal Commission approved site/development plans required by a qualified, licensed professional shall be reported to the Executive Director. No changes to the Coastal Commission approved final site/development plans shall occur without an amendment to the coastal development permit, unless the Executive Director determines that no amendment is required.

4. Interim Erosion Control Plans and Construction Responsibilities

A. PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit to the Executive Director an Interim Erosion Control and Construction Best Management Practices Plan, prepared by a qualified, licensed professional. The qualified, licensed professional shall certify in writing that the Interim Erosion Control and Construction Best Management Practices (BMPs) plan are in conformance with the following requirements:

1. Erosion Control Plan

(a) 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 plan and on-site with fencing or survey flags.

(b) Include a narrative report describing all temporary run-off and erosion control measures to be used during construction.

(c) The plan shall identify and delineate on a site or grading plan the locations of all temporary erosion control measures

(d) The plan shall specify that grading shall take place only during the dry season (April 1 – October 31). This period may be extended for a limited period of time if the situation warrants such a limited extension, if approved by the Executive Director. The applicant shall install or construct temporary sediment basins (including debris basins, desilting basins, or silt traps), temporary drains and swales, sand bag barriers, silt fencing, and shall stabilize any stockpiled fill with geofabric covers or other appropriate cover, install geotextiles or mats on all cut or fill slopes, and close and stabilize open trenches as soon as possible. Basins shall be sized to handle not less than a 10 year, 6 hour duration rainfall intensity event.

(e) The erosion control measures shall be required on the project site prior to or concurrent with the initial grading operations and maintained throughout the development process to minimize erosion and sediment from runoff waters during construction. All sediment should be retained on-site, unless removed to an appropriate, approved dumping location either outside of the coastal zone or within the coastal zone to a site permitted to receive fill.

(f) 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 geotextiles and/or mats, sand bag barriers, silt fencing; temporary drains and swales and sediment basins. The plans shall also specify that all disturbed areas shall be seeded with native grass species and include the technical specifications for seeding the disturbed areas. These temporary erosion control measures shall be monitored and maintained until grading or construction operations resume.

(g) All temporary, construction related erosion control materials shall be comprised of bio-degradable materials (natural fiber, not photo-degradable plastics) and must be removed when permanent erosion control measures are in place. Bio-degradable erosion control

materials may be left in place if they have been incorporated into the permanent landscaping design.

2. Construction Best Management Practices

(a) No demolition or construction materials, debris, or waste shall be placed or stored where it may enter sensitive habitat, receiving waters or a storm drain, or be subject to wave, wind, rain, or tidal erosion and dispersion.

(b) No demolition or construction equipment, materials, or activity shall be placed in or occur in any location that would result in impacts to environmentally sensitive habitat areas, streams, wetlands or their buffers.

(c) Any and all debris resulting from demolition or construction activities shall be removed from the project site within 24 hours of completion of the project.

(d) Demolition or construction debris and sediment shall be removed from work areas each day that demolition or construction occurs to prevent the accumulation of sediment and other debris that may be discharged into coastal waters.

(e) All trash and debris shall be disposed in the proper trash and recycling receptacles at the end of every construction day.

(f) The applicant shall provide adequate disposal facilities for solid waste, including excess concrete, produced during demolition or construction.

(g) Debris shall be disposed of at a permitted disposal site or recycled at a permitted recycling facility. If the disposal site is located in the coastal zone, a coastal development permit or an amendment to this permit shall be required before disposal can take place unless the Executive Director determines that no amendment or new permit is legally required.

(h) All stock piles and construction materials shall be covered, enclosed on all sides, shall be located as far away as possible from drain inlets and any waterway, and shall not be stored in contact with the soil.

(i) Machinery and equipment shall be maintained and washed in confined areas specifically designed to control runoff. Thinners or solvents shall not be discharged into sanitary or storm sewer systems.

(j) The discharge of any hazardous materials into any receiving waters shall be prohibited.

(k) Spill prevention and control measures shall be implemented to ensure the proper handling and storage of petroleum products and other construction materials. Measures shall include a designated fueling and vehicle maintenance area with appropriate berms and protection to prevent any spillage of gasoline or related petroleum products or contact with runoff. The area shall be located as far away from the receiving waters and storm drain inlets as possible.

(l) Best Management Practices (BMPs) and Good Housekeeping Practices (GHPs) designed to prevent spillage and/or runoff of demolition or construction-related materials, and to contain sediment or contaminants associated with demolition or construction activity, shall be implemented prior to the on-set of such activity

(m) All BMPs shall be maintained in a functional condition throughout the duration of construction activity.

B. The final Interim Erosion Control and Construction Best Management Practices Plan shall be in conformance with the site/ development plans approved by the Coastal Commission. Any necessary changes to the Coastal Commission approved site/development plans required by a qualified, licensed professional shall be reported to the Executive Director. No changes to the Coastal Commission approved final site/development plans shall occur without an amendment to the coastal development permit, unless the Executive Director determines that no amendment is required.

5. Landscaping and Fuel Modification Plans

PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit two sets of landscaping and fuel modification plans, prepared by a licensed landscape architect or a qualified resource specialist. The consulting landscape architect or qualified landscape professional shall certify in writing that the final Landscape and Fuel Modification plans are in conformance with the following requirements:

A) Landscaping Plan

(1) All graded & disturbed areas on the subject site shall be planted and maintained for erosion control purposes within thirty (30) days of receipt of the certificate of occupancy for the residence. 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 (http://www.CNPS.org/), the California Invasive Plant Council (formerly the California Exotic Pest Plant Council) (http://www.cal-ipc.org/), 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) Rodenticides containing any anticoagulant compounds (including, but not limited to, Warfarin, Brodifacoum, Bromadiolone or Diphacinone) shall not be used.

(5) Fencing of the entire property is prohibited. Fencing shall extend no further than the approved development area. 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 6, Structural Appearance**, below.

B) Fuel Modification Plans

Vegetation within 20 feet of the proposed house may be removed to mineral earth, vegetation within a 200-foot radius of the main 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. In addition, the applicant shall submit evidence that the 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.

C) Conformance with Commission Approved Site/Development Plans

The Permittee shall undertake development in accordance with the final Landscape and Fuel Modification Plans. The final Landscape and Fuel Modification Plans shall be in conformance with the site/development plans approved by the Coastal Commission. Any changes to the Coastal Commission approved site/development plans shall be reported to the Executive Director. No changes to the Coastal Commission approved final site/development plans shall occur without an amendment to the coastal development permit, unless the Executive Director determines that no amendment is legally required.

D) Monitoring

Three years from the date of the receipt of the Certificate of Occupancy for the residence the applicant shall submit to the Executive Director, a landscape monitoring report, prepared by a licensed Landscape Architect or qualified Resource Specialist, that certifies the on-site landscaping 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 requirements specified in this condition, the applicant, or successors in interest, shall submit, within 30 days of the date of the monitoring report, a revised or supplemental landscape plan, certified by a licensed Landscape Architect or a qualified Resource Specialist, that specifies additional or supplemental landscaping measures to remediate those portions of the original plan that have failed or are not in conformance with the original approved plan. This remedial landscaping plan shall be implemented within 30 days of the date of the final supplemental landscaping plan and remedial measures shall be repeated as necessary to meet the requirements of this condition.

6. Structural Appearance

PRIOR TO 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 all structures authorized by the approval of this Coastal Development Permit. 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 roofs, trims, exterior surfaces, driveways, retaining walls, and 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 this Coastal Development Permit if such changes are specifically authorized by the Executive Director as complying with this special condition.

7. Lighting Restriction

A. The only outdoor night lighting allowed on the subject parcel is limited to the following:

(1) The minimum necessary to light walkways used for entry and exit to the structures, including parking areas on the site. This lighting shall be limited to fixtures that do not exceed two feet in height above finished grade, are directed downward and generate the same or less lumens equivalent to those generated by a 60 watt incandescent bulb, unless a greater number of lumens is authorized by the Executive Director.
(2) Security lighting attached to the residence and garage shall be controlled by motion detectors and is limited to same or less lumens equivalent to those generated by a 60 watt incandescent bulb.
(3) The minimum necessary to light the entry area to the driveway with the same or less lumens equivalent to those generated by a 60 watt incandescent bulb.

B. No lighting around the perimeter of the site and no lighting for aesthetic purposes is allowed.

8. Future Development Restriction

This permit is only for the development described in this Coastal Development Permit. 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 the development governed by this Coastal Development Permit. Accordingly, any future structures, future improvements, or change of use to the permitted structures authorized by this permit, including but not limited to, any grading, clearing or other disturbance of vegetation other than as provided for in the approved landscape plan prepared pursuant to **Special Condition 5, Landscaping and Fuel Modification Plans,** shall require an amendment to this Coastal Development Permit from the Commission or shall require an additional coastal development permit from the Commission or from the applicable certified local government.

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

10. Habitat Impact Mitigation

PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit, for the review and approval of the Executive Director, a map delineating all areas of chaparral and coastal sage scrub habitat (ESHA) that will be disturbed by the proposed development, including fuel modification and brush clearance requirements on the project site and adjacent property. The chaparral and coastal sage scrub ESHA areas on the site and adjacent property shall be delineated on a detailed map, to scale, illustrating the subject parcel boundaries and, if the fuel modification/brush clearance zones extend onto adjacent property, adjacent parcel boundaries. The delineation map shall indicate the total acreage for all chaparral and coastal sage scrub ESHA, both on and offsite, that will be impacted by the proposed development, including the fuel modification/brush clearance areas. A 200-foot clearance zone from the proposed structures shall be used to determine the extent of off-site brush clearance for fire protection purposes. The delineation shall be prepared by a qualified resource specialist or biologist familiar with the ecology of the Santa Monica Mountains.

Mitigation shall be provided for impacts to the chaparral and coastal sage scrub ESHA from the proposed development and fuel modification/brush clearance requirements by <u>one</u> of the three following habitat mitigation methods:

A. Habitat Restoration

1) Habitat Restoration Plan

PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit a habitat restoration plan, for the review and approval of the Executive Director, for an area of degraded chaparral and/or coastal sage scrub habitat equivalent to the area of chaparral and/or coastal sage scrub ESHA impacted by the proposed development and fuel modification/brush clearance area. The habitat restoration area may either be onsite or offsite within the coastal zone either in the City of Malibu or elsewhere in the Santa Monica Mountains. The habitat restoration area shall be delineated on a

detailed site plan, to scale, that illustrates the parcel boundaries and topographic contours of the site. The habitat restoration plan shall be prepared by a qualified resource specialist or biologist familiar with the ecology of the Santa Monica Mountains and shall be designed to restore the area in question for habitat function, species diversity and vegetation cover. The restoration plan shall include a statement of goals and performance standards, revegetation and restoration methodology, and maintenance and monitoring provisions. If the restoration site is offsite, the applicant shall submit written evidence to the Executive Director that the property owner has irrevocably agreed to allow the restoration work, maintenance and monitoring required by this condition and not to disturb any native vegetation in the restoration area.

The applicant shall submit, on an annual basis for five years, a written report, for the review and approval of the Executive Director, prepared by a qualified resource specialist, evaluating compliance with the performance standards outlined in the restoration plan and describing the revegetation, maintenance and monitoring that was conducted during the prior year. The annual report shall include recommendations for mid-course corrective measures. At the end of the five-year period, a final detailed report shall be submitted for the review and approval of the Executive Director. If this report indicates that the restoration project has been, in part or in whole, unsuccessful, based on the approved goals and performance standards, the applicant shall submit a revised or supplemental restoration plan with maintenance and monitoring provisions, for the review and approval of the Executive Director, to compensate for those portions of the original restoration plan that were not successful. Should supplemental restoration be required, the applicant shall submit, on an annual basis for five years, a written report, for the review and approval of the Executive Director, prepared by a qualified resource specialist, evaluating the supplemental restoration areas. At the end of the five-year period, a final report shall be submitted evaluating whether the supplemental restoration plan has achieved compliance with the goals and performance standards for the restoration area. If the goals and performance standards are not met within 10 years, the applicant shall submit an application for an amendment to the coastal development permit for an alternative mitigation program and shall implement whatever alternative mitigation program the Commission approves, as approved.

The habitat restoration work approved in the restoration plan shall be carried out prior to occupancy of the residence.

2) Open Space Deed Restriction

No development, as defined in section 30106 of the Coastal Act, shall occur in the habitat restoration area, as shown on the habitat restoration site plan required pursuant to (A)(1) above.

PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit evidence that the applicant has executed and recorded a deed restriction (if the applicant is not the owner, then the applicant shall submit evidence that the owner has executed and recorded the deed restriction), in a form and content acceptable to the Executive Director, reflecting the above restriction on development and designating the habitat restoration area as open space. The deed restriction shall include a graphic

depiction and narrative legal descriptions of both the parcel on which the restoration area lies and the open space area/habitat restoration area. The deed restriction shall run with the land, binding all successors and assigns, and shall be recorded free of prior liens that the Executive Director determines may affect the enforceability of the restriction. This deed restriction shall not be removed or changed without a Commission amendment to this coastal development permit.

3) Performance Bond

PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall post performance bonds to guarantee implementation of the restoration plan as follows: a) one equal to the value of the labor and materials; and b) one equal to the value of the maintenance and monitoring for a period of 5 years. Each performance bond shall be released upon satisfactory completion of items (a) and (b) above. If the applicant fails to either restore or maintain and monitor according to the approved plans, the Coastal Commission may collect the security and complete the work on the property.

B. Habitat Conservation

PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall (or, if the applicant is not the owner of the habitat conservation site, then the owner of the habitat conservation site shall) execute and record an open space deed restriction in a form and content acceptable to the Executive Director, over the entirety of a legal parcel or parcels containing chaparral and/or coastal sage scrub ESHA. The chaparral and/or coastal sage scrub ESHA located on the mitigation parcel or parcels must be of equal or greater area than the ESHA area impacted by the proposed development, including the fuel modification/brush clearance areas. No development, as defined in section 30106 of the Coastal Act, shall occur on the mitigation parcel(s) and the parcel(s) shall be preserved as permanent open space. The deed restriction shall include a graphic depiction and narrative legal descriptions of the parcel or parcels. The deed restriction shall run with the land, binding all successors and assigns, and shall be recorded free of prior liens that the Executive Director determines may affect the enforceability of the restriction.

Prior to occupancy of the residence, the applicant shall submit evidence, for the review and approval of the Executive Director, that the recorded documents have been reflected in the Los Angeles County Tax Assessor Records.

If the mitigation parcel(s) is/are larger in size than the impacted habitat area, the excess acreage may be used to provide habitat impact mitigation for other development projects that impact like ESHA.

C. Habitat Impact Mitigation Fund

PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit evidence, for the review and approval of the Executive Director, that payment

for compensatory mitigation has been provided to the Mountains Recreation and Conservation Authority to mitigate adverse impacts to chaparral and coastal sage scrub habitat ESHA. The payment shall be calculated as follows:

1. Development Area, Irrigated Fuel Modification Zones, Off-site Brush Clearance

The payment for these areas shall be $12,000 per acre within the development area, any required irrigated fuel modification zones, and required off-site brush clearance areas (assuming a 200-foot radius from all structures). The total acreage shall be based on the map delineating these areas required by this condition.

2. Non-irrigated Fuel Modification Zones

The payment for non-irrigated fuel modification areas (on-site) shall be $3,000 per acre. The total acreage shall be based on the map delineating these areas required by this condition.

Prior to the payment for mitigation to the Mountains Recreation and Conservation Authority, the applicant shall submit, for the review and approval of the Executive Director, the calculation of the payment required to mitigate adverse impacts to chaparral and/or coastal sage scrub habitat ESHA, in accordance with this condition. After review and approval of the payment calculation, the payment shall be made to the Mountains Recreation and Conservation Authority's Coastal Habitat Impact Mitigation Fund for the acquisition, permanent preservation or restoration of habitat in the Santa Monica Mountains coastal zone, with priority given to the acquisition of or extinguishment of all development potential on properties containing environmentally sensitive habitat areas and properties adjacent to public parklands.. The payment may not be used to restore areas where development occurred in violation of the Coastal Act's permit requirements.

11. Open Space Conservation Easement

A. No development, as defined in Section 30106 of the Coastal Act, grazing, or agricultural activities shall occur outside of the approved development area, within the portion of the property identified as the "open space conservation easement area", as shown in **Exhibit 5** except for:

(1) Fuel modification required by the Los Angeles County Fire Department undertaken in accordance with the final approved fuel modification plan approved pursuant to **Special Condition 5, Landscaping and Fuel Modification Plans**.

(2) Drainage and polluted runoff control activities required and approved pursuant to:
   a. The drainage and runoff control plans approved pursuant to **Special Condition 3, Permanent Drainage and Runoff Control Plan,** of this permit; and
   b. The landscaping and erosion control plans approved pursuant to **Special Condition 4, Interim Erosion Control & Construction Best Management Practices Plan, and Special Condition 5, Landscaping and Fuel Modification Plans,** of this permit;

(3) Planting of native vegetation and other restoration activities, if approved by the Commission as an amendment to this coastal development permit or a new coastal development permit;

(4) If approved by the Commission as an amendment to this coastal development permit or a new coastal development permit,
   a. construction and maintenance of public hiking trails; and
   b. construction and maintenance of roads, trails, and utilities consistent with existing easements.

B. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall execute and record a document in a form and content acceptable to the Executive Director, granting to the Mountains Recreation and Conservation Authority ("MRCA") on behalf of the people of the State of California an open space conservation easement over the "open space conservation easement area" described above, for the purpose of habitat protection. The recorded easement document shall include a formal legal description of the entire property; and a metes and bounds legal description and graphic depiction, prepared by a licensed surveyor, of the open space conservation easement area, as generally shown on **Exhibit 5**. The recorded document shall reflect that no development shall occur within the open space conservation easement area except as otherwise set forth in this permit condition. The grant of easement shall be recorded free of prior liens and encumbrances (other than existing easements for roads, trails, and utilities) which the Executive Director determines may affect the interest being conveyed, and shall run with the land in favor of the MRCA on behalf of the people of the State of California, binding all successors and assigns.

12. Site Inspection

By acceptance of this permit, the applicant irrevocably authorizes, on behalf of the applicant and all successors-in-interest with respect to the subject property, Coastal Commission staff and its designated agents to enter onto the property to undertake site inspections for the purpose of monitoring compliance with the permit, including the special conditions set forth herein, and to document their findings (including, but not limited to, by taking notes, photographs, or video), subject to Commission staff providing 24 hours advanced notice to the contact person indicated pursuant to paragraph B prior to entering the property, unless there is an imminent threat to coastal resources, in which case such notice is not required. If two attempts to reach the contact person by telephone are unsuccessful, the requirement to provide 24 hour notice can be satisfied by voicemail, email, or facsimile sent 24 hours in advance or by a letter mailed three business days prior to the inspection. Consistent with this authorization, the applicant and his successors: (1) shall not interfere with such inspection/monitoring activities and (2) shall provide any documents requested by the Commission staff or its designated agents that are relevant to the determination of compliance with the terms of this permit.

PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit to Commission staff the email address and fax number, if available, and the address and phone number of a contact person authorized to receive the Commission's notice of the site inspections allowed by this special condition. The applicant is responsible for updating this contact information, and the Commission is entitled to rely on the last contact information provided to it by the applicant.

13. Removal of Natural Vegetation

Removal of natural vegetation for the purpose of fuel modification within the 50 foot zone surrounding the proposed structure(s) shall not commence until the local government has issued a building or grading permit for the development approved pursuant to this permit. Vegetation thinning within the 50-200 foot fuel modification zone shall not occur until commencement of construction of the structure(s) approved pursuant to this permit.

14. Removal of Excavated Material

PRIOR TO 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.

15. Oak Tree Protection

To ensure that all other oak trees located on the subject parcel and along the proposed access road are protected during construction activities, temporary protective barrier fencing shall be installed around the protected zones (5 feet beyond dripline or 15 feet from the trunk, whichever is greater) of all oak trees and retained during all construction operations. If required construction operations cannot feasibly be carried out in any location with the protective barrier fencing in place, then flagging shall be installed on trees to be protected. The permittee shall also follow the oak tree preservation recommendations that are enumerated in the Oak Tree Report referenced in the Substantive File Documents.

16. Pool and Spa Drainage and Maintenance

By acceptance of this permit, the applicant agrees to install a no chlorine or low chlorine purification system and agrees to maintain proper pool water pH, calcium and alkalinity balance to ensure any runoff or drainage from the pool or spa will not include excessive amounts of chemicals that may adversely affect water quality or environmentally sensitive habitat areas. In addition, the applicant agrees not to discharge chlorinated or non-chlorinated pool water into a street, storm drain, creek, canyon drainage channel, or other location where it could enter receiving waters.

IV. FINDINGS AND DECLARATIONS

The Commission hereby finds and declares:

A. Project Description and Background

1. Project Description.

The project site is located in the Malibu Bowl area east of Corral Canyon Road in the Santa Monica Mountains. The subject property is bordered by the Malibu Bowl small lot subdivision

to the south west, undeveloped state parkland to the north and undeveloped privately owned lots to the east and west (Exhibit 11). The topography of the project site gradually slopes down to the north east and south towards a nearby riparian canyon located within the Corral Canyon watershed. The southwest corner of the site is located approximately 15 ft. from the paved Ingleside way road, which provides access to other developed lots throughout the Malibu Bowl small lot subdivision In order to provide access to the subject site the applicant proposes to utilize an existing driveway easement on the undeveloped property to the west. In order to provide proper access the applicant proposes to construct an approximately 10-25 ft. wide, 100ft. long paved driveway from Ingleside way to the proposed residence and accessory garage/guest house structure. The proposed driveway, residence, accessory structure, and pool would be located on a historically graded area, which has been subject to pre-coastal grading activities and vegetation clearance. The applicant proposes to construct a 27.5 ft. high, two story, 2,389 sq. ft. single family residence, a detached, 20 ft. high two story structure with a 750 sq. ft. two car garage and a 750 sq. ft. guest house above, a 446 sq. ft. pool and spa. (Exhibit 3).

A portion of the proposed driveway is located within an existing access easement on the adjoining parcel to the west. The proposed driveway located within the existing access easement would be constructed within a historically (pre-1976) cleared and graded area on the adjoining parcel to the west. The existing easement is held by the applicant for ingress and egress to the subject parcel. The proposed driveway will extend onto the eastern portion of the neighboring parcel located to the west within the applicant's easement. Coastal Act Section 30601.5 states as follows:

All holders or owners of any interests of record in the affected property shall be notified in writing of the permit application and invited to join as co-applicant.

As this application includes a parcel on which the applicant has an easement to access the subject property, and the applicant is proposing a driveway and grading, the Commission must notify these property owners of the application pursuant to Section 30601.5. A letter was sent by staff on May 21, 2013 inviting this property owner (Michael and Renee Taylor), 29204 Heathercliff Road, Malibu, CA 90265) to join this application as a co-applicant if they so choose (Exhibit 9). No response has been received from the adjacent property owners.

The subject parcel is located along the northeast flank of a northwest trending ridge consisting of a gently northeast sloping pad with descending slopes to the north, east and south. The subject site ranges in elevation from 1,325 ft. on the southwestern portion to 1,170 ft. in the northeastern portion. Maximum topographic relief on-site is about 120 feet. A U.S. Geological Survey (U.S.G.S.) designated blue-line stream, which drains into the Cold Creek Canyon watershed, lies approximately 1,200 feet downslope to the east of the site. The subject site was burned in a 2007 November brush fire.

Staff has reviewed historic aerial photographs of the project site and confirmed that the existing sloping pad was created and cleared of vegetation prior to the effective date of the Coastal Act in 1977. However, the existing footprint and contours of the graded access driveway are not identifiable in aerial photographs until 1993. No coastal development permits were issued authorizing the additional grading that seems to have occurred sometime between 1986 and 1993 for the existing unimproved driveway. While these historic aerials indicate that additional grading may have occurred on the site to establish an unpaved access roadway sometime between 1986 and 1993, it is difficult to confirm that additional grading took place or accurately

quantify any grading that may have occurred. However, the existing graded access roadway is located to the north and north east of the proposed development area and no portion of the graded roadway would be improved, paved, or utilized for access as part of the proposed project. Therefore, the subject project would not be intrinsically related to or dependent upon the existing graded road. The footprint of the proposed access driveway proposed as part of the subject project would be located within an area where pre-coastal grading and vegetation clearance activities have occurred and which is currently graded and devoid of ESHA.

The project site is located in a scenic area; however, the subject site is not visible from any LUP-designated Scenic Highways and is located on the downslope of a hill, which functions to reduce the visibility of the site from the nearest major public road, Corral Canyon. The site is visible at a distance from public lands to the north and northeast, however, the closest existing public trails are located across another ridgeline to the northeast approximately .3 miles away. Due to the building site's distance from and elevation below the nearest major public roadway, and the presence of intervening ridges and existing development in the vicinity, no alternative siting or design options exist on the parcel in which the development would be significantly less visible from public viewing areas.

2. Past Commission Action

In 1992, the Commission approved Coastal Development Permit (CDP) No. 5-91-124 (Kremidas) for construction of a 35 ft. high, 3748 sq. ft. single family residence with a 529 sq. ft. garage, a septic system, and 20 cubic yards of grading, as well as after the fact approval of a lot line adjustment. Conditions of approval included a requirement to record a conservation and open space deed restriction, submit landscaping and grading plans, drainage and erosion control plans, and conformance with geotechnical engineering recommendation. The open space deed restriction was recorded and the permit was issued. However, the residence was never constructed and the site has remained undeveloped. In 2007, the Commission approved Coastal Development Permit (CDP) No. 4-05-195 for construction of a 28 ft. high, two story, 3,000 sq. ft. single family residence, a detached 20 ft. high 682 sq. ft. two car garage with a 475 sq. ft. guest house above, driveway, septic system, gas tank, and 560 cu. yds. of grading (280 cu. yds. of cut and 280 cu. yds. of fill). Conditions of approval included plans conforming to geologic recommendation, landscaping and erosion control plans, removal of natural vegetation, assumption of risk, future development restriction, color restriction, lighting restriction, open space restriction, deed restriction, drainage and polluted runoff control plan, habitat impact mitigation, and site inspection. However, the permit was never issued and the site remains undeveloped.

In each of its previous CDP actions for the subject project site, the Commission found that the parcel was created lawfully prior to the effective date of the Coastal Act, but no specific information was provided to support Staff's conclusion. The applicant has not provided evidence regarding the method or date by which the subject parcel was created. However, the owner of the parcel immediately to the east has provided evidence that the subject parcel is one of four parcels that were created by deed in 1929 and that it is depicted on two "Licensed Surveyor's Maps" (also known as "records of survey") that were recorded in 1929 and 1930 (one map before and one map after the adjacent parcel to the east was created by deed). Although licensed surveyor's maps (or records of survey) do not create parcels, in this case, these maps reflect the parcels that were created by deed. The earliest Los Angeles County ordinance that regulated the division of fewer than five parcels was effective in 1967 and the earliest version of

the Subdivision Map Act that regulated such divisions was effective in 1972. Based on this evidence, the subject parcel was created by a method that was consistent with state and local statutes at the time of creation. As such, the proposed project site is a legal lot. Further, the Commission previously approved CDP 5-91-124 that included after-the-fact approval of a lot line adjustment between the subject site and the adjacent parcel to the west. The current lot configuration is consistent with that approved in this lot line adjustment in 1991.

B. Hazards and Geologic Stability

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

> *(1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.*
>
> *(2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.*

The proposed development is located in the Malibu/Santa Monica Mountains area, an area historically subject to significant natural hazards including, but not limited to, landslides, erosion, flooding and wild fire. The submitted geology, geotechnical, and/or soils reports referenced as Substantive File Documents conclude that the project site is suitable for the proposed project based on the evaluation of the site's geology in relation to the proposed development. The reports contain recommendations to be incorporated into the project plans to ensure the stability and geologic safety of the proposed project, the project site, and the adjacent properties. To ensure stability and structural integrity and to protect the site and the surrounding sites, the Commission requires the applicant to comply with the recommendations contained in the applicable reports, to incorporate those recommendations into all final design and construction plans, and to obtain the geotechnical consultant's approval of those plans prior to the commencement of construction.

Additionally, to minimize erosion and ensure stability of the project site, the project must include adequate drainage and erosion control measures. In order to achieve these goals, the Commission requires the applicant to submit drainage and interim erosion control plans certified by the geotechnical engineer.

Further, the Commission finds that, for the project to ensure stability and avoid contributing significantly to erosion, all slopes and disturbed areas of the subject site must be landscaped, primarily with native plants, to stabilize disturbed soils and reduce erosion resulting from the development.

Although the conditions described above render the project sufficiently stable to satisfy the requirements of Section 30253, no project is wholly without risks. Due to the fact that the proposed project is located in an area subject to an extraordinary potential for damage or destruction from natural hazards, including wildfire and erosion, those risks remain substantial

here. If the applicant nevertheless chooses to proceed with the project, the Commission requires the applicant to assume the liability from these associated risks. Through the assumption of risk condition, the applicant acknowledges the nature of the fire and/or geologic hazard that exists on the site and that may affect the safety of the proposed development.

The following special conditions are required, as determined in the findings above, to assure the project's consistency with Section 30253 of the Coastal Act and as a response to the risks associated with the project:

Special Condition 1: Plans Conforming to Geotechnical Engineer's Recommendations
Special Condition 2: Assumption of Risk, Waiver of Liability and Indemnity
Special Condition 3: Permanent Drainage and Polluted Runoff Control Plans
Special Condition 5: Landscaping and Erosion Control Plans

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. Water Quality

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, minimizing alteration of natural streams.*

The Commission recognizes that new development in the Santa Monica Mountains has the potential to adversely impact coastal water quality and aquatic resources because changes such as the removal of native vegetation, the increase in impervious surfaces, and the introduction of new residential uses cause increases in runoff, erosion, and sedimentation, reductions in groundwater recharge and the introduction of pollutants such as petroleum, cleaning products, pesticides, and other pollutants, as well as effluent from septic systems.

The proposed development will result in an increase in impervious surfaces, which leads to an increase in the volume and velocity of stormwater runoff that can be expected to leave the site and eventually be discharged to coastal waters, including streams, wetlands, and estuaries. The pollutants commonly found in runoff associated with residential use can reduce the biological productivity and the quality of such waters and thereby reduce optimum populations of marine organisms and have adverse impacts on human health. Additionally, both leakage and periodic maintenance drainage of the proposed swimming pool, if not monitored and/or conducted in a controlled manner, may result in excess runoff and erosion potentially causing the instability of the site and adjacent properties and potential impacts from pool chemicals (i.e. pool water algaecides, chemical pH balancing, and other water conditioning chemicals).

Therefore, in order to minimize the potential for such adverse impacts to water quality and aquatic resources resulting from runoff both during construction and in the post-development stage, the Commission requires the incorporation of Best Management Practices designed to control the volume, velocity and pollutant load of stormwater and dry weather flows leaving the developed site, including: 1) site design, source control and/or treatment control measures; 2) implementing erosion sediment control measures during construction and post construction; and 3) revegetating all graded and disturbed areas with primarily native landscaping.

Additionally, the applicant's geologic consultants have concluded that the site is suitable for the proposed Advanced Onsite Wastewater Treatment System and that there would be no adverse impact to the site or surrounding areas from the use of this type of septic system. The County of Los Angeles Environmental Health Department has given in-concept approval of the proposed septic system, indicating that it meets the plumbing code requirements. The Commission has found that conformance with the provisions of the plumbing code is protective of water resources.

The following special conditions are required, as determined in the findings above, to assure the project's consistency with Section 30231 of the Coastal Act:

Special Condition 3: Permanent Drainage and Polluted Runoff Control Plans
Special Condition 4: Interim Erosion Control Plans and Construction Responsibilities
Special Condition 5: Landscaping and Erosion Control Plans
Special Condition 14: Removal of Native Vegetation
Special Condition 17: Pool Drainage and Maintenance

Therefore, the Commission finds that the proposed project, as conditioned, is consistent with Section 30231 of the Coastal Act.

D. Environmentally Sensitive Habitat

Section 30240 of the Coastal Act protects environmentally sensitive habitat areas (ESHA) by restricting development in and adjacent to ESHA. Section 30240 states:

> *(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.*

Section 30107.5 of the Coastal Act, defines an environmentally sensitive area as:

> *"Environmentally sensitive area" means any area in which plant or animal life or their habitats are either rare or especially valuable because of their special*

nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments.

In addition, the Malibu/Santa Monica Mountains LUP provides policy guidance regarding the protection of environmentally sensitive habitats. The Coastal Commission has applied the following relevant policies as guidance in the review of development proposals in the Santa Monica Mountains.

P57 Designate the following areas as Environmentally Sensitive Habitat Areas (ESHAs): (a) those shown on the Sensitive Environmental Resources Map (Figure 6), and (b) any undesignated areas which meet the criteria and which are identified through the biotic review process or other means, including those oak woodlands and other areas identified by the Department of Fish and Game as being appropriate for ESHA designation.

P63 Uses shall be permitted in ESHAs, DSRs, Significant Watersheds, and Significant Oak Woodlands, and Wildlife Corridors in accordance with Table l and all other policies of this LCP.

P68 Environmentally sensitive habitat areas (ESHAs) shall be protected against significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas. Residential use shall not be considered a resource dependent use.

P69 Development in areas adjacent to environmentally sensitive habitat areas (ESHAs) shall be subject to the review of the Environmental Review Board, 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.

P72 Open space or conservation easements or equivalent measures may be required in order to protect undisturbed watershed cover and riparian areas located on parcels proposed for development. Where new development is proposed adjacent to Environmentally Sensitive Habitat Areas, open space or conservation easements shall be required in order to protect resources within the ESHA.

P74 New development shall be located as close as feasible to existing roadways, services, and existing development to minimize the effects on sensitive environmental resources.

P82 Grading shall be minimized for all new development to ensure the potential negative effects of runoff and erosion on these resources are minimized.

P84 In disturbed areas, landscape plans shall balance long-term stability and minimization of fuel load. For instance, a combination of taller, deep-

rooted plants and low-growing ground covers to reduce heat output may be used. Within ESHAs and Significant Watersheds, native plant species shall be used, consistent with fire safety requirements.

A. Project Description and Site Specific Biological Resource Information

The subject site is located on the east side of Corral Canyon Road, adjacent to the Malibu Bowl small-lot subdivision. The project site gradually slopes down to the east towards an adjacent riparian canyon and a USGS designated blue line stream approximately 1,200 feet downslope to the east. This blue line stream drains into the larger Corral Canyon watershed. About 2/3 of the site is well vegetated with mixed Chaparral ESHA and coast live oak woodland ESHA, while the remainder of the site has been historically graded and cleared of native habitat. The entire property burned in 2007, however the native habitat on site appears to have recovered to the pre-fire coverage levels.

The applicant submitted the Biological Assessment, listed in the Substantive File Documents, which addresses the habitats present on the project site. The report identifies three vegetation/habitat communities on the project site described as follows:

Disturbed Habitat

A historically graded and cleared area adjacent to Ingleside Road exists on-site, and occupies approximately 1/3 of the subject property. The vegetation within this area is dominated by exotic and non-native vegetation and bare ground areas.

Coastal Sage Scrub and Coastal Chaparral

This is the most abundant vegetation type found on site. The dominant plants in this vegetation type are greenbark ceanothus, big pod ceanothus, and laurel sumac, with California Sagebrush Coyote Brush, Purple Sage, canyon sunflower, Western Clematis, Manroot, Wavyleaf Soap Plant, and Bush Mallow present in smaller distributions. Limited amounts of Coast live oak and Scrub oak are also present in this habitat on the subject site to the north and northeast of the proposed building pad.

Coast Live Oak Woodland

The densest cluster of Coast Live Oaks (Quercus agrifolia) occurs to the northwest of the proposed building site. However, there are coast live oaks scattered throughout the property.

A map of the habitats on the site was also prepared by the biological consultant, and is included as Exhibit 12. The LUP designates a Significant Watershed in this area which includes most of the north part of the subject property. The south portion of the site where the proposed residence, guest house, pool, driveway, and landscaping are located is not within the Significant Watershed. The Significant Watershed boundary runs in a diagonal line which intersects with the east property line approximately 260 ft. north of the southeast corner and with the west property line approximately 105 ft. north of the southwest corner. A large part of fuel modification zone C and a small portion of zone B will be within the Significant Watershed, but otherwise no development is proposed within the Significant Watershed.

While there is scattered residential development in the area and more intense residential development in the small lot subdivision southwest of the project site, there is undisturbed,

contiguous coastal sage scrub, chaparral habitat, and oak woodland habitat to the north and east of the site, mostly located within state parkland located immediately to the north of the subject site. Exhibit 11 is a 2001 aerial photograph of the immediate area around the project site. The parcel is 1.4-acres in size, and there are other scattered, residential developments in the same area that are part of the Malibu Bowl small lot subdivision. State Public parkland is located directly adjacent to the project site to the north of the subject site. There is currently no offer to purchase the property from any public park agency.

According to public information, the applicant purchased the subject parcel in 2010 for $199,000. The parcel was designated in the Los Angeles County Land Use Plan for residential use. Two land use designations apply to the property which are: Mountain Land II, that allows residential development at a maximum density of 1 dwelling unit per 20 acres of land; and Rural Land III, that allows .5 unit per 1 acre.

The project has been designed to place all structures within the area of the site that has been historically disturbed and graded prior to the effective date of the Coastal Act, which lies closest to Ingleside Road. Any alternative location on the site would likely include the removal of more native vegetation. Not including the area of the driveway or turnaround, the proposed development area is estimated by the applicant to measure approximately 4,422 sq. ft. The applicant's approved fuel modification plan (approved by the Los Angeles County Fire Department) shows the use of the standard three zones of vegetation modification. Zones "A" (setback zone) and "B" (irrigation zone) are shown extending in a radius of approximately 50 feet from the proposed structures. A "C" Zone (thinning zone) is provided for a distance of 150 feet beyond the "A" and "B" zones.

ESHA Designation on the Project Site

Pursuant to Section 30107.5, in order to determine whether an area constitutes an ESHA, and is therefore subject to the protections of Section 30240, the Commission must answer three questions:

1) Is there a rare species or habitat in the subject area?

2) Is there an especially valuable species or habitat in the area, which is determined based on:

a) whether any species or habitat that is present has a special nature, OR

b) whether any species or habitat that is present has a special role in the ecosystem;

3) Is any habitat or species that has met either test 1 or test 2 (i.e., that is rare or especially valuable) easily disturbed or degraded by human activities and developments?

If the answers to questions one or two and question three are "yes", the area is ESHA.

The project site is located within the Mediterranean Ecosystem of the Santa Monica Mountains. The Coastal Commission has found that the Mediterranean Ecosystem in the Santa Mountains is rare, and valuable because of its relatively pristine character, physical complexity, and resultant biological diversity. Large, contiguous, relatively pristine areas of native habitats, such as coastal sage scrub, chaparral, oak woodland, and riparian woodland have many special roles in

the Mediterranean 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. Additional discussion of the special roles of these habitats in the Santa Monica Mountains ecosystem are discussed in the March 25, 2003 memorandum prepared by the Commission's Ecologist, Dr. John Dixon[1] (hereinafter "Dr. Dixon Memorandum"), which is incorporated as if set forth in full herein.

Unfortunately, the native habitats of the Santa Monica Mountains, such as coastal sage scrub, chaparral, oak woodland and riparian woodlands are easily disturbed by human activities. As discussed in the Dr. Dixon Memorandum, development has many well-documented deleterious effects on natural communities of this sort. These environmental impacts may be both direct and indirect and include, but certainly are not limited to, the effects of increased fire frequency, of fuel modification, including vegetation clearance, of introduction of exotic species, and of night lighting. Increased fire frequency alters plant communities by creating conditions that select for some species over others. The removal of native vegetation for fire protection results in the direct removal or thinning of habitat area. Artificial night lighting of development affects plants, aquatic and terrestrial invertebrates, amphibians, fish, birds and mammals. Thus, large, contiguous, relatively pristine areas of native habitats, such as coastal sage scrub, chaparral, oak woodland, and riparian woodlands are especially valuable because of their special roles in the Santa Monica Mountains ecosystem and are easily disturbed by human activity. Accordingly, these habitat types meet the definition of ESHA. This is consistent with the Commission's past findings in support of its actions on many permit applications and in adopting the Malibu LCP[2].

As described above, the project site contains pristine mixed chaparral and oak woodland habitat that is part of a large, contiguous block of pristine native vegetation. As discussed above and in the Dr. Dixon Memorandum, this habitat is especially valuable because of its special role in the ecosystem of the Santa Monica Mountains and it is easily disturbed by human activity. Accordingly, the Commission finds that the mixed chaparral and oak woodland habitat on the project site meets the definition of ESHA in the Coastal Act.

Resource Dependent Use

The Commission finds that the project site and the surrounding area constitutes an environmentally sensitive habitat area (ESHA). Section 30240 of the Coastal Act restricts development within ESHA to only those uses that are dependent on the resource. The applicant proposes to construct a single family residence on the parcel. As single-family residences do not have to be located within ESHA to function, single-family residences are not a use dependent on ESHA resources. Section 30240 also requires that ESHA be protected against significant disruption of habitat values. As the construction of a residence on the site will require the trimming and removal of ESHA from the fuel modification zones for fire protection purposes around it, the proposed project would also significantly disrupt the habitat value in those

[1] The March 25, 2003 Memorandum Regarding the Designation of ESHA in the Santa Monica Mountains, prepared by John Dixon, Ph. D, is available on the California Coastal Commission website at http://www.coastal.ca.gov/ventura/smm-esha-memo.pdf

[2] Revised Findings for the City of Malibu Local Coastal Program (as adopted on September 13, 2002) adopted on February 6, 2003.

locations. Application of Section 30240, by itself, would therefore require denial of the project, because the project would result in significant disruption of habitat values and is not a use dependent on those sensitive habitat resources.

However, the Commission must also consider Section 30010, and the United States Supreme Court's decision in *Lucas v. South Carolina Coastal Council* (1992) 505 U.S. 1003, 112 S.Ct. 2886. Section 30010 of the Coastal Act provides that the Coastal Act shall not be construed as authorizing the Commission to exercise its power to grant or deny a permit in a manner that will take private property for public use. Application of Section 30010 may overcome the presumption of denial in some instances. The subject of what sort of government action results in a "taking" was addressed by the Court in the *Lucas* case. In *Lucas*, the Court identified several factors that should be considered in determining whether a proposed government action would result in a taking. For instance, the Court held that where a permit applicant has demonstrated that he or she has a sufficient real property interest in the property to allow the proposed project, and that project denial would deprive his or her property of all economically viable use, then denial of the project by a regulatory agency might result in a taking of the property for public use unless the proposed project would constitute a nuisance under State law. Other Supreme Court precedent establishes that another factor that should be considered is the extent to which a project denial would interfere with reasonable investment-backed expectations.

The Commission interprets Section 30010, together with the *Lucas* decision, to mean that if Commission denial of the project would deprive an applicant's property of all reasonable economic use, the Commission may be required to allow some development even if a Coastal Act policy would otherwise prohibit it, unless the proposed project would constitute a nuisance under state law. In other words, Section 30240 of the Coastal Act cannot be read to deny all economically beneficial or productive use of land because Section 30240 cannot be interpreted to require the Commission to act in an unconstitutional manner.

As described above, the subject parcel was designated in the Los Angeles County Land Use Plan for residential use. Residential development has previously been approved by the Commission on sites in the immediate area. At the time the applicant purchased the parcel, the County's certified Land Use Plan did not designate the vegetation on the site as ESHA. Based on these facts, along with the presence of existing and approved residential development in the area, the applicant had reason to believe that it had purchased a parcel on which it would be possible to build a residence.

The Commission finds that in this particular case, other allowable uses for the subject site, such as a recreational park or a nature preserve, are not feasible and would not provide the owner an economic return on the investment. There is currently no offer to purchase the property from any public park agency. The Commission thus concludes that in this particular case there is no viable alternative use for the site other than residential development. The Commission finds, therefore, that outright denial of all residential use on the project site would interfere with reasonable investment-backed expectations and deprive the property of all reasonable economic use.

Next the Commission turns to the question of nuisance. There is no evidence that construction of a residence on the project site would create a nuisance under California law. Other houses have been constructed in similar situations in similar habitat areas in Los Angeles County,

apparently without the creation of nuisances. The County's Health Department has not reported evidence of septic system failures. In addition, the County has reviewed and approved the applicant's proposed septic system, ensuring that the system will not create public health problems. Furthermore, the use that is proposed is residential, rather than, for example, industrial, which might create noise or odors or otherwise create a public nuisance.

In conclusion, the Commission finds that, notwithstanding Section 30240, a residential project on the subject property must be allowed to permit the applicant a reasonable economic use of their property consistent with Section 30010 of the Coastal Act.

Siting and Design Alternatives to Minimize Significant Disruption of Habitat Values

While the applicant is entitled under Section 30010 to an assurance that the Commission will not act in such a way as to "take" the property, this section does not authorize the Commission to avoid application of the policies of the Coastal Act, including Section 30240, altogether. Instead, the Commission is only directed to avoid construing these policies in a way that would take property. Aside from this instruction, the Commission is still otherwise directed to enforce the requirements of the Act. Therefore, in this situation, the Commission must still assure compliance with Section 30240 by avoiding impacts that would significantly disrupt and/or degrade environmentally sensitive habitat, to the extent this can be done without taking the property.

Obviously, the construction of residential development, including vegetation removal for both the development area as well as required fuel modification, grading, construction of a residence and accessory structures, and the use of the development by residents will result in unavoidable loss of ESHA. The development can be sited and designed to minimize ESHA impacts by measures that include but are not limited to: limiting the size of structures, limiting the number of accessory structures and uses, clustering structures, siting development in any existing disturbed habitat areas rather than undisturbed habitat areas, locating development as close to existing roads and public services as feasible, and locating structures near other residences in order to minimize additional fuel modification.

In this case, siting and design alternatives have been considered in order to identify the alternative that can avoid and minimize impacts to ESHA to the greatest extent feasible. In past permit actions, the Commission has allowed up to 10,000 sq. ft. of development area for a residence on a parcel zoned for residential development in this area of the Santa Monica Mountains to avoid a taking of property. As detailed above, the proposed development area would be 4,422 sq. ft., which is far less than the maximum development area of 10,000 sq. ft. All proposed structures are located within this development area. Additionally, the development area is all proposed to be located on a portion of the subject site and associated access easement where pre-coastal vegetation removal and grading has occurred. Therefore, as all of the proposed development would already be contained within a graded area with no existing ESHA, a smaller development area would not reduce the ESHA loss. Nor are there other resources such as streams, riparian areas, or visual resources that would be protected by a smaller development area. As such, the Commission concludes that the proposed siting and design of the project will minimize impacts to ESHA to the extent feasible. The Commission also finds that the proposed development area provides a reasonable economic use.

Open Space Conservation

This project is inconsistent with Section 30240 of the Coastal Act, and is only being allowed to avoid a taking of private property for public use. The Commission finds that for the project to be consistent with Section 30240 to the maximum extent feasible, while providing a reasonable economic use, this project must constitute the maximum amount of ESHA destruction on the site and the remaining ESHA on the property must be preserved in perpetuity.

The Commission finds that the most effective way to assure ESHA preservation on the site is the granting of an open space conservation easement to the Mountains Recreation and Conservation Authority (a joint powers authority) that prohibits development on the remainder of the site now and in the future. The Mountains Recreation and Conservation Authority (MRCA) is a public agency that represents a partnership between the Santa Monica Mountains Conservancy, the Conejo Recreation and Park District, and the Rancho Simi Recreation and Park District. The MRCA is dedicated to the preservation and management of open space, parkland, watershed lands, trails, and wildlife habitat. The MRCA manages and provides ranger services for almost 50,000 acres of public lands and parks that it owns or that are owned by the Santa Monica Mountains Conservancy. In the course of its normal duties, the MRCA park rangers and other staff are better able to monitor open space areas to ensure that the restrictions are followed than Commission staff. Further, an easement will be recorded against the title to the property and thus provide notice to future owners of the limitations that apply to the open space conservation area, reducing the risk of a future irreparable violation of the restriction. The governing board of the MRCA has agreed to accept all open space easements required by the Commission for properties within the Santa Monica Mountains National Recreation Area.

It is important that the property owner grant an easement to MRCA rather than simply record an open space deed restriction. Although a deed restriction should notify future owners of the restriction in the same manner that a recorded easement would, it would not be as effective in preserving the remaining ESHA for the following two reasons. First, a deed restriction is not as reliable because a property owner can record another document purporting to rescind the deed restriction. Although any attempt to rescind a deed restriction required by a coastal development permit ("CDP") without an amendment to that CDP authorizing such a rescission would constitute a violation of the CDP and the Coastal Act, the County Recorder's office is likely to allow recordation of a rescission without the required Coastal Commission authorization. Indeed, the Commission has experienced the phenomenon of property owners recording documents purporting to modify deed restrictions recorded pursuant to CDP requirements. *See, e.g.*, Commission findings for CDP Amendment F7453-A2 (Stephenson), approved March 2005, and Violation File V-6-04-010 (Del Mar Estates). On the other hand, because an easement necessarily involves more than one person, the County Recorder would not likely record a document purporting to rescind an easement unless the easement holder was also to sign the document. Thus, a condition requiring a deed restriction is much easier to violate, and therefore much less protective, than a condition requiring an easement. The required conservation easement area (generally depicted on Exhibit 5) would ensure the maximum protection of the existing ESHA on that portion of the subject property. This easement area overlaps and is larger than the previously recorded open space deed restricted area. The terms of the deed restriction and easement are consistent and the additional restriction over a portion of the open space easement area should not present any issue for the accepting agency.

Second, the Legislature has recently adopted new provisions to the Government Code specifically sanctioning the use of conservation easements for this purpose and changing procedures to ensure that they are prominent in searching title to property. In 2001, the Legislature adopted a new requirement that County Recorders keep a separate and "comprehensive index of conservation easements." *See* Cal. Gov't Code § 27255(a). As such, the Commission finds that the requirement of an open space and conservation easement is the most effective method of ensuring that the remaining ESHA on the project site will be conserved in the future. Finally, the Commission concludes that an open space easement that allows only the easement holder and no other entity to enter the property for inspection purposes does not interfere with the fee title owner's right to exclude the general public. It therefore does not constitute a significant invasion of the fee title owner's property interest.

In conclusion, the Commission finds that it is necessary to require the applicant to grant an open space easement to the MRCA over the open space area on the project site in order to ensure that the remaining ESHA will be preserved. Only as conditioned will the proposed project minimize impacts to ESHA, as required by Section 30240 of the Coastal Act.

Habitat Impact Mitigation

While impacts resulting from development within ESHA can be reduced through siting and design alternatives for new development and by ensuring that the remaining ESHA on the site is permanently protected, they cannot be completely avoided, given the location of ESHA on and around the project site, the high fire risk in the Santa Monica Mountains, and the need to modify fuel sources to protect life and property from wildfire.

Fuel modification is the removal or modification of combustible native or ornamental vegetation. It may include replacement with drought tolerant, fire resistant plants. The amount and location of required fuel modification will vary according to the fire history of the area, the amount and type of plant species on the site, topography, weather patterns, construction design, and siting of structures. There are typically three fuel modification zones applied by the Los Angeles County Fire Department, which include a setback zone immediately adjacent to the structure (Zone A) where all native vegetation must be removed, an irrigated zone adjacent to Zone A (Zone B) where most native vegetation must be removed or widely spaced, and a thinning zone (Zone C) where native vegetation may be retained if thinned or widely spaced although particular high-fuel plant species must be removed. The combined required fuel modification area around structures can extend up to a maximum of 200 feet. If there is not adequate area on the project site to provide the required fuel modification for structures, then brush clearance may also be required on adjacent parcels. In this way, for a large area around any permitted structures, native vegetation will be cleared, selectively removed to provide wider spacing, and thinned. The Commission has found in past permit actions, that a new residential development (with a 10,000 sq. ft. development area) within ESHA with a full 200 foot fuel modification radius will result in impact (either complete removal, irrigation, or thinning) to ESHA habitat of four to five acres.

Obviously, native vegetation that is cleared and replaced with ornamental species or substantially removed and widely spaced will be lost as habitat and watershed cover. As discussed in the Dr.

Dixon Memorandum[3], the cumulative loss of habitat cover also reduces the value of the sensitive resource areas as a refuge for birds and animals, for example by making them—or their nests and burrows—more readily apparent to predators. Further, fuel modification can result in changes to the composition of native plant and wildlife communities, thereby reducing their habitat value. Although the impacts from habitat removal cannot be avoided, the Commission finds that the loss of ESHA resulting from the removal, conversion, or modification of natural habitat for new development including the building site area, and fuel modification can be mitigated in order to ensure that ESHA impacts are minimized to the extent feasible.

The Commission has identified three appropriate methods for providing mitigation for the unavoidable loss of ESHA resulting from development; namely, habitat restoration, habitat conservation, and payment for mitigation. The Commission finds that any of these measures is appropriate in this case to mitigate the loss of ESHA on the project site. The first method is to provide mitigation through the restoration of an area of degraded habitat (either on the project site, or at an off-site location) that is equivalent in size to the area of habitat impacted by the development. A restoration plan must be prepared by a biologist or qualified resource specialist and must provide performance standards, and provisions for maintenance and monitoring. The restored habitat must be permanently preserved through the recordation of an open space easement.

The second habitat impact mitigation method is habitat conservation. This includes the conservation of an area of intact habitat of a similar type as that impacted equivalent to the area of the impacted habitat. The parcel containing the habitat conservation area must be restricted from future development and permanently preserved. If the mitigation parcel is larger in size than the impacted habitat area, the excess acreage could be used to provide habitat impact mitigation for other development projects that impact ESHA.

The third habitat impact mitigation option is the payment for mitigation of impacts to habitat. The payment is based on the habitat types in question, the cost per acre to restore or create comparable habitat types, and the acreage of habitat affected by the project. The Commission has, in past permit decisions, determined the appropriate payment for the restoration or creation of chaparral and coastal sage scrub habitat, based on research carried out by the Commission's biologist. A range of cost estimates was obtained that reflected differences in restoration site characteristics including topography (steeper is harder), proximity to the coast (minimal or no irrigation required at coastal sites), types of plants (some plants are rare or difficult to cultivate), density of planting, severity of weed problem, condition of soil, etc.

The Commission has determined that the appropriate mitigation for loss of coastal sage scrub or chaparral ESHA should be based on the actual installation of replacement plantings on a disturbed site, including the cost of acquiring the plants (seed mix and container stock) and installing them on the site (hydroseeding and planting). The payment amount found by the Commission to be appropriate to provide mitigation for the habitat impacts to ESHA areas where all native vegetation will be removed (building site, the "A" zone required for fuel modification, and off-site brush clearance areas), and where vegetation will be significantly removed and any

[3] The March 25, 2003 Memorandum Regarding the Designation of ESHA in the Santa Monica Mountains, prepared by John Dixon, Ph. D, is available on the California Coastal Commission website at http://www.coastal.ca.gov/ventura/smm-esha-memo.pdf

remaining vegetation will be subjected to supplemental irrigation (the "B" zone or any other irrigated zone required for fuel modification) is $12,000 per acre. Further, the Commission has required a payment of $3,000 per acre for areas where the vegetation will be thinned, but not irrigated ("C" zone or other non-irrigated fuel modification zone).

The acreage of ESHA that is impacted must be determined based on the size of the development area, required fuel modification (as identified on the fuel modification plan approved by the Los Angeles County Fire Department) on the site, and required brush clearance off-site. The Commission finds that it is necessary to condition the applicant to delineate the total acreage of ESHA on the site (and offsite brush clearance areas, if applicable) that will be impacted by the proposed development, and provide mitigation to compensate for this loss of habitat, through one of the three methods described above. Only as conditioned will the proposed project minimize impacts to ESHA, pursuant to Section 30240 of the Coastal Act.

Protection of Oaks

The project site contains portions of an oak woodland, as well as individual oak trees that are interspersed within the Chaparral habitat on the site that meet the definition of ESHA. Through past permit actions in the Santa Monica Mountains, the Commission has found that native oak trees are an important coastal resource, especially where they are part of a larger woodland or other habitat area that is ESHA. As required by Section 30250 of the Coastal Act, the proposed new development can be approved only where it will not have impacts on coastal resources. Additionally, oak trees are an important component of the visual character of the area and must be protected in order to ensure that the proposed development is visually compatible with this character, as required by Section 30251 of the Coastal Act. Furthermore, native trees prevent the erosion of hillsides and stream banks, moderate water temperatures in streams through shading, provide food and habitat, including nesting, roosting, and burrowing to a wide variety of wildlife. Individual oak trees such as those on or adjacent to the subject site do provide habitat for a wide variety of wildlife species and are considered to be an important part of the character and scenic quality of the area.

Oak trees are easily damaged. They are shallow-rooted and require air and water exchange near the surface. The oak tree root system is extensive, extending as much as 50 feet beyond the spread of the canopy, although the area within the "protected zone" (the area around an oak tree that is five feet outside the dripline or fifteen feet from the trunk, whichever is greater) is the most important. Oaks are therefore sensitive to surrounding land uses, grading or excavation at or near the roots and irrigation of the root area particularly during the summer dormancy. Improper watering, especially during the hot summer months when the tree is dormant and disturbance to root areas are the most common causes of tree loss. Oak trees in residentially landscaped areas often suffer decline and early death due to conditions that are preventable. Damage can often take years to become evident and by the time the tree shows obvious signs of disease it is usually too late to restore the health of the tree.

Obviously, the removal of an oak tree results in the total loss of the habitat values of the tree. Encroachments into the protected zone of an oak tree can also result in significant adverse impacts. Changes in the level of soil around a tree can affect its health. Excavation can cut or severely damage roots and the addition of material affects the ability of the roots to obtain air or water. Soil compaction and/or pavement of areas within the protected zone will block the

exchange of air and water through the soil to the roots and can have serious long term negative effects on the tree.

In order to ensure that oak trees are protected so that development does not have impacts on coastal resources and so that the development is compatible with the visual character of the area, the Commission has required, in past permit actions, that the removal of native trees, particularly oak trees, or encroachment of structures into the root zone be avoided unless there is no feasible alternative for the siting of development.

Project Impacts

The Oak Tree Report, listed in the Substantive File Documents, indicates that 26 oak trees are present on the site and expansive swaths of oak woodland and scattered coast live oaks are located off-site in the immediate vicinity of the proposed project. The proposed project does not include the removal of any oak trees or the encroachment into any oak tree canopy driplines, however, the proposed Advanced Onsite Wastewater Treatment System and associated seepage pits (2) will be located as close as 2.5 ft. from the limits of the oak tree protected zones (5 feet from the outer limits of the tree dripline or 15 feet from the trunk, whichever is greater). In order to ensure that potential impacts to Oak trees are avoided during construction activities the Commission requires the applicant to install temporary protective barrier fencing around the protected zones (5 feet beyond dripline or 15 feet from the trunk, whichever is greater) of all oak trees within the development area during all construction operations. If required construction operations cannot feasibly be carried out in any location with the protective barrier fencing in place, then temporary flagging must be installed on all oak trees to ensure protection during construction. Therefore, the Commission finds that impacts to oak trees on the project or adjacent site will be minimized by employing protective measures during project construction. The applicant shall follow the oak tree preservation recommendations contained in the Oak Tree Report referenced in the substantive file documents.

Additional Mitigation Measures to Address Additional ESHA Impacts

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. Direct adverse effects from such landscaping result from the direct occupation or displacement of native plant communities by new development and associated non-native landscaping, and mitigation for that effect was discussed in the previous section. 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. This sort of impact was not addressed in the prior section. Therefore, in order to minimize adverse effects to the indigenous plant communities of the Malibu/Santa Monica Mountains area that are not directly and immediately affected by the proposed development, the Commission requires that all landscaping consist primarily of native plant species and that invasive plant species shall not be used.

In addition, the Commission has found that night lighting of ESHA areas in the Malibu/Santa Monica Mountains may alter or disrupt feeding, nesting, and roosting activities of native wildlife species. Therefore, the Lighting Restriction condition limits night lighting of the site in general;

limits lighting to the developed area of the site; and requires that lighting be shielded downward. Limiting security lighting to low intensity security lighting will assist in minimizing the disruption of wildlife that is commonly found in this rural and relatively undisturbed area and that traverses the area at night.

Furthermore, fencing of the property would adversely impact the movement of wildlife through the ESHA and wildlife migration corridor on this parcel. Therefore, the Commission finds it is necessary to limit fencing to the perimeter of the approved development area, turnaround, and driveway. This is required to be shown on the landscaping plan.

Additionally, in order to ensure that vegetation clearance for fire protection purposes does not occur prior to commencement of grading or construction of the proposed structures, the Commission finds that it is necessary to require that natural vegetation shall not be removed until grading or building permits have been secured and construction of the permitted structures has commenced. This limitation avoids loss of natural vegetation coverage resulting in unnecessary erosion in the absence of adequately constructed drainage and run-off control devices and implementation of the landscape and interim erosion control plans.

The Commission also finds that the amount and location of any new development that could be built in the future on the subject site consistent with the resource protection policies of the Coastal Act is significantly limited by the unique nature of the site and the environmental constraints discussed above. Therefore, the permitting exemptions that apply by default under the Coastal Act for, among other things, improvements to existing single family homes and repair and maintenance activities may be inappropriate here. In recognition of that fact, and to ensure that any future structures, additions, 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, the future development restriction is required.

Further, the Commission 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 thereby provides any prospective purchaser of the site with recorded notice that the restrictions are imposed on the subject property. Finally, in order to ensure that the terms and conditions of this permit are adequately implemented, the Commission conditions the applicant to allow staff to enter onto the property (subject to 24 hour notice to the property owner) to undertake site inspections for the purpose of monitoring compliance with the permit.

As described above, a residential project on the subject property must be allowed to permit the applicant a reasonable economic use of their property consistent with Section 30010 of the Coastal Act. Nonetheless, the Commission must still assure compliance with Section 30240 by avoiding impacts that would significantly disrupt and/or degrade environmentally sensitive habitat, to the extent this can be done without taking the property. The following special conditions are required, as determined in the findings above, to assure that the project is consistent with Section 30240 of the Coastal Act to the maximum extent possible:

Special Condition 5.	Landscaping and Fuel Modification Plans
Special Condition 7.	Lighting Restriction
Special Condition 8.	Future Development Restriction

Special Condition 9.	Deed Restriction
Special Condition 10.	Habitat Impact Mitigation
Special Condition 11.	Open Space Conservation Easement
Special Condition 13.	Site Inspection
Special Condition 14.	Removal of Natural Vegetation
Special Condition 15.	Oak Tree Protection

For the reasons set forth above, the Commission finds that the proposed project, as conditioned, is consistent with Section 30240 of the Coastal Act, as limited by Section 30010.

E. Public Access

Coastal Act Section 30210 states:

> *In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.*

Coastal Act Section 30212.5 states:

> *Wherever appropriate and feasible, public facilities, including parking areas or facilities, shall be distributed throughout an area so as to mitigate against the impacts, social and otherwise, of overcrowding or overuse by the public of any single area.*

Coastal Act Section 30213 states:

> *Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred.*

Coastal Act Section 30223 states:

> *Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.*

Coastal Act Section 30252 states:

> *The location and amount of new development should maintain and enhance public access to the coast 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.*

The Coastal Act mandates that maximum public access and recreational opportunities be provided and that development not interfere with the public's right to access the coast. Additionally, the Coastal Act mandates that lower cost visitor and recreational facilities, such as public hiking and equestrian trails, shall be protected, encouraged, and provided, where feasible.

In the Malibu/Santa Monica Mountains area, the existing system of heavily used historic trails located on private property has been adversely impacted by the conversion of open lands to housing. In an effort to preserve and formalize the public's right to use these trails, Los Angeles County adopted the Riding and Hiking Trails Master Plan for the Santa Monica Mountains, which is adopted by ordinance into the highway element of the County's 1982 General Management Plan for the Santa Monica Mountains National Recreation Area as updated in 1984 as the Land Protection Plan. The trail system is mapped as part of the 1986 certified Land Use Plan (LUP) for the Malibu/Santa Monica Mountains Area, a component of the County's Local Coastal Program. This trail system has become an important and commonly used recreational asset and a means of providing access to and links between natural, scenic, and recreational areas in the mountains.

While the subject site is located adjacent to state parkland to the north, there are no existing public access trails or trailheads located in close proximity to the subject property. Additionally, at this point CCC staff is not aware of any future plans for developing public access trails in the region of the state parkland that borders the subject property. Therefore, the proposed project and associated construction activities will not impact public access in the area.

The Commission therefore finds that the proposed project, as conditioned, is consistent with Sections 30210, 30212.5, 30213, 30223, and 30252 of the Coastal Act.

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

The proposed project is located within a rural area characterized by expansive, naturally vegetated mountains and hillsides. The project site is located in the Malibu Bowl area east of Corral Canyon Road. The project site is located on a gently sloping pad with descending slopes (maximum gradient of 1.5:1 or less, horizontal to vertical) to the north, east and south located in the northwestern Malibu Bowl within the Corral Canyon watershed. The site is accessed by a short driveway, located on the adjoining parcel's easement to the west from Ingleside Way (Exhibits 1-3). The applicant proposes to construct a 27.5 ft. high, two story, 2,389 sq. ft. single

family residence, a detached, 20 ft. high two story structure with a 750 sq. ft. two car garage and a 750 sq. ft. guest house above, a 446 sq. ft. pool and spa, a 750 sq. ft. driveway; septic system; Liquefied Petroleum Gas (LPG) gas tank; and 560 cu. yds. of grading (280 cubic yards of cut, 280 cubic yards of fill) (Exhibit 3). Development of the proposed residence raises two issues regarding the siting and design: (1) whether or not public views from public roadways will be adversely affected; and (2) whether or not public views from public lands and trails will be affected. Small portions of the proposed development located closest to Ingleside Way will be minimally visible from Corral Canyon road, a public road. Additionally, intermittent views of the east side of the development will be visible from a public trail on a distant ridgeline located across a canyon from the subject site.

However, as the subject site is positioned on the downward sloping side of a larger, higher, hill the proposed development is not anticipated to be visually prominent or obtrusive when viewed from any public roads or trails. The applicant proposes to cut the western portion of this pad near Ingleside Way about 3.5 feet to construct the garage at the 1,316 foot elevation above sea level. The two-story residence steps down the gentle slope to a finished grade of 1,305. The two story residence is 27.5 ft. above this 1,299 foot elevation and finished grade. As proposed, the siting for the residential building pad, and proposed two-story, 28 foot high residence will be visible from public lands located to the north and northeast as close as 2,000 feet (Exhibit 20). The garage will not be visible as it is located behind the residence with a 20 foot high maximum height as viewed from these public lands. Small portions of the proposed development will also be visible from the closest public hiking trail approximately 1,750 ft. to the east (Exhibit 7). However the visual impacts from public lands and this trail will be limited due to the approximate one third mile distance.

Furthermore, the proposed building site and design minimizes the amount of grading and landform alteration necessary for the project and there are no siting alternatives that would reduce impacts to visual resources. Other possible building areas are on slopes as steep as 1.5:1 further from Ingleside Way and would result in substantial landform alteration, removal of ESHA, and greater adverse impacts to public views. Thus, the Commission finds that the proposed building location will serve to minimize adverse impacts to public views. However, the Commission has also considered design alternatives to reduce visual impacts. In past permit actions, the Commission has required that new development located in highly visible, scenic areas be restricted in height (between 18 to 26 feet in height from existing grade) in order to protect visual resources. The subject site is not located on a ridgeline or on a highly visible promontory, and the proposed development will reach a maximum height of 27.5 ft. Therefore as proposed, the project has been sited and designed to avoid and minimize impacts to public visual resources.

To further minimize the visual impacts associated with development of the project site, the Commission requires: that the structure be finished in a color consistent with the surrounding natural landscape; that windows on the development be made of non-reflective glass; use of appropriate, adequate, and timely planting of native landscaping to soften the visual impact of the development from public view areas; and a limit on night lighting of the site to protect the nighttime rural character of this portion of the Santa Monica Mountains.

In recognition that future development normally associated with a single-family residence, that might otherwise be exempt, has the potential to impact scenic and visual resources of the area,

the Commission requires that any future improvements on the subject property shall be reviewed by the Commission for consistency with the resource protection policies of the Coastal Act through a coastal development permit.

Additionally, the Commission 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.

The following special conditions are required to assure the project's consistency with Section 30251 of the Coastal Act:

Special Condition 5.	Landscaping and Fuel Modification Plans
Special Condition 6.	Structural Appearance
Special Condition 7.	Lighting Restriction
Special Condition 8.	Future Development Restriction
Special Condition 9.	Deed Restriction

For the reasons set forth above, the Commission finds that the proposed project, as conditioned, is consistent with Section 30251 of the Coastal Act.

G. Cumulative Impacts

Section 30250(a) of the Coastal Act states:

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

Section 30252 of the Coastal Act states:

> *The location and amount of new development should maintain and enhance public access to the coast by (l) 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.*

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.*

The Commission has consistently emphasized the need to address the cumulative impacts of new development in the Malibu/Santa Monica Mountains area, particularly those of subdivisions, multi-family residential development, and second residential units, all of which result in increased density. It is particularly critical to evaluate the potential cumulative impacts of increased density given the existence of thousands of undeveloped and poorly sited parcels in the mountains that were created decades ago in antiquated subdivisions. Construction of a guest house unit or second unit on a site where a primary residence exists intensifies the use of the subject parcel. The intensified use creates additional demands on public services, such as water, sewage, electricity, and roads. Thus, guest houses and second units pose potential cumulative impacts in addition to the impacts otherwise caused by the primary residential development.

In past actions, the Commission has limited the development of guest house units and second units on residential parcels in the Malibu and Santa Monica Mountain areas to a maximum of 750 sq. ft. In its review and action on the Malibu/Santa Monica Mountains Land Use Plan (LUP), the Commission found that placing an upper limit on the size of these units (750 sq. ft.) was necessary given the traffic and infrastructure constraints which exist in Malibu/Santa Monica Mountains area 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, and electricity) than an ordinary single family residence.

The applicant is proposing a 750 sq. ft. guest unit. This conforms to the Commission's past actions, allowing a maximum of 750 square feet for a guest unit or second dwelling unit in the Santa Monica Mountains area. However, future improvements to the proposed unit such as additional square footage could raise issues with regard to individual or cumulative impacts to coastal resources. Such improvements and their potential impacts must be addressed by the Commission to ensure conformance with the Chapter 3 policies of the Coastal Act.

To ensure that any additions or improvements that could further intensify the use of the unit will be reviewed by the Commission and to ensure that the unit conforms with the maximum 750 sq. ft. guidance, the Commission requires that any additions or improvements related to the unit, that may otherwise be exempt from coastal permit requirements, shall be reviewed by the Commission for consistency with the resource protection policies of the Coastal Act.

Additionally, the Commission 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.

The following special conditions are required to assure the project's consistency with Sections 30250 and 30252 of the Coastal Act, as well as the Los Angeles County LUP:

Special Condition 8. Future Development Restriction
Special Condition 9. Deed Restriction

The Commission finds that, as conditioned, the proposed development is consistent with Sections 30250 and 30252 of the Coastal Act.

H. Local Coastal Program Preparation

Section 30604(a) 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 coastal program that is in conformity with the provisions of Chapter 3 (commencing with Section 30200).*

Section 30604(a) of the Coastal Act provides that the Commission shall issue a Coastal Development Permit only if the project will not prejudice the ability of the local government having jurisdiction to prepare a Local Coastal Program, which conforms to Chapter 3 policies of the Coastal Act. The preceding sections provide findings that the proposed projects 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 avoid or minimize adverse impacts and is found to be consistent with the applicable policies contained in Chapter 3. The following special conditions are required to assure the project's consistency with Section 30604 of the Coastal Act:

Special Conditions 1 through 16

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).

I. California Environmental Quality Act

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 prohibiting development outside of the approved development area as required the granting of an open space conservation easement. 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), and requiring future improvements to be considered through a CDP. Finally, the habitat impact mitigation condition is a measure required to compensate for impacts to ESHA.

The following special conditions are required to assure the project's consistency with Section 13096 of the California Code of Regulations:

Special Conditions 1 through 16

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.

APPENDIX 1

Substantive File Documents

Certified Malibu/Santa Monica Mountains Land Use Plan; The March 25, 2003 Memorandum Regarding the Designation of ESHA in the Santa Monica Mountains, prepared by John Dixon, Ph. D; Biological Assesment by Impact sciences dated March, 2013, Oak tree report by TREES etc. dated 1/11/12 and 8/24/11, County of Los Angeles approval in concept for the proposed AOWTS dated 8/2/11, Goetechnical report by GeoConcepts inc. dated 8/25/10, GeoConcepts update report dated 10/30/12, LA County approval in concept dated 3/19/12 for plan set dated 2/15/12, Coastal Development Permit 4-05-0195 (Elliston), and Coastal Development Permit 5-91-124 (Kremidas).

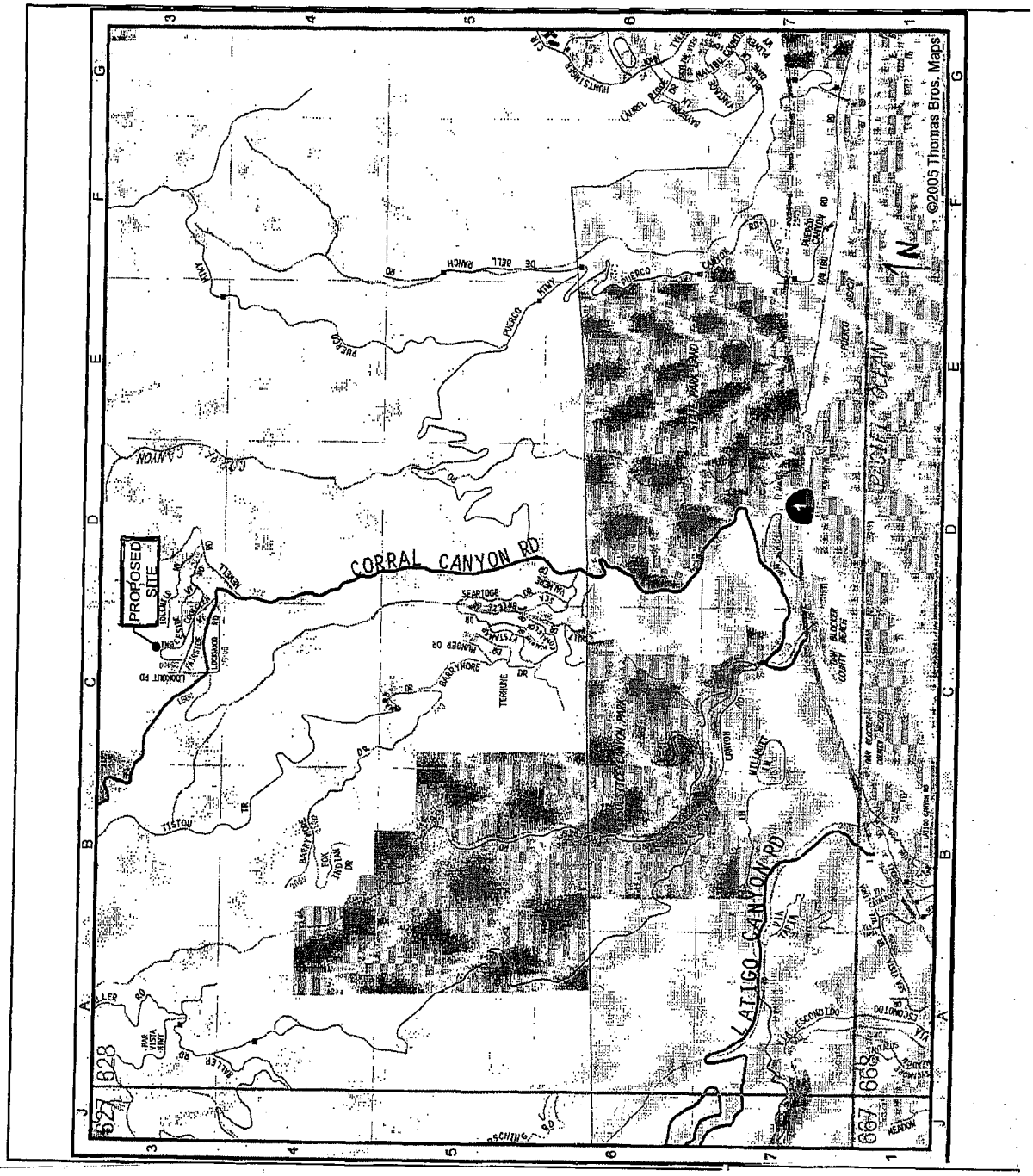


EXHIBIT 1

CDP APPLICATION NO. 4-12-026

VICINITY MAP

4457 | 6

SCALE 1" = 200'

2009

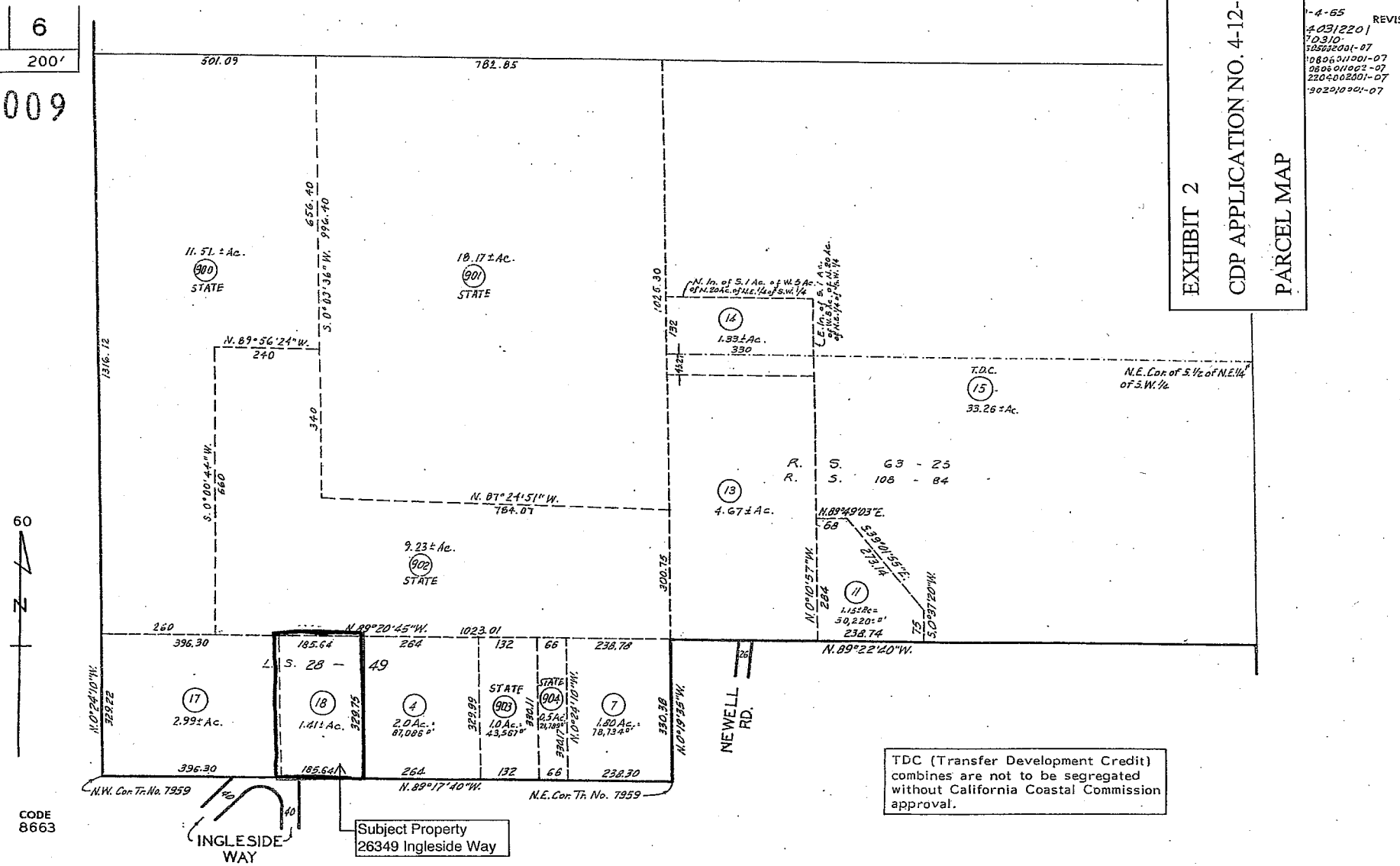
EXHIBIT 2

CDP APPLICATION NO. 4-12-026

PARCEL MAP

1-4-65 REVIS

4031220 1
70310
5056020 01-07
0806011001-07
0806011002-07
2204002001-07
9022010901-07

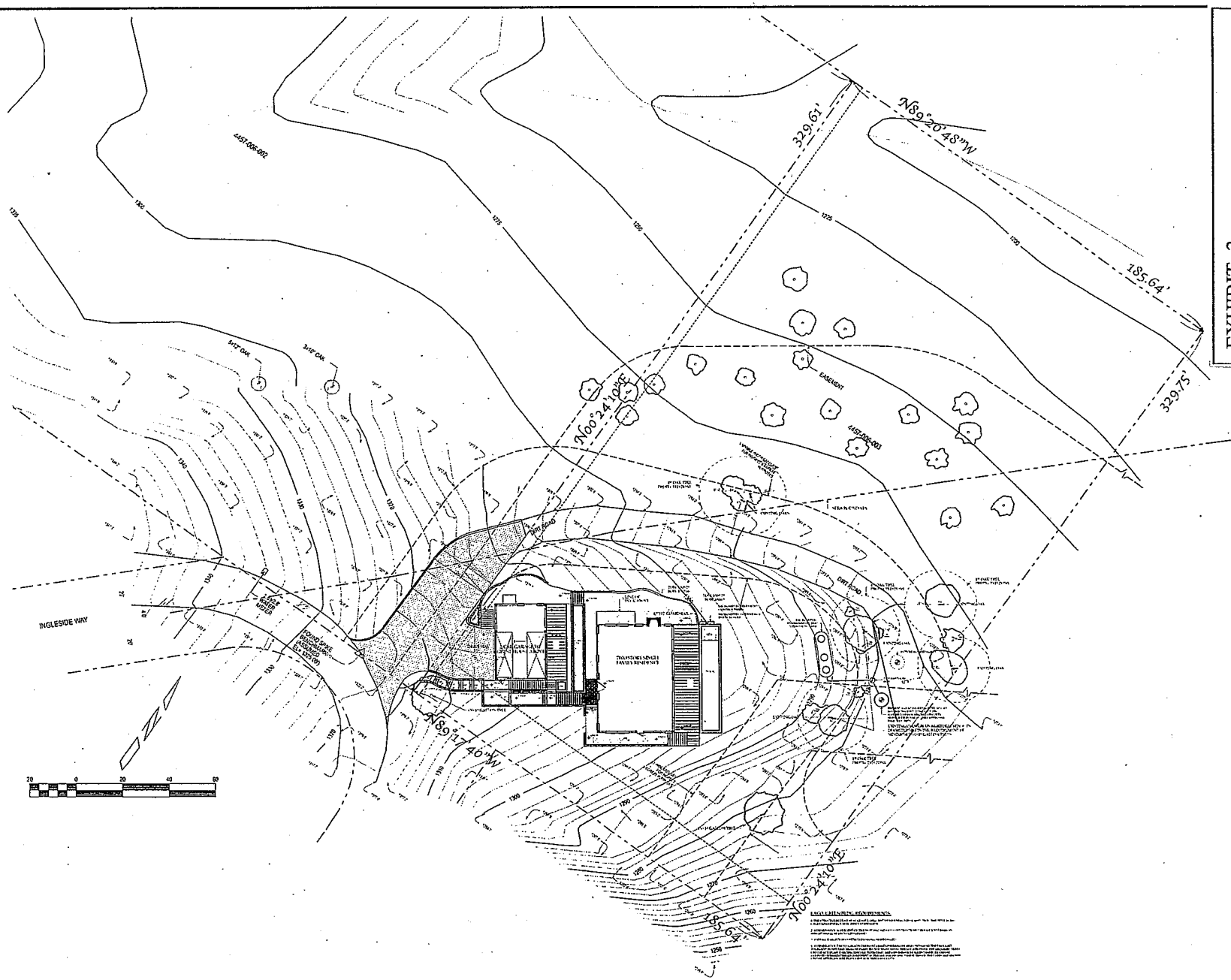


TDC (Transfer Development Credit) combines are not to be segregated without California Coastal Commission approval.

FOR PREV. ASSM'T. SEE: 482-5

ASSESSOR'S MAP
COUNTY OF LOS ANGELES, CALIF.

EXHIBIT 3
CDP APPLICATION NO. 4-12-026
PROJECT PLANS, PAGE 1 OF 5



DIN
ENCE

IDE WAY
A 90265

THE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHT OF THE ARCHITECT AND SHALL NOT BE USED FOR ANY OTHER WORK EXCEPT BY WRITTEN AGREEMENT WITH THE ARCHITECT

WRITTEN DIMENSIONS SHALL BE VERIFIED ON THE JOB AND ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO THE COMMENCEMENT OF ANY WORK.

NO	DATE	ISSUE
	5/6/12	AGC Regional Planning Submittal
	6/19/12	AGC Regional Planning Re-Submittal
	7/6/12	AGC Fire Dept. Access Submittal
	8/6/12	AGC Regional Planning Re-Submittal
	2/19/13	AGC Regional Planning Re-Submittal
	6/17/13	AGC Coastal Comm. Submittal
	9/20/13	AGC Coastal Comm. Re-Submittal

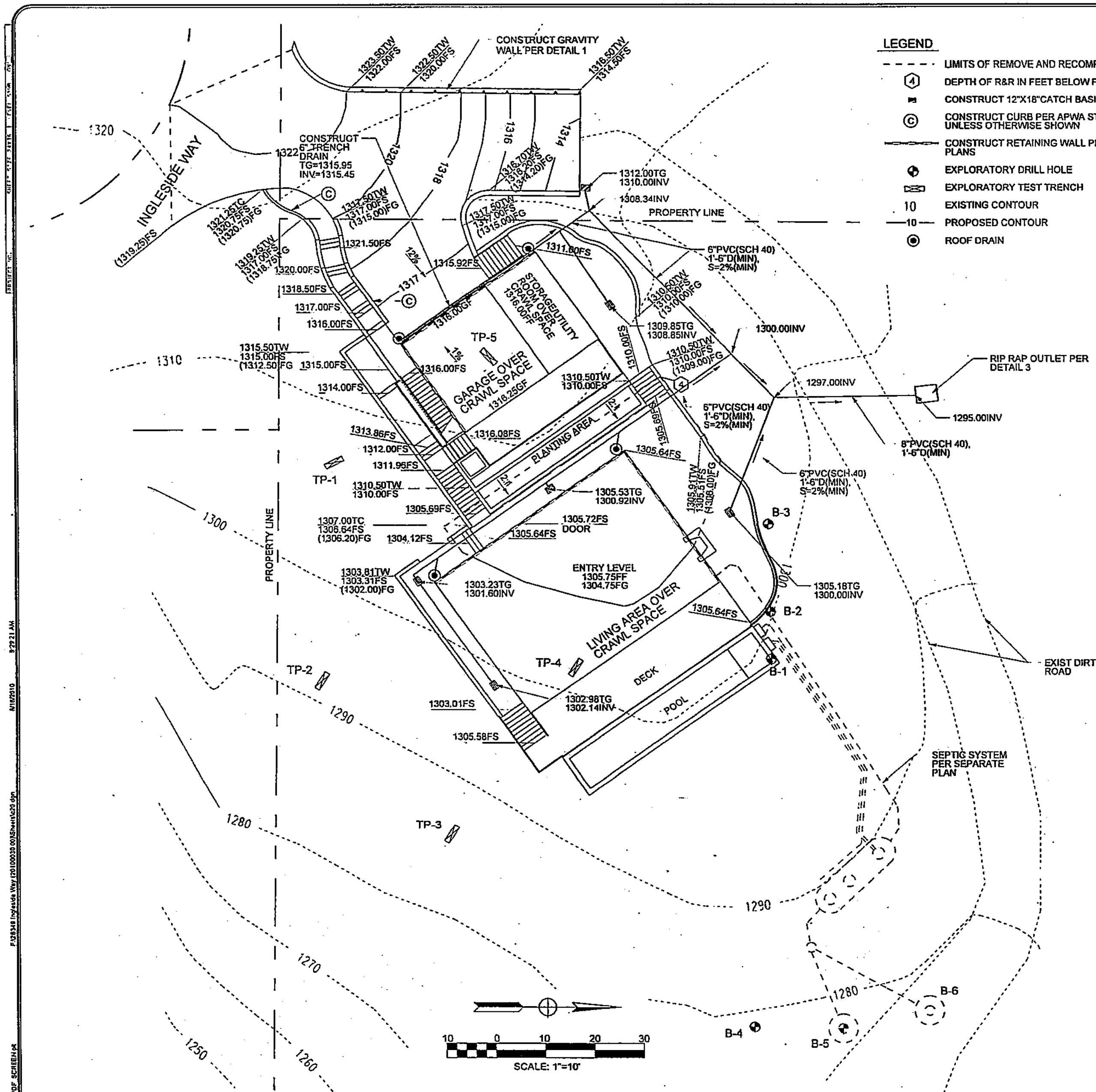
BURDGE & Associates ARCHITECTS
MALIBU SUN VALLEY
WWW.BUAIA.COM

DESCRIPTION:

SITE PLAN

DRAWING NO.
A0.1

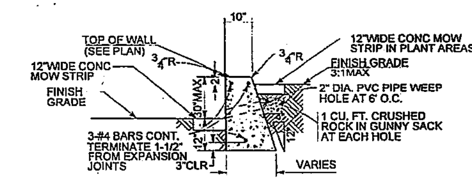
PROJECT	GOLDEN RESIDENCE
DATE	9/20/13
SCALE	
DRAWN BY	D.W.B., A.F., E.T., S.D.



LEGEND

- LIMITS OF REMOVE AND RECOMPACT(R&R)
- (4) DEPTH OF R&R IN FEET BELOW FOUNDATIONS
- CONSTRUCT 12"X18"CATCH BASIN PER DETAIL 2
- (C) CONSTRUCT CURB PER APWA STD 120-1, CF=6" UNLESS OTHERWISE SHOWN
- CONSTRUCT RETAINING WALL PER STRUCTURAL PLANS
- EXPLORATORY DRILL HOLE
- EXPLORATORY TEST TRENCH
- 10 EXISTING CONTOUR
- —10— PROPOSED CONTOUR
- ROOF DRAIN

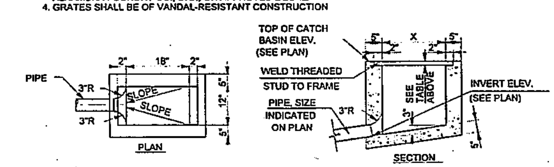
NOTES:
1. THIS PLAN ACCURATE FOR GRADING AND DRAINAGE ONLY.
2. ALL DRAINAGE PIPES ARE 6"DIA PVC SOLID PIPE UNLESS OTHERWISE NOTED.
3. ALL DRAINAGE PIPES TO BE INSTALLED AT 18"MIN BELOW FINISHED SURFACE.
4. CONNECT ALL ROOF DRAINS AND NEW SUBSURFACE DRAINS TO TRUNK LINES.
5. SECURE PERMISSION FROM CITY ENGINEER FOR CONSTRUCTION, GRADING, AND/OR DISCHARGE OF DRAINAGE WITHIN STREET RIGHT-OF-WAY.
6. PROVISIONS SHALL BE MADE FOR CONTRIBUTORY DRAINAGE AT ALL TIMES.
7. ENGINEER MUST SET GRADE STAKES FOR ALL DRAINAGE DEVICES AND OBTAIN INSPECTION BEFORE POURING.
8. CONNECT ALL STRUCTURAL SUBDRAINS TO NEW DRAINAGE SYSTEMS WITH 4"SOLID PVC PIPE, (SCH 40) UNLESS OTHERWISE SHOWN.
9. RETAINING WALL PER SEPARATE PERMIT.
10. TREAT ALL NEWLY MFG'D SLOPES WITH MESH TO STABILIZE SLOPE BEFORE NEWLY PLANTED SLOPES TAKE ROOT.
11. PRIOR TO OBTAINING GRADING PERMIT, APPLICANTS SHALL PROVIDE 2 SETS OF APPROVED GRADING PLANS SIGNED AND WET SEALED BY PROJECT SOIL ENGINEER.
12. All CONCRETE PLACED ON GRADE SHALL BE COLORED TO MATCH NATURAL CONDITIONS ADJACENT TO THE STRUCTURES. SURFACE PAINT IS NOT ACCEPTABLE. ALL COLORS ARE TO BE INCORPORATED INTO THE MIX AND BLENDED UNIFORMLY.



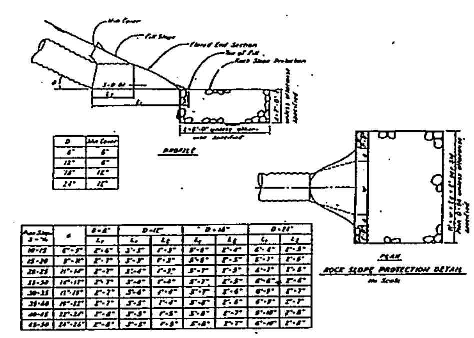
NOTES:
1. PROVIDE EXPANSION JOINTS AT 30'-0"O.C. MAX.
2. ALIGN VERTICAL FACE OF GRAVITY WALL TO ADJACENT CMU WHERE OCCURS.

GRAVITY WALL TYPICAL SECTION (1/C-2.0)
NOT TO SCALE

NOTES:
1. USE 3/4 "DIA PIPE BAR SPACERS ASSEMBLED ON (2) 1/2 "DIA RODS WITH THREADS AND NUTS AT BOTH ENDS.
2. ALL METAL PARTS SHALL BE GALVANIZED AFTER FABRICATION AND WELDING AND BEFORE ASSEMBLY.
3. FRAME AND GRATE SHALL BE SCHOOL BOARD TYPE (ADA COMPLIANT) CATCH BASIN GRATE AND FRAME BY ALHAMBRA FOUNDRY CO., LTD., OR APPROVED EQUAL.
4. GRATES SHALL BE OF VANDAL-RESISTANT CONSTRUCTION



CATCH BASIN DETAIL (2/C-2.0)
NOT TO SCALE



RIP RAP OUTLET DETAIL (3/C-2.0)

NO.	REVISIONS:	BY:	DATE:

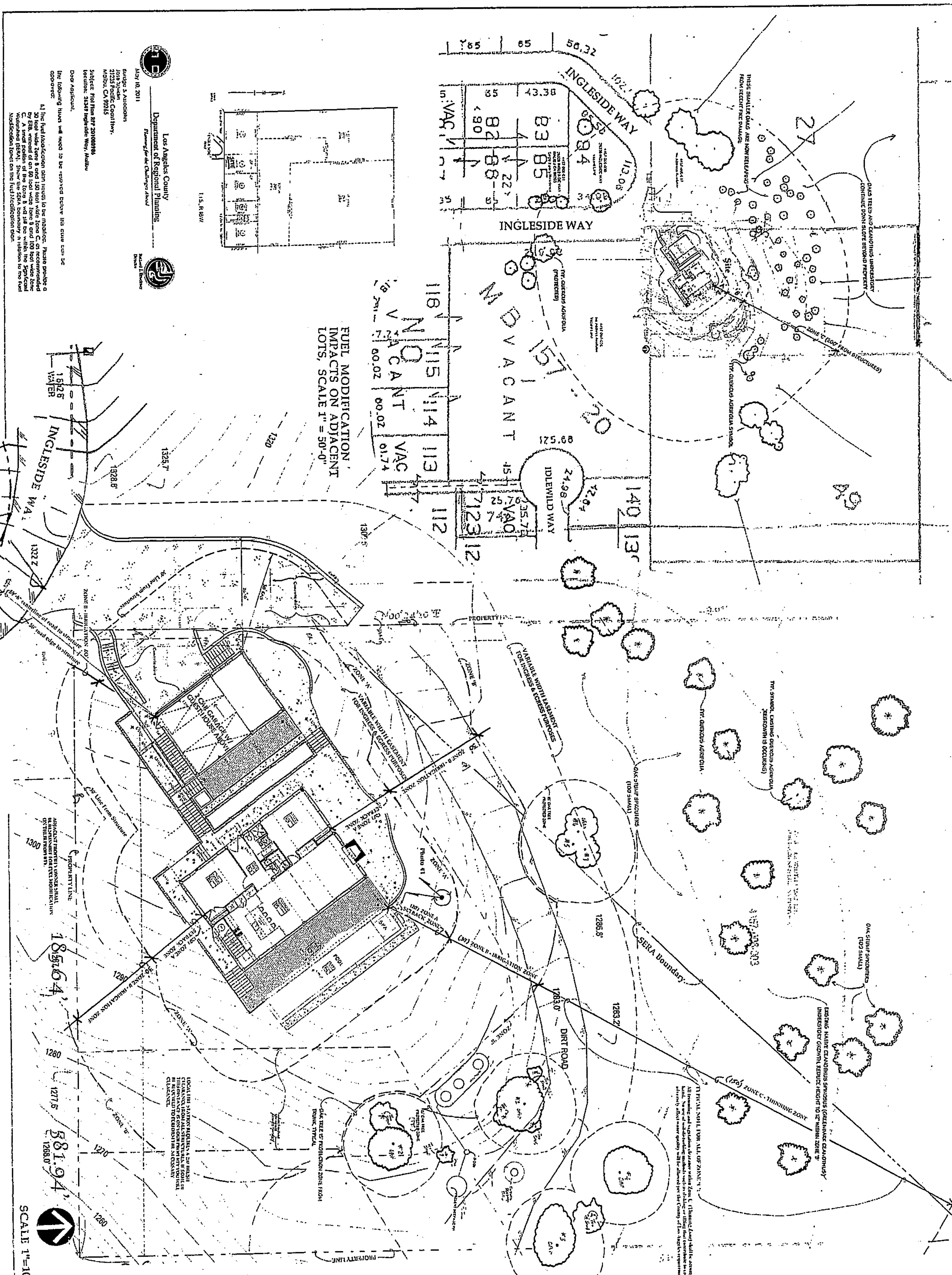
PLANS PREPARED BY: JMC² Civil Engineering & Surveying, John M. Cruikshank Consultants, Inc., 411 N. Harbor Blvd, Suite 201, San Pedro, CA 90731, P: 310.241.6650 / F: 310.320.8871, www.jmc-2.com

REGISTERED PROFESSIONAL ENGINEER — JOHN M. CRUIKSHANK — No. 50792 — Exp 9-30-11 — CIVIL — STATE OF CALIFORNIA

PROJECT: 26353 INGLESIDE WAY, MALIBU, CA 90265

SHEET TITLE: GRADING AND DRAINAGE PLAN

PROJECT NO.	20100030
SCALE	
DATE	AUGUST 12, 2010
DESIGNED BY	CC
DRAWN BY	CC
CHECKED BY	LJ
SHEET NO.	C-2.0



GOLDIN Residence 26349 Ingleside Way Malibu, Ca 90265	FIRE FUEL MODIFICATION PLAN	R.W. GRAHAM & ASSOCIATES Landscape Architecture Planning	F-1

PLANTING NOTES

1. THE CONTRACTOR SHALL MAINTAIN A QUALIFIED SUPERVISOR ON THE SITE AT ALL TIMES DURING CONSTRUCTION THROUGH COMPLETION OF PICKUP WORK.
2. THE CONTRACTOR SHALL VERIFY ALL PLANT MATERIAL QUANTITIES PRIOR TO INSTALLATION. PLANT MATERIAL QUANTITIES LISTED FOR CONVENIENCE OF THE CONTRACTOR. THE ACTUAL NUMBER OF SYMBOLS SHALL HAVE PRIORITY OVER QUANTITY DESIGNATED.
3. GROUND COVER PLANTING OR BARK SHALL BE CONTINUOUS UNDER ALL TREES AND SHRUB MASSES. GROUND COVERS ARE TO BE TRIANGULARLY SPACED UNLESS OTHERWISE SPECIFIED.
4. ALL TREES AND SHRUBS SHALL BE LOCATED BY THE LANDSCAPE ARCHITECT. CONTRACTOR SHALL PLACE ALL PLANTS IN THEIR FINAL LOCATIONS ON THE SITE PRIOR TO LANDSCAPE ARCHITECT ARRIVING TO THE SITE.
5. THE SOIL SHALL BE AMENDED AS FOLLOWS (4:1 slopes or less) ROTOTILL TO A DEPTH OF 6" TYPICAL

   AMOUNT PER 1,000 SQUARE FEET

   25 CU. YDS NITROGEN STABILIZED ORGANIC AMENDMENT DERIVED FROM REDWOOD SAWDUST, FIR SAWDUST OR FINELY GROUND BARK.

   2 LBS. NITROGEN
   2 LBS. PHOSPHORUS
   1 LB. POTASSIUM

   THE AMENDMENT SHALL BE UNIFORMLY BROADCAST AND THOROUGHLY INCORPORATED BY MEANS OF ROTOTILLER OR EQUAL.
6. THE PLANTING PITS FOR ALL SHRUBS AND STAKED TREES SHALL BE EXCAVATED TWICE THE DIAMETER AND 12" DEEPER THAN THE ROOTBALL. THE PLANTING PITS FOR THE BOXED TREES SHALL BE EXCAVATED 6" BEYOND THE BOX SIZE ON ALL SIDES AND 12" DEEPER MINIMUM. THE BACKFILL MIX FOR USE AROUND THE ROOTBALL IN ALL TREES AND SHRUBS SHALL CONSIST OF THE FOLLOWING FORMULA

   6 PARTS BY VOLUME ON SITE SOIL
   4 PARTS BY VOLUME ORGANIC AMENDMENT PER ABOVE SOIL PREPARATION
   1 LB/CU.YD. OF [illegible] COMMERCIAL FERTILIZER
   4 OZ/CU.YD. OF ZINC SULFATE
   4 OZ/CU.YD. OF MANGANESE SULFATE
   [illegible] LB/CU.YD. OF BLOOD AND BONE MEAL
7. FERTILIZER TABLETS SHALL BE [illegible] 21 GRAM PLANTING TABLETS IN QUANTITIES AS FOLLOWS:

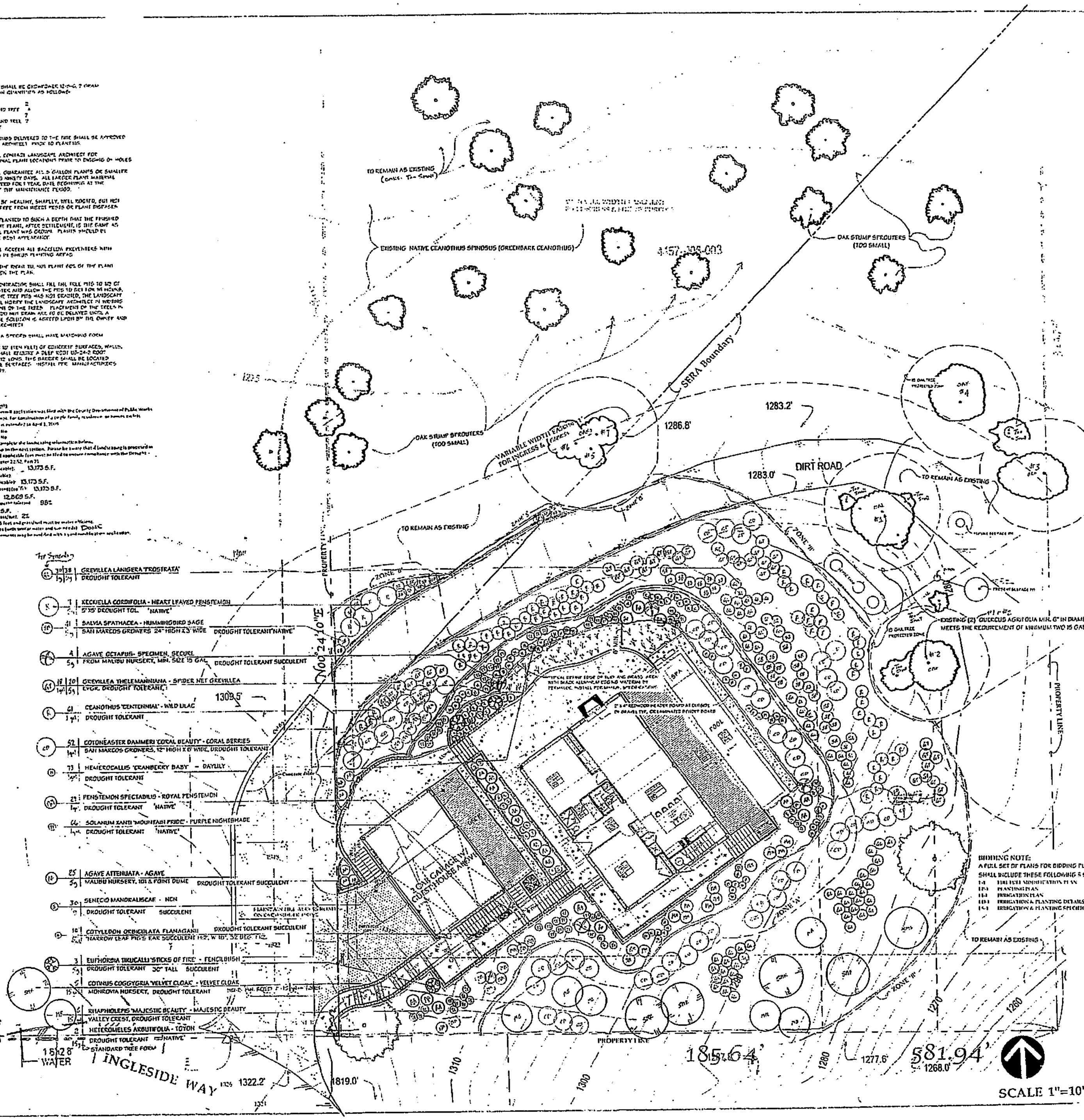
   1 GALLON SHRUB 2
   5 GALLON SHRUB AND TREE 4
   15 GALLON SHRUB 7
   15 GALLON SHRUB AND TREE 7
   1 PER 4" OF BOX SIZE
8. ALL TREES AND SHRUBS DELIVERED TO THE SITE SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO PLANTING.
9. CONTRACTOR SHALL CONTACT LANDSCAPE ARCHITECT FOR APPROVAL OF ALL FINAL PLANT LOCATIONS PRIOR TO DIGGING OF HOLES.
10. CONTRACTOR SHALL GUARANTEE ALL 5 GALLON PLANTS OR SMALLER FOR A PERIOD OF 90 NINETY DAYS. ALL LARGER PLANT MATERIAL SHALL BE GUARANTEED FOR 1 YEAR, DATE BEGINNING AT THE COMMENCEMENT OF THE MAINTENANCE PERIOD.
11. ALL PLANTS SHALL BE HEALTHY, SHAPELY, WELL ROOTED, BUT NOT ROOT BOUND, AND FREE FROM INSECT PESTS OR PLANT DISEASES.
12. PLANTS SHALL BE PLANTED TO SUCH A DEPTH THAT THE FINISHED GRADE LEVEL OF THE PLANT, AFTER SETTLEMENT, IS THE SAME AS THAT AT WHICH THE PLANT WAS GROWN. PLANTS SHOULD BE FACED TO GIVE THE BEST APPEARANCE.
13. CONTRACTOR SHALL SCREEN ALL BACKFLOW PREVENTERS WITH AVAILABLE SHRUBS IN SHRUB PLANTING AREAS.
14. OWNER RESERVES THE RIGHT TO NOT PLANT 10% OF THE PLANT MATERIAL SHOWN ON THE PLAN.
15. THE LANDSCAPE CONTRACTOR SHALL FILL THE TREE PITS TO 1/2 OF ITS DEPTH WITH WATER AND ALLOW THE PITS TO SIT FOR 24 HOURS. IF THE WATER IN THE TREE PITS HAS NOT DRAINED, THE LANDSCAPE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT IN WRITING PRIOR TO PLACEMENT OF THE TREES. PLACEMENT OF THE TREES IN PLANT PITS WHICH DO NOT DRAIN ARE TO BE DELAYED UNTIL A SUITABLE DRAINAGE SOLUTION IS AGREED UPON BY THE OWNER AND THE LANDSCAPE ARCHITECT.
16. ALL TREES WITHIN A SPECIES SHALL HAVE MATCHING FORM.
17. ANY TREES WITHIN 10' (TEN FEET) OF CONCRETE SURFACES, WALLS, BUILDINGS, ETC. SHALL REQUIRE A DEEP ROOT UB-24-2 ROOT CONTROL BARRIER 12' LONG. THE BARRIER SHALL BE LOCATED 6" FROM CONCRETE SURFACES. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

Drought-Tolerant Landscaping Requirements

- A project where a complete building permit application was filed with the County Department of Public Works (DPW) prior to January 1, 2009 is exempt. For [illegible] of a single family residence [illegible] created by a parcel map, the deadline is extended to April 1, 2009.
- Is landscaping required? ☒ Yes ☐ No
  Is landscaping proposed? ☒ Yes ☐ No
  If you check yes for either question, complete the landscaping information below.
  If you check no for both questions, skip to the next section. Please be aware that if landscaping is proposed in the future, a new site plan review and applicable fees must be filed to ensure compliance with the Drought-Tolerant Landscaping Ordinance, Chapter 22.52, Part 21.
- Required landscaping (sq. ft.) (if applicable): 13,173 S.F.
- Existing landscaping (sq. ft.) (if applicable):
- Proposed landscaping (sq. ft.) (if applicable): 13,173 S.F.
- Total landscaping (existing and proposed) (sq. ft.): 13,173 S.F.
- Drought-tolerant landscaping (sq. ft.): 12,869 S.F.
- Percent of total landscaping to be drought tolerant: 98%
- Total grass/turf area (sq. ft.): 304 S.F.
  Percent of total landscaping to be grass/turf: 2%
  Grass/turf width must be minimum 3 feet and grass/turf must be water efficient.
- Plants shall be grouped in hydrozones (with similar water and sun needs): DONE
- Drought-tolerant landscaping requirements may be [illegible] with a [illegible] application.

GROUND COVER LEGEND

- FESTUCA RUBRA - SEED DEFINED AREA WITH 1 LB. OF SEED & TOP DRESS. LISTED ON WATER EFFICIENT TURF LIST
- 3/8" DIAMETER 'PALM SPRINGS GOLD' ROCK. INSTALL MIN. 3" THICK OVER WEED BARRIER CLOTH. SUBMIT SAMPLE FOR OWNERS APPROVAL PRIOR TO ORDER
- PHYLA NODIFLORA (LIPPIA REPENS) @ 12" O.C.E.W. FROM FLATS. TYP. SYMBOL - LIGHTLY HAND BROADCAST CALIFORNIA POPPY SEEDS IN THESE AREAS OVER THE NEWLY PLANTED LIPPIA/PHYLLA GROUNDCOVER. DROUGHT TOLERANT
- DUCHESNEA INDICA FROM FLATS @ 12" O.C.E.W. INDIAN MOCK STRAWBERRY. DROUGHT TOLERANT
- ANGLICUM SEDUM @ 8" O.C.E.W. FROM FLATS - DROUGHT TOLERANT
- ESCHSCHOLZIA CALIFORNICA - CALIFORNIA POPPY. SEED AT RATE OF 7 LBS. PER ACRE, RAKE IN AND TOP DRESS LIGHTLY. 'NATIVE'



Tree Symbol
30 | 38 GREVILLEA LANIGERA 'PROSTRATA' 1g | 5g DROUGHT TOLERANT
7 KECKIELLA CORDIFOLIA - HEART LEAVED PENSTEMON 5'X5' DROUGHT TOL. 'NATIVE'
41 SALVIA SPATHACEA - HUMMINGBIRD SAGE SAN MARCOS GROWERS 24" HIGH X 3' WIDE DROUGHT TOLERANT 'NATIVE'
4 AGAVE OCTAPUS - SPECIMEN, SECURE 5g FROM MALIBU NURSERY, MIN. SIZE 15 GAL DROUGHT TOLERANT SUCCULENT
18 | 20 GREVILLEA THELEMANNIANA - SPIDER NET GREVILLEA EVGR. DROUGHT TOLERANT
61 CEANOTHUS 'CENTENNIAL' - WILD LILAC DROUGHT TOLERANT
52 COTONEASTER DAMMERI 'CORAL BEAUTY' - CORAL BERRIES SAN MARCOS GROWERS, 12" HIGH X 8' WIDE, DROUGHT TOLERANT
73 HEMEROCALLIS 'CRANBERRY BABY' - DAYLILY DROUGHT TOLERANT
27 PENSTEMON SPECTABILIS - ROYAL PENSTEMON DROUGHT TOLERANT 'NATIVE'
66 SOLANUM XANTI 'MOUNTAIN PRIDE' - PURPLE NIGHTSHADE DROUGHT TOLERANT 'NATIVE'
25 AGAVE ATTENUATA - AGAVE 5g MALIBU NURSERY, 101 & POINT DUME DROUGHT TOLERANT SUCCULENT
30 SENECIO MANDRALISCAE - NCN DROUGHT TOLERANT SUCCULENT
16 COTYLEDON ORBICULATA FLANAGANII DROUGHT TOLERANT SUCCULENT 'NARROW LEAF PIG'S EAR SUCCULENT
3 EUPHORBIA TIRUCALLI 'STICKS OF FIRE' - PENCILBUSH 5g DROUGHT TOLERANT 30" TALL SUCCULENT
5 COTINUS COGGYGRIA 'VELVET CLOAK' - VELVET CLOAK 15 gal MONROVIA NURSERY, DROUGHT TOLERANT
6 RHAPHIOLEPIS 'MAJESTIC BEAUTY' - MAJESTIC BEAUTY 15 gal VALLEY CREST, DROUGHT TOLERANT
2 HETEROMELES ARBUTIFOLIA - TOYON 15 gal DROUGHT TOLERANT 'NATIVE' STANDARD TREE FORM
1512.8' WATER
INGLESIDE WAY
1322.2'
1819.0'
1309.5'
N00°24'10"E
PROPERTY LINE
TO REMAIN AS EXISTING
EXISTING NATIVE CEANOTHUS SPINOSUS (GREENBARK CEANOTHUS)
OAK STUMP SPROUTERS (TOO SMALL)
4457-008-003
SERA Boundary
VARIABLE WIDTH EASEMENT FOR INGRESS & EGRESS
1286.8'
1283.2'
1283.0'
DIRT ROAD
ZONE 'B'
ZONE 'A'
POOL
EXISTING (2) QUERCUS AGRIFOLIA MIN. 6" IN DIAMETER MEETS THE REQUIREMENT OF MINIMUM TWO 15 GALLON TREES.
BIDDING NOTE:
A FULL SET OF PLANS FOR BIDDING PURPOSES SHALL INCLUDE THESE FOLLOWING 5 SHEETS:
IRRIGATION PLAN
IRRIGATION & PLANTING DETAILS
IRRIGATION & PLANTING SPECIFICATIONS
185.64'
581.94'
1310
1300
1280
1270
1260
1277.6'
1268.0'
SCALE 1"=10'-0"

REVISIONS	BY
[illegible]	
[illegible]	
[illegible]	

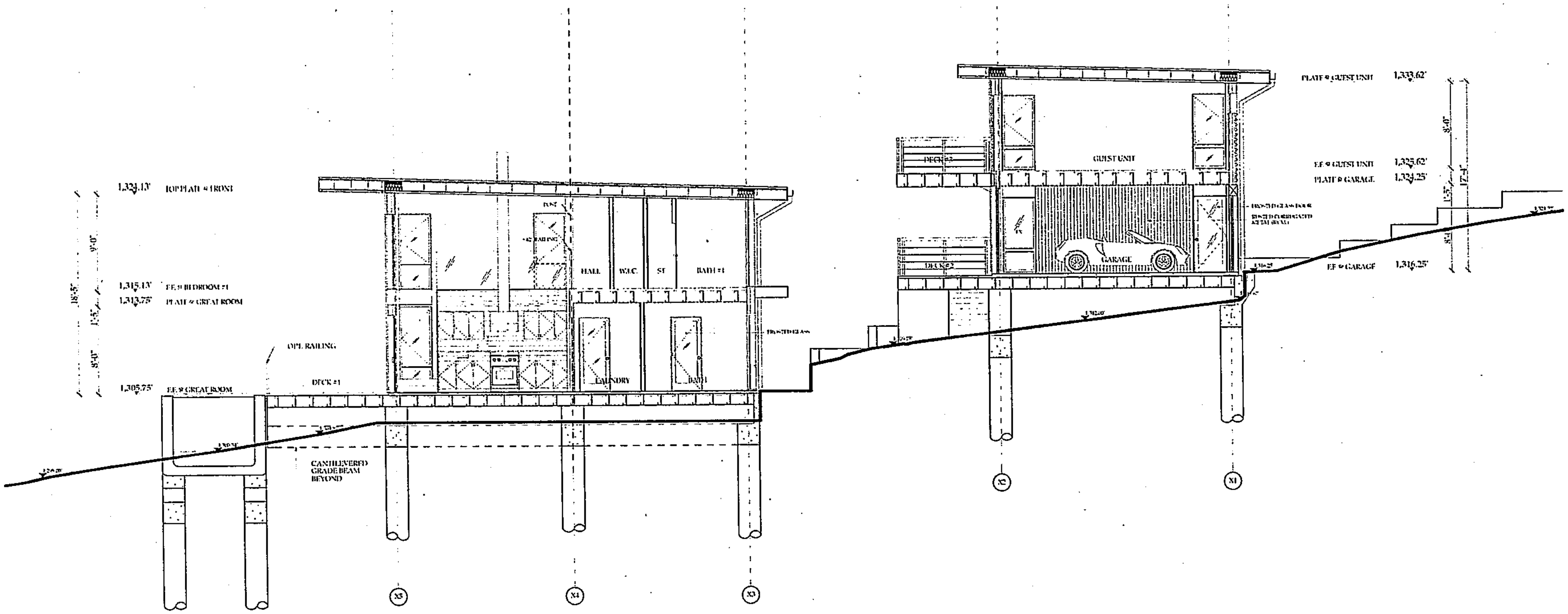
R.W. GRAHAM & ASSOCIATES
Landscape Architecture
Planning
107 N. Reino Road #112, Thousand Oaks, California 91320
phone: (805) 499-7389 fax: (805) 375-2350

California Registered Landscape Architect [illegible]. The use of these plans, specifications and designs shall be restricted to the original site for which they were prepared and publication is limited to such use. Reproduction, publication or re-use by any method, in whole or in part without the expressed consent of R.W. Graham & Associates is prohibited. Visual contact with these plans & specifications shall constitute prima facie evidence of the acceptance of these restrictions.

PLANTING PLAN

GOLDIN Residence
26349 Ingleside Way
Malibu, Ca 90265
APN [illegible]

Date: FEB. 15, 2012
Scale:
Drawn: ROLAND
Job:
Sheet: LP-1
of Sheets



SECTION A

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GOLDIN RESIDENCE

26349 INGLESIDE WAY
MALIBU, CA 90265

NO	DATE	ISSUE
	[illegible]	[illegible] Regional Planning Submittal
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BURDGE & Associates ARCHITECTS
MALIBU SUN VALLEY
WWW.BUAIA.COM

DESCRIPTION:

SECTION

DRAWING NO.

A3.1

PROJECT	GOLDIN RESIDENCE
DATE	[illegible]
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DRAWN BY	D.W.B., A.J., K.T., S.D.

STATE OF CALIFORNIA – THE RESOURCES AGENCY GRAY DAVIS, GOVERNOR

CALIFORNIA COASTAL COMMISSION
45 FREMONT, SUITE 2000
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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).

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.

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[1]. 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[2]. Therefore, this relatively pristine area is both large and mostly unfragmented, which fulfills a fundamental tenet of conservation biology[3]. The need for large contiguous areas of natural habitat in order to maintain critical ecological processes has been emphasized by many conservation biologists[4].

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[5]. 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[6] 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

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[1] National Park Service. 2000. Draft general management plan & environmental impact statement. Santa Monica Mountains National Recreation Area – California.

[2] Ibid.

[3] 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. Sorice 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.

[4] 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), 2nd 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), 2nd 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.

[5] 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).

[6] 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[7]. 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[8].

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[9]. Large terrestrial predators are particularly good indicators of habitat connectivity and of the general health of the ecosystem[10]. 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[11]. Sightings of cougars in both inland and coastal areas of the Santa Monica Mountains[12] 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[13]. Beyond simply destabilizing the ecosystem, fragmentation and disturbance

[7] Letters received and included in the September 2002 staff report for the Malibu LCP.
[8] Schoch, D. 2001. Survey lists 300 pathways as vital to state wildlife. Los Angeles Times. August 7, 2001.
[9] 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.
[10] 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. Conerv. Biol. 10: 949-963. Noss, R. F. 1995. Maintaining ecological integrity in representative reserve networks. World Wildlife Fund Canada.
[11] 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.
[12] 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.
[13] Gause, G. F. 1934. The struggle for existence. Balitmore, 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)[14].

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[15]. 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[16] 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[17].

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,

[14] Scheffer, M., S. Carpenter, J. A. Foley, C. Folke and B. Walker. 2001. Catastrophic shifts in ecosystems. Nature 413:591-596.
[15] NPS. 2000. op.cit.
[16] 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.
[17] 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[18]. 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[19]. 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[20] 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[21]. 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

[18] 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.
[19] 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.
[20] 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.)
[21] 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[22]. 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[23], 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[24] 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

[22] 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.

[23] 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.

[24] 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*).

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[25]. 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[26]. 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[27]. Writing at the same time as Faber, Bowler asserted that, *"[t]here is no question that riparian habitat in southern California is endangered."*[28] 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[29]. Human-caused increased fire frequency has resulted in increased sedimentation rates, which exacerbates the cannibalistic predation of adult newts on the larval stages.[30] 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[31]. These introduced predators have eliminated the newts from streams where they previously occurred by both direct predation and suppression of breeding.

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[25] Testimony by R. Dagit, Resource Conservation District of the Santa Monica Mountains at the CCC Habitat Workshop on June 13, 2002.

[26] Dr, Lee Kats, Pepperdine University, personal communication to Dr J. Allen, CCC.

[27] 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.

[28] 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.

[29] 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.

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

[31] 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.[32] 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[33]. 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."[34] Several other researchers have noted the replacement of chaparral by coastal sage scrub, or coastal sage scrub by chaparral depending on fire history.[35] In transitional and other settings, the mosaic of chaparral and coastal sage

[32] Cooper, W.S. 1922. The broad-sclerophyll vegetation of California. Carnegie Institution of Washington Publication 319. 124 pp.
[33] 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).
[34] Hanes, T.L. 1965. Ecological studies on two closely related chaparral shrubs in southern California. Ecological Monographs 41:27-52.
[35] 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[36]. New growth of chaparral evergreen shrubs takes place about four months later than coastal sage scrub plants and it continues later into the summer[37]. For example, in coastal sage scrub, California sagebrush flowers and grows from August to February and coyote bush flowers from August to November[38]. 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[39]. The insects in turn are followed by insectivorous birds such as the blue-gray gnatcatcher[40], 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

[36] 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, 2nd Edition. Calif. Native Plant Soc. Spec. Publ. #9.
[37] Schoenherr, A. A. 1992. A natural history of California. University of California Press, Berkeley. 772p.
[38] Dale, N. 2000. Flowering plants of the Santa Monica Mountains. California Native Plant Society, 1722 J Street, Suite 17, Sacramento, CA 95814.
[39] Ballmer, G. R. 1995. What's bugging coastal sage scrub. Fremontia 23(4):17-26.
[40] Root, R. B. 1967. The niche exploitation pattern of the blue-gray gnatcatcher. Ecol. Monog.37:317-350.

the Santa Monica Mountains[41]. Five species of hummingbirds also follow the flowering cycle[42].

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[43].

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[44]."

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

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[41] 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.

[42] 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

[43] 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.

[44] 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[45].

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[46] 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[47] 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[48]. 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.

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[45] 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.

[46] 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), 2nd Interface Between Ecology and Land Development in California, U.S. Geological Survey Open-File Report 00-62.

[47] 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.

[48] 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[49], 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[50], 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 the 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

[49] 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.

[50] 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.

distributed from the San Francisco Bay area to Mexico[51]. 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."[52]

Coastal sage scrub in southern California provides habitat for about 100 rare species[53], many of which are also endemic to limited geographic regions[54]. In the Santa Monica Mountains, rare animals that inhabit coastal sage scrub[55] 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[56]. 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[57]. A total of 32 sensitive species of reptiles, birds and mammals have been identified in this community by the National Park Service.[58]

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

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[51] Westman, W.E. 1981. Diversity relations and succession in Californian coastal sage scrub. Ecology 62:170-184.
[52] Ibid.
[53] 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 9th St., Sacramento, CA 95814.
[54] Westman, W.E. 1981. op. cit.
[55] 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.
[56] 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.
[57] 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.
[58] 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.[59] 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.[60] 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[61]. 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[62]. 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[63]. The rare red shank chaparral plant community also occurs in the Santa Monica Mountains. Although included within the category "northern mixed chaparral" in

[59] Dr. John O'Leary, SDSU, personal communication to Dr. John Dixon, CCC, July 2, 2002
[60] Westman, W.E. 1981. op. cit.
[61] Dr. Stephen Davis, Pepperdine University. Presentation at the CCC workshop on the significance of native habitats in the Santa Monica Mountains. June 13, 2002.
[62] 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.
[63] Ibid.

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[64].

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, Braunton's milk vetch and salt spring checkerbloom[65]. 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.[66]

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[67]. 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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[64] Ibid.
[65] 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.
[66] Ibid.
[67] 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.

penetrating the bedrock below[68], so chaparral literally holds the hillsides together and prevents slippage.[69] 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[70]. Thus, the erosion from a 2-inch rain-day event drops from 5 yd^3/acre of soil one year after a fire to 1 yd^3/acre after 4 years.[71] 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^3/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

[68] 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.

[69] 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.

[70] 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.

[71] Ibid.

tolerant of salt-laden fog than other oaks and is generally found nearer the coast[72]. 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[73]. These habitats support a high diversity of birds[74], and provide refuge for many species of sensitive bats[75]. 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

[72] NPS 2000. op. cit.
[73] 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.
[74] 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
[75] 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[76]. Mixed with these native needlegrasses are many non-native annual species that are characteristic of California annual grassland[77]. Native perennial grasslands are now exceedingly rare[78]. In California, native grasslands once covered nearly 20 percent of the land area, but today are reduced to less than 0.1 percent[79]. The California Natural Diversity Database (CNDDB) lists purple needlegrass habitat as a community needing priority monitoring and restoration. The CNDDB 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[80].

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

[76] 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.
[77] 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.
[78] 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.
[79] NPS 2000. op. cit.
[80] NPS 2000. op. cit.

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[81], 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[82], and computer simulation studies of the development patterns over the next 25 years predict a serious increase in habitat fragmentation[83]. 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[84]. 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

[81] 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.
[82] 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.
[83] 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.
[84] NPS, 2000, op. cit.

Workshop stated[85] "*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"[86]. Fuel removal is reinforced by insurance carriers[87]. 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[88] around the home. The combination of insurance incentives and regulation assures that the 200-foot clearance zone will be applied universally[89]. 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[90]. 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

[85] 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.
[86] 1996 Los Angeles County Fire Code Section 1117.2.1
[87] 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.
[88] Fuel Modification Plan Guidelines. Co. of Los Angeles Fire Department, Fuel Modification Unit, Prevention Bureau, Forestry Division, Brush Clearance Section, January 1998.
[89] 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.
[90] Ibid.

(mourning dove, American crow, Western scrub-jay, Northern mockingbird)[91]. 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[92].

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[93]. The Argentine ant competes with native harvester ants and carpenter ants displacing them from the habitat[94]. 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[95]. 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[96]. 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

[91] 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.
[92] 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.
[93] 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.
[94] 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.
[95] 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.
[96] 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[97].

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.[98] 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[99].

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[100]. 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[101].

Summary

In a past action, the Coastal Commission found[102] 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

[97] Longcore, T.R. 1999. Terrestrial arthropods as indicators of restoration success in coastal sage scrub. Ph.D. Dissertation, University of California, Los Angeles.
[98] Christian, C. 2001. Consequences of a biological invasion reveal the importance of mutualism for plant communities. Nature 413:635-639.
[99] 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.
[100] . 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.
[101] Ibid, and Ecological Consequences of Artificial Night Lighting, Conference, February 23-24, 2002, UCLA Los Angeles, California.
[102] 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[103]. 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 chapparal (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.

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

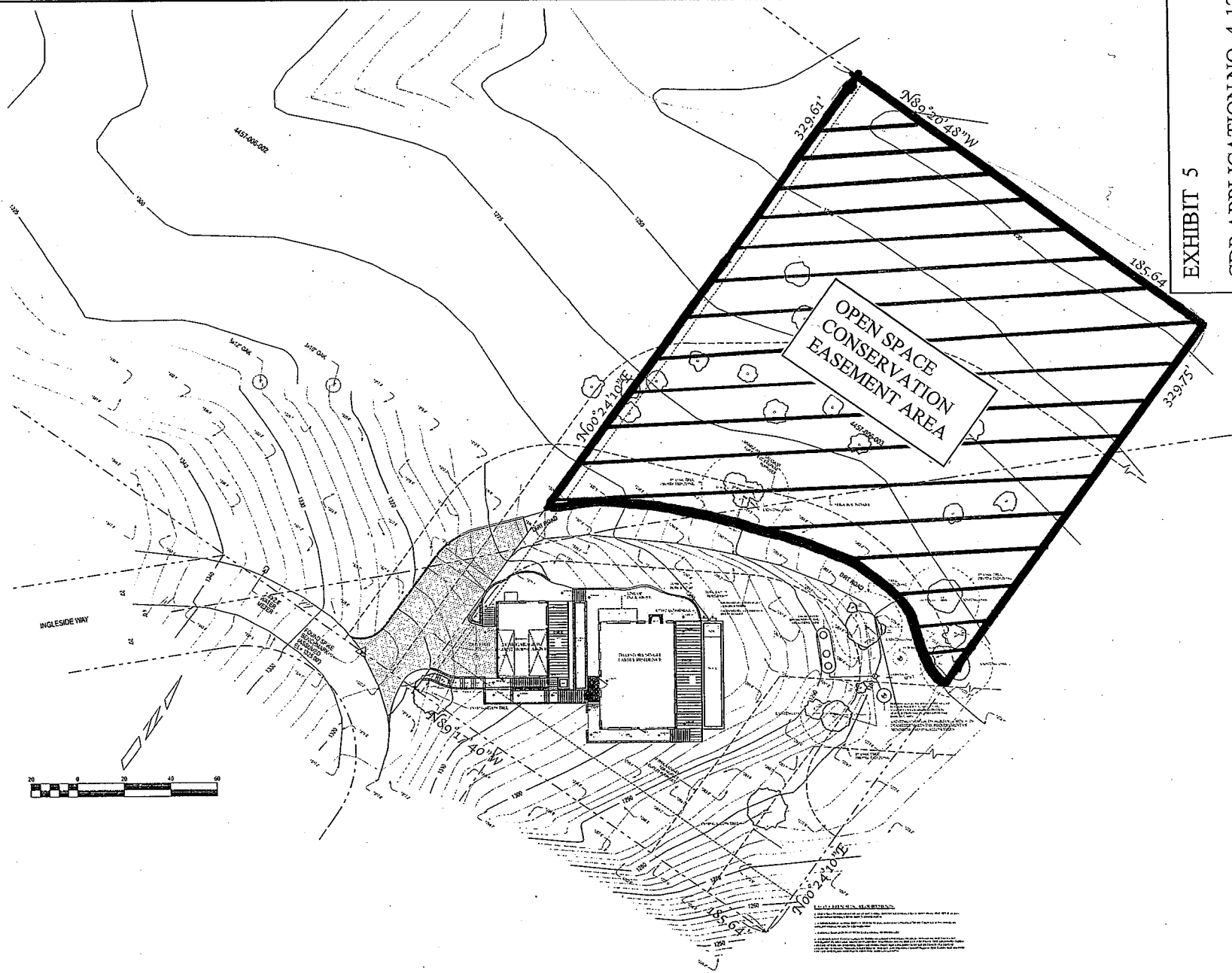

EXHIBIT 5

CDP APPLICATION NO. 4-12-026

OPEN SPACE CONSERVATION EASEMENT

IN
NCE

DE WAY
90265

NO	DATE	ISSUE

BURDGE & Associates ARCHITECTS
MALIBU SUN VALLEY
WWW.BUAIA.COM

DESCRIPTION:

SITE PLAN

DRAWING NO.

A0.1

PROJECT	
DATE	3-20-13
SCALE	
DRAWN BY	

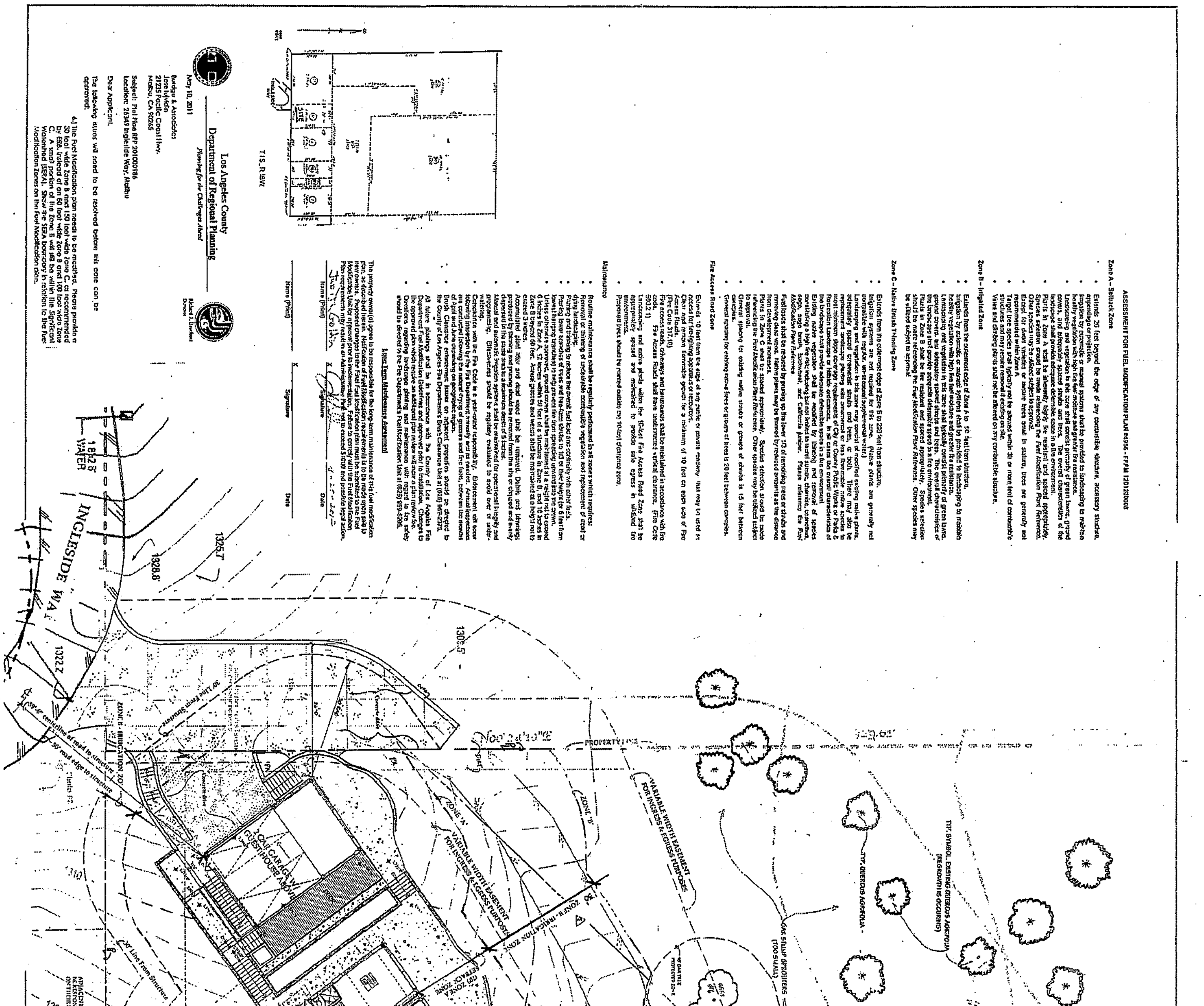

EXHIBIT 6

CDP APPLICATION NO. 4-12-026

FUEL MODIFICATION PLAN

GOLDIN Residence 26349 Ingleside Way Malibu, Ca 90265	FIRE FUEL MODIFICATION PLAN	R.W. GRAHAM & ASSOCIATES Landscape Architecture Planning	Sheet F-1

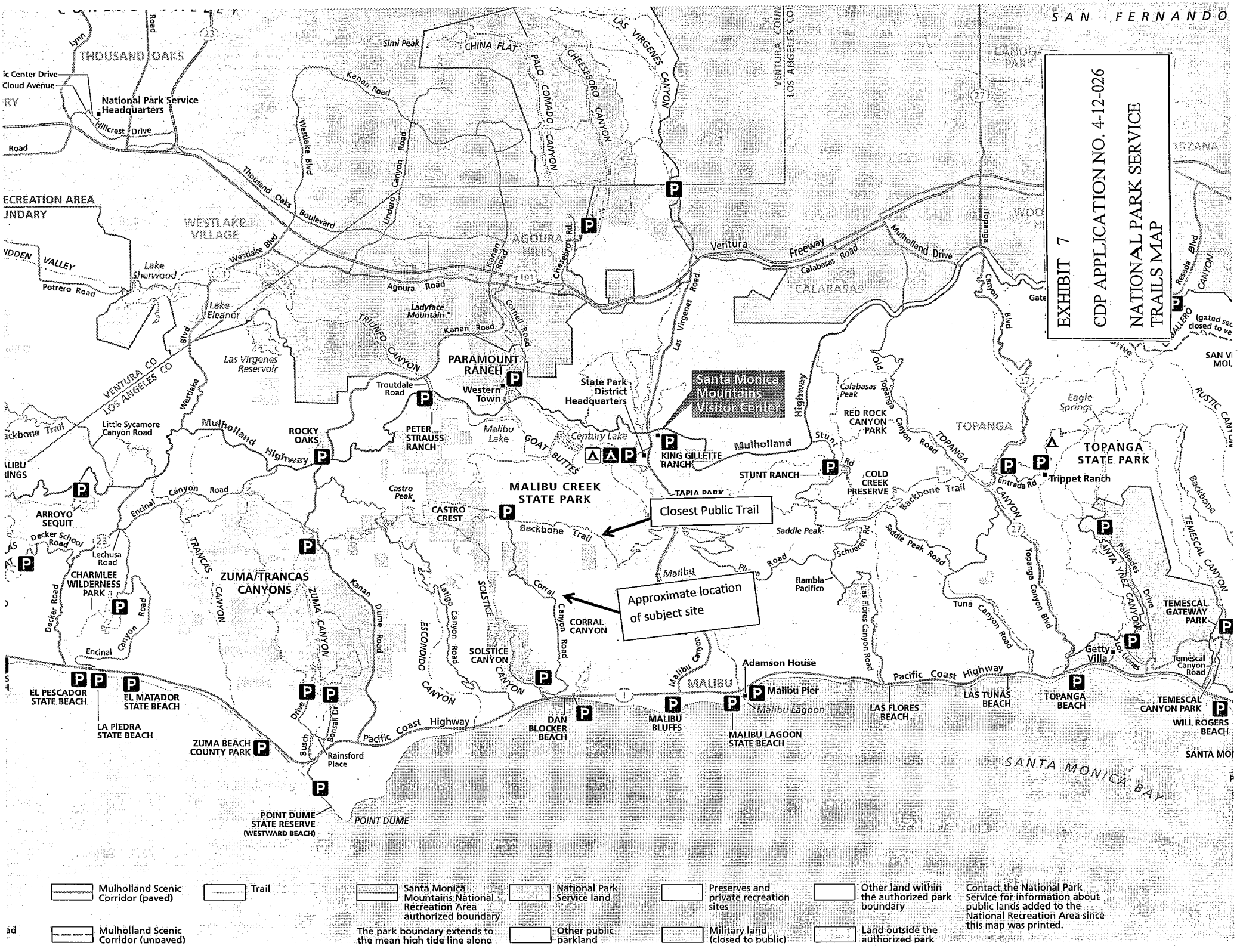
EXHIBIT 7
CDP APPLICATION NO. 4-12-026
NATIONAL PARK SERVICE
TRAILS MAP
Closest Public Trail
Approximate location of subject site
Santa Monica Mountains Visitor Center
National Park Service Headquarters
PARAMOUNT RANCH
PETER STRAUSS RANCH
ROCKY OAKS
KING GILLETTE RANCH
STUNT RANCH
COLD CREEK PRESERVE
RED ROCK CANYON PARK
TOPANGA STATE PARK
Trippet Ranch
MALIBU CREEK STATE PARK
CASTRO CREST
CORRAL CANYON
ZUMA/TRANCAS CANYONS
CHARMLEE WILDERNESS PARK
ARROYO SEQUIT
EL PESCADOR STATE BEACH
EL MATADOR STATE BEACH
LA PIEDRA STATE BEACH
ZUMA BEACH COUNTY PARK
POINT DUME STATE RESERVE (WESTWARD BEACH)
DAN BLOCKER BEACH
MALIBU BLUFFS
MALIBU LAGOON STATE BEACH
Malibu Pier
Adamson House
LAS FLORES BEACH
LAS TUNAS BEACH
TOPANGA BEACH
TEMESCAL CANYON PARK
WILL ROGERS BEACH
TEMESCAL GATEWAY PARK
Getty Villa
Pacific Coast Highway
Mulholland Highway
Ventura Freeway
SANTA MONICA BAY
Mulholland Scenic Corridor (paved)
Mulholland Scenic Corridor (unpaved)
Trail
Santa Monica Mountains National Recreation Area authorized boundary
The park boundary extends to the mean high tide line along
National Park Service land
Other public parkland
Preserves and private recreation sites
Military land (closed to public)
Other land within the authorized park boundary
Land outside the authorized park
Contact the National Park Service for information about public lands added to the National Recreation Area since this map was printed.

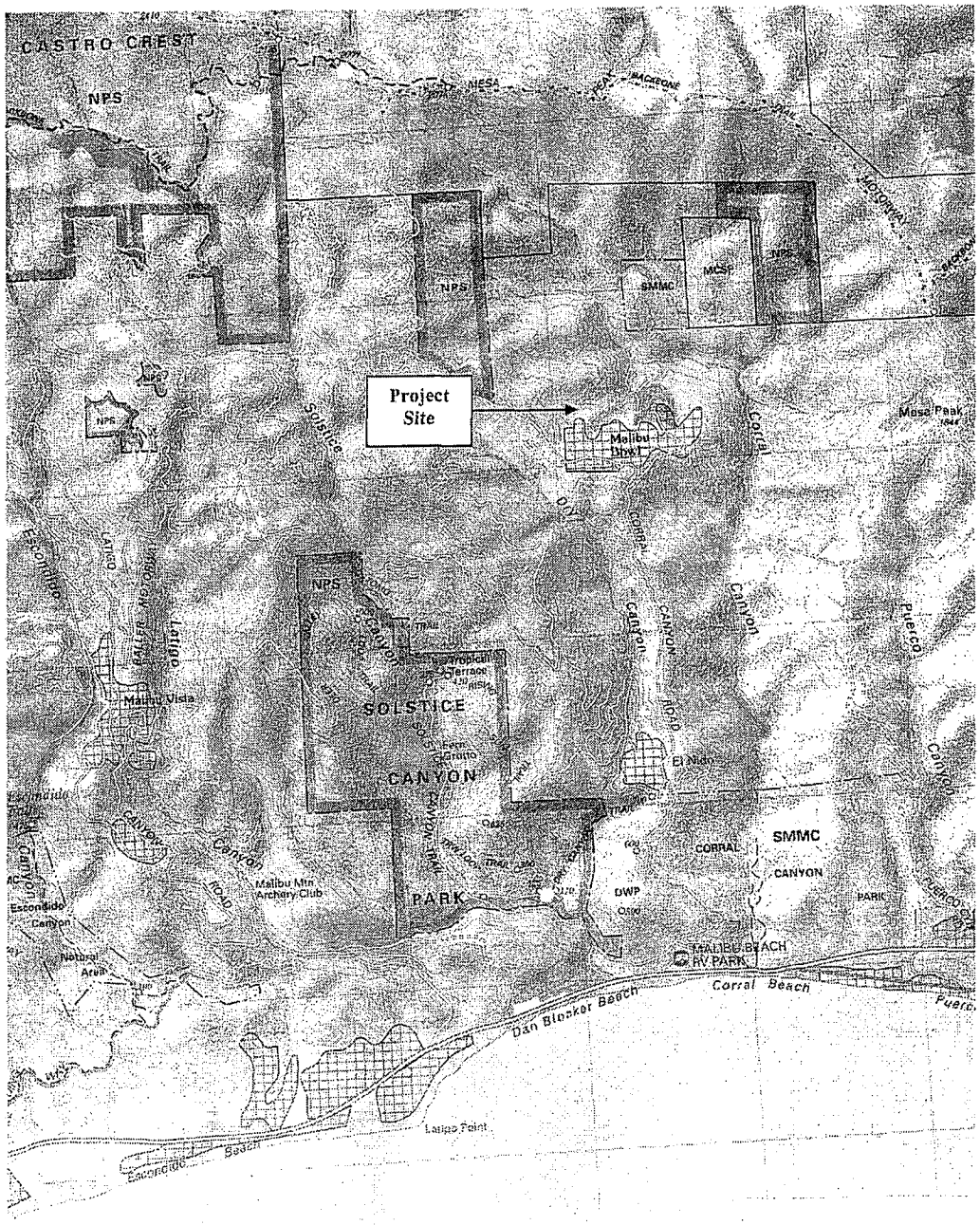

EXHIBIT 8

CDP APPLICATION NO. 4-12-026

PUBLIC LANDS MAP

CALIFORNIA COASTAL COMMISSION
SOUTH CENTRAL COAST AREA
89 SOUTH CALIFORNIA ST., SUITE 200
VENTURA, CA 93001
(805) 585-1800

May 21, 2013

Attn: Michael P. Taylor and Renee Taylor
29204 Heathercliff Rd.
Malibu, CA
90265-4178

RE: Coastal Development Permit Application (4-12-026), 26349 Ingleside Way, Santa Monica Mountains, Los Angeles County [APN: 4457-006-018]

Dear Mr. & Mrs. Taylor,

This office has received a request to process Coastal Development Permit Application No. 4-12-026 from Daniel and Judith Goldin to construct a 27.5 ft. high, 2,389 sq. ft. single family residence, detached 750 sq. ft. garage and second story 750 sq. ft. guest house, pool and spa, driveway, advanced onsite wastewater treatment system, drainage and retaining walls, landscaping, as well as 212 cubic yards of cut grading and 161 cubic yards of fill grading at 26349 Ingleside way, Los Angeles County.

The application is filed and scheduled for public hearing at the Coastal Commission's June 12-14th, 2013 meeting in Long Beach.

Coastal Act Section 30601.5 states as follows:

> **All holders of any interests of record in the affected property shall be notified in writing of the permit application and invited to join as co-applicant.**

Our records indicate that you are the owner of a fee interest in the property across which the driveway grading and paving improvements are proposed (APN 4457-006-017). As such, the Commission is notifying you of the application pursuant to Section 30601.5. With this letter staff is inviting you to join as a co-applicant, if you so choose. If you wish to join as a co-applicant, you may indicate your agreement by signing and returning a copy of this letter. If you have any questions or need further information about this application or the proposed project before you sign and return this letter, please call me at the number above, or Andrew Ferguson of Burdge and associates Architects, Inc., the applicant's agent, at 310-456-5905. A copy of the staff report will be available online at the Commission's website www.coastal.ca.gov.

AGREED: _____
Name(s) Print

Sincerely,

_____
Signatures

Melissa Ahrens
Coastal Program Analyst

_____
Mailing A

_____
Phone Nu

Cc: Andrew Ferguson, Burdge and Associates Architects, Inc.
21235 Pacific Coast Highway
Malibu, CA
90265

EXHIBIT 9
CDP APPLICATION NO. 4-12-026
CO-APPLICANT INVITATION LETTER

Photo 1 – View north from near center of proposed pad, disturbed habitat in foreground; scattered oaks and edge of chaparral habitat in background

Photo 2 – View west from same location. Oak woodland (mostly off site) in bac

EXHIBIT 10

CDP APPLICATION NO. 4-12-026

BUILDING SITE VIEW

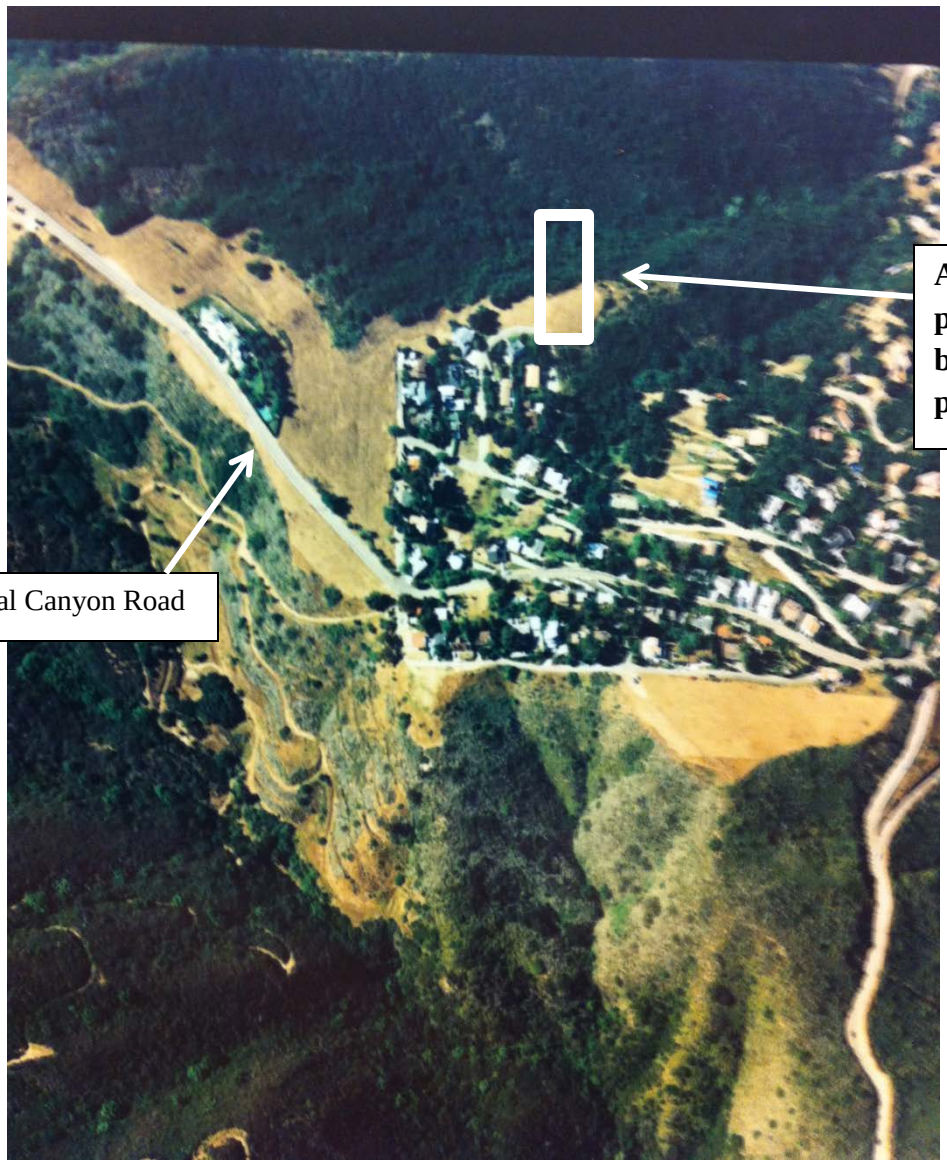

EXHIBIT 11

CDP APPLICATION NO. 4-12-026

AERIAL PHOTO 2001

SOURCE: Impact Sciences, Inc., March 2013

FIGURE **3**

Site Vegetation

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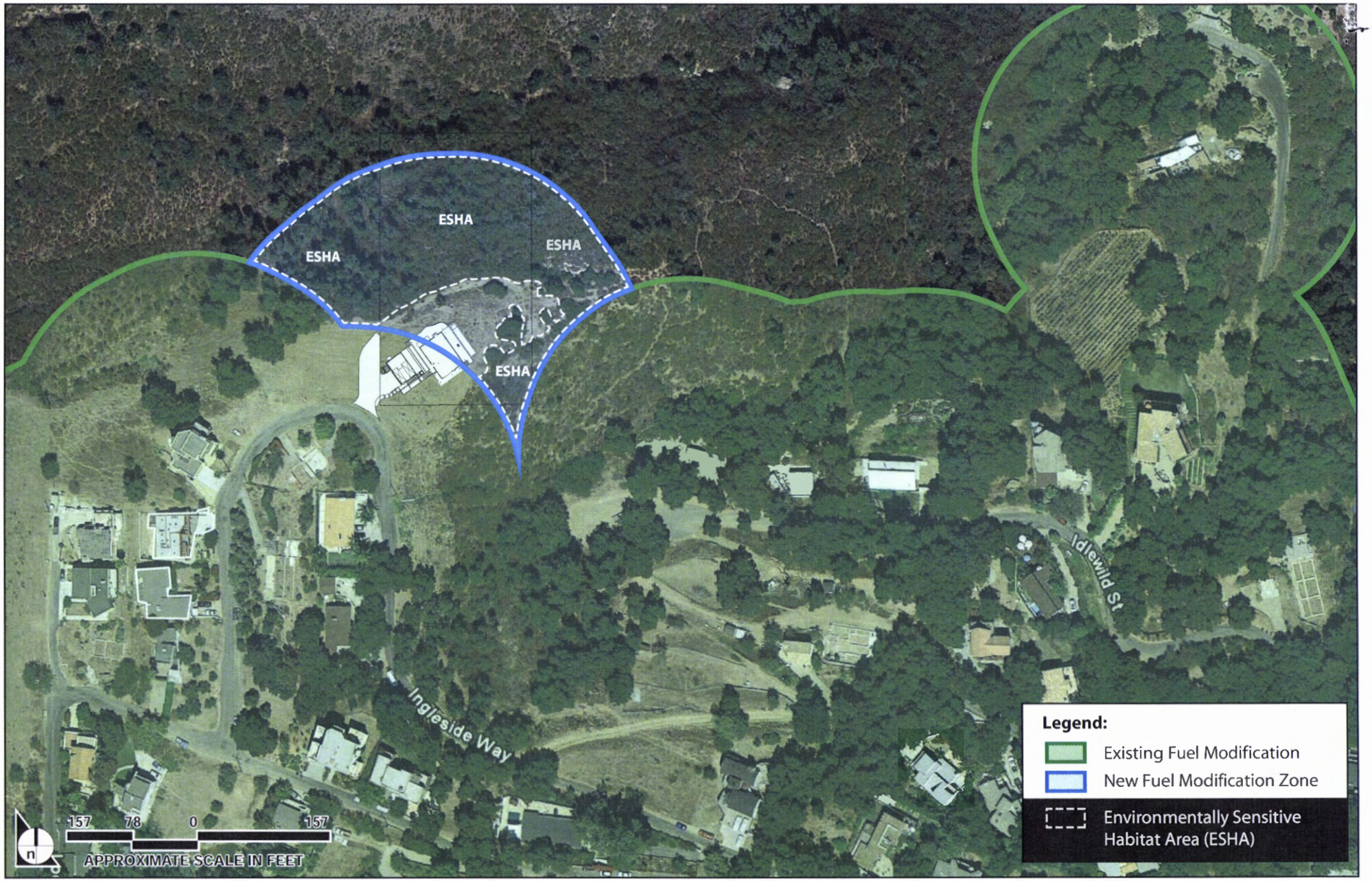

SOURCE: Impact Sciences, Inc., March 2013

FIGURE **4**

ESHA and Fuel Modification Zones

1179.001•03/13