CALIFORNIA COASTAL COMMISSION

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W13b

Staff: KFS-LB
Staff Report: May 22, 2003
Hearing Date: June 11-13, 2003
Commission Action:

STAFF REPORT: REVISED FINDINGS

RECORD PACKET COPY

APPLICATION NUMBER: 5-03-013

APPLICANT: MT No. I LLC, Jim Johnson CEO and President

AGENTS: Nancy Lucast, Lucast Consulting
Mark R. McGuire, Esq.

PROJECT LOCATION: Northwest of the intersection of Avenida Pico and N. El Camino Real, City of San Clemente (Orange County)

PROJECT DESCRIPTION: Residential and commercial development, public park, trails and open space and associated infrastructure including roads and utilities on the 201.38 acre portion of the Marblehead property within the coastal zone. Included are a property subdivision and construction of 313 single family homes on 44.24 acres, 141,506 square feet of commercial space in ten commercial buildings on 22.3 acres, 15.43 acres of public parks; 95.04 acres of public and private open space and pedestrian and bicycle trails; 12.43 acres of private streets; 10.91 acres of public streets; more specifically described in Section II.A. of this staff report. The application also requests follow-up approval for emergency bluff stabilization grading that occurred in the early 1990s.

DATE OF COMMISSION ACTION: April 9, 2003

COMMISSIONERS ON PREVAILING SIDE: Burke; Desser; Hart; Iseman; Kruer; McClain-Hill; Nava; Peters; Potter; Wan; Wooley; Chairman Reilly

SUMMARY OF STAFF RECOMMENDATION:

Staff recommends that the Commission adopt the following revised findings in support of the Commission's approval of Coastal Development Permit Application 5-03-013 with special conditions on April 9, 2003. The major issues raised at the public hearing related to 1) proposed construction of utilities through an area located on the bluffs along El Camino Real, the status of which (in the sense of whether or not it constituted ESHA) was in dispute; and 2) the placement of a ¾ acre turf park area along the bluff top in a connective habitat area. With respect to the trenching for utilities, the Commission found that, under existing conditions, the area does not qualify as ESHA. Rather, the area in question is a connective corridor located between ESHA present within Drainage B and the Western Canyon. The Commission found that the proposed trenching would not significantly disrupt adjacent ESHA provided that work in that area was avoided during the gnatcatcher breeding season, that native plant stands within the work area were avoided, and that the area was restored with native vegetation once the work is completed. Special Condition 10.B.2.h (page 19) and the findings on pages 68, 75 and 87 have been modified accordingly. With respect to the ¾ acre turf park area, the staff recommendation was adopted by the Commission. Thus, the proposed turf area in question must be eliminated from the plans, with use of that area limited to habitat restoration, trails, and viewpoints with benches.

Additional changes were also adopted at the hearing. For instance, concerns were raised that the proposed 4.3 acres of native perennial grassland restoration was inadequate mitigation for impacts to native grassland that occurred during the emergency bluff grading. Special Condition 10.B.10 and the findings on pages 81-82 have been modified to indicate that additional native perennial grassland will be restored in ecologically suitable locations within the proposed habitat restoration area. In addition, concerns were raised regarding off-leash dogs on the trail network and within parks. The special conditions have been modified to implement controls on domestic pets.

The project, as submitted, raised issues pertaining to protecting wetlands and upland environmentally sensitive habitat area (ESHA), the alteration of natural landforms, avoidance of geologic hazards, the provision of public access and recreation facilities, the protection of water quality, and the protection of archeological resources. At the April 2003 hearing, the Commission imposed the following special conditions that address the issues raised by the project: Special Condition 1 places open space restrictions and public access requirements over corresponding areas of land; Special Condition 2 requires fee dedication of the proposed park lands to the City; Special Condition 3 requires that trail easements be offered over the proposed trail network; Special Condition 4 requires the development of a final maintenance and management program for the proposed parks and habitat areas; Special Condition 5 places certain requirements on the proposed subdivision; Special Condition 6 puts certain procedures in place relative to renumbering on the final tract map; Special Condition 7 requires a revised construction phasing plan that prioritizes development of the public access and recreation facilities and the habitat restoration; Special Condition 8 identifies construction related responsibilities such as habitat and water quality protection requirements; Special Condition 9 requires the design of construction staging areas and fencing in a manner that protects habitat; Special Condition 10 requires the applicant to submit a final habitat management plan that complies with the recommended habitat buffers and other identified changes to the plan; Special Condition 11 identifies requirements on landscaping and vegetation used in the development; Special Condition 12 identifies requirements relative to fire hazards and fuel modification; Special Condition 13 requires lighting to be designed to avoid impacts on habitat areas; Special Condition 14 identifies requirements related to walls, fences and other barriers to prevent impacts on habitat; Special Condition 15 identifies requirements related to public access and recreation facilities; Special Condition 16 identifies the requirements relative to water quality impact mitigation; Special Condition 17 places some requirements on the design of the proposed bridge at Avenida Vista Hermosa; Special Condition 18 requires submittal of final revised plans that conform with the requirements of the permit; Special Condition 19 requires conformance with proposed geotechnical recommendations; Special Condition 20 the applicant to assume any risks associated with the development of the property; Special Condition 21 identifies requirements related to the proposed 1.0 acre coastal commercial lot; Special Condition 22 identifies requirements regarding the appearance of structures; Special Condition 23 places restrictions on the height and siting of the residential structures; Special Condition 24 identifies parking, height and setback requirements for the regional commercial development; Special Condition 25 establishes certain procedures related to future development of the property; Special Condition 26 establishes requirements and procedures regarding the possible discovery of archeological resources during grading; Special Conditions 27 and 28 require evidence of final approvals from other agencies; Special Condition 29 requires the applicant to demonstrate their legal ability to comply with all conditions; Special Condition 30 requires the applicant to comply with the proposal as conditioned herein; Special Condition 31 requires the applicant to comply with certain requirements associated with after-the-fact development; Special Condition 32 establishes requirements and procedures in the event the applicant sells the property or portions thereof; Special Condition 33 requires the applicant to allow inspections of the site during development; and Special Condition 34 requires a deed restriction to be recorded against the property which notifies all landowners, present and future, of the terms and

conditions of this permit.

EXECUTIVE SUMMARY

Development of the subject site was previously reviewed by the Commission under Coastal Development Permit Applications 5-99-260 and 5-01-459. Prior to Commission action, both applications were withdrawn. Staff also reviewed a version of this project for the September, 2002 hearing. As with the currently proposed project, the previously proposed versions of the project have included a property subdivision, residential and commercial development, public parks, trails and open space and associated infrastructure including roads and utilities. The following chart shows a comparison between the previous projects and the current project:

Project Element	Mar. 2001 (5-99-260)	Sept. 2002 Proposal (5-01-459	Jan. 2003 Proposal (5-01-459)	April 2003 Proposal (5-03-013)
Grading	3,830,000 cu. Yds.	2,470,000 cu. Yds.	2,412,300 cu. Yds.	2,172,600 cu. Yds.
Quantity of Residential Units	424	351	314	313
Acreage Occupied by Residential	110 acres	74 acres	64.5 acres	61.93 acres
Regional Commercial	84,313[1] sq. ft.	141,506 sq. ft.	141,506 sq. ft.	141,506 sq. ft.
Acreage Occupied by Commercial (in CZ)	22 acres	22 acres	22 acres	22 acres
Open Space[2] (incl.trails)	58.3 acres	77.3 acres	87.8 acres	89.78 acres
Parks	12 acres	14 acres	14 acres	15.4 acres
Public Streets	8.5 acres	13 acres	11.6 acres	10.91 acres

The major issues raised by the prior proposals (CDP Applications 5-99-260 and 5-01-459) related to landform alteration including filling canyons, narrowing canyons using steep loffelstein walls (5-99-260 only), grading bluffs (5-99-260 only), wetlands fill (5-99-260 only) and inadequate provision of wetland buffers, adverse impacts to wetlands hydrology, adverse impacts to ESHA including Blochman's dudleya and California gnatcatcher habitat, and deficiency of priority uses including public access and recreation opportunities provided in the development.

The project now proposed retains the same basic elements as the prior development plans; however, the footprint of the development has been modified to retract development from within the significant areas of canyons and drainages and away from the bluffs. As shown in the chart above, the applicant has modified the project incrementally, each change bringing it progressively closer to compliance with the mandates of the Coastal Act. From the initial proposal (March 2001) to the current proposal, the applicant has eliminated 111 residential units. This change to the project has eliminated the significant alteration of Marblehead Canyon and the Western Canyon through loffelstein walls, has removed homes from the 'peninsula' area located between the main stem and east branch of Marblehead Canyon and results in the preservation of significant portions of the Trident Canyon and Drainages A and B located west of the Western Canyon.. The applicant also expanded their proposed habitat restoration to include these newly avoided areas. In addition, the applicant has been working with the Orange County Fire Authority to significantly reduce the fuel modification requirements of the project.

[1] The square footage reported here is smaller than the later proposals due to a correction of the location of the coastal zone boundary. The corrected coastal zone boundary line places more of the commercial buildings within the coastal zone.
[2] These figures exclude about 6 acres of open space that are interior to the residential area and include landscaped slopes between rows of houses and small pocket parks.

These changes represent significant strides toward a proposal that is consistent with the Coastal Act.

The applicant has improved the project compared with previous proposals. Relatively minor issues remained regarding ESHA and buffers. Special conditions address these issues. In addition, special conditions are imposed that would implement the applicant's proposal and make modifications where necessary to ensure consistency with the Coastal Act.

PLANNING PROCESS SINCE WITHDRAWAL OF THE FIRST APPLICATION 5-99-260 (i.e. March, 2001 proposal)

During the March 2001 public hearing on a prior application (5-99-260), the Commission and Executive Director agreed to accept an abbreviated local approval process in connection with the next application. According to the process arranged between the City and the applicant, the applicant would only obtain a preliminary approval from the City prior to submitting the application to the Commission. The Commission would accept and process the application with only the preliminary local approval having been completed. The applicant would submit the project to obtain final approval from the City once an approval had been obtained from the Commission. This modified local approval process is intended to minimize and avoid inconsistencies between the coastal development permit and City-granted approvals. The City granted the applicant an 'approval in concept'. Now that the subject application has been approved by the Commission, the applicant will obtain required approvals from the City. Through condition compliance, and amendments as necessary, the two approvals will be reconciled.

Also, during the March 2001 public hearing , the Commission directed the applicant to work with Commission staff to design a project that would be consistent with Coastal Act requirements. Since that time, the applicant has submitted a variety of project configurations, which, until the most recent revision, continued to raise significant issues. A second consultation with the Commission in January 2003 that resulted in a withdrawal of the applicant's second application 5-01-459 allowed time for the significant outstanding issues to be addressed. Meetings have been held on a regular basis where the major issues regarding development of the site and various iterations of project site plans were discussed. Through this process, all of the major issues have been substantially addressed including landform alteration, impacts on ESHA, raptor use of the site, coyote access and circulation through the site, bluff stability, wetlands hydrology, and wetlands fill. Special conditions are identified that address the relatively minor remaining issues..

FEDERAL CONSISTENCY:

The proposed project site includes property located inland of the coastal zone boundary. The proposed development on that portion of the property would require a permit from the Corps of Engineers pursuant to Section 404 of the Clean Water Act. Section 307(c)(3)(A) of the federal Coastal Zone Management Act, 16 U.S.C. § 1456(c)(3)(A), provides that:

> *...any applicant for a required Federal license or permit to conduct an activity, in or outside of the coastal zone affecting any land or water use or natural resource of the coastal zone of that state shall provide in the application to the licensing or permitting agency a certification that the proposed activity complies with the enforceable policies of the state's approved program and that such activity will be conducted in a manner consistent with the program. At the same time, the applicant shall furnish to the state or its designated agency a copy of the certification, with all the necessary information and data. . . . . At the earliest*

> *practicable time, the state or its designated agency shall notify the Federal agency concerned that the state concurs with or objects to the applicant's certification. . . . No license or permit shall be granted by the Federal agency until the state or its designated agency has concurred with the applicant's certification or until, by the state's failure to act, the concurrence is conclusively presumed. . .*

In this case, development inland of the coastal zone and its associated facilities could potentially affect water supply to wetlands within the coastal zone, species migration to the coastal zone, and visual resources of the coastal zone. Therefore, that development may require Commission concurrence with a consistency certification before the Corps can issue its permit for any part of the development.

The project presented to the Commission in the subject application identifies, for reference purposes, the siting and design of the portion of the development located on the applicant's property outside the coastal zone. As shown on the materials presented to the Commission, the project would substantially avoid impacts to wetlands and the existing water supply that provides water to the wetlands both inside and outside the coastal zone. The applicant is also proposing to preserve and restore wetland and coastal sage scrub habitat that will expand such habitat area from about 2 acres to about 9 acres. In addition, the proposal substantially preserves the existing canyon. Provided the applicant retains the above features of the project outside the coastal zone, the Commission could avoid any need to assert federal consistency review of the project. However, a final determination regarding such review will be made at the time a public notice regarding the Section 404 permit is published by the U.S. Army Corps of Engineers.

OTHER AGENCY APPROVALS RECEIVED: See Appendix A

SUBSTANTIVE FILE DOCUMENTS: See Appendix A

STAFF RECOMMENDATION, MOTION AND RESOLUTION OF APPROVAL OF FINDINGS

MOTION: ***I move that the Commission adopt the revised findings in support of the Commission's action on April 9, 2003 concerning Coastal Development Permit 5-01-013***

STAFF RECOMMENDATION OF APPROVAL:

Staff recommends a YES vote on the motion. Passage of this motion will result in the adoption of revised findings as set forth in this staff report. The motion requires a majority vote of the members from the prevailing side present at the April 9, 2003 hearing, with at least three of the prevailing members voting. Only those Commissioners on the prevailing side of the Commission's action are eligible to vote on the revised findings.

RESOLUTION TO ADOPT REVISED FINDINGS:

The Commission hereby adopts the findings set forth below for Coastal Development Permit 5-03-013 on the ground that the findings support the Commission's decision made on April 9, 2003 and accurately reflect the reasons for it.

I. APPROVAL

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 this permit is reported to the Commission. 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. OPEN SPACE, HABITAT, PARKS, AND PUBLIC ACCESS REQUIREMENTS

A. Open Space Restriction – Habitat Restoration Areas

No development, as defined in Section 30106 of the Coastal Act shall occur within the land identified as the habitat restoration areas in the final habitat management plan approved by the Executive Director (as generally, but not fully depicted in Exhibit 18) and as described and depicted in an exhibit attached to the Notice of Intent to Issue Permit (NOI) that the Executive Director issues for this permit except for the following: habitat restoration and other development necessary to implement the final habitat management plan; fuel modification within those areas identified in the final fuel management plan; installation of utilities (only as approved by this permit); construction of water quality management structures (only as approved by this permit), grading (only as approved by this permit), public access trails and associated appurtenances (only as approved by this permit), re-construction of existing drains (only as approved by this permit), maintenance and repair activities pursuant to an in conjunction with the

management and maintenance program detailed in Special Condition 4.A.

The following additional development may be allowed in the areas covered by this condition (1.A.) if approved by the Coastal Commission as an amendment to this coastal development permit or a new coastal development permit: habitat restoration, construction and maintenance of passive public recreation and access facilities and appurtenances, maintenance, repair and upgrade of utilities, water quality management structures, and drains, and erosion control and repair.

The lands identified in this restriction shall be maintained in accordance with the final maintenance and funding program approved by the Executive Director in accordance with Special Condition 4.

B. Open Space Restriction and Access Requirement –Residual Open Space & Park Areas--

No development, as defined in Section 30106 of the Coastal Act shall occur within the areas of the proposed open space lots identified below and as described and depicted in an exhibit attached to the Notice of Intent to Issue Permit (NOI) that the Executive Director issues for this permit except for the following development: additional habitat restoration not listed in the final habitat management plan, other development necessary to implement the final habitat management plan; fuel modification (only as identified in the final fuel management plan); landscaping (only as approved by this permit); construction of utilities (only as approved by this permit); construction of water quality management structures (only as approved by this permit); grading (only as approved by this permit); public access and recreation facilities and associated appurtenances (only as approved by this permit); public roads and parking areas (only as approved by this permit); re-construction of existing drains (only as approved by this permit), maintenance and repair activities pursuant to an in conjunction with the management and maintenance program detailed in Special Condition 4.A. This restriction shall apply to the following areas (excepting those areas of land identified in Special Condition 1.A): all of the land within the proposed lots described as 'public open space Ocean View Park', 'general open space Sports Park', 'dudleya reserve', 'central canyon', 'westerly canyon', 'tributary c', 'trident, and 'N. El Camino Real Slope', 'major perimeter open space' in the land use summary on proposed Amended Tentative Tract No. 8817 dated February 14, 2003 submitted by the applicant.

All areas of the above identified land shall be open to the general public for recreational use except as restricted in these special conditions. Those portions of the above identified lands that are to be used for habitat restoration shall be open to entities designated to undertake habitat restoration.

The following additional development may be allowed in the areas covered by this condition (1.B.) if approved by the Coastal Commission as an amendment to this coastal development permit or a new coastal development permit: habitat restoration; landscaping; construction and maintenance of public recreation and access facilities and appurtenances; maintenance, repair and upgrade of utilities, water quality management structures, and drains; and erosion control and repair.

The lands identified in this restriction shall be maintained in accordance with the final maintenance and funding program approved by the Executive Director in accordance with Special Condition 4.

C. Public Trails and Bikeways

No development, as defined in Section 30106 of the Coastal Act, shall occur within the access corridors identified below and as described and depicted in an exhibit attached to the Notice of Intent to Issue Permit (NOI) that the Executive Director issues for this permit except for the following development: grading and construction necessary to construct the trails, bikeways and other development approved by this permit, public access and recreation facilities and appurtenances (e.g. signs, interpretive facilities, benches, shade structures, safety fencing), vegetation planting and removal, underground utilities, drainage devices, erosion control and repair, maintenance and repair activities pursuant to an in conjunction with the management and maintenance program detailed in Special Condition 4.A, provided that development that diminishes public access through any identified corridor shall be prohibited. This restriction shall apply to the following areas: The lands for public trails and bikeways, as depicted on final plans approved by the Executive Director but generally depicted on Marblehead Coastal, Amended Tentative Tract No. 8817, Sheets 1 and 2, dated February 14, 2003 and Marblehead Coastal Amended Residential Site Plan #97-16, plot date February 14, 2003. Except as noted on the plans identified above, all pedestrian trails shall have a minimum 10 foot wide corridor with a minimum 8 foot wide improved trail. Widths of bicycle corridors and trails shall be as described on Tentative Tract 8817.

The public access trails and associated appurtenances within the above identified land shall be open to the general public for recreational use.

The following additional development if approved by the Coastal Commission as an amendment to this coastal development permit or a new coastal development permit may be allowed in the areas covered by this condition (1.C.): maintenance of development authorized by this permit, trails and bikeways, public access and recreation facilities and appurtenances,, vegetation planting and removal, underground public utilities, drainage devices, and erosion control and repair. Development that diminishes public access through any identified corridor shall be prohibited.

The lands identified in this restriction shall be maintained in accordance with the final maintenance and funding program approved by the Executive Director in accordance with Special Condition 4.

D. Streets, Roads and Public Parking Areas

Streets, roads and parking shall be provided as described on Tentative Tract 8817, dated February 14, 2003. All publicly and privately maintained streets, roads and public parking areas identified in Tentative Tract 8817 shall be for public street purposes including, but not limited to, pedestrian, bicycle and vehicular access. Parking shall be provided as described in the applicant's submittal and on Tentative Tract 8817 dated February 14, 2003, except that all streets, whether publicly or privately maintained, except proposed street segments CCCC, DDDD, FFFF, OOOO, PPPP, QQQQ. RRRR, SSSS, shall be open to the public for vehicular access and parking. All streets, roads and public parking areas shall be open for use by the general public 24 hours per day. Long term or permanent physical obstruction of streets, roads and public parking areas in Tentative Tract 8817 shall be prohibited. All public entry controls (e.g. gates, gate/guard houses, guards, signage, etc.) and restrictions on use by the general public (e.g. preferential parking districts, resident-only parking periods/permits, etc.) associated with any streets or parking areas shall be prohibited, except that signage, curb painting or permits to restrict public access to certain parking areas may be implemented on proposed street segments CCCC, DDDD, FFFF, OOOO, PPPP, QQQQ. RRRR, SSSS.

The lands identified in this restriction shall be maintained in accordance with the final maintenance and funding program approved by the Executive Director in accordance with Special Condition 4.

E. **PRIOR TO ISSUANCE BY THE EXECUTIVE DIRECTOR OF THE NOI FOR THIS PERMIT**, the applicant shall submit for the review and approval of the Executive Director, and upon such approval, for attachment as an Exhibit to the NOI, formal legal descriptions and graphic depictions of the portions of the subject property affected by this condition, as generally described above and shown on Exhibit 4 attached to the findings in support of approval of this permit.

2. **OFFER TO DEDICATE IN FEE TO THE CITY OF SAN CLEMENTE OPEN SPACE FOR PARKS, PUBLIC ACCESS AND HABITAT ENHANCEMENT**

A. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, and in order to implement the permittee's proposal, the permittee shall submit to the Executive Director, for review and approval, a proposed document(s) irrevocably offering the dedication of fee title over the areas identified below to the City of San Clemente, and/or other public agency or non-profit entity acceptable to the Executive Director, for parks, public access, passive recreational use, habitat enhancement, trail, public parking and street purposes. Once the documents irrevocably offering to dedicate the areas identified below are approved, and also PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the permittee shall submit evidence that it has executed and recorded documents in a form and content acceptable to the Executive Director completing that offer to dedicate. The land shall be offered for dedication subject to the restrictions set forth in the special conditions of this permit, and the offer to dedicate shall reflect that fact. The offer shall be recorded free of prior liens and encumbrances which the Executive Director determines may affect the interest being conveyed. The offer shall run with the land in favor of the People of the State of California, binding all successors and assignees, and shall be irrevocable for a period of 21 years, such period running from the date of recording. The entirety of the following land shall be offered for dedication to the City, and/or other public agency or non-profit entity acceptable to the Executive Director pursuant to this condition: all of the land described as 'public open space', 'general open space', and 'roads (public)' in the land use summary on proposed Amended Tentative Tract No. 8817 dated February 14, 2003 submitted by the applicant.

B. Prior to the issuance by the City of San Clemente of the 200th certificate of occupancy of any residential unit approved by this permit, or 4 years from the date of issuance of this coastal development permit, whichever comes first, the permittee shall submit evidence that it has executed and recorded documents in a form and content acceptable to the Executive Director completing the transfer of fee title over the land identified in part A of this condition to the City of San Clemente and/or other public agency or non-profit entity acceptable to the Executive Director.

3. **OFFER TO DEDICATE TRAIL EASEMENTS OVER THE AREA DESCRIBED IN CONDITION 1.C**

PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the permittee shall execute and record document(s) in a form and content acceptable to the Executive Director, irrevocably offering to dedicate to a public agency or private association approved by the Executive Director an easement for public pedestrian and, where noted, bicycle access and passive recreational use of the corridors described below, but excluding from the offer any portion of a trail that shall be dedicated to the City of San Clemente in accordance with Special Condition2 of this permit. The recorded document(s) shall include legal descriptions

of both the permittee's entire parcel(s) and the easement area. The recorded document(s) shall also reflect that development in the offered area is restricted as set forth in the Special Conditions of this permit. The offer shall be recorded free of prior liens and encumbrances that the Executive Director determines may affect the interest being conveyed. The offer shall run with the land in favor of the People of the State of California, binding all successors and assignees, and shall be irrevocable for a period of 21 years, such period running from the date of recording. The lands to be offered for public trails and bikeways are generally depicted on Marblehead Coastal, Amended Tentative Tract No. 8817, Sheets 1 and 2, dated February 14, 2003 and Marblehead Coastal Amended Residential Site Plan #97-16, plot date February 14, 2003. Except as noted on the plans identified above, all pedestrian trails shall have a minimum 10 foot wide corridor with a minimum 8 foot wide improved trail. Widths of bicycle corridors and trails shall be as described on Tentative Tract 8817.

The lands identified in this dedication shall be maintained in accordance with the final maintenance and funding program approved by the Executive Director in accordance with Special Condition 4.

4. ACCESS AND HABITAT MANAGEMENT AND MAINTENANCE

A. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the permittee shall provide for the review and approval by the Executive Director a management and maintenance program for proposed parks, trails, open spaces, public facilities, associated structures and appurtenances for the foregoing and water quality management structures and associated appurtenances. The final program, which may be incorporated in whole or in part in the final habitat management plan, shall include the following:

1. IDENTIFY ALL ENTITIES RESPONSIBLE FOR OWNERSHIP, MANAGEMENT AND MAINTENANCE. In general, the owner of the land shall maintain it until such time as any easement required to be offered by this permit is accepted or a fee dedication required by this permit is complete, from which point on the easement-holder or the new holder of fee title shall maintain it. Where an easement or a fee dedication is accepted by an entity in accordance with the terms and conditions of this permit, the holder of the easement or fee title shall be responsible for management and maintenance of the facilities within the easement or land area unless the arrangements between the landowner and the fee or easement holder dictate that the landowner shall retain all or part of said management and maintenance responsibility. All management and maintenance shall occur in accordance with the approved management and maintenance program.

2. IDENTIFICATION OF MANAGEMENT AND MAINTENANCE ACTIVITIES AND ASSOCIATED FUNDING PROGRAM. The management and maintenance program shall include identification of management and maintenance activities and funding program that will provide for the actual cost of:

   i. maintenance and periodic repair and replacement of park facilities, trails and associated appurtenances including, but not limited to, landscaping, restrooms, trail routes and surfaces, fences, benches and other facilities; and appropriate domestic pet controls and services and,

   ii. on-going habitat protection, restoration and maintenance, including regular exotic plant removal, which shall also include on-site supervision of trail and

habitat areas by qualified personnel, operation of interpretive signs and displays, funding of public outreach programs, including resident education and docent program;

iii. maintenance of drainage systems, water quality management structures and other devices required to protect on-site habitat and ocean waters.

3. LEGAL AUTHORITY. The program shall demonstrate the legal ability of the assigned entities to undertake the development and maintain said development in accordance with the requirements of this permit.

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

5. **COVENANTS, CONDITIONS, AND RESTRICTIONS (CC&R'S), AND FINAL TRACT MAPS.**

A. Consistent with the applicant's proposal, the applicant shall establish covenants, conditions and restrictions (CC&R's), or an equivalent thereof, for the proposed residential lots and proposed regional commercial lots to address ownership and management of open space lots not dedicated to the City of San Clemente pursuant to Special Condition 2. The CC&R's shall reflect the requirements of this coastal development permit, including but not limited to the limitations on the development of the open space lots as proposed by the applicant and as conditioned by this permit.

B. Subject to the review and approval of the Executive Director, where feasible, the applicant shall consolidate proposed open space lots that are contiguous with one another and that are to be held by a common owner.

C. The CC&R's for the 313 proposed residential lots and all open space lots within the coastal zone not given to a public entity pursuant to Special Condition 2 above, except proposed lots SSS, UUU and VVV, shall indicate that: 1) all of those open space lots are to be held in common ownership of all residential lots; 2) those lots shall not be sold individually; 3) those lots shall be maintained by a common entity (e.g. master homeowner's association) in accordance with the special conditions of this permit.

D. The CC&R's (or equivalent) for the regional commercial center and proposed open space lots SSS, UUU and VVV, shall indicate that: 1) open space lots SSS, UUU and VVV shall be held in common ownership of all of the commercial lots; 2) the open space lots shall not be sold individually; 3) the open space lots shall be maintained by a common entity (e.g. the master residential homeowner's association identified in subpart A above or an equivalent commercial landowner's association) in accordance with the special conditions of this permit.

E. Consistent with the applicant's proposal, as soon as a homeowner's association or similar entity comprised of the individual owners of the 313 proposed residential lots is created, the applicant shall transfer title to the lots described in paragraph C to that entity. Consistent with the applicant's proposal, as soon as a commercial landowners' association or similar entity comprised of the individual owners of the

commercial lots is created, the applicant shall transfer title to the lots described in paragraph D to that entity.

F. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, and prior to recordation of any CC&R's, parcel maps or tract maps associated with the approved project, said CC & R's and Tract and parcel maps shall be submitted to the Executive Director for review and approval. The Executive Director's review shall be for the purpose of insuring compliance with the standard and special conditions of this coastal development permit. The restriction on use of the land cited within the special conditions of this permit shall be identified on the Tract Maps, where appropriate, and placed in the CC & R's. Any CC & R's, parcel map conditions or notes, or tract map provisions which the Executive Director determines are not consistent with any of the Conditions of this permit shall be modified to be consistent before recordation.

G. Simultaneous with the recording of the final tract map(s) approved by the Executive Director, the permittee shall record the covenants, conditions and restrictions approved by the Executive Director, against the property.

6. RENUMBERING AND TRACT MAP DESIGNATIONS

PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT and accompanying relevant revised, final plans submitted to the Executive Director for review and approval, the permittee shall prepare a comparison of the proposed final lot letters and numbers, with the lot letters and numbers shown on Tentative Tract 8817 dated February 14, 2003, and described in the Commission's actions. Numerical or letter designations of all lots necessary to conform to the Commission's Conditions shall be provided for the review and approval of the Executive Director. Additional lots created in order to conform to the Commission's Conditions shall be shown on the revised tentative tract maps subject to the review and approval of the Executive Director. The language of these special conditions shall be modified as necessary so that these conditions, as well as all recorded documents, shall reflect the final lots numbers, as approved by the Executive Director. An amendment to this permit to renumber lots and their configuration and locations shall be necessary if the Executive Director determines an amendment is required.

7. CONSTRUCTION/DEVELOPMENT PHASING

A. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit a revised, final construction phasing plan for review and approval by the Executive Director which shall conform with the following:

Prior to or concurrent with opening proposed Avenida Vista Hermosa for vehicular use by the public, the following roads, parking and trails shall be operational and open to the public: 1) proposed public road segment AAAA and the Park Access Road (Lot ZZ) including accompanying public parking areas (street parking and parking lots); and 2) trails identified on the exhibit titled "First Phase Habitat, Trail and Park Phasing Plan" dated April 2, 2003 submitted by the applicant and generally described as a continuous trail along the western side of Marblehead canyon linking Avenida Vista Hermosa to El Camino Real and with linkage to continuous bluff top, bluff edge, and mid-bluff trails that connect the proposed public park adjacent to Avenida Pico to the western side of the Western Canyon. Subject to the review and approval of the Executive Director, where construction of development authorized by

this permit follows opening of proposed Avenida Vista Hermosa and such construction would necessitate significant reconstruction of certain segments of the above trails, roads, and parking areas, those trail segments, roads and parking areas identified may be constructed with interim-level improvements (which shall suffice to meet the requirement at the beginning of this paragraph that they be operational and open to the public) until the required disturbance is completed, and the final trail is constructed to the standards identified in the final public access and recreation improvements plan(s) approved by the Executive Director. Subject to the review and approval of the Executive Director, trail segments constructed with interim-level improvements may be temporarily closed to facilitate construction of the development approved by this permit provided that direct alternative bypasses are made available.

Prior to the issuance by the City of San Clemente of the 50th certificate of occupancy of any residential unit approved by this permit or the occupation of the 50,001st square foot of commercial structure approved by this permit, the following shall occur: 1) at least fifty percent (50%) of the lands proposed for habitat restoration (generally those lands identified on the exhibit titled "First Phase Habitat, Trail and Park Phasing Plan" dated April 2, 2003 submitted by the applicant and generally located along the bluffs and in the canyons nearest El Camino Real) shall have been planted or seeded in accordance with the final Habitat Management Plan, however, such planting and seeding shall not take place until appropriate exotic removal and control has taken place. The remainder of the lands to be restored shall occur as soon as possible thereafter in accordance with the final habitat management plan approved by the Executive Director; 2) the proposed park area near the bluffs along El Camino Real at the termination of the Park Access Road (Lot ZZ) shall be constructed with interim level improvements and open to the public; and 3) Except as identified below in this condition, the proposed park nearest Avenida Pico (proposed Lots E and F) including facilities to support public use of the park (e.g. parking, roads, etc.) shall be constructed in accordance with the final road improvement, public access and recreation facilities and signage plans approved by the Executive Director and open to the public. In order to accommodate construction disturbance associated with the widening of Avenida Pico approved by this permit, the access from Avenida Pico to the proposed park (proposed Lots E and F) may be constructed with interim-level improvements until the widening is completed. When widening of Avenida Pico is completed the park access shall be constructed to the standards identified in the final public access and recreation improvements plans approved by the Executive Director. Plans for any interim level improvements shall be submitted for review and approval by the Executive Director prior to issuance of the coastal development permit.

All trails shall be fully improved in accordance with the final public access and recreation facilities plans approved by the Executive Director in accordance with the completion date identified in the applicant's Trail Phasing Plan dated February 12, 2003, except where the conditions of this permit mandate completion of such facilities upon a different time frame.

Notwithstanding the phasing identified above, prior to the occupation of any 200th residential unit approved by this permit or no later than 4 years from the date of issuance of this coastal development permit, whichever comes first, all trails and associated appurtenances, all parks and associated facilities and appurtenances, all public roads, and the initial phase of restoration on all lands proposed for habitat restoration shall be completed in accordance with the final public access and

recreation improvements plans and final habitat management plan approved by the Executive Director.

B. The permittee shall undertake development in accordance with the approval final construction/development phasing plans. Any proposed changes to the approved final construction/development phasing plans shall be reported to the Executive Director. No changes to the approved final plans shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is required.

8. GENERAL CONSTRUCTION RESPONSIBILITIES

A. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the permittee shall submit, for the review and approval of the Executive Director, a final construction-phase erosion, sediment and polluted runoff control plan that conforms with the requirements of this permit and has been approved by the City of San Clemente. The erosion, sediment and polluted runoff control plan shall include written descriptions and site plans, as necessary, to describe the non-structural and structural erosion, sediment and polluted runoff controls to be used consistent with the requirements of this permit. The permittee shall undertake development in accordance with the approved final plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. Except for minor adjustments in the location of temporary erosion control measures necessary to protect trails, parks and habitat resources, no changes to the approved final plan shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is required. In addition, the construction-phase erosion, sediment, and polluted runoff control plan shall include the following requirements:

1. Erosion, sedimentation and polluted runoff shall be minimized to the maximum extent practicable.
2. Construction materials, chemicals, debris, and sediment shall be properly contained and secured on site to prevent the unintended transport of materials, chemicals, debris, and sediment into wetlands, habitat areas, and coastal waters by wind, rain, runoff, or tracking;
3. Best Management Practices (BMPs) designed to prevent spillage and/or runoff of construction-related materials and to contain sediment or contaminants associated with construction activity shall be implemented prior to the on-set of construction. BMPs selected shall be maintained in a functional condition throughout the duration of the project. A comprehensive education program designed to advise and educate construction personnel of the applicable Construction Best Management Practices enumerated in this Special Condition 8.A.3. A pre-construction meeting shall be held for all personnel to review procedural and BMP guidelines. BMPs that shall be implemented include, but are not limited to:
   a. Erosion & Sediment Source Control.
      i. Construction shall be sequenced to install sediment-capturing devices first, followed by runoff control measures and runoff conveyances. Land clearing activities shall only commence after the minimization and capture elements are in place;
      ii. Clearing and grading activities shall be timed to avoid the rainy season (October 15th to April 15th), where feasible;

iii. Grading shall be phased to minimize the area of bare soil exposed at one time;
iv. Only areas essential for construction shall be cleared;
v. Bare soils shall be stabilized with nonvegetative BMPs within five days of clearing or inactivity in construction. If seeding or another vegetative erosion control method is used, such vegetation should become established within two weeks. Applicable stabilization BMPs may include:
    - Mulching bare soil surfaces with blankets of straw, wood chips, shredded bark or other plant residue, gravel, or synthetic material;
    - Establishing native perennial vegetative cover with seed in disturbed areas to minimize erosion;
    - Seeding with rapid-growing native annual plants can be considered for temporary stabilization of disturbed soils that will not be brought to final grade within 30 days;
    - Sod, instead of seed, for surface stabilization, in areas with steep slopes and unsuitable for seeding, such as flowways and around inlets.
vi. Construction entrances shall be properly graded and stabilized to prevent runoff and tracking of sediments from construction site. The entrances shall be stabilized immediately after grading and frequently maintained to prevent erosion and control dust.
vii. In areas prone to high winds, wind erosion controls shall be implemented to limit the movement of dust from disturbed soil surfaces. Wind erosion controls may include wind barriers that block air currents and are effective in controlling blowing soil. Materials for wind barriers may include solid board fences, snow fences, and bales of hay. Provided that runoff is controlled, water may be sprinkled on soils for dust control.

b. Runoff Control and Conveyance
    i. Runoff above disturbed slopes shall be intercepted and conveyed to a permanent channels or stormdrains by using earth dikes, perimeter dikes or swales, or diversions. Use check dams where appropriate;
    ii. Benches, terraces, or ditches shall be constructed at regular intervals to intercept runoff on long or steep slopes. Biodegradable fiber rolls are recommended along the face of exposed and erodible slopes to shorten slope length;
    iii. Provide protection for runoff conveyance outlets by reducing flow velocity and dissipating flow energy;

c. Sediment-Capturing Devices
    i. Install stormdrain inlet protection that traps sediment before it enters the storm sewer system. Such barriers may consist of filter fabric, gravel, or sand bags. The use of straw bales is discouraged for this purpose;
    ii. Install sediment traps/basins at outlets of diversions, channels, slope drains, or other runoff conveyances that discharge sediment-laden water. Sediment traps are usually used for drainage areas no greater than 5 acres, while the basins are appropriate for larger areas. Sediment traps/basins shall be cleaned out when 50% full (by volume). Temporary detention basin(s) shall be designed to capture runoff generated in a 10-year storm event for the area to be graded, to the extent feasible and practicable, however in no event shall such basins be designed to capture less than the runoff generated in a 2-year, 24 hour storm event with a 40 hour draw down time;;
    iii. Use silt fences and/or vegetated filter strips to trap sediment contained in sheet flow. The maximum drainage area to the fence shall be 0.5 acre or

less per 100 feet of fence. Silt fences shall not be used on slopes where flow is concentrated. Silt fences shall be inspected regularly and sediment removed when it reaches 1/3 the fence height. Vegetated filter strips shall have relatively flat slopes and be vegetated with native erosion-resistant species.

d. Chemical Control
   i. Properly store, handle, apply, and dispose of pesticides, petroleum products, and other construction materials;
   ii. All construction materials with the potential to emanate harmful chemicals shall be stored securely by enclosing the material on all sides and not in contact with the bare ground surface;
   iii. Establish fuel and vehicle maintenance staging areas located away from all upland habitat, wetlands and drainage courses, and design these areas to control runoff. Equipment shall be properly maintained and stream crossings (only in locations previously approved) shall be properly installed in order to reduce pollution of water by these sources;
   iv. Develop and implement spill prevention and control measures.
   v. Provide sanitary facilities for construction workers.
   vi. Maintain and wash equipment and machinery in confined areas specifically designed to control runoff. Thinners or solvents shall not be discharged into surface waters or sanitary or storm sewer systems. Washout from concrete trucks shall be disposed of at a location not subject to runoff and more than 50 feet away from a stormdrain, open ditch or surface water. Where feasible, recycle washout by pumping backing into mixers for reuse. If not feasible, let water percolate through soil and dispose of settled, hardened concrete with trash.
   vii. Provide adequate disposal facilities for solid waste, including excess asphalt, produced during construction.
   viii. Develop and implement nutrient management measures. Properly time applications, and work fertilizers and liming materials into the soil to depths of 4 to 6 inches. Reduce the amount of nutrients applied by conducting soil tests to determine site nutrient needs.

e. Debris Control
   i. Disposal of debris and excess material. Debris and excess material shall be disposed or recycled at a legal disposal/recycling site. 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 required. No debris or excess material shall be dumped within any canyon, placed on the beach, or on any protected habitat or restoration areas without a coastal development permit.
   ii. Construction debris and sediment shall be removed from construction areas as necessary to prevent the accumulation of sediment and other debris which may be discharged into coastal waters.
   iii. Any and all debris resulting from construction activities shall be removed from the project site within 24 hours of completion of construction;
   iv. Lunchtime trash shall be properly recycled or disposed of by the end of every construction day.

B. Grading and construction shall fully comply with the provisions of the final habitat management plan approved by the Executive Director including, but not limited to, the recommendations relative to the preservation of groundwater flow characteristics and wetlands hydrology contained within the document titled Geotechnical Review of

the Proposed Grading Plan for Marblehead Coastal, Amended Tentative Tract 8817, City of San Clemente, Orange County, dated October 19, 2001, and prepared by Lawson & Associates of San Clemente (Project No. 010009-01).

C. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the permittee shall submit, for the review and approval of the Executive Director, final engineered grading plans for all of the proposed development which shall incorporate the requirements of these special conditions. The plans shall have been reviewed and approved by the project geologist, the City engineer and the City geologist. Grading plans shall substantially conform to the preliminary plans shown on Tentative Tract Map No 8817 dated February 14, 2003, except as required to be modified by these special conditions. The permittee shall undertake development in accordance with the approved final plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved final plans shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is required.

9. <u>CONSTRUCTION STAGING AREA AND FENCING</u>

A. All construction plans and specifications for the project shall indicate that impacts to wetlands and environmentally sensitive habitats shall be avoided and that the California Coastal Commission has not authorized any impact to wetlands or other environmentally sensitive habitat. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the permittee shall submit a final construction staging and fencing plan for the review and approval of the Executive Director which indicates that the construction in the construction zone, construction staging area(s) and construction corridor(s) shall avoid impacts to wetlands and other sensitive habitat consistent with this approval. The plan shall include the following requirements and elements::

1. Wetlands and any other environmentally sensitive habitats shall not be affected in any way, except as specifically authorized in this permit.
2. Prior to commencement of construction, temporary barriers shall be placed at the limits of grading adjacent to ESHA. The barriers shall be a minimum 8 feet tall and one-inch thick in those areas adjacent to occupied gnatcatcher habitat. Solid physical barriers shall be used at the limits of grading adjacent to all other ESHA. Barriers and other work area demarcations shall be inspected by a qualified biologist to assure that such barriers and/or demarcations are installed consistent with the requirements of this permit. All temporary barriers, staking, fencing shall be removed upon completion of construction.
3. No grading, stockpiling or earth moving with heavy equipment shall occur within ESHA, wetlands or their designated buffers, except as noted in the final habitat management plan approved by the Executive Director.
4. No construction materials, debris, or waste shall be placed or stored where it may enter sensitive upland habitat or wetlands, storm drain, receiving waters, or be subject to wind erosion and dispersion;
5. No construction equipment shall be stored within any ESHA, wetlands or their buffers.
6. The plan shall demonstrate that:
   a. Construction equipment, materials or activity shall not occur outside the staging area and construction zone and corridors identified on the site plan required by this condition; and

b. Construction equipment, materials, or activity shall not be placed in any location which would result in impacts to wetlands or other sensitive habitat;

7. The plan shall include, at a minimum, the following components:
   a. A site plan that depicts:
      i. limits of the staging area(s)
      ii. construction corridor(s)
      iii. construction site
      iv. location of construction fencing and temporary job trailers with respect to existing wetlands and sensitive habitat
      v. Compliance with 'General Construction Responsibilities' Special Condition of this coastal development permit.

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

10. FINAL HABITAT MANAGEMENT PLAN

A. The permittee shall implement and comply with the habitat protection, enhancement and loss mitigation measures in the final habitat preservation and mitigation plan (i.e. final habitat management plan) approved by the Executive Director, the primary elements of which are described within the documents titled Marblehead Coastal Project Habitat Management Plan dated November 28, 2001, as amended (most recent amendment is dated February 14, 2003), and Protection and Enhancement Plan for Upland ESHA dated February 2003 with Addendum dated February 13, 2003, which implements the preservation or creation of the following habitat within the coastal zone at the project site: preserve 10.26 acres of existing CSS habitat, create 64.22 acres of CSS habitat on-site (no further disturbance), plus 1.23 acres of CSS habitat on-site that may be subject to periodic disturbance for fuel management and utility maintenance, plus 1.68 acres of CSS off-site; preserve 0.62 acres of native perennial grassland and create 4.3 acres of native perennial grassland (of which 3.26 acres may be subject to periodic disturbance for fuel modification); preserve 5.21 acres of wetland habitat; create 0.2 acres of alkali meadow wetlands within the canyons; and create 1.72 acres of wetland and 2.90 acres of wetland/mixed riparian scrub within the proposed detention basins; and which shall be modified as described below and elsewhere within these special conditions.

B. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the permittee shall submit a revised, final habitat management plan for review and approval by the Executive Director. The final habitat management plan shall be developed in consultation with the California Department of Fish & Game and U.S. Fish & Wildlife Service. The final habitat management plan shall substantially conform with the Habitat Management Plan dated November 28, 2001, as amended, and the Protection and Enhancement Plan for Upland ESHA dated February 2003 with Addendum dated February 13, 2003, except that it shall be modified as follows:

1. Wetlands shall have 100-ft wide buffers (horizontally), except at the "slot" canyon (generally within proposed Lots C and D of proposed Tract 8817), where a minimum 50-foot wide buffer shall be required. Except for the proposed bridge pilings for proposed Avenida Vista Hermosa, the installation of utilities near the mouth of Marblehead Canyon, and except for habitat restoration and

maintenance and construction and maintenance of public trails, there shall be no development, including grading or fuel modification, in the wetland buffers. However, prior to construction of the utilities, the permittee shall submit a hydrologic analysis for review and approval of the Executive Director which demonstrates that the construction of the utilities in the areas identified as 8 and 9 on Exhibit 19c to the findings adopted in support of this permit shall have no negative effects on wetland hydrology.

2. Upland ESHA shall have 100-foot wide (horizontally) buffers, where feasible. The minimum buffer width shall be 50 feet wide (horizontally). There shall be no development, including grading, within 50 feet of ESHA boundaries and no grading within 50 feet of coastal bluff scrub, Blochman's dudleya populations, native grasslands and those stands of CSS within gnatcatcher use areas, with these exceptions: a) One-time, brief (less than 30 days) grading to construct the western-most detention basin may take place within 50 feet of CSS; b) One-time, brief (less than 30 days) grading to construct the eastern detention basin; c) Grading and subsequent construction of approved development within 50 feet of ESHA adjacent to the slot canyon (proposed Lot C); d) one-time trenching and placement of utilities within 50 feet of ESHA located at the mouth of Marblehead canyon; e) Grading adjacent to the gnatcatcher use area next to the existing central soil stockpile (i.e. in the vicinity of proposed Lots 90 to 106 in proposed Tract 8817) may take place within 50 feet of CSS; f) Grading along the upper edges of the western canyon; and along the western edge of Drainage B, g) Brief trenching to install storm drain and sewer along the east side of the western detention basin, h) brief, one-time trenching for the installation of subsurface sewer and storm drain lines within a maximum 20 foot wide disturbance area from the western detention basin, down the bluff face to El Camino Real provided no saltbushes are disturbed and work only occurs outside the gnatcatcher breeding season; i) Construction of approved trails and associated structures; j) Habitat maintenance and restoration activities. In no case shall grading or other soil disturbance (including driving of vehicles), other than for habitat restoration activities and construction and maintenance of trails and associated appurtenances, take place closer than 20 feet from ESHA boundaries.
3. In order to preserve habitat connectivity including protecting the California gnatcatcher, the permittee shall eliminate proposed turf within proposed Lot I of proposed Tract 8817. Vegetation within Lot I shall consist of plants native to coastal Orange County and appropriate to the natural habitat type. Lot I shall be incorporated into the final Habitat Management Plan and shall be managed consistent with the provisions of the plan. In addition to appropriate vegetation, Lot I shall include a recreational trail along the bluff edge and vista points including seating and interpretive signs. Only wildlife resistant trash receptacles shall be utilized within Lot I.
4. All turf within the 50 foot ESHA buffer identified on Exhibit 19 shall be eliminated. These areas shall be planted with native vegetation appropriate to the habitat type.
5. The proposed trail segment that passes through the slot canyon (Lot C on proposed Tract 8815) shall be routed to avoid ESHA. The revised route shall maintain an on-site connection between the easterly detention basin (Lot XX) and the park (Lot F) by following the perimeter of proposed Lots C and D. The trail shall be located at the outer perimeter of the ESHA buffer, where feasible.
6. A trail and pedestrian bridge that crosses ESHA and it's buffer and that provides a public access connection between Lot F and Lot J shall be allowable.
7. Trails passing through ESHA, buffers and ESHA connecting areas shall be limited to pedestrian and wheelchair use (i.e. no bicycles or equivalent).

8. Grading Adjacent to CSS-ESHA: There shall be no grading within 100 feet of native scrub habitats that occur within ESHA boundaries during the gnatcatcher breeding season(considered to be from February 15 through August 31), if gnatcatchers are present. During the non-breeding season(September 1 through February 14), ESHA defined by historical gnatcatcher use shall be shielded from the sight and sound of construction activities taking place within 50 feet of the ESHA using the techniques proposed by the applicant in the documents identified above.
   Grading Associated with Non-ESHA CSS: Approved clearing of non-ESHA CSS shall occur outside of the gnatcatcher breeding season. Subject to the review and approval of the Executive Director, clearing of CSS more than 100 feet from Environmentally Sensitive Habitat Area shown on Exhibit 19 of the findings for this permit may occur during the gnatcatcher breeding season, if the contingency measures given in subsection 9 of this condition are implemented to minimize impacts to gnatcatchers.
9. The permittee shall staff a qualified monitoring biologist on-site during all CSS clearing and any other project-related work adjacent to CSS to be avoided. The biologist must be knowledgeable of gnatcatcher biology and ecology. The permittee shall ensure that the biologist shall perform the following duties:
   a. Prior to and during the clearing of any CSS or other suitable gnatcatcher habitats outside the gnatcatcher breeding season, the biologist shall locate any individual gnatcatchers on-site and direct clearing to begin in an area away from birds. In addition, the biologist shall walk ahead of clearing equipment to flush birds towards areas of habitat that will be avoided. It shall be the responsibility of the permittee to assure that gnatcatchers shall not be directly injured or killed by the clearing of CSS.
   b. If clearing of CSS within 100 feet of the Environmentally Sensitive Habitat Area shown on Exhibit 19 of the findings of approval is necessary and approved by the Executive Director during the gnatcatcher breeding season, in addition to the above, the biologist shall locate and monitor gnatcatchers and/or any gnatcatcher nests within clearing areas by conducting a minimum of three surveys, on separate days, after the initiation of the nesting season to determine the presence of gnatcatchers, nest building activities, egg incubation activities, or brood rearing activities. These surveys shall be conducted within the week prior to the initiation of clearing. One survey shall be conducted the day immediately prior to the initiation of clearing. If gnatcatchers are found, but no nests, the biologist shall flush the gnatcatchers from the clearing area as described above. If nesting birds are found, a nest monitoring program approved by the Executive Director in consultation with the Resources Agencies shall be initiated and clearing shall be postponed within and adjacent to the foraging area used by the pair during the nesting cycle, until the nest is determined either a success or failure by the Executive Director in consultation with the Resources Agencies and the project biologist. Nest success/failure shall be established by regular and frequent trips to the site, on an as-needed basis, as determined by the biologist and approved by the Executive Director in consultation with the Resources Agencies. Further work activities within and adjacent to the foraging area shall not be initiated until nestlings have fledged or the nest has been determined a failure, as approved by the Executive Director in consultation with the Resources Agencies. The biologist shall then flush any adult and/or fledgling gnatcatchers from the clearing area as described above.
   c. If project construction within 100 feet of CSS to be avoided is necessary and

approved by the Executive Director during gnatcatcher breeding season, the biologist shall locate and monitor gnatcatchers (including nests) within 100 feet of work. The biologist shall determine whether bird activity within this area is being substantially disrupted by implementing a monitoring plan developed in consultation with the Resources Agencies and approved by the Executive Director. If the biologist determines that gnatcatcher activity is being substantially disrupted, the permittee shall stop work and coordinate with the Executive Director in consultation with the Resources Agencies to minimize and mitigate noise to 60 dBA adjacent to habitat occupied by gnatcatchers through the use of sound walls and/or other measures designed in consultation with the Resources Agencies and approved by the Executive Director .

d. Prior to initiating clearing and/or project construction during the gnatcatcher breeding season, the biological monitor shall meet on-site with the construction manager and/or other individual(s) with oversight and management responsibility for the day-to-day activities on the construction site to discuss implementation of the relevant avoidance/minimization/mitigation measures for gnatcatcher. The biologist shall meet as needed with the construction manager (e.g., when new crews are employed) to discuss implementation of these measures.

e. The permittee shall submit weekly reports (including photographs of impact areas) to the Executive Director and the Wildlife Agencies during initial clearing of CSS and/or project construction within 100 feet of avoided CSS during the gnatcatcher breeding season. The weekly reports shall document that authorized CSS impacts were not exceeded, work did not occur within the 100-foot setback during the gnatcatcher breeding season except as approved by the Executive Director, and general compliance with all conditions. The reports shall also outline the duration of gnatcatcher monitoring, the location of construction activities, the type of construction which occurred, and equipment used. These reports shall specify numbers, locations, and sex of gnatcatchers (if present), observed gnatcatcher behavior (especially in relation to construction activities), and remedial measures employed to avoid, minimize, and mitigate impacts to gnatcatchers. Raw field notes shall be available upon request by the Executive Director.

10. The 4.3 acres of native perennial grassland proposed to be created by the applicant shall not count toward mitigation of impacts to native grassland that occurred during emergency bluff grading. In addition to the 4.3 acres of native perennial grassland proposed to be created by the applicant, the applicant shall mitigate the impact to 2.5 acres of native perennial grassland (a.k.a. needlegrass grassland) that occurred during emergency bluff grading in 1990 by restoring/creating native perennial grassland at biologically suitable site(s) within the habitat management plan area that will not be subject to fuel modification, in quantities consistent with biological restoration goals (but not less than 5 acres), subject to the review and approval of the Executive Director.
11. Trails, parks, turf areas, sidewalks, and roadways shall be separated from adjacent ESHA and buffer areas with fences and barrier plantings designed to define the limits of the use area but that are easily passable by coyotes and smaller mammals. Those portions of residential lots immediately adjacent to ESHA and buffer areas shall be separated from those areas with fencing or walls adequate to prevent the passage of people and domestic pets.
12. Any fences around the western and central detention basin shall be easily passable by coyotes and smaller mammals. The area of the western detention

basin shall not be accessible from the nearby residential area by residents and the general public. Fencing and barrier plantings shall be used, as appropriate, to control entry to habitat areas and detention basins by residents and the general public.

13. Only locally native species (no cultivars) obtained within coastal Orange County as available from as close to the project area as possible shall be used within the habitat restoration area. The source and proof of local nativeness of all plant material and seed shall be provided in the plan;
14. Coastal bluff scrub restoration (CBS) shall be designed to preserve existing Blochman's dudleya habitat and shall be designed to allow expansion of the dudleya occupied habitat by natural recruitment. Restoration shall include enhancing Blochman's dudleya populations wherever there is appropriate physical habitat.
15. All CSS and CBS restoration sites shall be prepared for planting by decompacting the top soil in a way that mimics natural CSS top soil to the maximum extent practicable and in a manner consistent with preservation of Blochman's dudleya. Topsoil and plant materials salvaged from the CSS areas to be impacted shall be transplanted to, and/or used as a seed/cutting source for, the CSS restoration areas to the maximum extent practicable. All planting shall be installed in a manner that mimics natural plant distribution, and not in rows.
16. Only irrigation that is temporary and associated with restoration shall be allowed within ESHA boundaries, within ESHA buffers, and within open space and habitat intended to promote connectivity between Marblehead canyon and the western canyon.
17. Restoration activities in the open space areas adjacent to the coastal bluff and in the western canyons shall be initiated as soon as possible and planting shall take place prior to the construction of residences near this area, except where this schedule is not compatible with best restoration practices (e.g., optimal weed control). Restoration (including preparatory activities such as weed control) shall begin no later than the initiation of grading activities and shall proceed contemporaneously with project construction.
18. The permittee shall fence the limits of the construction corridor to demarcate the boundary of the habitat that is authorized to be impacted by this coastal development permit and the habitat which shall be avoided. Fencing shall be designed to prevent additional CSS impact and spread of silt from the construction zone into adjacent CSS and other habitats and shall allow the continued circulation of small mammals, including coyote, through the site.
19. The habitat management plan shall be modified to eliminate reference to off-site mitigation as an automatically acceptable contingency measure. Contingency mitigation shall be determined by the Executive Director, or the Commission if an amendment or new permit is deemed necessary.
20. The habitat management plan shall be modified to eliminate the exemption for replanting due to natural hazards. The necessity to replant as a result of damage to restored areas due to natural hazards shall be determined by the Executive Director.
21. The permittee shall submit a final report prepared by the biological monitor to the Executive Director, for review and approval, within 60 days of project completion that includes: as-built construction drawings with an overlay of CSS and wetlands that were impacted and avoided, photographs of CSS and wetland areas avoided, and other relevant summary information documenting that authorized CSS and wetlands impacts were not exceeded and general compliance with all conditions of this permit.
22. The permittee shall install protective fencing or barriers along any interface with

developed areas and/or use other measures, designed in consultation with the Resources Agencies and approved by the Executive Director, to deter human and pet entrance into all avoided/restored CSS and wetland areas. Plans for fencing and/or other preventative measures shall be submitted to the Executive Director for review approval prior to the issuance of the coastal development permit in accordance with the 'Construction Staging Area and Fencing' special condition of this permit.

23. The permittee shall implement a perpetual management, maintenance and monitoring plan for the habitat management plan area. The plan shall include a description of the perpetual management, maintenance and monitoring actions. The permittee shall also establish a non-wasting endowment in favor of the State of California for an amount determined in consultation with the Resources Agencies and approved by the Executive Director based on a Property Analysis Record (PAR) (Center for Natural Lands Management ©1998) to secure the ongoing funding for the perpetual management, maintenance and monitoring of the habitat management plan area by an agency, non-profit organization, or other entity approved by the Executive Director. The non-wasting endowment shall be no less than the proposed $250,000 plus an amount equal to $75 per dwelling per year (adjusted annually consistent with the Consumer Price Index) for each residential unit. Until a qualified management entity is identified, the permittee shall be responsible for such management.
24. The permittee shall develop a resident education program. The program shall advise residents of the potential impacts to sensitive plant and animal species and the potential penalties for taking (i.e. disturbing or harming) such species. The program shall include, but not be limited to, information pamphlets and signage included as part of the interpretive program within the habitat management plan area. Informational pamphlets shall be distributed to all residences on a regular basis (e.g. once a year). At a minimum, the program shall include the following topics: occurrence of the listed and sensitive species in the area, their general ecology, sensitivity of the species to human activities, impacts from free-roaming pets (particularly domestic and feral cats), legal protection afforded these species, penalties for violations of Federal and State laws, reporting requirements, the importance of the presence of large predators such as the coyote in maintaining the habitat, and project features designed to reduce the impacts to these species and promote the species continued successful occupation of the preserved areas.
25. The permittee shall ensure that development landscaping adjacent to the habitat management plan area shall be consistent with the 'Landscaping Requirements' special condition of this permit which prohibits the use of exotic plant species that may be invasive to native habitats anywhere within the development. The final habitat management plan shall incorporate the lists of approved and prohibited plant species required to be submitted pursuant to the 'Landscaping Requirements' special condition of this permit.
26. The permittee shall ensure that development lighting adjacent to the habitat management plan area shall be directed away from and/or shielded so as not to illuminate native habitats.
27. The proposed restoration monitoring and maintenance shall occur for the proposed five (5) year period. Annual mitigation maintenance and monitoring reports shall be submitted to the Executive Director no later than one month following the close of the reporting year. The permittee or successor in interest shall comply with the proposed Habitat Management Plan performance criteria. Monitoring shall include botanical as well as animal resources such as gnatcatcher usage. Gnatcatcher monitoring shall document nesting, breeding

territory size and location, and fledging success. Performance criteria shall include botanical goals and wildlife usage goals. If at the end of the proposed 5 year period the performance criteria have not been met, the permittee or successor in interest shall provide an analysis to the Executive Director of reasons the plan did not succeed and the measures to be taken to ensure success. If at the end of the proposed 5 year period the performance criteria have not been met, the permittee or successor in interest shall seek an amendment for measures to ensure the success of the habitat restoration plan. Restoration monitoring and maintenance shall be extended in accordance with the requirements of any amendment. This requirement does not limit the permittee's responsibility for post-restoration, perpetual monitoring and maintenance required in these special conditions.

28. Restoration activities, such as weed control and removal and planting and seeding shall not take place within 100 feet of gnatcatcher territory where gnatcatchers are present unless the permittee provides a biological monitor who will ensure no impacts to gnatcatcher occur and the permittee must obtain prior written approval from the Resources Agencies. Prior to initiation of such activities, the permittee shall submit written evidence of Resources Agency approval for the review and approval of the Executive Director.
29. Appropriate controls and services that prohibit the entry of domesticated animals into habitat restoration areas shall be identified and implemented. In addition, appropriate controls and services shall be identified and implemented for areas where domestic animals may be permitted, such as trails.

C. The permittee shall undertake development in accordance with the approved final plans. Any proposed changes to the approved final plans or phases of construction shall be reported to the Executive Director. No changes to the approved final plans shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is required.

11. LANDSCAPE REQUIREMENTS

A. All areas disturbed and/or denuded by the development shall be re-vegetated and maintained to protect habitat and to prevent erosion into habitat areas, wetlands, and coastal waters. Such re-vegetation shall occur in accordance with the requirements of the special conditions of this permit. Furthermore, undisturbed areas shall be re-vegetated in accordance with the final Habitat Management Plan approved by the Executive Director. All required plantings shall be maintained in good growing condition throughout the life of the project, and whenever necessary, shall be replaced with new plant materials that conform to the requirements of the special conditions of this permit.

B. Except for landscaping on the non-open space lots in the regional commercial development and the private residential lots within TTM 8817 and for approved turf within the park areas, all landscaping (including temporary erosion control and final landscaping) for the entire development covered by this permit shall be of plants native to coastal Orange County and appropriate to the natural habitat type. Native plants used for landscaping shall be obtained, to the maximum extent practicable, from seed and vegetative sources on the project site. No plant species listed as problematic and/or invasive by the California Native Plant Society, California Exotic Pest Plant Council, or as may be identified from time to time by the State of California shall be utilized anywhere within the proposed development area, including the landscaping within the regional commercial development and private residential lots of TTM 8817 and the park areas. No plant species listed as a

'noxious weed' by the State of California or the U.S. Federal Government shall be utilized anywhere within the proposed development area, including the private residential lots of TTM 8817 and the park areas. Use of drought tolerant and native plant species is encouraged within the private residential lots and within approved turf areas in parks.

C. For visual purposes, prior to the issuance of the coastal development permit, a visual enhancement plan shall be submitted for review and approval by the Executive Director that is designed to soften, through selective placement of vegetation, the visual impact of large expanses of wall or roof within residentially and commercially developed portions of the site that would be visible from the proposed parks and significant vantage points along proposed trails. The plan shall provide for the adequate planting of shrubs, vines, groundcover, and occasional trees, selectively placed to soften the visual impact of approved development from significant vantage points. Such plantings shall comply with fuel modification requirements of the relevant fire authority. Vegetation for visual softening shall be installed by the landowner within 180 days of occupancy of each applicable residence in accordance with the CC&Rs for the proposed residences and prior to occupancy of the applicable commercial structure(s).

D. Temporary Erosion Control Landscaping. See 'General Construction Responsibilities' Condition.

E. Timing of Final Landscaping. Final landscaping guidelines for all areas outside the habitat management plan area shall be completed and submitted for review and approval by the Executive Director prior to the issuance of the coastal development permit. The guidelines shall state that landscaping shall be installed by the landowner consistent with the guidelines within 180 days of initial occupancy of each residence or each commercial building approved by this permit. Interim erosion control measures shall be identified in the guidelines. The guidelines shall be consistent with the requirements of this coastal development permit. The applicable covenants, conditions and restrictions required by Special Condition 5 for all areas outside the habitat management plan area shall require that landscaping be consistent with the landscaping guidelines approved by the Executive Director. The timing of re-vegetation efforts within the habitat restoration areas identified in the revised final Habitat Management Plan shall be as indicated in the revised final Habitat Management Plan approved by the Executive Director.

F. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the permittee shall submit landscape palette lists to be incorporated into the landscaping guidelines detailed in Special Condition 11.E. subject to the review and approval of the Executive Director, that identify: 1) the native plant species that may be planted in the development; 2) a representative list of the non-native, non-invasive common garden plant species that may be planted in the residential lots; 3) the non-native, non-invasive turf that may be planted within approved turf areas in parks, and 4) the invasive plant species that are prohibited from use anywhere within the development. The landscape palette for the development shall be consistent with the lists of approved plants as reviewed and approved by the Executive Director. These lists shall remain available for public consultation at the California Coastal Commission, the City of San Clemente, any homeowners association(s) established for the development, and from the on-site naturalist for the Project. Additions to or deletions from these lists may be made by the Executive Director of the California Coastal Commission, in consultation with the project's restoration ecologist and the resource

agencies. No deviations from the list shall occur in the plantings on the site without an amendment to this permit or a new coastal development permit unless the Executive Director determines that no amendment or new permit is required.

G. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the permittee shall submit for review and approval by the Executive Director final landscaping and erosion control plans for the entire project (e.g. open spaces, parks, trail corridors, common open spaces, graded and disturbed areas, and the commercial and residential development). The plans shall be modified in accordance with the requirements of the special conditions of this permit. The permittee shall undertake development in accordance with the approved final plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved final plans shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is required.

H. PRIOR TO SUBMITTAL OF FINAL LANDSCAPE PALETTE LISTS, LANDSCAPE PLANS, AND TEMPORARY EROSION CONTROL PLANS, the permittee shall obtain the review and approval of those lists and plans by the California Department of Fish and Game, the United States Fish and Wildlife Service and the Orange County Fire Authority. Written evidence of the required reviews and approvals shall be submitted with the lists and plans submitted to the Executive Director.

I. CONCURRENT WITH SUBMITTAL OF ALL PLANS IDENTIFYING LANDSCAPING, the permittee shall provide an analysis of each plan submitted, prepared by a qualified biologist, which documents that the landscaping complies with all of the landscaping and habitat management requirements of this permit.

J. Monitoring. Five years from the date of the completion of the installation of landscaping as required in these special conditions, the permittee shall submit for the review and approval of the Executive Director, a landscape monitoring report, prepared by a licensed Landscape Architect or qualified Resource Specialist, that certifies the on-site landscaping is in conformance with the requirements of the special conditions of this permit and the landscape plans approved pursuant to the special conditions of this permit. The monitoring report shall include photographic documentation of plant species and plant coverage. If the landscape monitoring report indicates the landscaping is not in conformance with or has failed to meet the performance standards specified in the landscaping plan approved pursuant to this permit, the permittee, or successors in interest, shall submit a revised or supplemental landscape plan for the review and approval of the Executive Director. The revised landscaping plan must be prepared by a licensed Landscape Architect or a qualified Resource Specialist and shall specify measures to remediate those portions of the original plan that have failed or are not in conformance with the original approved plan. The permittee or successor in interest shall implement the supplemental landscaping plan approved by the Executive Director and/or seek an amendment to this permit if required by the Executive Director.

12. <u>FIRE HAZARD MITIGATION AND FUEL MODIFICATION REQUIREMENTS</u>

A. All fuel modification shall be consistent with the requirements of this permit, the final habitat management plan approved by the Executive Director, and the final fuel management plan to be submitted for review and approval of the Executive Director pursuant to subpart B of this condition that is conceptually described in the

"Conceptual Fuel Management Plan for the Marblehead Coastal Development Amended Tentative Tract No. 8817", prepared by Firewise 2000, Inc. dated 27 November 2002 and amended on February 19, 2003. Proposed and future residential and commercial structures shall be set back a sufficient distance from proposed habitat preservation and restoration areas such that there is no vegetation thinning or clearance required by the relevant fire authority (e.g. Orange County Fire Authority) within habitat preservation and restoration areas and such that there is no prohibition by the fire authority on the types of native plant species that may be planted or allowed to grow within the habitat preservation and restoration areas, except as specified in the Conceptual Fuel Management Plan identified above and the final fuel management plan identified below. In general, the fuel management allowed within habitat preservation and restoration areas is outside of ESHA and buffers and limited to trimming of created native perennial grasses located between residences and CSS along each side of Marblehead canyon, and between residences and the trail and the eastern detention basin (proposed Lot XX). This requirement shall not result in any reduction of preserved and restored habitat or public access and recreation opportunities.

B. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the permittee shall submit a final fuel management plan for the development for review and approval by the Executive Director which shall be consistent with the requirements outlined above and in the special conditions of this permit. The final fuel management plan and relevant development plans shall have received final approval from the relevant fire authority and the submittal shall include written evidence of said approval. The final plans for the development and the final fuel management plan shall incorporate the mitigation measures outlined in the "Conceptual Fuel Management Plan for the Marblehead Coastal Development Amended Tentative Tract No. 8817", dated November 27, 2002 and amended February 14, 2003. The fuel management plan shall include a statement which states that any changes to the plan, including any changes required by the relevant fire authority or other resource agencies, shall be reported to the Executive Director of the Coastal Commission, and shall require an amendment to this permit or a new coastal development permit prior to implementation of changes unless the Executive Director of the Coastal Commission determines that no amendment or new permit is required.

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

D. For purposes of this permit, this condition shall serve as notification to present and future property owners that certain structures and areas of land are subject to special fuel treatment requirements that are specified in the final fuel management plan approved by the Orange County Fire Authority and the Executive Director of the Commission. With some exceptions, all commercial and residential structures facing upon open spaces and perimeter slopes vegetated with coastal sage scrub within Tract 8817 are required to incorporate building construction features consistent with Orange County Fire Authority guidelines for construction of structures within special fire hazard areas. Furthermore, with some exceptions, there is a prohibition on the placement of combustible materials in an area of land within residential and commercial lots that abut open spaces and perimeter slopes vegetated with coastal

sage scrub within Tract 8817. Proposed and future development shall conform to the requirements of the final fuel management plan.

13. LIGHTING

A. All lighting within the development shall be directed and shielded so that light is directed away from wetlands, canyons, coyote access corridors, bluff face, and other habitat areas. Furthermore, no skyward-casting lighting shall be used. The lowest intensity lighting shall be used that is appropriate to the intended use of the lighting. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the permittee shall submit, for the review and approval of the Executive Director, revised plans to protect the wetlands, canyons, coyote access corridors, bluff face and other habitat areas from light generated by the project. The lighting plan to be submitted to the Executive Director shall be accompanied by an analysis of the lighting plan prepared by a qualified biologist which documents that the lighting plan is effective at preventing lighting impacts upon adjacent environmentally sensitive habitat.

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

14. WALLS, FENCES, GATES, SAFETY DEVICES AND BOUNDARIES

A. Walls, fences, gates, safety devices and boundary treatments within or controlling access to open spaces and wildlife corridors shall be designed to allow the free ingress, egress and traversal of the habitat areas of the site by wildlife, including the coyote. Where the backyards of residences abut habitat areas, there shall be walls, fences, gates, safety devices and boundary treatments, as necessary, to contain domestic animals within the residential and commercial development and exclude such animals from sensitive habitat. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the permittee shall submit final revised plans showing the location, design, height and materials of all walls, fences, gates, safety devices and boundary treatments for the review and approval of the Executive Director. Said plans shall be accompanied by an analysis of the wall, fence, gate and boundary treatment plan prepared by a qualified biologist which documents that the modified walls, fences, gates and safety barriers and boundary treatments will minimize the uncontrolled entry of domesticated animals into environmentally sensitive habitat and allow for free ingress, egress and traversal of the habitat areas of the site by wildlife, including the coyote. The plans shall have received prior review and approval by the City of San Clemente, the California Department of Fish and Game and the United States Fish and Wildlife Service.

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

15. PUBLIC ACCESS AND RECREATION IMPROVEMENTS AND SIGNAGE

A. The applicant shall ensure the construction of the public access and recreation improvements for park and trail purposes as described in the project description submitted by the applicant; in a letter from the City of San Clemente dated February 2, 2002; and depicted on plans titled Marblehead Coastal, Amended Tentative Tract No. 8817, Sheets 1 and 2, dated February 14, 2003; Marblehead Coastal Amended Residential Site Plan #97-16, plot date February 14, 2003; Marblehead Coastal Landscape Concept Plan Amended Commercial Site Plan, dated December 5, 2001; Marblehead Coastal Landscape Concept Plan Amended Residential Site Plan #97-16, dated February 14, 2003 and as modified by the special conditions of this permit. All public access and recreation improvements for park and trail purposes shall be completed and open for use by the general public in accordance with the final construction phasing plan approved by the Executive Director in accordance with the 'Construction/Development Phasing' special condition of this permit. Furthermore, the facilities identified in this condition shall be maintained in accordance with the final maintenance and funding program approved by the Executive Director in accordance with the 'Access and Habitat Management and Maintenance' special condition of this permit.

B. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the permittee shall submit revised final, detailed plans of the public access and recreation improvements for park and trail purposes for review and approval by the Executive Director. All facilities constructed shall be sited and designed to minimize disturbance to adjacent habitat areas and to minimize the obstruction of public views. All facilities shall conform with the final habitat management plan approved by the Executive Director. Plans shall identify all structures including location, dimensions, materials and colors, and use as well as sign text, size and orientation. All plans shall be of sufficient scale and detail to verify the location, size and content of all signage, and the location, size, materials and use of structures during a physical inspection of the premises. The plans shall be revised to incorporate any additional trails, open space and park areas required by the Special Conditions of this permit. Said plans shall have received prior review and approval by the City of San Clemente and shall reflect the City's final plans relative to the parks and trails. Development which is not specifically shown on the final plans which are reviewed and approved by the Executive Director and which the City intends to construct within the park shall require an amendment to this permit or a new coastal development permit unless the Executive Director determines that no amendment or new permit is required. The final plans shall also comply with the following:

1. Public Recreational Facilities: The final plans submitted for review and approval by the Executive Director shall include detailed plans identifying all recreational and support amenities such as picnic tables, outdoor cooking facilities, trash facilities, children's play facilities, restrooms, sports courts, recreational buildings, hardscape, etc. In addition to any other modifications necessary to comply with the special conditions of this permit, the following modifications shall be incorporated into the public recreational facilities plan:
   i. At minimum, restrooms shall be located within proposed Lot F and within proposed Lot N of proposed Tract 8817;
   ii. Turf shall not be installed within the proposed turf area (Lot I) seaward of the central detention basin. In place of turf, the area shall be re-vegetated with plants native to coastal Orange County and appropriate to the natural habitat type. In addition to appropriate vegetation, Lot I shall include a recreational

trail along the bluff edge and vista points including seating and interpretive signs. Only wildlife resistant trash receptacles shall be utilized within Lot I;

iii. All turf within the 50 foot ESHA buffer, such as the area of proposed Lot N adjacent to the western canyon, shall be eliminated. These areas shall be re-vegetated with plants native to coastal Orange County and appropriate to the natural habitat type. The proposed trail through this area shall be retained but re-routed to conform with the buffer criteria identified in the 'Final Habitat Management Plan' special condition of this permit.

2. Public Trail Plan: The final plans submitted for review and approval by the Executive Director shall include detailed trail improvement plans for both interim (as necessary) and final phases. An interim trail improvement plan shall only be necessary should the applicant choose to implement interim trail improvements in advance of final, trail improvements in accordance with the criteria outlined in the 'Construction/Development Phasing' condition of this permit. The detailed interim and final trail improvement plans submitted shall be in substantial conformance with the plans identified above and as modified by the conditions of this permit. Said plan(s) shall include trail alignment, width, and materials; designated parking; interpretive signs; designated overlooks; recreational appurtenances such as benches, picnic tables, shade structures, refuse containers; fencing between trails and habitat areas; erosion control and footpath control plantings (such as cactus adjacent to sensitive areas); steps, where necessary. In addition to any other modifications necessary to comply with the special conditions of this permit, the following modifications shall be incorporated into the final trail plan:

   i. Unless deemed inconsistent with the final habitat management plan by the Executive Director, a trail and pedestrian bridge that bypasses El Camino Real and provides a direct trail connection between the portions of the bluff park that flank the mouth of Marblehead canyon (e.g. Lot F and Lot J of proposed Tract 8817) shall be constructed;

   ii. A continuous pedestrian trail shall follow the entire rim of the western canyon with connections to the bluff edge trail at each end;

   iii. The proposed trail segment that passes through the slot canyon (Lot C on proposed Tract 8815) shall be routed to avoid ESHA. To the maximum extent feasible the revised route shall maintain an on-site connection between the trail that follows the perimeter of the easterly detention basin (Lot XX), and the park (Lot F), by following the perimeter of proposed Lots C and D. The trail shall be located at the outer perimeter of the ESHA buffer, where feasible.

3. Sign Plan: The final plans submitted for review and approval by the Executive Director shall include a detailed signage plan which directs the public to the various public access and recreation opportunities on the project site and declares the public's right to use such facilities. Signs shall invite and encourage public use of access opportunities and shall identify, provide information and direct the public to key locations. Key locations including, but not limited to, public parking (including both parking along streets and within parking lots), parks, trails, restrooms, and overlooks. Signage shall be visible from major thoroughfares (e.g. El Camino Real, Avenida Pico, proposed Avenida Vista Hermosa) and from internal circulation roads, access corridors and parks. Signage shall include public facility identification monuments (e.g. public park name); community identification monuments (e.g. Marblehead Community); facility identification/directional monuments (e.g. location of park amenities); key

directional monuments (e.g. small monuments at key street intersections to direct the public to various amenities); informational signage and circulation (e.g. maps of community and circulation, location of major amenities); interpretive signs, and roadways signs. Signs shall also identify key habitat preservation areas, explain biology and other resource characteristics of the site, explain water quality management at the site, and identify restricted areas. Signs not explicitly permitted in this document shall require an amendment to this permit unless the Executive Director determines that no amendment is required.

B. The revised plans shall, prior to submittal to the Executive Director, be reviewed and certified by a qualified professional to ensure that they are consistent with the Commission's approval and with the recommendations of any required technical reports.

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

16. <u>WATER QUALITY</u>

A. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit, for the review and approval of the Executive Director, a final revised Water Quality Management Plan (WQMP) for the post-construction project site. The WQMP shall be prepared by a licensed water quality professional and shall include project plans, hydrologic calculations, and details of the structural and non-structural Best Management Practices (BMPs) that shall be included in the project.

The final plan shall be reviewed by the consulting engineering geologist to ensure conformance with geotechnical recommendations. The final plan shall demonstrate substantial conformance with the <u>Marblehead Coastal Water Quality Plan</u> dated November 28, 2001, prepared by RBF Consulting with addendum sheet received April 17, 2002; revision dated April 18, 2002, including Revised Exhibit 8 'Marblehead Stormwater Quality Monitoring Plan by GeoSyntec Consultants; Exhibit 9 Recommended Maintenance Activities by GeoSyntec Consultants; Exhibit 10 Proposed Responsibility and Funding for Marblehead Coastal Development Water Quality Best Management Practices; and revision dated February 14, 2003. In addition to the specifications above, the plan shall be in substantial conformance with the following requirements:

1. <u>Best Management Practice Specifications</u>

   a. Site Design, Source Control, and Treatment Control BMPs shall be designed to reduce, to the maximum extent practicable, the volume, velocity and pollutant load of storm water and nuisance flow leaving the developed site.
   b. Maintain, to the maximum extent practicable, pre-development peak runoff rates and average volume of runoff;
   c. Post-construction structural BMPs (or suites of BMPs) shall be designed to treat, infiltrate or filter the amount of storm water runoff produced by all storms up to and including the 85th percentile, 24-hour storm event for volume-based BMPs, and/or the 85th percentile, 1-hour storm event, with an appropriate safety factor (i.e., 2 or greater), for flow-based BMPs.

d. The structural BMPs shall be constructed prior to or concurrent with the construction of infrastructure associated with the development within Tentative Tract 8817. Prior to the occupancy of residential or commercial structures approved by this permit, the structural BMPs proposed to service those structures and associated support facilities shall be constructed and fully functional in accordance with the final WQMP approved by the Executive Director.

e. All structural and non-structural BMPs shall be maintained in a functional condition throughout the life of the approved development to ensure the water quality special conditions are achieved. Maintenance activity shall be performed according to the specifications in 'Exhibit 9: Recommended Maintenance Procedures, prepared by GeoSyntec Consultants' (dated February 5, 2002) of the "Marblehead Coastal Water Quality Plan" (dated November 28, 2001 plus amendments thereto). At a minimum, maintenance shall include the following:

   i. All structural BMPs shall be inspected, cleaned and repaired, as needed prior to the onset of the storm season, no later than October 1st of each year; after every major storm event; and at least once during the dry season;
   ii. Wetlands vegetation installed within water quality detention basins shall be monitored and maintained in a manner that ensures successful establishment of the vegetation and ongoing ability of the vegetation to remove pollutants for the life of the development. All such maintenance shall be conducted under the supervision of a qualified wetlands biologist or qualified professional for the life of the development;
   iii. 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 and restoration of the eroded area. Should repairs or restoration become necessary, prior to 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. If the Executive Director determines that an amendment or a new permit is required to authorize the work, no such work shall begin or be undertaken until it is approved in accordance with the process outlined by the Executive Director;
   iv. Should a qualified water quality professional(s) determine that the Recommended Maintenance Procedures as proposed in the Marblehead Coastal Water Quality Plan need to be revised due to site-specific data, the applicant shall submit revisions and supporting information describing the reason for the revisions for review and approval of the Executive Director.

2. <u>Residential Low Flow Diversion:</u>

   a. The applicant shall submit final design specifications for the installation of the low flow diversion pumps for the residential area. Prepared by a licensed water quality professional, the designs shall demonstrate sufficient sizing of pumps and/or pump structures to divert all dry weather/nuisance flows from the drainage area called the "residential area" in the submitted Water Quality Plan.

3. Landscaping and Gardens
   a. Where irrigation is necessary and consistent with the final Habitat Management Plan approved by the Executive Director, the applicant shall install efficient irrigation systems, and to the extent feasible and commercially available satellite technology irrigation controllers, in all commercial landscaped areas and common areas and the CC&Rs required pursuant to Special Condition 5 shall require such efficient irrigation systems in landscaping and in residential lots. Efficient irrigation systems are those that match the water demand of the vegetation and the quantity of water delivered to the vegetation.
   b. Drought tolerant, non-invasive vegetation that is native to coastal Orange County shall be used as dictated in the 'Landscape Requirements' special condition of this permit.
   c. The use of chemical pesticides, herbicides, and fertilizers shall be minimized to the maximum extent practicable. An Integrated Pest Management Program (IPM) shall be implemented in all common area landscaping and encouraged in other development areas. The IPM Program shall be designed and implemented for all of the proposed landscaping/planting on the project site and shall include the following IPM features, as appropriate:
      i. Bacteria, viruses and insect parasites shall be considered and employed as a pest management measure, where feasible.
      ii. Manual weeding, hoeing and trapping.
      iii. Use of non-toxic, biodegradable, alternative pest control products.

   d. Where pesticides and/or herbicides are deemed necessary in conjunction with the IPM program, the list of pesticides and their application methods shall be included in the plans. Pesticides that are not on the list approved by the Executive Director shall not be used.
   e. The applicant or responsible party shall be responsible for educating all landscapers or gardeners on the project site about the IPM program and other BMPs applicable to water quality management of landscaping and gardens. Education shall include written and verbal materials.

4. Restaurants:
   a. Wash down areas for restaurant equipment and accessories and food preparation areas shall be designed to meet the following:
      i. The area shall be self-contained, equipped with a grease interceptor, and properly connected to a sanitary sewer. The grease interceptor shall have the capacity to capture grease to the maximum extent practicable.
      ii. If a wash area is to be located outdoors, it shall be covered, paved, have primary containment, and be connected to the sanitary sewer.
      iii. The grease interceptor shall be regularly maintained according to manufacturer's specifications to ensure maximum removal efficiencies.
      iv. The applicant shall be responsible for ensuring that restaurant owners, managers, and staff are educated about the use and maintenance of grease interceptors, as well as best management practices designed to limit, to the maximum extent practicable, the contribution of pollutants from restaurants, wash areas, loading areas, trash and recycling storage areas.
      v. Informational signs around the establishments for employees and customers about water quality and the BMPs used on-site shall be provided.

5. Trash and recycling containers and storage areas:
The applicant shall use trash and recycling containers and storage areas that, if they are to be located outside or apart from the principal commercial structures, are fully enclosed and water-tight in order to prevent stormwater contact with waste matter which can be a potential source of bacteria, grease, and particulates and suspended solids in runoff, and in order to prevent dispersal by wind and water. Trash container areas must have drainage from adjoining roofs and pavement diverted around the area(s), and must be screened or walled to prevent off-site transport of trash.

6. Avenida Pico:
   a. Runoff from all new and redeveloped surfaces on Avenida Pico, including the portion of road northeasterly of the proposed Avenida Vista Hermosa and Avenida Pico intersection, as well as all surfaces in the 8.5 acre drainage area that encompasses the northwesterly half of Avenida Pico fronting the project site (Lots D, E, and F of proposed Tentative Tract 8817) and the Parking Lot E contained therein, shall be collected and directed through a system of media filter devices and bioswales. The filter elements shall be designed to treat, filter, or infiltrate runoff and 1) trap sediment, particulates and other solids and 2) remove or mitigate contaminants through filtration and biological uptake. The drainage system shall also be designed to convey and discharge runoff in a non-erosive manner.

   b. The applicant shall incorporate the proposed bioswale within proposed Lot F of TTM 8817 in the treatment train treating runoff from Avenida Pico which is described in the April 26, 2002 letter prepared by RBF Consulting to the California Coastal Commission.

7. El Camino Real:

   a. Runoff from all new and redeveloped surfaces on El Camino Real shall be collected and directed through a system of media filter devices. The filter elements shall be designed to treat, filter, or infiltrate runoff and 1) trap sediment, particulates and other solids and 2) remove or mitigate contaminants through filtration. The drainage system shall also be designed to convey and discharge runoff in a non-erosive manner.

8. Education and Training

   a. Annual verbal and written training of employees, tenants, landscapers, and property managers and other parties responsible for proper functioning of BMPs in commercial development shall be required.
   b. Outdoor drains in the commercial site shall be labeled/stenciled to indicate whether they flow to an on-site treatment device, a storm drain, or the sanitary sewer as appropriate.
   c. Storm drain stenciling ("No Dumping, Drains to Ocean" or equivalent phrase) shall occur at all storm drain inlets in the development.
   d. Annual verbal and written training of homeowners, Homeowners Associations, BMP maintenance crews, landscapers, and other parties responsible for proper functioning of BMPs in commercial development shall be required.
   e. Informational signs around the commercial establishments for customers and

employees/tenants about water quality and the BMPs used on-site shall be provided.

f. Informational signs around the residential development for homeowners and the public about urban runoff and the BMPs used on-site shall be provided near the detention ponds, at trail heads, and at centralized locations near storm drain inlets.

B. Water Quality Monitoring Plan

PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit, for review and approval of the Executive Director, a final revised Water Quality Monitoring Plan, designed to characterize and evaluate the potential effects of stormwater and dry weather runoff from the proposed development on receiving waters. The final plan shall demonstrate substantial conformance with the "Exhibit 8 "Marblehead Coastal Stormwater Quality Monitoring Plan Overview" dated December 5, 2001, prepared by GeoSyntec Consultants and its revisions dated February 5, 2002, and it shall be consistent with the requirements of these special conditions:

1. Water quality monitoring for the Marblehead Development shall comply with the following requirements:

   a. Baseline water quality data of pre-development conditions shall be collected prior to commencement of construction. The baseline water quality studies shall be sufficient to document background (pre-development) levels of the contaminants that will be analyzed in the ongoing water quality monitoring program.
   b. Dry weather sampling shall be conducted from the commencement of construction through the time in which low flow diversions are permanent. Dry weather sampling shall occur on a monthly basis.

2. The Water Quality Monitoring Plan shall include a map of the proposed sampling locations.
3. If monitoring results indicate that incidents are occurring in which applicable water quality standards including, but not limited to, any applicable standards in the California Toxics Rule and the California Ocean Plan, are not being met and/or that recurring incidents are threatening to establish a condition in which applicable water quality standards are not being met, the applicant shall investigate the cause or source of the incidents and/or condition and provide information to the Executive Director demonstrating any incidents and/or resulting condition in which applicable water quality standards have not been met is not the result of the applicant's failure to comply with the terms and conditions of this Permit. If the Executive Director determines otherwise, based on the information generated from the applicant's investigation and all other information available to the Executive Director, corrective actions or remedies shall be required. If remedies or corrective actions constitute development under Section 30106 of the Coastal Act, an amendment to this Permit shall be required, unless the Executive Director determines no such amendment is required.
4. Baseline water quality data of the pre-development conditions of the constituents that will be monitored in the Stormwater Quality Monitoring Plan shall be collected.
5. The applicant shall clarify parameters that will "trigger" a reevaluation of trash and debris BMPs in the Water Quality Monitoring Plan.

6. In addition to construction phase monitoring, post-development monitoring shall be conducted for a minimum period of three (3) years, following completion of development approved by this permit. Annual reports and semiannual updates containing data and analytical assessment of data in comparison to any applicable water quality objectives and other criterion specified herein, shall be submitted to the Executive Director of the Commission and to the San Diego Regional Water Quality Control Board for three (3) years after all construction approved by this permit has been completed.

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

17. <u>AVENIDA VISTA HERMOSA BRIDGE REQUIREMENTS AND PLAN REVISIONS</u>

A. All development associated with the construction of the proposed Avenida Vista Hermosa Bridge shall maintain a minimum 25 foot horizontal setback from wetlands and a minimum 61 foot vertical clearance from the wetland surface. Also, the permittee shall maximize public views available to motorists, bicyclists and pedestrians from the proposed bridge through the installation of bridge rails that minimize visual obstructions for bridge users. Furthermore, the bridge shall be constructed with materials that are colored and textured to be compatible with the canyon. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit revised plans to the Executive Director for review and approval. The revised plans shall incorporate the above requirements and show the following changes to the Avenida Vista Hermosa bridge:

1. All development shall maintain a minimum 25 foot horizontal setback from wetlands and a minimum 61 foot vertical clearance from the wetland surface;

2. The bridge should be designed to provide suitable habitat for locally occurring bat species, as feasible.

3. Bridge rails shall be designed to minimize visual obstructions for bridge users. Bridge rails to be used shall have been crash tested and approved for use with sidewalks in California by the California Department of Transportation (CalTrans). At minimum, the applicant shall utilize the Type 80-SW bridge rail or Type ST-10 bridge rail, whichever is less visually obtrusive in this application. If a less visually obtrusive bridge rail has been crash tested and approved for use with sidewalks in California, said rail shall be used. The Executive Director shall approve the least obtrusive CalTrans-approved bridge rail, which in order of preference from least preferable to most preferable known at this time consists of the Type-80SW (CalTrans-approved), "Wyoming modified" rail (not yet known to be CalTrans-approved), and then the "Alaska" rail (not yet known to be CalTrans-approved).

4. Excepting the roadway surface, the structure shall be constructed with materials that have been colored with earth tones that are compatible with the canyon; white and black tones shall not be used; the color shall be maintained throughout the life of the structure; the structure shall have a non-reflective texture to be compatible the adjacent canyon; decorative accents (e.g. stamped patterns) shall

be used where feasible.

B. If a less visually obtrusive bridge railing becomes CalTrans approved after the permittee complies with subsection A of this condition, the permittee is strongly encouraged to use such railing. The Executive Director may approve revised plans incorporating said railing without requiring an amendment to this coastal development permit, unless the Executive Director determines that an amendment is required.

C. The permittee shall undertake development in accordance with the approved final plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. Except as noted in subsection B, no changes to the approved final plans shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is required.

18. REVISED PLANS

PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the permittee shall submit, for the review and approval of the Executive Director, revised final plans, approved by the City of San Clemente, which conform with the requirements of the special conditions of this permit and indicate the final layout of all development including but not limited to lots, grading, streets, utilities and easements, infrastructure, water quality management system, trails and other access corridors, park and recreation facilities, signs, interpretive amenities, habitat restoration, landscaping, and residential and commercial buildings and appurtenance. The permittee shall undertake development in accordance with the approved final plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved final plans shall occur without a Commission amendment to this coastal development permit unless the Executive Director determines that no amendment is required.

19. CONFORMANCE OF DESIGN AND CONSTRUCTION PLANS TO GEOTECHNICAL REPORT

A. All final design and construction plans, including foundations, grading and drainage plans, shall be consistent with all recommendations contained in Geotechnical Review of the Proposed Grading Plan for Marblehead Coastal, Amended Tentative Tract 8817, City of San Clemente, Orange County, dated October 19, 2001, and prepared by Lawson & Associates of San Clemente (Project No. 010009-01) and subsequent, supplemental recommendations identified in the geologic reports listed under Substantive File Documents of the adopted findings. PRIOR TO THE ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the permittee shall submit, for the Executive Director's review and approval, evidence that an appropriate licensed professional has reviewed and approved all final design and construction plans and certified that each of those final plans is consistent with all of the recommendations specified in the above-referenced geologic evaluations approved by the California Coastal Commission for the project site.

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

20. ASSUMPTION OF RISK, WAIVER OF LIABILITY AND INDEMNITY

By acceptance of this permit, the permittee acknowledges and agrees (i) that the site may be subject to hazards from landslide, bluff retreat, erosion, and earth movement; (ii) to assume the risks to the permittee 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.

21. LOT 352 RESTRICTION

Development of Lot 352 within proposed Tract 8817 shall be limited to:

1. Grading and development approved by Coastal Development Permit 5-03-013, future visitor-serving commercial, active public recreation and support facilities, passive public recreation and support facilities, open space, habitat restoration, and water quality improvement facilities; and

2. the following development, if approved by the Coastal Commission as an amendment to this coastal development permit or new coastal development permit: landslide and erosion repair and underground public utilities.

3. Future structures shall not exceed two floors above the land grade approved by Coastal Development Permit 5-03-013.

4. Future structures shall be sited and designed to minimize the obstruction of public views from public parks, trails and open spaces approved by Coastal Development Permit 5-03-013.

5. Future structures shall be sited and designed to conform, at minimum, with the ESHA buffer requirements outlined in this permit.

22. STRUCTURAL APPEARANCE CONDITION - EXTERIOR BUILDING MATERIALS

A. For structures that would be visible from, face upon, or be constructed within proposed parks, open spaces and trails, all walls and building exteriors shall be finished in earth tones including deep shades of brown, gray and green, with no white, light or bright colors except as minor accent features. The color shall be maintained through-out the life of the structure(s).

B. The proposed to be re-constructed terrace and down drains on the El Camino Real bluff shall be finished in earth tones that are compatible with the adjacent bluff face and vegetation. White and black tones shall not be used. The color shall be maintained through-out the life of the structure(s). The structure(s) shall have a non-reflective texture to match the adjacent bluff face.

23. RESIDENTIAL AREA HEIGHT RESTRICTIONS AND SLOPE EDGE SETBACKS

A. The heights of residential structures and appurtenances shall be as identified in the final plans approved by the Executive Director. Future development shall conform with these heights unless such heights are changed by an amendment to this permit, unless the Executive Director determines that no amendment to this permit is required.

B. Structures (enclosed) and appurtenant buildings on residential lots adjoining canyons within Tract 8817 shall be setback a minimum of 20 feet from the slope edge created as a result of grading approved under Coastal Development Permit 5-03-013. Slope edge shall be defined as the upper termination of a canyon slope. In cases where the top edge of the canyon is rounded away from the face of the canyon slope as a result of grading approved under this permit or erosional processes related to the presence of the slope, the slope line or edge shall be defined as that point nearest the canyon slope beyond which the downward gradient of the surface increases more or less continuously until it reaches the general gradient of the canyon slope. In a case where there is a steplike feature at the top of the canyon slope, the landward edge of the topmost riser shall be taken to be the slope edge.

24. INLAND COMMERCIAL SITE RESTRICTIONS

A. Non-visitor serving uses shall be prohibited on the main pedestrian level of all commercial buildings located on designated commercial lots in Tract 8817, or portions thereof, within the coastal zone.

B. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the permittee shall provide written evidence of a reciprocal/shared parking agreement which ensures that all proposed and future uses in the commercial center shall have use of all parking spaces within commercial lots 353 to 379 in Tract 8817.

C. As proposed by the applicant, the general public shall be allowed to park within the parking spaces within commercial lots 353 to 379 in Tract 8817 at the same times and under the same conditions as the visitors to the shopping center. Parking validation from the commercial center shall not be required to park within the commercial parking area.

D. If the regional commercial center is constructed in sub-phases, prior to the occupation of any portion of each sub-phase, the permittee shall demonstrate to the Executive Director that sufficient parking to support that sub-phase, in combination with demand and available parking associated with any prior sub-phase, has been provided on-site. At minimum, such demonstration shall consist of a parking analysis prepared by qualified personnel and evidence of approval of the proposed quantity of parking from the City of San Clemente.

E. Structures (enclosed) and appurtenant buildings on commercial lots adjoining canyons within Tract 8817 shall be setback a minimum of 20 feet from the slope edge created as a result of grading approved under Coastal Development Permit 5-03-013. Slope edge shall be defined as the upper termination of a canyon slope. In cases where the top edge of the canyon is rounded away from the face of the canyon slope as a result of grading approved by this permit or erosional processes related to the presence of the slope, the slope line or edge shall be defined as that point nearest the canyon slope beyond which the downward gradient of the surface

increases more or less continuously until it reaches the general gradient of the canyon slope. In a case where there is a steplike feature at the top of the canyon slope, the landward edge of the topmost riser shall be taken to be the slope edge.

F. The heights of commercial structures and appurtenances shall be as identified in the final plans approved by the Executive Director. Future development shall conform with these heights unless such heights are changed by an amendment to this permit, unless the Executive Director determines that no amendment is required.

25. FUTURE DEVELOPMENT RESTRICTION

This permit is only for the development described in Coastal Development Permit No. 5-03-013. Pursuant to Title 14, California Code of Regulations, sections 13250(b)(6) and 13253(b)(6), the exemptions otherwise provided in Public Resources Code, section 30610(a) and 30610(b) shall not apply. Accordingly, any future improvements to the single family houses and other structures described in this permit, including but not limited to repair and maintenance identified as requiring a permit in Public Resources Code, section 30610(d) and Title 14, California Code of Regulations, sections 13252(a)-(b), shall require an amendment to Permit No. 5-03-013 from the Commission or shall require an additional coastal development permit from the Commission or from the applicable certified local government, unless the Executive Director of the Commission determines that no amendment or new permit is required.

26. AREA OF POTENTIAL ARCHAEOLOGICAL SIGNIFICANCE

A. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit for the review and approval of the Executive Director a revised archeological monitoring plan prepared by a qualified professional, that shall incorporate the following measures and procedures:

1. The applicant shall comply with all recommendations and mitigation measures contained in the Archaeology Plan prepared for the project by Gavin H. Archer, RPA, dated November 2002, as amended by the Archeological Monitoring and Treatment plan dated February 20, 2003 and as further modified by the conditions below and any other applicable conditions of this permit;
2. If any cultural deposits are discovered during project construction, including but not limited to skeletal remains and grave-related artifacts, traditional cultural sites, religious or spiritual sites, or artifacts, the permittee shall carry out significance testing of said deposits and, if cultural deposits are found to be significant, additional investigation and mitigation in accordance with this special condition including all subsections. No significance testing, investigation or mitigation shall commence until the provisions of this special condition are followed, including all relevant subsections;
3. If any cultural deposits are discovered, including but not limited to skeletal remains and grave-related artifacts, traditional cultural sites, religious or spiritual sites, or artifacts, all construction shall cease in accordance with subsection B. of this special condition;
4. In addition to recovery and reburial, in-situ preservation and avoidance of cultural deposits shall be considered as mitigation options, to be determined in accordance with the process outlined in this condition, including all subsections;
5. Archaeological monitor(s) qualified by the California Office of Historic Preservation (OHP) standards, Native American monitor(s) with documented ancestral ties to the area appointed consistent with the standards of the Native

American Heritage Commission (NAHC), and the Native American most likely descendent (MLD) when State Law mandates identification of a MLD, shall monitor all project grading;

6. The permittee shall provide sufficient archeological and Native American monitors to assure that all project grading that has any potential to uncover or otherwise disturb cultural deposits is monitored at all times;
7. If human remains are encountered, the permittee shall comply with applicable State and Federal laws. Procedures outlined in the monitoring plan shall not prejudice the ability to comply with applicable State and Federal laws, including but not limited to, negotiations between the landowner and the MLD regarding the manner of treatment of human remains including, but not limited to, scientific or cultural study of the remains (preferably non-destructive); selection of in-situ preservation of remains, or recovery, repatriation and reburial of remains; the time frame within which reburial or ceremonies must be conducted; or selection of attendees to reburial events or ceremonies. The range of investigation and mitigation measures considered shall not be constrained by the approved development plan. Where appropriate and consistent with State and Federal laws, the treatment of remains shall be decided as a component of the process outlined in the other subsections of this condition.
8. Prior to the commencement and/or re-commencement of any monitoring, the permittee shall notify each archeological and Native American monitor of the requirements and procedures established by this special condition, including all subsections. Furthermore, prior to the commencement and/or re-commencement of any monitoring, the permittee shall provide a copy of this special condition, the archeological monitoring plan approved by the Executive Director, and any other plans required pursuant to this condition and which have been approved by the Executive Director, to each monitor.

B. If an area of cultural deposits, including but not limited to skeletal remains and grave-related artifacts, traditional cultural sites, religious or spiritual sites, or artifacts, is discovered during the course of the project, all construction activities in the area of the discovery that has any potential to uncover or otherwise disturb cultural deposits in the area of the discovery and all construction that may foreclose mitigation options or the ability to implement the requirements of this condition shall cease and shall not recommence except as provided in subsection C and other subsections of this special condition. In general, the area where construction activities must cease shall be 1) no less than a 50 foot wide buffer around the cultural deposit; and 2) no more than the residential enclave or commercial development area within which the discovery is made.

C. An applicant seeking to recommence construction following discovery of the cultural deposits shall submit a Significance Testing Plan for the review and approval of the Executive Director. The Significance Testing Plan shall identify the testing measures that will be undertaken to determine whether the cultural deposits are significant. The Significance Testing Plan shall be prepared by the project archaeologist(s), in consultation with the Native American monitor(s), and the Most Likely Descendent (MLD) when State Law mandates identification of a MLD. The Executive Director shall make a determination regarding the adequacy of the Significance Testing Plan within 10 working days of receipt. If the Executive Director does not make such a determination within the prescribed time, the plan shall be deemed approved and implementation may proceed.
   (1) If the Executive Director approves the Significance Testing Plan and determines that the Significance Testing Plan's recommended testing measures are de

minimis in nature and scope, the significance testing may commence after the Executive Director informs the permittee of that determination.

(2) If the Executive Director approves the Significance Testing Plan but determines that the changes therein are not de minimis, significance testing may not recommence until after an amendment to this permit is approved by the Commission.

(3) Once the measures identified in the significance testing plan are undertaken, the permittee shall submit the results of the testing to the Executive Director for review and approval. The results shall be accompanied by the project archeologist's recommendation as to whether the findings are significant. The project archeologist's recommendation shall be made in consultation with the Native American monitors and the MLD when State Law mandates identification of a MLD. The Executive Director shall make the determination as to whether the deposits are significant based on the information available to the Executive Director. If the deposits are found to be significant, the permittee shall prepare and submit to the Executive Director a supplementary Archeological Plan in accordance with subsection D of this condition and all other relevant subsections. If the deposits are found to be not significant, then the permittee may recommence grading in accordance with any measures outlined in the significance testing program.

D. An applicant seeking to recommence construction following a determination by the Executive Director that the cultural deposits discovered are significant shall submit a supplementary Archaeological Plan for the review and approval of the Executive Director. The supplementary Archeological Plan shall be prepared by the project archaeologist(s), in consultation with the Native American monitor(s), the Most Likely Descendent (MLD) when State Law mandates identification of a MLD, as well as others identified in subsection D of this condition. The supplementary Archeological Plan shall identify proposed investigation and mitigation measures. The range of investigation and mitigation measures considered shall not be constrained by the approved development plan. Mitigation measures considered may range from in-situ preservation to recovery and/or relocation. A good faith effort shall be made to avoid impacts to cultural resources through methods such as, but not limited to, project redesign, capping, and placing cultural resource areas in open space. In order to protect cultural resources, any further development may only be undertaken consistent with the provisions of the Supplementary Archaeological Plan.

(1) If the Executive Director approves the Supplementary Archaeological Plan and determines that the Supplementary Archaeological Plan's recommended changes to the proposed development or mitigation measures are de minimis in nature and scope, construction may recommence after the Executive Director informs the permittee of that determination.

(2) If the Executive Director approves the Supplementary Archaeological Plan but determines that the changes therein are not de minimis, construction may not recommence until after an amendment to this permit is approved by the Commission.

E. Prior to submittal to the Executive Director, all plans required to be submitted pursuant to this special condition, except the Significance Testing Plan, shall have received review and written comment by a peer review committee convened in accordance with current professional practice that shall include qualified archeologists and representatives of Native American groups with documented ancestral ties to the area. Names and qualifications of selected peer reviewers shall

be submitted for review and approval by the Executive Director. The plans submitted to the Executive Director shall incorporate the recommendations of the peer review committee. Furthermore, upon completion of the peer review process, all plans shall be submitted to the California Office of Historic Preservation (OHP) and the NAHC for their review and an opportunity to comment. The plans submitted to the Executive Director shall incorporate the recommendations of the OHP and NAHC. If the OHP and/or NAHC do not respond within 30 days of their receipt of the plan, the requirement under this permit for that entities' review and comment shall expire, unless the Executive Director extends said deadline for good cause. All plans shall be submitted for the review and approval of the Executive Director.

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

27. U.S. ARMY CORPS OF ENGINEERS APPROVAL

PRIOR TO COMMENCEMENT OF CONSTRUCTION, permittee shall provide to the Executive Director a copy of a permit issued by the U.S. Army Corps of Engineers, or letter of permission, or evidence that no permit or permission is required. The applicant shall inform the Executive Director of any changes to the project required by the U.S. Army Corps of Engineers. Such changes shall not be incorporated into the project until the applicant obtains a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

28. OTHER AGENCY APPROVALS

PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the permittee shall provide to the Executive Director a copy of a permit, or letter of permission, or evidence that no permit or permission is required for the project by the following entities: City of San Clemente; California Department of Fish and Game; U.S. Fish and Wildlife Service; Regional Water Quality Control Board, Orange County Fire Authority. The applicant shall inform the Executive Director of any changes to the project required by the City of San Clemente; California Department of Fish and Game; U.S. Fish and Wildlife Service; Regional Water Quality Control Board, and Orange County Fire Authority. Such changes shall not be incorporated into the project until the applicant obtains a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

29. PROOF OF LEGAL ABILITY TO COMPLY WITH CONDITIONS

Prior to issuance of the coastal development permit, the permittee shall provide 1) proof of undivided legal interest in all the properties subject to this permit, or 2) proof of the permittee's ability to comply with all the terms and conditions of this coastal development permit. No land subject to this coastal development permit may be developed until and unless all terms and conditions relating to the project as a whole have been met and agreed to in writing by all parties with ownership interest.

30. COMPLIANCE.

All development shall occur in strict compliance with the proposal as set forth in the application for permit, subject to any changes approved in this permit and subject to any approved revised plans provided in compliance with the Commission's special conditions and any other special conditions noted above. Any proposed change from the approved plans must be reviewed and approved by the Executive Director to determine if an amendment or new permit is necessary.

31. CONDITION COMPLIANCE

WITHIN 1 YEAR OF COMMISSION ACTION ON THIS CDP APPLICATION, or within such additional time as the Executive Director may grant for good cause, the applicant shall satisfy all requirements of Special Condition 10 and 11 that the applicant is required to satisfy prior to issuance of this permit. Failure to comply with this requirement may result in the institution of enforcement action under the provisions of Chapter 9 of the Coastal Act.

32. BUYER' (S) ACKNOWLEDGMENT

A. Prior to issuance of this coastal development permit, the owner(s) of the property that is the subject of this permit shall agree that before any sale or transfer of any of that property or any interest in that property that occurs before completion of all public amenities required in this permit and establishment of habitat restoration areas required in this permit (collectively, the "Improvements"), the owner-seller shall secure a letter from the buyer of the property (1) acknowledging (a) that the conditions imposed by this permit, as amended, run with the land, (b) that the use and/or development of the land is restricted by the special conditions of the permit and restrictions recorded on the property pursuant thereto, and development of the property is contingent on the implementation of habitat preservation and enhancement described in the final habitat management plan and the construction and opening to the public of public trails and other public access and recreation amenities, (c) that pursuant to the special conditions of the permit and the special offers recorded pursuant thereto or otherwise required in this coastal development permit, the public has certain rights with respect to future use of project streets and trails; and (2) agreeing that, prior to any further sale or transfer of any of the property or any interest in the property that occurs before completion of the Improvements, that that buyer-turned-seller shall secure from its buyer a letter to the same effect.

B. Subsequent to the issuance of this coastal development permit, and prior to the sale or transfer of any of the property or any interest in the property that is the subject of this permit that occurs before completion of all of the Improvements, the owner of the property being sold shall secure a letter from the buyer (1) acknowledging (a) that the conditions imposed by this permit, as amended, run with the land, (b) that the use and/or development of the land is therefore restricted by the special conditions of this permit and restrictions recorded on the property pursuant thereto, and development of the property is contingent on the implementation of habitat preservation and enhancement described in the final habitat management plan and the construction and opening to the public of public trails and other public access and recreation amenities, and furthermore, (c) that pursuant to the special conditions of the permit and the special offers recorded pursuant thereto or otherwise required in this coastal development permit, the public has certain rights with respect to future use of project streets and trails; and (2) agreeing that, prior to close of escrow on any

further sale or transfer of any of the property or any interest in the property that occurs before completion of the Improvements, that that buyer-turned-seller shall secure from its buyer a letter to the same effect.

C. A copy of such letter(s) shall be provided to the Executive Director, and the Planning Director of the City of San Clemente before close of escrow..

33. INSPECTIONS

The Commission staff shall be allowed to inspect the site and the project during its development, subject to 24-hour advance notice.

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

IV. FINDINGS AND DECLARATIONS:

The Commission hereby finds and declares:

A. SITE AND PROJECT DESCRIPTION

The Marblehead site is a 247.88 acre property (201.38 acres in the coastal zone) located between El Camino Real (a.k.a. Pacific Coast Highway) to the southwest, Avenida Pico to the southeast, the Interstate 5 freeway to the northeast, and the Colony Cove residential subdivision to the northwest (Exhibit 1). The site is roughly square and consists of an upland bluff top mesa which is incised by one large canyon (Marblehead Canyon) and several smaller canyons and drainages (Exhibit 2). The southwestern boundary of the project site (along El Camino Real) consists of 70 to 100 foot high coastal bluffs which are intersected by the mouths of the on-site canyons and drainages. The bluff is separated from the beach by El Camino Real, train tracks, and a private gated mobile home park (Capistrano Shores); therefore, the bluffs do not provide direct access to the beach, nor is the previously graded coastal bluff presently subject to marine processes. The closest beach access is at North Beach, which is across the street and south of the bluffs. North Beach is a popular beach area that contains public beach parking and a Metrolink train station. The project site is the last large, vacant, privately owned area of land in the coastal zone in the City of San Clemente, and among the largest vacant privately owned lands in coastal Orange County[3].

The applicant is proposing a comprehensive residential and commercial development, public park, trails and open space and associated infrastructure including roads and utilities on the 247.88 acre Marblehead site in the City of San Clemente, Orange County (Exhibits 4-10). While the project is an integrated development, about 201.38 acres are located within the coastal zone, therefore, only the portion of the development in the coastal zone requires a coastal development permit. The portion of the project outside the coastal zone may require Federal consistency review (see previous note). Included in the development are a property subdivision and construction of 313 single family homes on 44.24 acres; 141,506 square feet of commercial space in ten commercial buildings on 22.3 acres; 15.43 acres of public parks; 95.04 acres of public and private open space and pedestrian and bicycle trails; 12.43 acres of private streets; and 10.91 acres of public streets (see table below).

Following is a table identifying the proposed land uses followed by a detailed description of the proposed project:

[3] Bolsa Chica in Huntington Beach and Banning Ranch in the Newport Beach area are larger at approximately 308 and 412 acres, respectively.

Land Use	Non-Open Space (acres)	Open Space (acres)	Total (acres)	%
Single Family Lots (No. 1-313) and Private Streets (Lot No. BBBB [partial] – DDDD, FFFF – TTTT)	56.67			
Interior Slopes & Common Areas (Lots V, Y, Z, AA – HH, JJ, PP,QQ, UU, WW)		5.26		
Total Residential Area			**61.93**	**30.75 %**
Regional Commercial Area	22.3			
Total Regional Commercial			**22.33**	**11.09 %**
Coastal Commercial – up to 60,000 square feet allowed according to the City's Specific Plan for the area (no actual buildings proposed) (Lot No. 352)	1.0			
Total Coastal Commercial			**1.0**	**0.5%**
Ocean View Park @ Bluffs (Lot No. D – F, I, J, M-P, R, RR-TT, ZZ)(including road & parking lots)		12.81		
Public Sports Park (Lot No. KK, LL, MM)(part in cz incl. road & parking lot)		2.62		
Public Roads (including Avenida Pico widening, Avenida Vista Hermosa, and Lot No. AAAA, BBBB (partial), EEEE)	10.91			
Total Public Area			**26.34**	**13.08 %**
Dudleya Reserve and Buffer [4] (Lot No. H)		2.10		
Wetland along El Camino Real next to Dudleya reserve (Lot No. YY)		0.04		
Central Canyon (Marblehead Canyon) - Within Residential Area (Lot No. L, C, VV, KKK, KKK-1, LLL,) - Within Commercial Area (Lot MMM - RRR)		 39.05 4.57		
El Camino Real Bluff Face/Bluff Top/Trident/Western Canyon (Lot No. G, Q, S		29.34		
Detention Basins (Lot No. K, T, XX)		6.35		
Perimeter Open Space - Manufactured Slopes next to roads & other development (Lot No. A, B, U, W, X, OO, II, SSS, TTT, UUU, VVV)		8.33		
Total Open Space (includes trails)			**89.78**	**44.58 %**
Total All	**90.88**	**110.47**	**201.38**	

1. Subdivision - Tentative Tract 8817

The applicant has indicated that the property is currently subdivided into 10 existing lots (Exhibit 4, pages 3-4). Information submitted by the applicant indicates that a lot line adjustment related to these lots was processed at the local government level in 1998, purporting to reconfigure the ten lots and reduce the total number of lots to eight. However, subdivisions, lot line adjustments, etc. within the coastal zone are considered development, which requires a coastal development permit to be valid in the coastal zone. Commission staff have not identified any coastal development permits for subdivision(s), lot line adjustments, etc. for the subject site. Therefore, the 1998 lot line adjustment is not valid, and the Commission treats the site as comprising ten legal parcels.

The applicant is proposing to subdivide the 247.88 acre site (201.38 acres in the coastal zone) as follows (Exhibit 4, pages 1-2):

[4] Dudleya reserve and buffer already deed restricted for habitat restoration purposes pursuant to Coastal Development Permit 5-97-136

- 313 residential lots (Lots 1 through 313) ranging in size from 3,364 to 20,517 square feet and totaling 44.24 acres (entirely within the Coastal Zone).

- 28 commercial lots (Lots 352 through 379 ranging in size from 0.54 to 4.23 acres and totaling 52.58 acres) of which 15 lots are totally or partially within the coastal zone, and would range from 0.54 to 3.79 acres in size, and total 22.3 acres in the coastal zone, plus 1 acre at El Camino Real and Avenida Pico.

- 12.75 acres of public street right-of-way (10.91 acres within the Coastal Zone) excluding the right of way for the Avenida Vista Hermosa bridge (0.91 ac).

- 12.43 acres for privately maintained street right-of-way which would be open to the public (all or part of Lots BBBB through TTTT).

- 63 open space lots (Lots A through VVV, with all but Lots NN, PPP, QQQ, RRR, and TTT in the Coastal Zone) ranging in size from 0.03 acre to 36.34 acres and totaling 125.88 acres, of which 110.47 acres are within the Coastal Zone, for public park, habitat protection, public access and common area.

- Open space lot (Lot X) of 0.24 acre to accommodate the existing driveway access easement to the adjoining church property.

As noted above, only the portion of the development within the coastal zone requires a coastal development permit. Accordingly, only the portion of the subdivision on the 201.38 acres in the coastal zone requires a coastal development permit.

2. Grading and Site Preparation

The applicant is proposing to grade approximately two-thirds of the site. The remainder that would not be graded includes some of the canyon/wetlands areas; about 600 linear feet of bluff which have not previously been graded along El Camino Real; and approximately 1,900 linear feet of bluff that were graded previously under Emergency Coastal Development Permit 5-90-274-G (Exhibits 9-13). The applicant is requesting permanent authorization of the emergency grading under this permit application.

Emergency Coastal Development Permit 5-90-274-G authorized 310,000 cubic yards of grading in order to stabilize approximately 1,900 linear feet of the approximately 2,400 linear feet of 70 to 100 foot high bluffs which are on the Marblehead site and which face El Camino Real. The grading resulted in laying the bluff face back at a 1.5:1 to 2:1 slope. According to the Marblehead Coastal Bluffs Emergency Grading Program Focused EIR dated April 15, 1991, the actual emergency grading undertaken was 348,400 cubic yards of cut. This 348,000 cubic yards of cut was stockpiled in two locations (Exhibit 3): 1) between the Western Canyon and middle central canyon (a.k.a. Marblehead Canyon) on the Marblehead site; and 2) within the Marblehead Canyon on the site of the sewage treatment plant which was demolished in the early 1980's (see below for details). The 1991 EIR also states that a 30,000 cubic yard stabilization key involved the cutting and stockpiling of 30,000 cubic yards of material. According to a report by Leighton and Associates dated June 15, 2000, the stabilization key (essentially a ring of compacted soil) was constructed around the soil stockpiles to stabilize them since they were not placed as compacted engineered fill.

In addition to the Phase I grading which was already undertaken, the applicant is proposing, within the coastal zone, 1,101,800 cubic yards of cut and 1,070,800 cubic yards of fill (31,000 cubic yards exported from the portion of the site located inside the coastal zone to the portion of

the site outside the coastal zone). The footprint of the graded area would be 132.47 acres (68.91 acres not graded) including the earthwork for slope stabilization performed under Emergency Coastal Development Permit 5-90-122-G and 5-90-274-G. Outside the coastal zone, there would be 389,000 cubic yards of cut and 420,000 cubic yards of fill within a grading footprint of 46.5 acres (4.3 acres un-graded) (see Exhibit 9 for breakdown of grading quantities for individual areas on the project site).

Finally, the applicant is proposing to reconstruct all of the existing terrace drains and downdrains that were constructed on the re-contoured bluff face as part of the emergency grading. The reconstructed drains would be in the same location as the existing drains and in most cases, the same size. The applicant has stated the existing drains need to be reconstructed because they were constructed without supportive steel mesh, and that the drains are cracked and broken, allowing water to run under or along the side of the ditches rather than within them, which is causing erosion of the slope. Using heavy equipment (e.g. backhoe) and hand labor the existing concrete would be removed from the ditch, the ditch would then be re-contoured as necessary to restore the ditch to its original design; wire mesh would be placed in the ditch, then the concrete gunite would be applied to the mesh followed by hand trowelling for the finish work. The cement gunite would be supplied by trucks staged on either El Camino Real or the top of bluff and delivered to the ditches via hose. Splash walls (1.5 to 3 feet high) would also be constructed at T-intersections to prevent water from flowing over the ditch. Also, the down drains from the mouth of the Western Canyon and the Trident Canyon would be widened from 3 feet to about 5 feet to accommodate flows from those drainage. Also, where drains cross the proposed mid-bluff trail, the trail would be bridged over the ditch so that the trail surface is uninterrupted. This construction will take a few weeks to complete.

3. Residential Development

The applicant is proposing to construct 313 single family residences on new lots comprised of 44.24 acres of land within the seawardmost portion of the property within the coastal zone (Exhibits 4-6). On Lots 1 through 182 (with lot sizes averaging 7,501 square feet in size), the applicant is proposing construction of 182 detached, two-story single-family homes plus attached garages. There are nine basic floor plans which range in square footage from 3,190 to 4,625 square feet (Exhibit 6). The structures have a roof line height ranging from 24 feet to 29 feet with an additional maximum 5.5 foot projection for the chimney. Each design has an attached garage with capacity for at least two vehicles. Each residential lot would also have landscape and hardscape improvements.

On Lots 183 through 313 (lot sizes averaging 4,288 square feet), the applicant is proposing construction of 131 detached, two-story single-family homes ranging in size from 1,612 to 2,320 square feet, plus two-car garages, in clusters of two to five units. Each residential lot would also have landscape and hardscape improvements. There are three basic floor plans with variations upon the base design. These structures would have a maximum roof line height of 24 feet plus an additional three feet for the chimney.

The proposed residential development includes all associated infrastructure including roads, utilities, property boundary walls and fences, and 'community theme walls' (i.e. community boundary walls) and miscellaneous retaining walls. The applicant is proposing construction of privately-maintained, open to the public, two-lane internal circulation roads in 36-to-60-foot wide right-of-ways, including on-street parking, sidewalks and streetscape. The applicant indicates that 379 on-street parking spaces would be provided for use by residents. No gates, guardhouses or other controls or monitoring (e.g. kiosks) of public entry to the private streets is proposed. However, the applicant is proposing to prohibit the general public from using the 379 on-street parking spaces through the use of signage. There are an additional 171 on-street

parking spaces within the residential area and adjacent to proposed parks that have been identified by the applicant that would be available to the general public for public parking purposes

4. Commercial Development

a. Marblehead Commercial Center:

The proposed project would include a total 21 commercial buildings on 52.58 acres inside and outside the coastal zone, containing a total of 675,243 square feet of floor area, and associated parking, on Lots 353 through 379. Six buildings on 22.3 acres -including one retail and five restaurants- are entirely within the coastal zone, while four buildings -three retail and one restaurant- are partially within the coastal zone. The total floor area within the coastal zone is 141,506 square feet of which 58,416 is restaurant and 83,090 square feet is retail (Exhibits 7-8). Building heights would range from 35 to 59 feet tall. Following are the building sizes and proposed general uses of the development within the coastal zone:

Building No.	Size (ft^2)	Use
1	43,442	Retail
2	10,176	Retail
3	32,120	Restaurant/Meeting Rm./ Building Services
4	23,736	Restaurant/Bldg. Services
5	6,450	Restaurant
6	6,750	Retail
7	6,000	Restaurant
8	3,280	Restaurant
9	8,370	Retail
10	1,182	Restaurant
Total	**141,506**	

The applicant's submittal states that the general commercial uses intended for this center would include a video store, convenience store, optometry, real estate sales, optical/sun glass shop, one-hour photo, home furnishings store, art gallery, chiropractor, surf shop, interior design studio, shoe store, general gift store, card shop, nail salon, barber, beauty supply, tobacco shop, bicycle shop, picture frame store, copy store, hardware store, bookstore, electronics/appliance store and offices for building services. According to the applicant, visitor serving uses include restaurants and public viewing plaza areas located within the commercial center (both inside and outside the coastal zone). The proposed uses within the coastal zone are:

Use	Square Footage
Video Store	2,500
Convenience Food Store	2,723
Optometry	1,200
Real Estate Sales	1,000
1 Hour Photo	1,000
Home Furnishings Store	4,000
Art Gallery	2,000
Chiropractor	1,200
Surf Shop	1,300
Interior Design Studio	2,000
Shoe Store	3,000

Use	Square Footage
General Gift Store	3,000
Card Shop	2,000
Nail Salon	900
Barber	1,000
Beauty Supply	1,000
Tobacco Shop	900
Bicycle Shop	1,200
Picture Frame Store	2,000
Copy Store	1,200
Hardware Store	4000
Building Services	14,352
Bookstore	23,000
Electronics/Appliance	6,615
Restaurant Uses	58,416
Total	**141,506**

Associated infrastructure to serve the commercial development would be constructed including internal circulation roads (and one bridge located outside the coastal zone), parking, walkways and decorative hardscape, landscaping and utilities.

There are four proposed entrances to the commercial development located within the coastal zone (a fifth entrance is located outside the coastal zone) which are accessed off proposed Avenida Vista Hermosa.

A total of 2,724 parking spaces would be provided within the 52.58 acre commercial area as follows: 557 spaces in a two-level parking structure of which 479 are completely or partially in the coastal zone, and 2,167 surface parking spaces of which 1,253 are completely or partially within the coastal zone. The commercial center would also include a regional transit service area including bus queuing area and bicycle storage facilities.

b. Other Commercial

In addition to the proposed commercial development, the applicant is proposing to designate 1.0 acre of land for visitor serving commercial use near the corner of Avenida Pico and El Camino Real. More specifically, the applicant is proposing to designate Lot 352 for future visitor-serving commercial development, not to exceed 60,000 square feet. This commercial area would be adjacent to a proposed Dudleya Native Plant Reserve (Lot H) and a portion of the public coastal park (Lot F). This site would be graded only and would be reserved for visitor serving commercial uses. The mechanism for reserving the land is unspecified (i.e. deed restriction, dedication to public/private entity, etc.).

In addition, the applicant is proposing the contribution of money to the City of San Clemente for the enhancement of the downtown business district. According to the applicant, a significant portion of the business district where the money would be spent is in the coastal zone.

5. Public Roads

In addition to the private road system noted above, the applicant is proposing the construction of one main arterial public roadway, Avenida Vista Hermosa. The proposed public road would extend from existing Avenida Pico to a new freeway interchange at Interstate 5 (a portion of the road and the interchange are outside the coastal zone). The road would provide access to the commercial and residential development, the sports park and public trails.

Proposed Avenida Vista Hermosa would be a four-lane, approximately 100 foot wide roadway (100-110 foot wide right of way) with a center median. The road would have a minimum 14 foot wide landscaped center median, 35 foot wide two-lane roadways in each direction (total 70 foot wide). In addition, on the 'north' side of the road adjacent the commercial development, there would be a minimum five foot wide landscape parkway and minimum five foot wide sidewalk and a bicycle trail. Along the 'south' side of the road adjacent to the residential development, there would be a minimum five foot wide landscape parkway and eight foot wide meandering pathway plus bicycle trail.

In order to construct Avenida Vista Hermosa, one concrete box girder bridge would be constructed over Marblehead Canyon. This bridge would be approximately 400 feet long[5] (between abutments) and 100 feet wide with 61 to 70 feet of clearance between the bottom of the bridge span and the wetlands below. The railings are proposed to be "Type ST-10" and picket railing TRACC (Trinity Attenuation Crash Cushion) style, or an alternative design submitted by the applicant and approved by the City of San Clemente and the Executive Director. The bridge would be founded upon pilings and compacted fill retained by loffelstein retaining walls. There would be a total of six (6) pilings measuring seven (7) feet in diameter all of which are to be located a minimum of 25 feet from the edge of the wetlands located in the canyon bottom. Two loffelstein walls (one on each side of the canyon) would be constructed under the bridge and flanking areas adjacent to the bridge. The wall on the west side of the canyon would measure approximately 160 feet long. The wall on the east side of the canyon would measure approximately 280 feet long. The proposed loffelstein walls would have a v-ditch drainage channel along the top of the wall which would be connected by subsurface pipes to discharge locations at the base of the wall. Drainage would discharge from the pipes and sheet flow to the wetlands which are located 100 feet from the toe of the proposed loffelstein walls.

The applicant is also proposing to widen 1,800 linear feet of El Camino Real in front of the project site. The widening would increase the roadway from 45 to 50 feet wide. In addition, a seven foot wide bike lane and five foot wide sidewalk would be added to this portion. Overall, El Camino Real would be widened by 17 feet.

Avenida Pico would also be widened by 23 feet as a result of the project. The widening would affect 2,100 linear feet of Avenida Pico and would consist of increasing the width of the southbound lane from 20 feet to 28 feet (to accommodate two lanes), plus a seven foot wide bike lane and an eight foot wide sidewalk.

The applicant is also proposing construction of several public, two-lane roads within the residential area consisting of three proposed 40-to-54-foot wide rights-of-way (Streets AAAA, EEEE, and a portion of Street BBBB). These public roads would include sidewalks, streetscape, and seventy[6] on-street parking spaces available to the public.

The applicant is also proposing the contribution of money to the City of San Clemente for off-site circulation improvements including construction of the Avenida Vista Hermosa freeway interchange and improvements to the Avenida Pico freeway interchange. The applicant is proposing the construction of roads and other infrastructure to serve the proposed development.

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[5] Glenn Lukos study dated December 4, 2001 states the proposed bridge is 330 feet long. This measurement is the distance between the toe of the loffelstein retaining walls rather than the bridge abutments.

[6] As noted above, the applicant is proposing a total of 80 on-street public parking spaces along the streets within the residential development. Seventy (70) would be along proposed public streets. The remaining ten(10) would be provided along a privately maintained street in the eastern residential enclave.

6. Other Infrastructure

Other infrastructure includes utilities to serve the proposed development such as water lines, reclaimed water lines, gas, electric, sewer, and storm drains with storm water management system.

The proposed storm water management system is described in the Marblehead Coastal Water Quality Plan dated November 28, 2001 (and subsequently amended-see substantive file documents) prepared by RBF Consulting (herein referred to as the Water Quality Plan). The proposed storm water management system includes storm drain catch basins with catch basin inserts, storm water retention basins, underground storm water storage tanks and a valve and telemetry system to control the diversion of dry weather nuisance flows and first flush storm water to the sewage treatment plant for processing and discharge through the South East Regional Reclamation Authority (SERRA) ocean outfall. There are three proposed storm water detention basins, two located on the slopes of Marblehead Canyon and the third adjacent to the Western Canyon. These detention basins store storm water from the residential development prior to either diversion to the sewage treatment plant for processing or discharge of the storm water through various existing culverts which pass under El Camino Real and discharge at the beach. The detention basins would have sediment forebays and biofilters. In addition, there are three proposed underground water storage tank systems located underground in the proposed commercial development. The storage tanks consist of several interconnected 10 foot diameter cylinders. These storage tanks capture the first flush and dry weather nuisance flows from the proposed commercial development as well as run off from some developed areas located on the inland side of Interstate 5 which discharge onto the subject site. According to the Water Quality Plan, the applicant is also proposing installation of at least five (5) to six (6) continuous deflection separation (CDS) units.

7. Open Space, Park, Trails, and Bikeways

The applicant is proposing open space areas, a bluff park, trails and bikeways as part of the proposed development (Exhibits 5 and 12). According to the applicant, a total of 110.47 acres of public parks and privately maintained, publicly accessible, on-site open space are proposed within the coastal zone. This figure cited by the applicant includes manufactured slopes within the residential development (5.26 acres), vegetated setbacks and manufactured slopes surrounding the perimeter of the development (8.33 acres), public park areas (15.43 acres), and privately maintained open space areas (81.45 acres) including a Blochman's dudleya habitat reserve and buffer, the central canyon (Marblehead Canyon), Western Canyon, Trident Canyon, water quality detention basins, and the El Camino Real bluff face (see table above for land use break down).

With respect to public parkland, the applicant is proposing dedication of 21.53 acres of public parkland and construction of park improvements, both inside (15.43 acres) and outside (6.1 acres) the coastal zone, consisting of the following:

- Dedication of 12.81 acres of ocean view public park. The park will straddle the mouth of Marblehead Canyon and extend along the coastal bluffs and will include a trail connection and footbridge across the canyon, and would be configured as follows:

    - An 8.95 acre area for passive recreational use (Lots I, J, M, N, O, P, R, ZZ), which includes three turf areas (2.03 acres), road access with 70 on-street parking spaces (previously noted above) and 21-space public parking lot (0.75

acre) and restored and enhanced native vegetation, public trails and interpretive facilities (6.17 acres).

- A 2.63-acre active recreation area public park (Lots D, E and F) containing turf, tot lot, half-court basketball and restroom facility, park furniture (Lot F, 1.38 acres); native vegetation (Lot D, 1.11 acres); and 14-space parking lot and road access (Lot E, 0.14 acres).

- A 1.23 acre public passive view park (Lots RR, SS, TT), that includes turf with park furniture (0.91 acres); road access and 10 on-street public parking spaces (previously noted above); public trails and interpretive facilities.

- Dedication of 8.72 acres of land for an 'active park' located inside (Lots KK – MM) and outside (Lot NN) the coastal zone. The portion of the park in the coastal zone would be 2.62 acres consisting of roadway access, parking and turf areas. In total, the active park would have turf, sports fields, access road with 40 on-street parking spaces plus a 20-space public parking area which will serve a dual function as a school bus drop-off area for the adjacent Shorecliffs Middle School.

As described in a letter dated February 2, 2002, from the City of San Clemente, the applicant and the City would develop the proposed park areas and amenities in a shared manner. The letter dated February 2nd states that the applicant would dedicate the public park land to the City in fee title and would initially contribute $2 million to the City to fund construction of the parks. Final park master plans are to be prepared for approval by the City. If costs for construction of the parks in accordance with the final park master plans exceed the initial $2 million contribution, the applicant would fund the balance for completion of the parks. The City would be responsible for building the parks.

Also, the applicant is proposing 4.1 miles of public trails. The trail network would extend through the public parks and the other publicly and privately maintained open space areas. The multi-purpose recreational trail system would include an interpretive program to introduce public trail users to the site's natural history, scenic resources, restored and created habitat, and water quality management features. The applicant would fund and construct all of the trails within the project area, including those within the property to be dedicated to the public and within the privately maintained, publicly accessible open space areas.

Finally, the applicant is proposing to contribute $3,456.22 per dwelling unit ($1,081,797) to the City for public improvements in the North Beach recreation and visitor-serving area.

8. Habitat Impacts and Mitigation

The applicant is proposing to impact certain vegetation communities which are present on the project site as a result of grading and construction of the development. The "Biological Resources" and "Wetlands" sections of these findings detail the impacts to the various plant communities. In summary, the applicant is proposing to impact 2.98 acres of the 13.7 acres of coastal sage scrub in the coastal zone. Some of the 13.7 acres of scrub is occupied by California gnatcatcher.

In addition to this impact that would occur under the development now proposed, the applicant is requesting final approval for the impacts to habitat that occurred under Emergency Coastal Development Permit 5-90-274-G. These impacts include destruction of 3 acres of coastal bluff scrub, 2.5 acres of needlegrass grassland, 0.1 acres of wetlands, and 3.5 acres of Blochman's dudleya (estimated 6,500 to 10,700 individuals).

In order to mitigate for the proposed impacts, the applicant has developed a habitat mitigation and management plan (Marblehead Coastal Project Habitat Management Plan dated November 28, 2001 and subsequently amended-see substantive file documents(herein 'Habitat Management Plan' or 'HMP'). The habitat management plan proposes to preserve in place a total of 10.43 acres of various types of scrub vegetation and to restore 64.22 acres of coastal sage scrub on the un-graded and proposed-to-be-graded slopes of Marblehead Canyon and the Western Canyon; the un-graded portion of the Trident Canyon; within the proposed park areas, upon proposed-to-be-graded slopes between the proposed commercial development and Avenida Pico, and upon the un-graded and already graded blufftop/bluff face along El Camino Real.

An additional 0.28 acres of CSS restoration would be undertaken within proposed fuel monitoring and management zones that would be actively managed for fire fuel management. An additional 0.95 acres of CSS restoration would be undertaken on proposed utility easements on the site, plus .04 acres off-site. The applicant is not requesting 'credit' for these restored areas because they may occasionally be subject to disturbance for fuel modification and maintenance of utility lines. An additional 1.68 acres of coastal sage scrub restoration would be undertaken within the City-owned right-of-way along El Camino Real at the toe of the bluff.

There are approximately 0.14 acres of Blochman's dudleya located within the 10.26 acres of coastal sage scrub that is to be preserved on site. No new impacts to Blochman's dudleya are being proposed. However, as noted above, the emergency grading that occurred under Emergency Coastal Development Permit 5-90-274-G destroyed approximately 3.5 acres of habitat (estimated 6,500 to 10,700 individuals). As mitigation, Coastal Development Permit 5-97-136 implemented a translocation program that established a 2.1 acre reserve for the dudleya on-site near the corner of Avenida Pico and El Camino Real. The applicant would continue to carry out the mitigation in accordance with the terms and conditions of CDP 5-97-136. The proposed Habitat Management Plan would include the site as part of the area subject to the long term management provisions of the plan. Some of the coastal sage scrub restoration described above would occur within the 2.1 acre reserve where it would be compatible with the Blochman's dudleya restoration effort.

Approximately 0.62 acres of native needlegrass is located within the Western Canyon and the Trident Canyon. This habitat would be preserved in place. In addition, the applicant is proposing to plant approximately 3.26 acres of native needlegrass in 30 foot wide swaths to create an irrigated 'fuel modification' buffer between the proposed residential development and the restored habitat in the canyon. Fuel modification requirements of the development are described in more detail below. These native needlegrass areas would be primarily planted along the graded rim of Marblehead Canyon and between the residential development and the eastern detention basin (Lot XX). An additional 1.04 acres of native grassland would be planted between the existing residential development at Colony Cove and the proposed residential development in the westerly portion of the property.

The applicant is proposing to avoid all wetland fill impacts within the coastal zone. Therefore, there would be no fill impacts to the 5.21 acres of wetlands located in the canyons and other drainages on the applicant's property within the coastal zone nor any impact upon the 0.03 acres of wetland located in the City's right of way along El Camino Real adjacent to the Blochman's dudleya reserve. However, a 17 foot wide by 89 foot long pedestrian footbridge, at one time proposed by the applicant, but removed and required to be added back to the project by the Commission pursuant to Special Condition 15, would cause 0.02 acres of shading impacts upon wetland habitat. The applicant would mitigate the impacts to 0.02 acres (871 square feet) of wetlands with the creation of 0.20 acres (8,712 square feet) of alkali marsh

on-site within Marblehead Canyon (0.11 acres) and the westerly canyon (0.09 acres). In addition, the applicant is proposing to create 1.72 acres of wetlands within the proposed detention basins and 2.90 acres of mixed riparian/scrub on the slopes of the detention basins (Exhibit 18). This additional wetland creation would be used to mitigate impacts to 0.55 acres of wetlands located outside the coastal zone at the head of Marblehead Canyon which is being required by the other resources agencies (see Exhibits 20-21).

The proposed project would also grade, fill or otherwise eliminate 0.44 acres of unvegetated ephemeral drainage channels on the project site. The applicant proposes to off-set these impacts by creating 1.72 acres of wetlands within the proposed storm water detention basins. According to the wetlands delineation, which has been approved by the California Department of Fish and Game, these ephemeral drainages are not considered wetlands under the Coastal Act.

In summary, the applicant is proposing to destroy 2.98 acres of habitat, preserve 16.09 acres of habitat and restore 69.88 acres of habitat in the coastal zone. An additional 4.49 acres of habitat would be restored that would be subject to regular disturbance for fuel modification and utility maintenance. In addition, some off-site areas would be preserved and restored including preserving 0.03 acres of wetlands and creating 1.68 acres of CSS within various public rights of way. Therefore, in total, there would be 92.15 acres of wetland and upland habitat within the project site in the coastal zone upon completion of the proposed project.

An additional 9.22 acres of wetland and upland habitat would be preserved and restored outside the coastal zone. Including the habitat inside and outside the coastal zone, the proposed project would preserve and restore 101.39 acres of wetland and upland habitat.

In addition to the above cited figures, the applicant is proposing to plant the 7.55 acres of interior irrigated slopes (i.e. slopes within the residential development) with native vegetation that is compatible with the habitat within the habitat management plan areas. These interior slopes would be subject to fire fuel modification requirements as described below.

Finally, the applicant is proposing to create a funding program to manage the preserved and restored habitat. The funding would consist of a $250,000 non-wasting endowment provided by the applicant. In addition, there would be an annual homeowner fee paid by the homeowners association equal to an average of $75 per dwelling unit per year for the 313 dwellings. In total, the funding is anticipated to provide approximately $39,000 per year to support the management efforts.

9. Fire Hazard Management

The proposed development is not located within a designated Very High Fire Hazard Severity Zone which are areas identified by the California Department of Forestry and Fire Protection as requiring intensive fuel modification around structures to protect them from significant fire hazards. However, Orange County Fire Authority (OCFA) is requiring the applicant to implement a fuel management plan due to the proposed retention of open space areas and the planting of native vegetation for habitat restoration that may pose a fire hazard when such areas are adjacent to proposed residential and commercial structures. The proposed fuel management plan is described in the document titled Conceptual Fuel Management Plan dated November 27, 2002, and subsequently amended (see substantive file documents), submitted by the applicant and is shown both on the Habitat Management Plan (Exhibit 18) and the Fuel Management Plan (Exhibit 24).

Typically, OCFA requires implementation of a 170 foot wide fuel modification zone adjacent to development that faces upon potentially flammable open space areas[7]. These fuel modification zones would normally require clearing, thinning and strict controls over the types of vegetation located within the 170 foot wide zone. However, in this case, OCFA has approved a site specific fuel management plan that is tailored to existing and proposed site conditions (Exhibit 23). This site specific analysis has demonstrated to OCFA that site conditions, proposed building design features, and proposed setbacks are adequate to protect the proposed development against fire hazards. As a result, there is no 170 foot wide zone required adjacent to the proposed development. In place of this 170 foot wide zone, the site specific fuel management plan relies on more narrow irrigated native plant zones between the development and the open space/habitat enhancement areas (identified as FMMZ I on the HMP map). The FMMZ I irrigated zones would be planted with native grasses that would be mowed yearly. These irrigated zones, combined with proposed roads, trails, fire resistant property perimeter walls, a prohibition within residential lots on the placement of combustible structures between primary residential structures and the open space areas, and use of fire resistant building design features would minimize fire hazards and the need to clear, thin or control the plant palette within the sensitive habitat areas (existing and restored).

None of the existing CSS and wetland habitat to be preserved would be subject to any fuel modification requirements. In addition, a majority of the restored CSS habitat (about 64.22 acres) would not be subject to any fuel modification requirements. However, in addition to the FMMZ I irrigated plant zones described above, there would be about 0.28 acres of restored CSS habitat that would be subject to fuel modification requirements (identified as FMMZ II and FMMZ III zones on Exhibits 18 and 24). Fuel modification in these zones would consist of strict controls on the plant palette, clearing of 40-50% of 'volunteer' high fuel volume plant species that un-intentionally colonize the zone, trimming and hand pruning to maintain required plant heights and removal of dead plant material, and mowing. One such area would be located on the upper slope of the west side of Marblehead canyon adjacent to proposed commercial building no.'s 8 and 9. However, this fuel modification area is located outside of the 100 foot wetland buffer and is not located in an area identified as terrestrial ESHA or ESHA buffer. Another fuel modification area is proposed to be located on some proposed-to-be revegetated slopes adjacent to Avenida Vista Hermosa and Avenida Pico. Once again though, these areas are not within ESHA or any ESHA buffer. Finally, the interior slopes within the proposed residential area that are proposed to be revegetated with native plants would be subject to fuel modification. However, these interior slopes are not within any ESHA or ESHA buffer, nor are they a formal part of the habitat management plan area proposed by the applicant.

10. Development Agreement and Specific Plan

The applicant has entered into a development agreement with the City of San Clemente. Where there is no certified local coastal program, such as at the project site, development agreements require a Coastal Commission approval to be effective in the coastal zone. The applicant has not requested the Commission's approval of the development agreement as part of this application.

In addition, a general plan amendment and specific plan was processed for the project at the local level. These documents were submitted as supporting documents by the applicant in their application for the subject coastal development permit. However, the City has not submitted the general plan or specific plan to the Commission for certification as their local coastal program. As described below, there is no certified land use plan or local coastal program for the Marblehead site nor is there one pending.

[7] Orange County Fire Authority 2001, " Fuel Modification Plans and Maintenance Guideline C-05", 32 p. guidance manual dated April 10, 2001.

B. PROJECT SITE HISTORY

Prior to the 1880's, there was no significant development between the bluffs at the Marblehead project site and the Pacific Ocean. However, with the construction of the railroad in the 1880's and El Camino Real in 1929, the bluffs were separated from the coastal dunes, sandy beach and Pacific Ocean. The construction of the Capistrano Shores mobile home park (prior to the Coastal Act) seaward of El Camino Real and the railroad placed another line of development between the bluffs at the site and the Pacific Ocean.

1. A-80-7433 and Site Planning During the 1980's

In 1980, the California Coastal Commission granted Coastal Development Permit A-80-7433 to Marblehead D. Lusk & Son General Partner for the demolition of an abandoned sewage treatment plant on an 18.5 acre parcel within the Marblehead site. The permit was granted without special conditions.

In 1981, the City of San Clemente submitted a land use plan (LUP) for certification to the Commission which included the Marblehead site (then known as Reeves Ranch). The Commission certified the LUP with modifications, including a modification which removed the Marblehead site from the LUP certification. The Commission cited the lack of cohesive plans for development of the site and a lack of appropriate policies to address coastal resource issues at the site in their denial of certification of the LUP for this area. The certified LUP was not adopted by the City, and the certification lapsed after six months. Subsequent LUPs have been submitted and approved by the Commission; however, each of these submittals did not include the Marblehead site. Therefore, there is no certified LUP for the Marblehead site.

In 1987 the City of San Clemente processed an environmental impact report for the Marblehead site which included 27 acres of tourist commercial (TC), 16.3 acres of park, 36.5 acres of residential (250 units), 5.9 acres of very low density residential, and a small parcel of general commercial. The tourist commercial designation was intended for the Nixon Library site. Staff submitted a letter in response to the Nixon Library Draft Environmental Impact Report; however, the project never progressed beyond the EIR stage and an application was not submitted for a CDP. In this letter, staff expressed concerns regarding coastal canyon setbacks, filling of coastal canyons which were designated as ESHAs, the filling of wetland habitat in coastal canyons, coastal bluff and landform alteration and protection of the Blochman's dudleya on the coastal bluffs.

2. Emergency Bluff Grading during the 1990s

On February 20, 1990, the Executive Director issued Emergency Coastal Development Permit 5-90-122-G to the City of San Clemente for the removal of those portions of the bluff face which were posing an immediate hazard to life and property to those using Pacific Coast Highway (a.k.a. El Camino Real). Unstable blocks of soil which were overhanging the bluff face or which were otherwise unstable were knocked down. The debris was then collected from the toe of the bluff and stockpiled on the subject property. The approved emergency work also included the preparation of pads at the top of the bluff to place equipment for additional bluff hazard remediation.

Subsequent assessments of the hazard remediation which occurred under Emergency CDP 5-90-122-G determined that the emergency had not been satisfactorily abated. Accordingly, after reporting the emergency situation to the Commission during a public comment period on March 13, 1990, the Executive Director issued Emergency Coastal Development Permit

5-90-274-G on April 4, 1990, for the first phase of three phases of bluff stabilization. The Lusk Company, together with the City of San Clemente, asserted that the over-steepened bluffs remained a safety hazard to vehicular traffic and pedestrians along Pacific Coast Highway (a.k.a. El Camino Real). The position of the Lusk Company and the City of San Clemente as to the public safety hazard was supported by the Commission's geologist, Richard McCarthy. During the Executive Director's report of the emergency situation to the Commission, the understanding was that no sensitive habitat was to be impacted by the project.

Phase I grading approved by Emergency Coastal Development Permit 5-90-274-G was for approximately 310,000 cubic yards of grading to lay the bluffs back to a 1.5:1 or 2:1 gradient. Approximately 2,500 linear feet of the coastal bluffs were laid back as a result of this emergency grading in 1990. Soil removed from the bluffs was stockpiled on the property on a relatively flat terrace area located between the Western Canyon and Marblehead Canyon. In addition, sandy soil –which was anticipated to be useful for beach nourishment purposes- was stockpiled in Marblehead Canyon on the site of the sewage treatment plant which had been demolished in the 1980's.

Prior to the commencement of the bluff stabilization work, it is estimated that approximately 5,000 Blochman's dudleya were salvaged and taken to the Tree of Life Nursery. Other estimates state that 3,700 plants were salvaged, while 2,900 plants were destroyed, out of a total population of approximately 10,000-12,000 plants. In total, about 3.5 acres of Blochman's dudleya habitat area was impacted by the emergency grading. An estimated 4,200 plants remained on site in the Phase II (3,600) and Phase III (600) areas and were not to be impacted by the emergency grading.

In addition, wetlands, maritime bluff scrub, coastal sage scrub, and native grasslands were located within the emergency grading area and the proposed stockpile areas. However, a follow-up biological survey prepared in 1991 reported that, in addition to the impacts to Blochman's dudleya habitat, about 2.5 acres of needlegrass grassland, 3 acres of coastal bluff scrub, and 0.1 acres of wetlands were impacted. In addition, about 47 acres of annual grassland used as raptor foraging habitat was impacted. The biological report states that raptor foraging activities were significantly impacted by the disturbance to grasslands on the site.

The grading was completed for Phase I but not for Phases II and III. Meanwhile, the applicants submitted a follow-up coastal development permit application (5-90-274) which was eventually withdrawn by the applicant due to financial issues. Subsequently, another follow-up application was submitted (5-94-263) in 1994. However, prior to Commission action on the application, the applicant withdrew this application as well.

In 1995, the Commission granted Coastal Development Permit 5-94-256 and Coastal Development Permit Amendment 5-94-256-A to the City of San Clemente for a slope stabilization project along the bluffs at Colony Cove, which is immediately northwest of the Marblehead project site. In addition, the Executive Director issued Emergency Coastal Development Permit G5-94-256. The slope stabilization project involved the cut of 58,000 cubic yards of soil and 3,000 cubic yards of fill along the bluff and installation of retaining structures. In addition to stabilizing the bluffs at Colony Cove, the stabilization project extended onto the Marblehead project site. Approximately 400 linear feet of bluffs on Marblehead site were graded under 5-94-256, 5-94-256A, and G5-94-256. According to a document in the Commission's files for permit 5-94-256, the City intended to stockpile the soils cut as a result of the stabilization project on the Marblehead site between Marblehead Canyon and the Western Canyon. According to Exhibit 3 of the Marblehead Coastal Resource Management Plan dated October 1997, the cut material was stockpiled in the planned location. However, Coastal Development Permits 5-94-256, 5-94-256A, and 5-94-256-G did not authorize the stockpile of any soils on the

Marblehead site and Commission staff have not been able to locate any coastal development permit approving this stockpile.

On November 5, 1997, the Commission granted Coastal Development Permit 5-97-136 to Marblehead Coastal, Inc. for the implementation of a Blochman's dudleya translocation plan. The translocation plan was intended as mitigation for the impacts to Blochman's dudleya that occurred due to the emergency bluff stabilization. The plan includes the collection of on-site Blochman's dudleya seed, cultivation of seed, re-vegetation with associated native plants, installation of a six foot high chain link fence around a 1.34 acre translocation site, relocation of a sub-sample of Dudleya plants from the natural population (approximately 10 percent) to the 1.34 acre site and establishment of a 50 foot buffer area around the 1.34 acre site. The approval was granted with special conditions requiring implementation of the plan, a requirement for submittal of monitoring reports and failure contingency plan, and restrictions on the use of the 1.34 acre site, with associated deed restrictions.

3. Coastal Development Permit Application 5-99-260 – Recent History

On March 12, 2001, a public hearing was held regarding Coastal Development Permit Application 5-99-260. The applicant, MT No. I LLC, applied for a permit to construct a residential and commercial development, public park, trails and open space and associated infrastructure including roads and utilities on the portion of the Marblehead property within the coastal zone. Included were a property subdivision and construction of 424 single family homes, 84,313 square feet of commercial space in eight commercial buildings in the coastal zone, a 9.4 acre bluff park, and 67.7 acres of public and private open space and pedestrian and bicycle trails. Upon conclusion of presentations by Commission staff and the applicant and conclusion of public testimony, the Commission moved to deny the proposed project because it would not be in conformity with Sections 30213, 30221, 30222, 30223, 30230, 30231, 30233, 30240, 30252, and 30253 of the Coastal Act. However, prior to Commissioners voting on the matter, the applicant withdrew the proposed application.

The proposed development entailed large-scale grading that would dramatically transform the natural landforms on the site. For example, the proposed project would have graded and filled the slopes of two canyons on the project site in order to expand the area of development for single family residences. Some fill slopes within the canyons would be steepened through the use of mechanically stabilized earth structures (a.k.a. loffelstein walls). Approximately 2,000 linear feet of walls were proposed to be constructed within Marblehead Canyon and over 1,700 linear feet of walls were proposed to be constructed in the Western Canyon. The result of this grading, filling, and use of loffelstein walls would have narrowed the width of the canyons and steepened the canyon walls. These landform alterations would have adverse visual impacts. Grading and construction of walls within the canyons would have occurred within five (5) to 30 feet of existing wetlands. This grading and construction would have eliminated existing native vegetation which provides a buffer for the existing wetlands. In addition, grading and construction within the canyons and grading of coastal bluffs would have eliminated existing Blochman's dudleya, a rare plant. Also, the proposed project would have filled a smaller canyon located between the Western Canyon and Marblehead Canyon known as the 'trident-shaped' canyon. The proposed development would also have committed land suitable for either visitor serving commercial development or lower cost public recreation opportunities for residential development, a low priority use under the Coastal Act. Finally, the applicant had not submitted sufficient information to allow the Commission to adequately evaluate the impacts of the proposed development on native habitat, wetlands, hydrology, geologic stability, and water quality.

4. Coastal Development Permit Application 5-01-459 – Recent History

On January 10, 2003, a brief public hearing was held regarding Coastal Development Permit Application 5-01-459. The applicant, MT No. I LLC, applied for a permit to construct a residential and commercial development, public park, trails and open space and associated infrastructure including roads and utilities on the portion of the Marblehead property within the coastal zone.

The applicant notified the Commission of their intention to continue to work with Commission staff regarding revisions to their project. However, due to Permit Streamlining Act requirements, they could not do so under the present application. Accordingly, the applicant withdrew their application and notified the Commission of their intent to immediately re-submit an application. The applicant requested that the Commission accept the re-submitted application as filed with the intent of returning to a hearing in April 2003. The Commission granted the applicant's request regarding the filing of a new application.

C. BIOLOGICAL RESOURCES

Section 30240 of the Coastal Act states that:

> *(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.*
>
> *(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 those areas, and shall be compatible with the continuance of those habitat and recreation areas.*

Section 30250 of the Coastal Act states:

> *(a) 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 only 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 surrounding parcels.*

The proposed project would result in impacts to biological resources, including coastal sage scrub plants and other habitat that may be used by California gnatcatcher. The project could also have shading impacts to wetlands and would provide final approval for the impacts to wetlands that occurred during emergency grading of the bluffs. This section contains a description of the known, sensitive biological resources, including wetlands, and associated impacts in order to provide a comprehensive view of the biological resources which are present on the site and the impacts to those resources. However, impacts to wetlands and their relationship to Coastal Act policy are more fully discussed in the "Wetlands" section of these findings.

The Marblehead site consists of approximately 247.88 acres, of which the most seaward 201.38 acres are in the coastal zone. The project site has been used for a variety of purposes in the

past (Exhibit 3). For instance, between 1949 and 1969, a sewage treatment plant was located on approximately 18 acres in Marblehead Canyon. The more level upland areas of the project site have been used for agriculture. Some of these same level upland areas have been used for the placement of soil stockpiles, construction staging areas, and a seasonal carnival. There are several unpaved roads which cross the area.

There are two primary canyons on the project site, the Western Canyon (Drainage C) and the larger Marblehead Canyon (Drainage E). These canyons contain a variety of sensitive habitat areas. The Western Canyon is approximately 2,300 linear feet long, runs roughly north-south, and is roughly perpendicular to the bluff face and El Camino Real. Alkali meadow wetlands course through the canyon bottom. Ephemeral drainages are found at the head of the canyon. The mouth of the canyon was graded by the emergency grading in 1990. Coastal sage scrub, annual grasslands and native needlegrass grasslands cover the slopes that form the canyon walls. This canyon contains habitat which has been occupied by California gnatcatcher according to surveys conducted in 1997, 1999-2000 and 2001. In 2001, a breeding territory was located here and adults were seen with dependent fledglings. The deeper, seawardmost parts of the canyon have been recorded as gnatcatcher habitat for over ten years. In addition, a population of Blochman's dudleya is located near the mouth of the canyon.

Marblehead Canyon is the largest canyon on the project site (about 3,700 linear feet) and roughly bisects the property running in a north-south configuration perpendicular with the bluffs and El Camino Real. Alkali meadow, freshwater, and mulefat scrub wetlands course through the canyon bottom. The slopes of the canyon are covered by coastal sage scrub, annual grasslands and non-native pine woodlands. There is an approximately 1,600 foot long linear canyon which branches off the main part of Marblehead Canyon (herein referred to as the 'eastern branch of Marblehead Canyon') that contains wetlands, coastal sage scrub, and annual grassland. South of the east branch, there is also a deep trench-like formation that extends from the main body of the canyon to Avenida Pico which may be related to the former sewage treatment plant. Coastal sage scrub and wetlands are present in this deep trench. Ephemeral drainages are found at the heads of the various branches and spurs off Marblehead Canyon. This canyon contains habitat that has been occupied by California gnatcatcher according to surveys conducted in 1996, 1997, 1999/2000 and 2001. Similar to the Western Canyon, another breeding territory was located here, and adults were seen with dependent young in 2001. As with the Western Canyon, a large area of this canyon has also been recorded as gnatcatcher habitat for over ten years.

Two smaller drainages (Drainage A and B) west of the Western Canyon also contain wetlands, coastal sage scrub and Blochman's dudleya. Parts of the mouths of these drainages were graded in 1990 in the emergency bluff stabilization. Ephemeral drainages occur at the heads of these drainages. Drainage B contains habitat which has been occupied by California gnatcatcher according to surveys conducted in 1997, 1999/2000 and 2001.

There is also a small canyon (Drainage D or 'Trident Canyon') located between the western canyon and Marblehead Canyon that contains native needlegrass grassland, goldenbush/annual grassland and non-native pine woodland. This canyon is roughly trident-shaped. Ephemeral drainages are present at the head of each trident. The mouth of the canyon was graded in 1990.

The bluffs overlooking El Camino Real and the Pacific Ocean range in height between 70 feet and 100 feet. Coastal sage scrub and Blochman's dudleya are found in areas not disturbed by the 1990 grading.

There is one blue-line stream (the Segunda Deschecha channel) on the United States Geologic Service (USGS) map for the area which is immediately adjacent to and outside the project site adjacent to the existing Blochman's dudleya reserve created pursuant to CDP 5-97-136. According to the applicant's submittal, the proposed development would not result in impacts to this channel.

Appendix A lists the biological analyses prepared for the project site submitted by the applicant that identify and characterize the resources found on the site. These studies formed the basis for the analysis of biological resources and potential impacts in the Marblehead Coastal Final Environmental Impact Report dated June 1998 (FEIR), the Addendum to Final Environmental Impact Report (Addendum FEIR) dated February 2000, and the Marblehead Coastal Project Habitat Management Plan dated November 28, 2001, and subsequently amended, for the Marblehead project. Supplemental analyses of biological impacts were also submitted by the applicant and are listed in Appendix A.

1. Habitat Areas on the Marblehead Site

There are several plant communities that are found on the Marblehead site. Recently, the applicant has submitted an updated vegetation map of the project site which shows that the habitat areas have changed since those reported in the biological study prepared for the EIR. Based on the revised vegetation mapping, there is coastal bluff scrub, sagebrush scrub, southern willow scrub, coyote bush scrub, saltbush scrub, and other mixed scrubs, annual grassland, native needlegrass grasslands, and mixed grasslands, alkali marsh, freshwater marsh, mulefat scrub, non-native Allepo Pine woodland, and disturbed ruderal habitat (Exhibit 15). In addition to these habitat areas, one sensitive non-wetland plant species was identified, Blochman's dudleya. Following is an acreage breakdown of the habitat types identified on the Marblehead site:

PLANT COMMUNITY	SUB ASSOCIATIONS	ACRES OF HABITAT IN THE COASTAL ZONE (APPROX.)
Coastal Sage Scrub	Coastal bluff scrub	1.33
	Southern Willow Scrub	0.07
	Sagebrush Scrub	1.84
	Coyote Bush Scrub	3.70
	Salt Brush Scrub	3.20
	Coyote Bush/Saltbush	1.56
	Mixed Scrub	0.68
	Mixed Scrub/Annual Grassland	0.82
Grassland	Annual Grasslands	1.43
	Golden Bush/Annual Grassland	2.00
	Needlegrass Grasslands	0.62
Wetlands	Alkali Marsh	3.40
	Alkali Meadows	0.56
	Seasonal Wetlands	0.21
	Freshwater Marsh	0
Riparian (wetlands)	Mulefat Scrub	0.89
	Willow	0.04
Developed	Ornamental Landscaping	2.64
	Developed	0.03
Disturbed/Ruderal	Disturbed or Barren	163.07
Other	Pine Woodlands	3.67
	Naturalized Exotics	9.05
	Tamarisk Scrub	0
	Rockpile	0.08

Additionally, the FEIR identifies the habitats, plants, or animals considered to be "sensitive" under a variety of criteria including: 1) listing as rare, threatened, or endangered under the Federal and/or State Endangered Species Acts; 2) State or Federal Candidates for listing as rare, threatened or endangered; 3) California Species of Special Concern; 4) Special Plants or Animals as listed by the Department of Fish and Game; 5) plant species included in the California Native Plant Society's "Inventory of Rare and Endangered Vascular Plants of California"; or 6) plant or animal species considered locally uncommon or declining by biologists familiar with regional population trends. These areas identified as "sensitive" by the FEIR are useful in identifying areas which would be designated as environmentally sensitive habitat area under the Coastal Act but such designations in the FEIR are not determinative relative to ESHA.

a. Coastal Sage Scrub Community

According to the applicant's submittal, there are 13.7 acres of coastal sage scrub on the project site within the coastal zone. The coastal sage scrub community consists of several types of scrub habitats including coastal bluff scrub, southern willow scrub, sagebrush scrub, coyote bush scrub, saltbush scrub and various mixtures thereof. According to the updated vegetation survey, the presence of California box thorn (Lycium californica) is the primary indicator of this habitat type on the Marblehead site with lower quantities of bladderpod and coast sunflower. On the Marblehead site, the Blochman's dudleya has been found in association with this plant community. The sagebrush scrub community is characterized by the presence of dense stands of California sagebrush (Artemesia californica). Coyote bush scrub is characterized by the presence of Coyote bush (Baccharis pilularis consanguinea). Finally, saltbush scrub contains Brewer's saltbush (Atriplex lentiformis lentiformis). Mixed sage scrub contains California buckwheat (Eriogonum fasciculatum, sage (Salvia spp.), sticky-leaved monkeyflower (Mimulus aurantiacus), coyote brush (Baccharis pilularis), coast goldenbush (Isocoma menziesii), coast sunflower (Encelia californica), and laurel sumac (Malosma laurina).

b. Grassland Community

According to the applicant's submittal, there are various types of grassland communities on the project site. These include Goldenbush/Annual grassland that is primarily located in the Trident Canyon and consists of non-native brome grasses, Italian ryegrass and rattail fescue interspersed by Coast goldenbush shrubs. There is also a mixed scrub/annual grassland that is primarily within the sand stockpile area of the site that contains coyote brush, coast goldenbush, saltbush and California sagebrush with an understory of non-native annual grasses and forbs. Native needlegrass grasslands are located in the Western Canyon and Trident Canyon and have purple needlegrass (Nassella pulchra), foothill needlegrass (Nassella lepida), coast range melic (Melica imperfecta) and june grass (Koeleria macrantha). Forbs include blue-eyed grass (Sisyrinchium bellum), wild hyacinth (Dichelostemma capitatum), golden stars (Bloomeria crocea), and shooting stars (Dodecatheon clevelandii). Non-native annual grasslands are found in the western corner of the site and have red brome, rattail fescue, and Italian ryegrass.

c. Wetlands

There are 5.21 acres of wetlands in the project area within the coastal zone. These wetlands are comprised of alkali marsh, alkali meadow, seasonal wetland, and mulefat scrub. The alkali marsh and meadow and seasonal wetlands are characterized by the presence of alkali heath (Frankenia salina), coastal salt grass (Distichilis spicata spicata), and common woody pickleweed (Salicornia virginica), coastal bulrush (Scirpus robustus) and slender cattail (Typha domingensis). These wetland areas are not subject to tidal inundation. The presence of these plants indicates there are alkali soils in the drainages. Mulefat scrub areas contain arroyo willow (Salix lasiolepis) and mulefat (Baccharis salicifolia).

d. Developed

There are 2.67 acres of habitat that have been identified by the applicant as "developed" because they contain ornamental vegetation. Ornamental vegetation includes trees and groundcover. Iceplant (Malephora crocea) is the dominant plant cover.

e. Disturbed/Ruderal

There are 163.02 acres that are described as disturbed/ruderal. These areas include slope stabilization and graded areas, dirt roads, and areas which have been cleared and disked on a regular basis.

f. Other

According to the applicant, there are 3.67 acres of area described as pine woodland and 9.05 acres of area described as naturalized exotics. The pine woodland areas contain allepo pines (Pinus halepensis), which the FEIR describes as a planted ornamental tree. These areas have an open canopy of allepo pines and an understory of annual grassland.

Areas characterized as naturalized exotics include ornamentals and annual grasslands which the FEIR states have invaded bluff habitat areas.

g. Plants

In addition to the habitat areas, one sensitive upland plant species was identified on the Marblehead site, the Blochman's dudleya (*Dudleya blochmaniae ssp. blochmaniea*). The Blochman's dudleya is a perennial succulent plant species found on coastal bluffs from San Luis Obispo County, California, into the Baja peninsula. The Blochman's dudleya is a small plant that grows with spring rainfall, flowers in April and May and then remains dormant during the summer and fall. The plant survives on starch reserves stored in the underground caudex or stem, similar to a bulb. The plant reproduces primarily by seed but can reproduce vegetatively, via detached leaves. The plant is found on the margin of open areas on coastal bluffs and usually in association with other native plants such as California boxthorn, California sagebrush, coastal goldenbush (Isocoma menzeisii), golden tarplant (Hemizonia fasiculata) and the lance leaf dudleya (Dudleya lanceolata). The California Native Plant Society (CNPS) has placed Dudleya blochmaniae on List 1B of their plant inventory indicating that the species is rare throughout its range and has been judged by CNPS to be "...vulnerable under present circumstances or to have a high potential for becoming so because of their limited or vulnerable habitat, their low numbers of individuals per population (even though they may be wide ranging), or their limited number of populations."[8]

2. **<u>Wildlife on the Marblehead Site</u>**

According to the FEIR, a variety of wildlife are expected within the coastal sage scrub habitats on the project site. Amphibians include the Pacific slender salamander (Batrachoseps pacificus), western toad (Bufo boreas), and Pacific treefrog (Hyla regilla). Reptiles include side-blotched lizard (Uta stansburiana), western whiptail (Cnemidophorus tigris), and gopher snake (Pituophis melanoleucus). Bird species include California towhee (Pipilo crissalis), Bewick's wren (Thrymmanes bewickii), western kingbird (Trannus verticalis), rufous-sided towhee (P. erythrophthalmus), scrub jay (Aphelocoma coerulescens), bushtits (Psaltriparus minimus), coastal California gnatcatcher (Polioptila californica), and house finch (Carpodacus

[8] California Native Plant Society 2001, "Inventory of Rare and Endangered Plants in California" 6th Edition, 2001

mexicanus). Open shrub areas provide foraging areas for raptors including red-tailed hawk (Buteo jamaicensis), turkey vulture (Cathartes aura) and American kestrel (Falco sparverius). Small mammals include deer mouse (Peromyscus maniculatus), and house mouse (Mus musculus). Large mammals include California ground squirrel (Spermophilus beecheyi), desert cottontail (Sylvilagus audubonii), long tailed weasel (Mustela frenata), striped and spotted skunks (Mephitis mephitis and Spilogale gracilis), and coyote (Canis latrans). Woodrats (Neotoma spp.) may also be present.

According to the FEIR, wildlife expected in grasslands include birds such as towhees, sparrows, quail, and finch. In addition, lesser and American goldfinches (Carduelis psaltria and C. tritis) would also be found. Raptors include turkey vulture, red tailed hawk, black shouldered kite/white tailed kite (Elanus caeruleus), American kestrel, barn owl (Tyto alba) and great horned owl (Bubo virginianus). Small mammals include deer mouse, house mouse, California ground squirrel, cottontail skunks, and coyote. In addition, California vole (Microtus californicus) and Botta's pocket gopher (Thomomys bottae) would be present.

Wildlife in wetland habitats include the Pacific tree frog (Hyla regilla) (was the only recorded amphibian) although, according to the FEIR, other amphibians mentioned above are likely. Birds specific to riparian areas include snowy egret (Egretta thula), American koot (Fulica americana), common yellow throat (Geothlypis trichas), and red winged blackbird (Agelaius phoeniceus).

According to the FEIR, one sensitive species of wildlife has been recorded on the project site, the coastal California gnatcatcher (Polioptila californica). The California gnatcatcher is listed by the U.S. Fish and Wildlife Service (USFWS) as threatened. According to the FEIR, the California gnatcatcher is an obligate, year-round resident of coastal sage scrub vegetation communities. California gnatcatchers primarily feed upon insects which are eaten directly off of coastal sage scrub vegetation.

In addition to the species identified in the FEIR, previous biological surveys have identified species which were not identified by the most recent surveys. For instance, according to the 1991 Biological Assessment Update prepared by Fred Roberts, a 1985 biological survey titled Biological Assessment Update for the Marblehead Coastal Project prepared by Karlin Marsh and Gordon Marsh noted that the project site was "...locally significant for raptors, including one species, the northern harrier, which is considered rare by the California Natural Diversity Data Base...". Also, Commission staff have observed white-tailed kite (Elanus leucurus) foraging on the project site and a Loggerhead shrike (Lanius ludovicianus) perched on a pine snag. The white-tailed kite is a state listed Fully Protected species. In addition, the Loggerhead shrike is a state listed Species of Special Concern.

Other winter and breeding season bird surveys were conducted at the site in 2001. The winter period survey, prepared by Klein-Edwards Professional Services, documents the presence of Sharp-shinned Hawk (Accipiter striatus), Red-shouldered Hawk (Buteo lineatus), Red-tailed Hawk, American Kestrel (Falco sparverius), and Burrowing Owl (Speotyto cunicularia). The survey also documents the presence of other wildlife including a variety of birds such as killdeer, greater yellowlegs, mourning dove, common ground-dove, Anna's hummingbird, European starling, American pipit, yellow-rumped warbler, common yellowthroat, California towhee, savannah sparrow, song sparrow, white-crowned sparrow, red-winged blackbird, western meadowlark, Brewer's blackbird, house finch, lesser goldfinch. The report also notes the presence of a mated pair of gnatcatchers and an additional individual. Other wildlife include Pacific chorus frog, Audubon's cottontail, California ground squirrel, Botta's pocket gopher, and raccoons. In addition, a variety of invertebrates were identified including monarch butterfly. The

variety of wildlife observed in this brief winter survey indicates the presence of a wide variety of species utilizing habitat present on the project site.

A breeding season survey was also conducted during 2001. The study indicates that Cooper's hawk, red-tailed hawk, and American kestrel were observed to forage at the site. However, the survey did not detect any occupied or defended nest sites or feeding young. Therefore, the survey makes a determination that conditions at the site are not currently conducive to nesting. This may be a result of a lack of tall trees for raptor perching and nesting on the project site. However, it remains that the site is utilized as foraging area.

Some species that dwell off-site but periodically visit the site are important to maintaining the current balance of wildlife on the site. For instance, the FEIR notes that coyote are present on the project site. Larger predators, such as the coyote, are important in controlling the presence of smaller predators that prey on avian species. In the absence of these larger predators, the diversity of avian species at the site would decline notably[9].

3. Environmentally Sensitive Habitat Areas

Environmentally sensitive habitat areas are defined in Section 30107.5 of the Coastal Act, as follows:

> *"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.*

Section 30240 of the Coastal Act requires that environmentally sensitive habitat areas be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas. It also regulates the siting and design of adjacent development that could degrade ESHA or be incompatible with its continuance.

While working with Commission staff, the applicant submitted an analysis, including a map, of specific locations that they identified as ESHA on the project site. The applicant's analysis stated that their ESHA determination is based on the following criteria: 1) all wetland areas in the coastal zone; 2) areas of suitable habitat observed to be used by the coastal California gnatcatcher during the breeding season, immediately contiguous habitat, and inclusions of non-native habitat or bare dirt; 3) areas containing Blochman's dudleya; 4) areas containing coastal bluff scrub; 5) areas containing needlegrass grassland; and 6) areas containing California sagebrush except for extremely small isolated patches not used by the California gnatcatcher and patches directly beneath non-native pines or eucalyptus trees.

The criteria used by the applicant to identify ESHA are sensible. Each one defines an area in which plant life, animal life, and/or their habitats are rare and/or especially valuable (in most cases because they support sensitive or threatened species). In addition, each one defines an area that is easily disturbed or degraded by human activities and development. Similar to the applicant, the Commission identifies ESHA on the project site based on the presence of sensitive vegetation communities such as Blochman's dudleya and its' habitat (coastal bluff scrub) and other rare vegetation communities such as native perennial grasses. While not all areas of coastal sage scrub should be identified as sensitive habitat, the Commission usually identifies areas that are utilized by or necessary for the survival of California gnatcatcher as environmentally sensitive habitat areas (ESHAs). Generally speaking, these ESHAs are based

[9] Crooks, K.R. and M.E. Soulé. 1999. Mesopredator release and avifaunal extinctions in a fragmented system. Nature 400:563-566.

on the estimates of gnatcatcher use area in the canyons below the top of slope. The rationale for the designation of ESHA is explained more thoroughly below as well as within Exhibits 25 and 26[10] (please note that the memorandum within Exhibit 25 references three exhibits as Exhibits A, B and C. These exhibits are attached to these findings as Exhibits 19a, 19b, and 19c, respectively. Thus, they are not also attached to the memorandum because they would be duplicative. In addition, the exhibits associated with Exhibit 26 are also not attached as they are superceded by Exhibits 19a, 19b, and 19c).

Although the applicant's and the Commission's rationales for identifying ESHA may be similar, the ESHA designated by the applicant and the Commission are not the same. In some cases, the ESHA designated by the Commission is larger than that which is identified by the applicant and in other cases, it is smaller. The more significant differences may be found in the areas of Drainage B and Spur E2 on the west side of Marblehead canyon. The Commission's ESHA designation (Exhibit 19d) is larger in these locations. In addition, other than 100 foot wide wetland buffers, the applicant has not identified any terrestrial ESHA buffers. The Commission requires the establishment of terrestrial ESHA buffers and connectivity areas in order to prevent the degradation of the terrestrial ESHA. Conformance with Section 30240 of the Coastal Act would necessitate the removal of significant development (e.g. houses, roads, detention basins.) from within the ESHA and ESHA buffers.

It should be noted that maps submitted by the applicant subsequent to their own ESHA determination, depict an ESHA determination prepared by Commission staff for the January 2003 hearing, rather than their own determination. Although the applicant may not fully agree with that ESHA determination, they indicated to staff that they have deferred to that determination for the purpose of designing their project. However, it should also be noted that the Commission has continued to refine the ESHA determination based upon new biological information. In general, that effort has resulted in a somewhat smaller ESHA determination than the one provided in the staff recommendation for the January 2003 hearing and depicted on the applicant's exhibits. The most up-to-date ESHA determination by staff is provided in Exhibit 19a-c.

With one exception regarding the gnatcatcher use area between Drainage B and the Western Canyon (Drainage C) along the bluffs, the Commission finds that the areas identified in Exhibit 19a-c as ESHA accurately represent the location of ESHA present on the site at this time. In the case of the bird use area between Drainage B and the Western Canyon, staff recommended that this area be designated as ESHA (see Exhibit 25, page 3). However, the Commission finds that the area along the bluffs between Drainage B and the Western Canyon is not ESHA itself, rather it is connective habitat adjacent to ESHA that must be maintained as open space to prevent impacts that would significantly degrade the adjacent ESHA located in Drainage B and the Western Canyon. The final ESHA determination made by the Commission is depicted in Exhibit 19d. The rationale for this final determination is described more fully below in Section C.6.b.ii.

a. Blochman's dudleya and Coastal Bluff Scrub Plant Community

The California Native Plant Society (CNPS) has placed Dudleya blochmaniae on List 1B of their Inventory of Rare and Endangered Vascular Plants. According to the CNPS classification, the plant is eligible for state listing as an endangered species.

The Dudleya blochmaniae is found at three known sites in Orange County; at the Dana Point Headlands, San Clemente State Beach, and at Marblehead, the project site. Within Orange

[10] Wetlands may constitute another type of ESHA on the project site that are discussed elsewhere in the 'wetlands' section of these findings.

County, the Marblehead site has the largest population. A 1991 biological assessment (1991 Biological Assessment Update Marblehead Coastal Project Site, San Clemente, California) by Fred Roberts (herein '1991 biological survey') states that the estimated population of Dudleya blochmaniae was approximately 10,500-12,000 individual plants. The Dana Point Headlands has a population of approximately 250 plants according to the Dana Point Headlands Development and Conservation Plan EIR. The San Clemente State Beach population is estimated as 150-300 plants. Additionally, there is a Camp Pendleton population in San Diego County estimated at perhaps 500 plants.

Roberts lists several factors that limit the spread of the Blochman's dudleya. These factors are that the plant: requires a specific maritime climate; is found near the coast; has very specific soil requirements; and does best where there is little or no competition from other plants. Blochman's dudleya is also sensitive to artificial irrigation that does not mimic the natural wet and dry seasons typical for southern California. The subsurface corm, from which the plant grows, can rot and die if it becomes wet from irrigation during spring and summer. Trampling during the growing season is also a threat to the plant's survival. Finally, herbivory impacts the plants as well. Roberts also notes that the population must be shielded from long-term impacts, such as future development.

According to the 1991 biological survey, Blochman's dudleya was likely present over much of the project site at one time. However, cultivation, disking, and more recently grading associated with bluff stabilization, has significantly decreased the extent of the population on the site. Presently, there are two known populations at the site. The first population is located along the bluffs overlooking El Camino Real at the southwest corner of the site and within the western canyon. The size of this population reported in various biological assessments has varied from 3,000 to 5,000 individuals. According to a recent biological survey (Year 6 Annual Report for the Blochman's Dudleya Translocation Plan for Marblehead Bluffs by RECON dated October 11, 2001 herein referred to as the '2001 transplantation monitoring report'), there are approximately 3,000 individuals presently located in this area. The second population is within the existing Blochman's dudleya reserve located at the southeast corner of the site created under CDP 5-97-136. The 2001 transplantation monitoring report indicates that approximately 16,000 individuals have been transplanted to this reserve. The actual total population count was not reported; however, the applicant reports that there are about 5,000 flowering individuals.

The Dudleya blochmaniae is only found in a few small populations throughout California and Mexico. This small population and limited range cause the Dudleya blochmaniae to be rare. In addition, the population at the Marblehead project site is especially large compared with other populations in the region, causing that population to be especially valuable. Larger populations are valuable because they tend to have more genetic diversity that allows the population to better withstand the kinds of environmental stresses (disease, drought, etc.) that may tend to extirpate smaller populations. The genetic diversity also makes the population a resource for augmenting or creating other populations in other suitable habitat. Furthermore, due to the very specific conditions upon which the Dudleya blochmaniae are dependent to survive, the Dudleya blochmaniae could be easily disturbed by human activity. Therefore, the Commission finds that the areas containing Dudleya blochmaniae on the Marblehead site are environmentally sensitive areas under Section 30107.5 of the Coastal Act because they are areas in which rare and especially valuable plants exist and are easily disturbed by human activities.

Also, as noted above, the Blochman's dudleya generally grows best where there is little or no competition from other plant species and where it can be shielded from herbivores and trampling. Coastal bluff scrub, a CSS vegetation community, is most commonly associated with Blochman's dudleya. The coastal bluff scrub community is associated with other plant species

such as California boxthorn (Lycium californica), California sagebrush (Artemisia californica), coast goldenbush (Isocoma menziesii), golden tarplant (Hemizonia fasciculate), mariposa lily (Calochortus sp.), lance leaf dudleya (Dudleya lanceolata), pineapple weed (Amblyopappus pusillus), and gumplant (Grindelia robusta). While the Blochman's dudleya can grow in full sun, the plant is often found as an understory species to boxthorn and goldenbush which are thought to serve as nurse plants that protect the species from herbivory and desiccation. The project site does contain coastal bluff scrub areas where Blochman's dudleya have not been recorded. The coastal bluff scrub plant community is distributed at localized sites along the coast, south of Point Conception; and at Point Magu, Point Dume, Point Vincente, Dana Point, Torrey Pines State Reserve, and Point Loma. Coastal bluffs along the southern California coastline have been heavily developed, therefore, this plant community is rare. Due to its rarity, the California Department of Fish and Game has listed the vegetation association as a high priority for inventory under the California Natural Diversity Database[11]. In addition, this plant community is especially valuable as habitat for Blochman's dudleya. Finally, this plant community could be easily disturbed by human activity. Therefore, the Commission finds that the areas fostering the coastal bluff scrub community on the project site are ESHA.

b. Coastal Sage Scrub – Current Determination Regarding ESHA

"Coastal sage scrub" or "soft chaparral" (herein 'CSS') is a general vegetation type characterized by special adaptations to fire and low soil moisture. The defining physical structure in CSS is provided by small and medium-sized shrubs which have relatively high photosynthetic rates, adaptations to avoid water loss, including drought deciduousness, and adaptations to fire, such as the ability to survive the loss of above-ground parts and re-sprout from root crowns. In addition to twenty or so species of perennial shrubs, such as California sage brush, CSS is home to several hundred species of forbs and herbs, such as the California poppy. For convenience in mapping and management, CSS periodically has been divided into many types and sub-types, such as "southern coastal bluff scrub" and "Diegan sage scrub," based on geographic location, physical habitat, and species composition.[12] Some of these types may be comprised of distinct groups of co-evolved species that represent some underlying evolutionary reality, but many simply document current patterns of association that are sufficiently common to warrant a name.

About 13.7 acres of various types of coastal sage scrub habitats are present on the Marblehead site. The stands are degraded, scattered throughout the several drainages/canyons and interspersed with non-native grasslands. The flat portions of the site are disked regularly and, therefore, do not support perennial vegetation. Despite the fragmented and degraded nature of the scrub habitats that are present, they are occupied by the California gnatcatcher (federally designated as "threatened"), a species dependent on scrub habitats. The presence of two pairs of gnatcatchers was documented in 1990, one pair was observed in 1996, and two pairs were recorded in 1997.[13] Additional surveys done in 1999/2000 indicate that up to three pairs occupied the site.[14] One pair and at least one other individual were observed by the applicant's biological consultant during an agency site visit in 2000.[15] Finally, surveys conducted in 2001[16]

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[11] California Department of Fish and Game 2002, California Natural Diversity Database, List of California Terrestrial Natural Communities Recognized by the California Natural Diversity Database dated May 2002.

[12] Axelrod, D.I. 1978. The origin of coastal sage vegetation, Alta and Baja California. American Journal of Botany 65:117-131; Holland, R.F. 1986. Preliminary descriptions of the terrestrial natural communities of California. Unpublished report. Sacramento, California Department of Fish and Game; Sawyer, J.O. and T. Keeler-Wolf. 1995. A manual of California vegetation. Sacramento, California Native Plan Society.

[13] City of San Clemente. 1998. Final Environmental Impact Report. Marblehead Coastal General Plan Amendment 96-01, Specific Plan 95-02, Tentative Tract Map. State Clearing House Number 95091037. A report prepared by David Evans and Associates dated June 1998 and adopted August 5, 1998.

[14] Bartel, J.A. and W.E. Tippets. 2000. Letter to James Hare, City of San Clemente, authorizing incidental take of gnatcatchers at Marblehead.

[15] Tony Bomkamp personal communication to John Dixon April 5, 2000.

[16] Glenn Lukos Associates. 2001. Letter report to U.S. Fish and Wildlife Service titled Submittal Requirements of Coastal California

found two pairs on the site, each with five fledglings. The location of these birds has not been the same each year. Therefore, it appears likely that the site has generally supported two to three pairs of California gnatcatchers and much of the scrub habitat may potentially be occupied at one time or another.

It is important to recognize that coastal sage scrub, as a habitat type, can qualify as ESHA regardless of the presence of California gnatcatchers. Indeed, if the gnatcatcher became extinct, CSS could still be ESHA. Section 30107.5 of the Coastal Act states, "'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." It is probably universally accepted among specialists that CSS is easily degraded and in fact has been destroyed by development over large areas of the state.[17] About 2.5% of California's land area was once occupied by CSS. In 1981, it was estimated that 85% to 90% of the habitat type had been destroyed state-wide and, in 1991, it was estimated that San Diego, Orange, and Riverside counties had lost 66% of their CSS.[18] Current losses are higher and losses in the coastal zone have undoubtedly been much higher. Compared to its natural distribution and abundance, CSS is in decline and it is in decline because it has been destroyed by human activities. Unfortunately for the habitat type, it occupies shallow slopes on lower elevations of coastal mountain ranges, areas that are understandably prized for development. Besides being in decline, CSS provides important ecological functions. It can be home to some 375 species of plants, many of which are local endemics. About half the species found in CSS are also found in chaparral after fire, but disappear from that habitat after about seven years. CSS may provide a spatial refuge for those herbs between fires.[19] Nearly 100 species of rare plants and animals are obligately or facultatively associated with coastal sage scrub habitats.[20] In addition, coastal sage scrub is often the natural upland habitat adjacent to wetland habitats such as coastal salt marshes and vernal pools, and is important to species that require both habitat types to complete their life cycle.

Even degraded coastal sage scrub may provide essential habitat for species that require both CSS and saltmarsh plants to complete their life cycle. In the heart of urban environments, CSS may still support many bird species when there is sufficient open space to include coyotes in the system. CSS within urban environments can also provide refuges for sensitive bird species, such as the gnatcatcher, that may repopulate larger preserves nearby that may be severely impacted by events such as fires that reduce or destroy that preserve's population (i.e. 'rescue effect'). High quality coastal sage scrub also may be of significant value in heavily urbanized areas by contributing to the local diversity of vegetation, even if it is so isolated as to lose much of its wildlife value. In addition, some categories of coastal sage scrub, such as southern coastal bluff scrub, are so rare that they may be inherently deserving of protection wherever they are found. Aside from being a rare habitat in and of itself, coastal bluff scrub on the project site is associated with two sensitive species, the coastal California gnatcatcher and Blochman's dudleya. Of course, if a stand of coastal sage scrub is home to listed species, the presumption should generally be that the habitat is ESHA in the absence of compelling evidence to the contrary.

Gnatcatcher Surveys on the Marblehead Project Site, City of San Clemente, Orange County, California.

[17] Mooney, H.A. 1977. Southern Coastal Scrub. Pages 471-489 in M.G. Barbour and J. Major, eds. Terrestrial Vegetation of California. Davis, U.C. Press; Westman, etc

[18] Westman, W.E. 1981. Factors influencing the distribution of species of California coastal sage scrub. Ecology 62:439-455; Michael Brandman Assoc. 1991. A rangewide assessment of the California gnatcatcher. A report to the Building Industry Association of Southern California cited by J.E. O'Leary, et al. 1994, below.

[19] Westman, W.E. 1979. A potential role of coastal sage scrub understories in the recovery of chaparral after fire. Madroño 26:64-68.

[20] O'Leary, J.F., et al. 1994. Bibliographies on coastal sage scrub and other related malacophyllous shrublands of Mediterranean-type climates. California Wildlife Conservation Bulletin No. 10.

It is evident that California coastal sage scrub is a habitat that could qualify for the designation as ESHA under the Coastal Act, regardless of the presence of the California gnatcatcher or any other particular species. However, that fact does not imply that every particular stand of vegetation designated as "coastal sage scrub" is ESHA. Section 30240 of the Coastal Act protects ESHA from any significant disruption of habitat values and confers considerable protection to adjacent areas. Given the far reaching implications of designating an area as ESHA, it is incumbent upon the Commission to use this designation with regard to a general category of habitat, such as coastal sage scrub, only where the local habitat itself meets the test of being rare or especially valuable because of its special nature or role in an ecosystem. However, in this context, it is important to remember that the meaning of the word "ecosystem" does not contain any guidance as to the portion of the biosphere included. An ecosystem is simply the combination of a biotic community and its environment. It is up to the practitioner to define the boundary of any "ecosystem" under consideration. It could encompass the world or only the locally important area. Therefore, a local area could certainly be an ESHA if it provides an important function in a local ecosystem, regardless of its regional significance. In summary, a case-by-case analysis is required, which has always been the Commission's approach.

In the case of Marblehead, there are several types of coastal sage scrub present. At the rare end of the spectrum is coastal bluff scrub which is present in several small patches and at the other end is coyote bush which is common and tolerant of disturbance. If coastal sage scrub has supported successful reproduction by California gnatcatcher, based on existing conditions, the areas of CSS and other habitat within the use area of the gnatcatchers should be designated ESHA under the Coastal Act (Exhibit 19d).

Another factor the applicant had asked the Commission to consider in determining whether any of the CSS on the project site should be considered ESHA relates to whether the CSS on the site is acting as an ecological "sink" to the detriment of the gnatcatcher species. Although the applicant is no longer asking the Commission to consider this argument in the ESHA determination, it is important to address this issue. In the parlance of conservation biology, a "sink" is an area of habitat where, for a species under consideration, mortality exceeds production of new individuals. Under such a regime, in the absence of colonization, the local population will eventually become extinct. However, if the habitat continues to attract dispersing individuals which would otherwise successfully reproduce elsewhere, then the habitat may be actually damaging to the species in a regional context. Conversely, if reproduction occurs here that would not occur otherwise, then even if the reproduction is less than replacement level, the site is having a positive influence. Since we cannot determine which of these alternatives is true, the sink question is totally dependent upon assumptions about unknown conditions. In addition, the site may be functioning as a stepping-stone connecting other habitat areas. If the Marblehead CSS actually is acting as a regional "sink," then it may be an "attractive nuisance" for gnatcatchers and its role as ESHA by nature of its being valuable habitat may be less sure unless it provides valuable functions for other species. The applicant has only provided data consisting of simple observations of gnatcatcher presence and habitat use and the physical descriptions of the site and its biota. The data necessary to address whether CSS on the project site is a regional sink would, at minimum, require a multi-year study of the reproductive success of banded birds, which would also allow one to assess immigration and emigration. These data are not available. However, as noted above, the project site has been occupied by at least 2-3 pairs of gnatcatchers over at least the past 10 years. In addition, recent data indicates that at least 10 fledglings were hatched in 2001. Furthermore, as will be discussed in more detail below, the project site is within the dispersal distance of other habitat in the region to which the fledglings could disperse. This information suggests that the site is presently good breeding habitat and contradicts the idea that the site serves as an ecological sink for the gnatcatcher. In the absence of convincing data and expert argument to the contrary, the Commission finds that there are no data submitted to the Commission that suggests that the

project site is acting as an ecological sink that is detrimental to California gnatcatcher. Therefore, the Commission rejects the argument that the CSS on the project site should not be considered ESHA because the site may be an ecological sink.

Rather than an ecological sink, the Commission finds that the CSS on the project site appears to be part of a functioning metapopulation of the coastal California gnatcatcher. The project site does contain CSS habitat that is fragmented and isolated –to a certain degree- from other larger contiguous stands of CSS habitat that are occupied by larger numbers of individual gnatcatchers. However, the gnatcatcher has rather impressive dispersal abilities. The data indicates[21] that the average dispersal distance for banded fledglings in urban fragmented habitat (Palos Verdes Peninsula) is 1.6 miles and that many of the fledglings go farther than this, the recorded record being 13 miles[22]. With this kind of dispersal, the project site would be accessible from Camp Pendleton (approximately three miles south), and even Dana Point (approximately five miles north), and there is much intervening open space, parkland and canyons scattered throughout the area where coastal sage scrub could serve as stepping stone habitat. It seems likely that gnatcatcher dispersal ability is greater than recognized, since the observed dispersal is to some extent dependent on the fragmentation in an area, and the gnatcatchers tend to disperse until a suitable site is found. If sites are farther apart, they probably can and will disperse farther. While there is certainly some limit to this ability, there is evidence that the gnatcatcher is not very sensitive to habitat fragmentation, and it has been labeled 'fragmentation insensitive'[23]. Accordingly, in addition to being a breeding site, the project site could serve as a stepping-stone in a larger scale metapopulation spatial structure.

Also, metapopulations of gnatcatchers have somehow persisted in very isolated collections of fragments throughout southern California for 50-75 years (since serious fragmentation began). For example, a population at Palos Verdes in Los Angeles County, while at high risk of extinction, has persisted for many decades in the face of serious fragmentation and apparent isolation[24]. The observation of gnatcatcher persistence in fragmented urban habitat suggests that this species is not as extinction prone as some[25] believe. The precautionary principle requires that fragments of CSS habitat should not be eliminated as useless or detrimental to the gnatcatcher species without additional evidence. These habitat patches appear to be functioning as important connecting links and stepping stones in a larger spatial metapopulation structure that is not fully understood.

The project site is performing a significant ecological function for a federally threatened species, and as such contains environmentally sensitive habitat under the Coastal Act. However, due to several factors discussed below, not all of the CSS on the project site is ESHA. Furthermore, some non-CSS habitat areas (including existing non-native vegetation communities) would be considered ESHA. Factors determining the location of the ESHA include gnatcatcher nesting preferences, present and historical patterns of use by gnatcatcher, contiguity of habitat, and the presence of corridors for habitat connectivity and foraging areas. In addition, while some areas would not be identified as being ESHA, there are some areas that are necessary to leave substantially undeveloped in order to protect the ESHA adjacent to it.

Observations indicate that the California gnatcatcher prefer to nest in CSS dominated by

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[21] Akcakaya, R. and J. L. Atwood. 1997. A habitat-based metapopulation model of the California gnatcatcher. Conserv. Biol. 11:422-434.

[22] Atwood, J. L., S. H. Tsai, C. H. Reynolds, J. C. Luttrell and M. R. Fugagli. 1998(a). Distribution and population size of California gnatcatchers on the Palos Verdes Peninsula, 1993-1997. Western Birds. 29:340-350.

[23] 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.

[24] Atwood et al. loc. cit.

[25] Akcakaya, R. and J. L. Atwood. 1997. loc. cit.

California sagebrush (Artemisia californica)[26], with only occasional nesting in other types of habitat[27]. Of the 13.7 acres of CSS vegetation in the coastal zone on the project site, there are approximately 1.84 acres of sagebrush-dominated CSS. As expected, gnatcatcher at the project site are observed to nest in this sagebrush dominated habitat. Other CSS vegetation types are present, however, the bulk of the remaining scrub is dominated by saltbush ('saltbush scrub') that is known to be less preferred habitat for gnatcatcher nesting[28].

The patches of sagebrush-dominated CSS are spread throughout the various drainages and canyons on the project site. Sagebrush dominated patches are located within Drainage B toward the bluff, within the Western Canyon, and within Marblehead Canyon at a spur and in some locations toward the centerline of the canyon. Except for two locations, gnatcatchers have been observed to utilize these sagebrush scrub patches. Due to the gnatcatchers preference to nest in these areas, the Commission finds that these vegetation patches, where gnatcatcher have been observed, and where these areas are within the drainage, are especially valuable habitat areas, and thus, are ESHA (Exhibit 19d).

While part of the ESHA designation can be made based on a vegetation type, such as sagebrush scrub, other parts of the designation require consideration of present and historical patterns of use by gnatcatcher, the contiguity of the habitat with other areas of habitat, and the presence of corridors for habitat connectivity and foraging areas. On the one hand, there are patches of native vegetation that may be defined as CSS and that may occasionally be used by gnatcatcher for foraging but are not preferred for nesting and are disjointed from core habitat areas. Such vegetation patches would not be ESHA. On the other hand, there are native and non-native vegetation patches that are contiguous with or part of core habitat areas and/or that provide connectivity between higher quality habitat areas. Such areas would be considered ESHA. Furthermore, there are some habitat areas where development must be strictly controlled in order to protect the habitat adjacent to it (Exhibit 19d).

On the project site, core habitat areas include the bluffs; the native vegetation within Drainage A and seaward portions of Drainage B; the native and non-native vegetated as well as unvegetated areas within the deeper, seaward-most portions of the Western Canyon; the contiguous patches of native and non-native habitat within the main body of Marblehead Canyon and the east branch of Marblehead Canyon and other areas of the site which have been documented to be utilized by California gnatcatcher. These core habitat areas would be considered ESHA (Exhibit 19d).

In addition to the core habitat areas, there are unvegetated and vegetated areas on the project site that provide connectivity between the core habitat areas. These areas are adjacent to the core habitat areas where it is critical to minimize edge effects. If development such as houses and fuel modification, as well as people, dogs and notably domestic cats, are placed between these core habitat areas or are allowed to encroach into a core habitat area and/or otherwise overlap known gnatcatcher breeding territories or fragment them, the impacts would probably extirpate the gnatcatchers from the site. For instance, between Marblehead Canyon and the Western Canyon, there is a smaller drainage described elsewhere in these findings as the Trident Canyon. The Trident Canyon has some native perennial grassland within its deeper areas, but mostly golden bush/annual grassland and non-native pine woodland following a fire that occurred there a few years ago. As noted above, the applicant and the Commission would identify the native perennial grassland as ESHA (Exhibit 19d). In addition, the drainage itself

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[26] Atwood, J., and D. R. Bontrager. 2001. California gnatcatcher (*Polioptila californica*). *In* The Birds of North America, No. 574, (A. Poole and F. Gill, eds.). The Birds of North America, Inc., Philadelphia, PA., 32pp.

[27] Bontrager,D. R., A. L. Gorospe and D. K. Kamada. 1995. Unpubl. Report. 1995 breeding biology of the California Gnatcatcher in the San Joaquin Hills, Orange County, California. The Superpark Project, Laguna Beach, CA.

[28] Atwood, J., and D. R. Bontrager. 2001, loc. cit.

and some more level areas flanking the drainage serve as a connecting area and foraging habitat between the two existing California gnatcatcher territories. Similarly, there is a spit of land at the confluence of the east branch of Marblehead Canyon and the main body of the Marblehead Canyon that is essential to maintaining the core body of habitat within Marblehead Canyon. Because of the need to maintain contiguous large habitat zones that are free of significant disturbance (i.e. reduce the perimeter to area ratio within critical areas), the location of these areas between gnatcatcher territories, and the impact that development of these areas presents, the Commission finds that these important connections between the core habitat areas must remain free of significant development in order to protect the adjacent ESHA from significant habitat disruption.

There are some CSS vegetation patches and portions of drainages that are outside of core habitat areas and connective corridors that the Commission would not identify as upland ESHA. For instance, while the shallow, inland portions of the Western Canyon contain some CSS vegetation (coyote bush scrub in this case), there has been no data submitted to the Commission which indicates that these areas are being used for breeding or foraging by gnatcatcher. In addition, this portion of the drainage is outside of any corridor that would connect areas where gnatcatcher have been observed to breed and forage. Similarly, while there are patches of CSS vegetation within the shallow, inland portions of the east branch of Marblehead Canyon and within a spur off the east flank of the main body of Marblehead Canyon, no data has been submitted to indicate these areas are being used for breeding and foraging by gnatcatcher. In addition, these areas are also distant from observed breeding and foraging areas and are outside of connective corridors. Based on the above, and the more detailed description of the determination found in Exhibits 25 and 26, the Commission excludes these areas from the ESHA designation.

In addition, there are some stands of degraded saltbush scrub that have grown along the slope of the soil stockpile located roughly in the center of the project site, that is outside of the canyons and drainages and outside of connective corridors. In this location, data submitted by the applicant indicate that the area has been used by gnatcatcher, and was included within a 1997 determination regarding estimated gnatcatcher use areas. However, in this instance all the observations were of a single gnatcatcher male that was utilizing a few scattered salt bushes in an otherwise unsuitable habitat during the non-breeding season of a single year. The Commission excludes these areas from the ESHA designation.

Also, at Drainage B, the 1997 estimate of gnatcatcher use area include the inland, very narrow and very shallow terminal end of the drainage where most of the shrubs grew above the plain of the surrounding flatland. A field examination by the Commission's and the applicant's biologists found that this area is qualitatively different from the areas where gnatcatchers had actually been sighted within that drainage and is unlikely to provide good gnatcatcher habitat. Therefore, the Commission excludes this area from the ESHA designation.

As described in Exhibit 26, Commission staff recommended that some of the area to be disturbed be considered ESHA based largely on the use of this area by California gnatcatcher. While the canyons, which contain substantial gnatcatcher habitat, are appropriately designated ESHA, the Commission finds that the bird use area between Drainage B and the Western Canyon is not ESHA. The area is largely unvegetated and is primarily used as a movement corridor between the canyons. Although the area is important for the functioning of the adjacent ESHA and although it provides some feeding opportunities for birds as they move between ESHA areas, the area itself does not rise to the level of ESHA because of the general lack of vegetation that could support gnatcatchers and the transient use the gnatcatchers make of the area. Rather, the area presently serves as connective habitat that is necessary to maintain as open space to prevent impacts that would significantly degrade the ESHA located in Drainage B

and the Western Canyon. The area will not functionally become ESHA until the area is restored by the proposed project.

Based on the evidence currently available to the Commission, which is more thoroughly described in Exhibits 25 and 26, the Commission finds that certain areas of coastal sage scrub habitat and adjacent use areas by the gnatcatcher at the subject site are ESHA (Exhibit 19d). Since the coastal sage scrub on the site is ESHA, Section 30240 of the Coastal Act places important restrictions on the use of these areas.

c. Coastal Sage Scrub – Prior Determination Regarding ESHA (CDP Applications 5-99-260 & 5-01-459)

As noted above, the Commission's determination regarding CSS ESHA at the project site has been refined as compared to the determination crafted previously when development of the site was being considered under Coastal Development Permit Application 5-99-260. It must be noted that CDP Application 5-99-260 was withdrawn by the applicant prior to any formal action made by the Commission. Accordingly, no actual ESHA determination was adopted by the Commission relative to the site under CDP Application 5-99-260. Similarly, CDP Application 5-01-459 was also withdrawn prior to any action by the Commission. Thus, no ESHA determination was adopted in that case either.

Previously, Commission staff had indicated that, "...coastal sage scrub and associated habitats [at the project site], be considered as environmentally sensitive habitat...". A plain reading of this statement suggests that all of the CSS on the project site would be considered ESHA. However, at the time of this statement, there was some debate regarding the extent of the CSS that would be delineated as ESHA. At issue were the applicants' assertions that the site was not ESHA because the project site should be considered an ecological sink, the resource agencies had omitted the site from their critical habitat designation and the resource agencies had approved a 4d take authorization which stated that the site was not essential to the conservation of the species. As noted above, the Commission has rejected these arguments. Further analysis, also discussed above, has more clearly defined the boundaries of the ESHA.

d. NCCP/HCP

The Marblehead site will be covered by the South Subregion Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP), which is being prepared by the California Department of Fish and Game (CDFG) and the U. S. Fish and Wildlife Service (USFWS). However, no written plan has been made available for public review to date. When completed, this plan will cover an overall area of about 130,000 acres, encompassing a variety of land uses and habitats. As planned, the 250-acre Marblehead project will result in the loss of about 2.98 acres of the 13.7 acres of coastal scrub. Based on a Special 4(d) "take" authorization issued by the USFWS (dated August 2002) related to the prior development plan for the site (CDP Application 5-01-459), development on the site has been anticipated to "take" probably one pair of California gnatcatchers[29] (Exhibit 21). The applicant has indicated that CDFG and USFWS may modify this determination to "no take" based on the latest project plans; however, evidence of this revised determination has not yet been submitted.

The fact that an NCCP/HCP was being prepared that affected the project site was an issue in prior development plans because the applicant was requesting that the Commission approve impacts to California gnatcatcher habitat on the site and to allow off-site mitigation outside the

[29] U.S. Fish and Wildlife Service & California Department of Fish and Game 2002, "Request for Determination of an Amendment to the Special 4(d) Rule Interim Habitat Loss Mitigation Plan (IHLMP) for the Marblehead Coastal Development Project, City of San Clemente, California", letter to the City of San Clemente dated August 30, 2002

coastal zone in an area anticipated to be included as part of an NCCP/HCP habitat preserve. The impacts were mostly associated with proposed housing. As is described above, the California gnatcatcher habitat on the site is ESHA. Impacts to ESHA for housing would not be consistent with the mandates of Section 30240 of the Coastal Act. However, this is no longer an issue in the proposed development plan because the proposed development plan would largely avoid California gnatcatcher habitat on the site. In addition, the applicant is proposing to implement a significant habitat restoration project on the site that is anticipated to significantly improve the quantity and quality of habitat for California gnatcatcher.

As noted above, the applicant has obtained approvals from the U.S. Fish and Wildlife Service and California Department of Fish and Game for the impacts to coastal sage scrub on the site. However, the project has been revised since the date of the last approvals. Accordingly, revised approvals may be necessary. In order to assure that these approvals do not conflict with or otherwise modify the proposal as approved by the Commission and to assure that any differences are reconciled in an appropriate way, the Commission imposes Special Condition 28, which requires the applicant to submit evidence of approval from relevant agencies prior to issuance of the permit and requires a permit amendment where necessary to reconcile the various approvals.

4. Cumulative Impacts on Coastal Resources

Although not all the vegetated habitats at the Marblehead site ought to be categorized as "ESHA," they all do provide habitat value and some provide quite significant value. For example, the foraging value of annual grasslands and open scrub to raptors is well known and important. Coastal sage scrub, whether ESHA or not, does provide valuable habitat to a variety of wildlife on the project site, as noted above. These habitat areas also serve as important buffer areas for wetlands on the project site. These habitat areas also provide corridors for key predators, such as the coyote, whose presence is essential to the persistence of gnatcatcher on the project site. Under Section 30250 of the Coastal Act, where development, as proposed, would have significant adverse effects, either individually or cumulatively, to coastal resources, steps must be taken to re-locate the development so as to eliminate those effects, or at least to minimize those effects such that they are not significant.

5. Impacts

The proposed project would involve the mass grading of the site and result in the construction of structures, ornamental landscaping and habitat revegetation on the subject site. The proposed development would result in impacts to biological resources on the project site. In addition, this application seeks final approval for the emergency grading undertaken in 1990. The work previously undertaken in 1990 also resulted in impacts to biological resources (Exhibit 17).

The following table details the acreage of each habitat type that is present (based on the most recent surveys), the quantity of habitat that would be removed for the proposed development (Exhibit 16) and the quantity of habitat preserved and mitigated (i.e. restored and/or created) (Exhibit 18):

PLANT COMMUNITY		EXISTING HABITAT	IMPACTED	PRESERVED	MITIGATED ON-SITE	MITIGATED OFF-SITE[30]	NET
Coastal Sage Scrub	Coastal Bluff Scrub (CBS)	1.33	0.00	1.33	Qty. Not Specified – See Total Below		
	Sagebrush Scrub (SS)	1.84	0.02	1.82	Qty. Not Specified – See Total Below		
	Coyote Bush Scrub (CS)	3.75	1.09	2.66	Qty. Not Specified – See Total Below		
	Saltbush Scrub (SBS)	3.24	1.85	1.39	Qty. Not Specified – See Total Below		
	Coyote Bush/Saltbush (CS/SBS)	1.56	0	1.56	Qty. Not Specified – See Total Below		
	Mixed Scrub (MS)	0.68	0	0.68	Qty. Not Specified – See Total Below		
	Southern Cactus Scrub (SCS)	0.02	0.02	0	Qty. Not Specified – See Total Below		
	Mixed Scrub/Annual Grassland (MS/AG)	0.82	0	0.82	Qty. Not Specified – See Total Below		
Coastal Sage Scrub - Total	CBS/SS/CS/SBS/MS/SWS[31]			10.26 (total from above)	64.22 +1.23	1.68[32]	76.16 + 1.23 in fuel mod zones and utility easements)
	Southern Willow Scrub (SWS)	0.07	0	0.07			0.07
Grassland	Needlegrass Grasslands	0.62	0	0.62	4.3 + Additional Interspersed in HMP Area	0	4.92
Marsh	Alkali Marsh (AM)	3.44	.02[33]	3.42	0	0	3.42
	Alkali Meadows (AMW)	0.59	0	0.59	0.20	0	0.79
	Seasonal Wetlands	0.21	0	0.21	0	0	.21
Riparian	Mulefat (MF)	0.89	0	0.89	2.90	0	3.79
	Willow	0.04	0	0.04	0	0	0.04
Stormwater Basins	AM/AMW/MF	0	0	0	1.72	0	1.72
Totals		19.10	3.00	16.10[34]	74.37 +	1.68	92.15

[30] 'Off-site' in this context means upon property that is not owned by the applicant but is immediately adjacent to their property and an inseparable portion of the overall development plan
[31] Breakdown of restoration/creation by vegetation community not provided by applicant
[32] Includes 0.04 CSS on Easement off site
[33] Shading impact only. No wetland fill impacts.
[34] Total preserved vegetation in HMP exhibit is 16.12 (16.09 onsite plus 0.03 off site)

In addition to the development now proposed, implementation of the emergency Phase I grading project resulted in the grading of approximately 1,900 linear feet of coastal bluffs and the disruption of habitat up to 650 feet inland. Earth removed during the grading operation was stockpiled in the central portion of the site, burying approximately 30 acres of habitat in the coastal zone. According to the 1991 biological assessment prepared by Roberts, this development resulted in adverse impacts to several plant communities including annual and native grasslands, coastal bluff scrub, Blochman's dudleya or coastal bluff scrub, and wetlands. These impacts are as follows: annual grassland – 47 acres impacted; needlegrass grassland - 2.5 acres impacted; coastal bluff scrub - 3.0 acres impacted; Blochman's dudleya - 3.5 acres or 6,500 to 8,000 plants impacted; and wetlands – 0.1 acres impacted.

As described above, the project site's plant communities provide valuable habitat for a wide variety of wildlife. The habitats provide food and water, shelter, sites for breeding and materials for nest building. The grading and construction of structures, as proposed, necessitates the removal of vegetation resulting in the loss of acres of habitat for wildlife. Small, slow-moving, or burrowing animals may be killed as a result of the grading operations. Some animals may be able to relocate to other areas, but competition with species already living there may preclude the long-term survival of displaced animals.

As noted in the project description, the applicant is proposing mitigation for the proposed impacts. The mitigation plan is described in the proposed HMP. The HMP proposes to preserve in place a total of 10.43 acres of various types of scrub vegetation and to restore 64.22 acres of coastal sage scrub on the un-graded and proposed-to-be-graded slopes of Marblehead Canyon and the Western Canyon; within the preserved area of the Trident Canyon; within the proposed park areas; upon proposed-to-be-graded slopes between the proposed commercial development and Avenida Pico, and upon the un-graded and already graded blufftop/bluff face along El Camino Real. An additional, 1.68 acres of coastal sage scrub restoration would occur within the City-owned right-of-way along El Camino Real at the toe of the bluff. The applicant is also proposing to plant 4.3 acres of needlegrass which would provide habitat and provide a fuel modification area. Furthermore, 0.02 acres of possible shading impact to wetlands would be off-set with 0.20 acres of wetlands restored within Marblehead Canyon and the Western Canyon. Some additional wetland habitat would be created within the proposed storm water detention basins.

6. Analysis

a. Section 30240 (a)

To ensure compliance with Section 30240 of the Coastal Act, development (aside from resource dependent uses) must be located outside of all environmentally sensitive habitat areas and must not cause significant disruption of the habitat values within those areas. Further, development adjacent to an ESHA must be sited to prevent impacts to the ESHA that would significantly degrade those areas, in part through the provision of a setback or buffer between the ESHA and the development. The buffer must be of an adequate size to prevent impacts that would degrade the resources. The width of such buffers would vary depending on the type of ESHA and on the type of development, topography of the site, and the sensitivity of the resources to the particular kind of disturbance. In some cases, where patches of ESHA are distributed throughout a site, such as at the project site, the more traditional linear buffers or setbacks must be augmented by connective habitat corridors in order to ensure the continuance of the ESHA and to prevent its degradation as a result of habitat isolation and fragmentation.

The project site contains various sensitive and valuable habitat areas, including wetlands, Blochman's dudleya, native perennial grassland and California gnatcatcher habitat including

coastal sage scrub and connecting corridors. The applicant is proposing to retain a significant portion of this existing sensitive habitat. In addition, the applicant is proposing a valuable restoration project that would expand native upland vegetation on the site from about 13.7 acres to about 70 acres.

Section 30240(a) of the Coastal Act requires that environmentally sensitive habitat areas be protected against any significant disruption of habitat values and that only uses dependent on those resources can be allowed within ESHA. There are certain instances where the proposal would cause an encroachment into ESHA. In summary, these instances are: i) proposed and required public trails; ii) prior encroachments as a result of the emergency grading in 1990 as well as reconstruction of the existing terrace drains and down drains located the face of the graded El Camino Real bluff; and iii) habitat restoration. These will be discussed below in the order identified above.

i. Proposed Trails

The applicant is proposing to preserve significant portions of existing canyons, drainages and level bluff top areas that provide habitat for a variety of sensitive plant and animal life. An extensive restoration project is also proposed that is anticipated to significantly improve the quality of the habitat now present. The proposed public trail network will wind around the drainages and along the bluff edge providing trail users the opportunity to view and study the habitat areas and enjoy expansive ocean views. The recreational and educational experience available to trail users is significantly enhanced by circulation through the habitat areas. In this case, the public trails, with their nature study component, can be viewed as resource dependent uses. While the trails pass through the open spaces, the principal use of the open space remains habitat conservation.

The proposed trail network would also cross through ESHA in several locations. In order to accommodate better circulation through the site and to provide a nature-oriented experience for the trail user, it would not be feasible to completely avoid the ESHA. Locations where the trails cross ESHA include at the bluffs overlooking El Camino Real in the vicinity of Drainage B and C. In addition, plans submitted indicate that a trail would pass through ESHA located in the slot canyon (proposed Lot C of Tract 8817) on the eastern side of the property next to the proposed bluff park. There is also a proposed trail that would follow along the side of wetlands and CSS near the mouth of Marblehead canyon. In addition, the applicant has recently revised their proposal to eliminate a pedestrian bridge and trail that would cross ESHA at the mouth of Marblehead canyon. However, as described more fully in the 'Public Access' section of these findings, the Commission is conditioning this permit to require the applicant to re-implement that proposal in order to accommodate better public access and circulation through the site.

To the maximum extent possible, it is preferable to avoid crossing ESHA with trails. Nevertheless, some crossings are necessary to maintain trail connectivity. In most cases, the proposed trails that pass through ESHA are located within alignments of existing footpaths and other minimally vegetated areas on the project site. Therefore, the trails themselves wouldn't necessitate removal of significant existing native vegetation and thus wouldn't disrupt the value of the habitat. Also, once the applicant implements the proposed habitat restoration, higher quality habitat would be present around these trails. Therefore, the project would improve the functioning of the habitat. One exception to the above would be the pedestrian bridge crossing that the Commission is requiring the applicant to re-implement. Even though the bridge would shade some wetland vegetation, the shading is not expected to degrade the ESHA. Another exception, is the proposed trail through the slot canyon. This trail would cross through ESHA at a location where human disturbance could be compounded by the steep walls of the canyon in the area. In this location, it would be necessary to re-route the trail along the outer portion of

the ESHA and buffer in this area. However, the trail should remain on site, rather than detoured to the street, in order to preserve trail connectivity and maintain a nature-oriented trail experience. Therefore, the Commission imposes Special Conditions 10 and 15.

ii. Emergency Grading Encroachments and Drain Replacement

The proposed project would make permanent the emergency grading of the bluffs that occurred in 1990. As noted above, the 1990 grading impacted coastal bluff scrub and Blochman's dudleya habitat, other coastal sage scrub habitat, native grasslands, and wetlands. If these habitats were present today, all or part of those habitat areas may have qualified as ESHA based on the criteria identified above. However, the records regarding the 1990 grading indicate there was a finding that no sensitive habitat would be impacted. In support of this finding, a special condition attached to Emergency CDP 5-90-122-G states that "..at the time of the issuance of this emergency permit, no federal or state listed endangered species were known to be present".

Regardless of whether the habitat impacted was ESHA, the grading operation was necessary to protect the existing road, El Camino Real, and to maintain existing public access along the coast. At this location, El Camino Real is the first public road paralleling the sea. This road is a significant coastal accessway. However, access along this road was significantly reduced, and sometimes blocked, due to periodic bluff erosion and landslides onto the road. As described in the 'Geologic Stability' section of these findings, the work was necessary and approvable under Section 30235 of the Coastal Act.

While the impacts may have been necessary and approvable, mitigation for impacts to these resources is appropriate. In order to mitigate for the loss of the Blochman's dudleya, the applicant implemented a mitigation program that was approved under Coastal Development Permit 5-97-136. The permit created the dudleya reserve located near the corner of El Camino Real and Avenida Pico that would be contained within proposed Lot H of proposed Tract 8817. Additional restoration and perpetual maintenance of this reserve is a part of the habitat management plan included in this current proposal.

With respect to the impacts to coastal bluff scrub, native perennial grasslands and wetlands, the applicant is proposing restoration of each of these habitat types within the proposed habitat management plan. In the case of coastal bluff scrub and wetlands, the proposed restoration is adequate mitigation for the impacts to these resources that occurred under the emergency grading. However, the Commission finds that the 4.3 acres of native perennial grassland restoration that is proposed along the rim of Marblehead canyon and between the western residential enclave and the existing Colony Cove neighborhood, shall not be deemed adequate compensatory mitigation for the impacts to that habitat which occurred during the emergency grading. As noted on Exhibit 18, 3.26 acres of the 4.3 acres of proposed annual grassland restoration would be subject to annual mowing for fuel modification purposes. A significant portion of the remaining 1.04 acres is located in a narrow strip of land between the proposed western residential enclave and Colony Cove. The fuel modification activity and the siting of the proposed annual grassland restoration will limit the biological function of this proposed habitat. While the proposed use of native grasses in the proposed locations is desirable in terms of compatibility with adjacent habitat as well as having modest habitat value, this habitat is not located, nor would it be managed, in a manner in which the Commission could accept that habitat as mitigation for the loss of native grassland habitat. Rather, in addition to the proposed 4.3 acres of native grassland restoration, the Commission shall require the applicant to mitigate the impact to 2.5 acres of native perennial grassland that occurred during emergency bluff grading, by restoring/creating native perennial grassland at biologically suitable site(s) within the habitat management plan area. The total area of habitat restoration would not be changed by

this requirement. The Commission recognizes that the additional grassland restoration may result in an offset to the total quantity of area identified as CSS restoration. The restored habitat must be placed in an area(s) that will not be subject to fuel modification, such as adjacent to the existing 0.62 acres of native perennial grassland on the site and/or along the bluffs and/or within the preserved canyons and drainages on the site. The availability of biologically suitable habitat may be a limiting factor for restoring native perennial grassland at the site. The applicant has indicated there is sufficient space, scattered as small to large patches, within the proposed habitat management plan area to restore at least 5 acres of habitat. Five (5) acres (2:1) should be the baseline quantity of native perennial grassland mitigation. However, the restoration planting plan may allow for additional scattered patches of perennial grassland restoration. Additional perennial grassland habitat may be biologically beneficial at this site in terms of enhancing the value of the habitat for California gnatcatcher. Thus, where it is consistent with the restoration goals of the project and there is biologically suitable area on the site, additional perennial grassland habitat should be incorporated into the restoration plan. Preferably, 7.5 acres (3:1) should be incorporated if consistent with restoration goals. The final restoration plan, including the ultimate quantity of perennial grassland restoration (not less than 5 acres) and the location of that restoration within the habitat management plan area, is subject to the review and approval of the Executive Director. Therefore, the Commission imposes Special Condition 10 to ensure the proposed and required mitigation is implemented.

Also, the current proposal seeks authorization for the reconstruction of the terrace and down drain system that are a part of the bluff stabilization system. The existing drains must be reconstructed because of cracks and breaks in the system which are allowing uncontrolled flows over the slope to erode bluff soils. These drains are an integral part of the bluff stabilization system. If they are not repaired, bluff stability could be compromised leading to damage to the existing road (El Camino Real). As noted above, El Camino Real is the first public road paralleling the sea in this area and is a major coastal accessway. Accordingly, Section 30235 of the Coastal Act mandates their repair. In order to assure that the reconstruction is conducted in a manner that is least disruptive to ESHA, the Commission imposes Special Conditions 8, 9, 10 and 11 which require the applicant to implement proposed and revised habitat impact minimization measures .

iii. Habitat Restoration

The proposed project includes the preservation of about 10.43 acres of existing native vegetation and the restoration/creation of about 64 acres of coastal sage scrub habitat as well as restoration/creation of about 6 acres of other habitat including native perennial grasslands. Some of this habitat restoration would occur within the boundaries of areas identified as ESHA. The restoration would require removal of existing non-native vegetation, light soil scraping in some cases, and the installation of new plants through seeding and container plants. These restoration activities are dependent on the resource and are compatible with the continuance of the ESHA. Therefore, these activities are consistent with Section 30240(a) of the Coastal Act.

The applicant is proposing a habitat management plan to ensure proper monitoring and maintenance of the habitat. Certain changes to the habitat management plan are necessary in order to assure that the habitat restoration is carried out in a manner consistent with Section 30240(a). These changes are identified in Special Condition 10, along with a requirement that the applicant follow through with the proposed restoration.

One way the applicant is proposing to prevent the significant disruption of habitat values of existing ESHA is to begin implementation of the habitat restoration as early as possible during implementation of the project. The applicant has identified this as 'Phase 1' of the restoration. According to the applicant, since plant seeds and cuttings used for restoration must come from

the site and nearby areas, there are limitations on the availability of seed and container stock for the restoration. Sufficient time is necessary to collect and grow enough plants for the restoration. Even with these possible constraints, the applicant has indicated agreement to a requirement that the first phase of planting of the proposed restoration for 50% of the land area to be restored must occur prior to the occupation of any commercial or residential structure. In general, the area to be restored in this first phase includes the bluffs along El Camino Real, the bluff top areas around drainages A and B, the seaward portions of the Western Canyon, the bluff top area between the Western Canyon and Marblehead Canyon, including the Trident Canyon, and the western side and seawardmost portions of Marblehead Canyon. These areas are generally depicted on Exhibit 27. In order to assure that this protective measure is implemented, the Commission imposes Special Condition 7.

In addition, the applicant has proposed to place the preserved and restored habitat within open space and park lots within the proposed subdivision. In some cases, the lots are proposed to be transferred in fee to the City. In other cases, the proposed disposition of these lots is presently uncertain. In order to assure the proposed open space lots and habitat areas within proposed parks are preserved in perpetuity and that uses within those areas are limited to those consistent with the protection of habitat, the Commission imposes Special Condition 1. It must be noted that certain types of repair and maintenance activities could proceed within the areas identified in Special Condition 1.A through 1.C. that would not adversely impact resources within those areas. For instance, sediment removal from erosion control and water quality devices; maintenance and repair of trails and associated appurtenances such as trail resurfacing, repairs to fences, signage, benches, vista points, and trailhead facilities; maintenance and repair of habitat areas; normal maintenance and repair of park facilities such as access road and parking resurfacing, striping or repair, landscape establishment, weeding and maintenance, play equipment and sports court repairs, repairs to signage, vista point facilities, shade structures, picnic tables and benches. Special Condition 4 allows the applicant to submit a list of repair and maintenance activities for the review and approval of the Executive Director which would be allowed within the restricted areas without need for an additional coastal development permit.

Special Condition 2 requires dedication of the proposed park areas in fee to the City, as proposed. Furthermore, in order to assure that the open space lots that will not be dedicated to the City are managed as open space and are not developed in a manner inconsistent with the preservation of open space, the Commission imposes Special Condition 5. Special Condition 5 outlines the procedures the permittee is required to follow with respect to the final tract maps, parcel maps, and CC&Rs. The CC&Rs will contain important procedures and restrictions related to the management, maintenance, and transfer of open space lots. In order to assure the CC&Rs are recorded at the same time the final tract map is recorded, which will allow the transfer of portions of the subject site, part G. is incorporated into the condition. Furthermore, in order to assure that the open spaces are appropriately managed and maintained in perpetuity, the Commission imposes Special Condition 4.

b. Section 30240(b)

In addition to protecting the ESHA itself, Section 30240 of the Coastal Act requires that development adjacent to ESHA be sited and designed to prevent impacts that would significantly degrade those areas, and shall be compatible with the continuance of those habitat areas. Buffers and development setbacks protect biological productivity by providing the horizontal spatial separation necessary to preserve habitat values and transitional terrestrial habitat area. Furthermore, buffers may sometimes allow limited human use such as low-impact recreation, and minor development such as trails, fences and similar recreational appurtenances when it will not significantly affect resource values. Buffer areas are not in themselves a part of the environmentally sensitive habitat area to be protected. Spatial

separation minimizes the adverse effects of human use and urban development on wildlife habitat value through physical partitioning. The greater the spatial separation, the greater the protection afforded the biological values that are at risk. Buffers may also provide ecological functions essential for species in the ESHA. With a few exceptions, the applicant has proposed the establishment of 100 foot wide buffers between wetlands and adjacent development. In addition, with certain exceptions, the applicant is proposing 50 to 100 foot wide buffers for the protection of terrestrial ESHA.

The primary impact to ESHA on the Marblehead site is to the habitat areas that support the coastal California gnatcatcher. These habitats are typically coastal bluff scrub, southern cactus scrub, sagebrush scrub and coyote brush scrub with some overlap into adjacent areas where observations have indicated historic use patterns or occupancy. Accordingly, these areas are mapped as ESHA.

i. Required Setback/Buffers for Terrestrial ESHA

In order to protect these habitat areas, the Commission requires that terrestrial ESHA have 100-foot wide buffers, wherever feasible, as the project is currently proposed. The buffer between designated ESHA and residential and commercial lots, roadways, parking areas, and parks, should extend a minimum of 50 feet beyond the designated ESHA boundaries. Other than the exceptions outlined below, there should be no grading within 50 feet of ESHA boundaries, and no grading at any time within 50 feet of coastal bluff scrub or native grasslands. In addition, there should be no grading within 100 feet of native scrub habitats that occur within ESHA boundaries during the gnatcatcher breeding season, if gnatcatchers are present. With the exception of trails, the entire buffer area should be planted with appropriate native vegetation. In order to implement these requirements and to ensure the development fully conforms, the Commission imposes Special Conditions 10, 11 and 18.

The applicant has requested several exceptions to the buffers identified above. These are shown in Exhibit 19c and are labeled A1, A2, B, C, and D as identified by the applicant and 0 through 10 as identified by the Commission.

Location 0 is an apparent small encroachment of grading into the 50-foot buffer on the west side of the property. The area is contains non-native, ruderal vegetation.

Two areas where grading is proposed within the 50-foot ESHA buffer are adjacent to proposed detention basins and required for the construction of those basins. Location 1 includes the two sides of the western detention basin (proposed Lot T) adjacent to Drainage B and the western canyon (Drainage C). Location 5 includes the areas on the south and west sides of the eastern detention basin adjacent to Marblehead Canyon and the slot canyon. Within those areas the limits of grading for the detention basins vary from 20 feet to about 48 feet from ESHA and are generally within 20-30 feet of the ESHA boundary.

Location 2 is a small area on the west side of the upper Western Canyon and location 3 is a larger area on the east side of the upper Western Canyon. In both areas grading occurs from 20-50 feet from the ESHA boundary. Except in the center of the canyon, most of the vegetation in this area is non-native and ruderal. The grading limit is at least 50 feet, and generally 100 feet, from patches of significant vegetation.

Location 4 is the area on the western side of Marblehead Canyon at the current location of a soil stockpile and adjacent to a proposed graded slope that would support a road and residential lots about 80 to 150 feet from the ESHA boundary. About 360 linear feet of the ESHA boundary will be less than 50 feet, and as little as 20 feet, from the toe of the graded slope. About 160 linear

feet of the affected boundary contains small, isolated patches of coastal sage scrub and the rest is non-native, ruderal vegetation.

Location 6 is the hatched area on the south side of the slot canyon adjacent to the proposed park. The proposed limit of grading for park construction will be 20 feet from ESHA for about 288 linear feet along the canyon and between 20 and 50 feet for another 130 linear feet of the canyon edge. The affected buffer is comprised of non-native, ruderal vegetation.

Location 8 is an area of non-native ruderal vegetation between the Dudleya Reserve and Marblehead Canyon. A subterranean drain pipe from the eastern detention basin and a sewer line is proposed for this area. Location 9 is also an area of non-native, ruderal vegetation that is proposed for a subterranean drain, in this case from the central detention basin. Both trenches will pass through the ESHA buffer at the mouth of Marblehead Canyon.

The Commission would allow construction of the detention basins, grading along the edge of Drainage B and along the edges of the upper portion of the Western Canyon, grading at the current site of the soil stockpile, grading for the public park, and trenching for the drains from the central and eastern detention basins be allowed as proposed. These exceptions to the general policy are acceptable because no significant native vegetation is affected, protective construction practices are proposed, the disturbance is temporary and brief, and restoration will take place immediately following construction. No native vegetation will be affected by the grading proposed within the terrestrial ESHA buffer. In no case will grading or other soil disturbance, including driving of vehicles, take place within 20 feet of any designated ESHA boundary. Construction (and, in the case of detention basins, any future maintenance) will take place outside the breeding season of California gnatcatchers. During construction, the gnatcatcher habitat will be shielded from sight and sound by 8-foot high, solid 1-inch thick barriers. A biological monitor must be on site daily to insure that the construction activities are having no negative impact on California gnatcatchers. Finally, immediately following grading, the detention basins and other graded areas will be planted with riparian and wetland species or coastal sage scrub, as appropriate to the site. These restored areas will provide habitat for California gnatcatchers and other species and will become part of a formal habitat maintenance and management plan funded in perpetuity. Gnatcatchers have been shown to be relatively tolerant of disturbance from construction activities and from nearby heavy vehicular traffic. With the proposed mitigation measures, the Commission finds that neither the proposed grading activities nor the later occasional maintenance of the detention basins, poses a significant threat to California gnatcatchers. On the other hand, the habitat restoration will be a significant benefit to gnatcatchers and other species, and will increase the effectiveness of the buffers.

Location 10 is a linear area below the western detention basin proposed for subsurface utilities. Impacts and required mitigation associated with the placement of utilities in that location is discussed below under 'Connectivity Areas'.

Location 7 is an area adjacent to and north of the dudleya reserve where the proposed limit of grading would be between 20 feet and 44 feet from the reserve, which is also an estimated gnatcatcher use area. In this location, the Commission finds that exceptions to the buffer standards identified above must not be allowed. The reserve is not only ESHA but is a mitigation site for impacts to dudleya that occurred under the emergency grading. The vegetation community that has been restored is rare and more sensitive than the scattered coastal sage scrub species adjacent to the areas described above where exceptions would be acceptable.

Several areas of irrigated turf are proposed as parks within the proposed project. All but one of these areas is proposed to be constructed adjacent to roads or residential areas and will not

have significant deleterious effects on ESHA if the buffer standards described above are followed. However, there is one instance where a turf area would encroach into a 50 foot buffer and a second turf area (discussed below) that would be within a connectivity area. The first area is the lobe of turf in proposed Lot N adjacent to the Western Canyon. Due to its close proximity to ESHA and its location in an area of intense bird usage, turf within the buffer must be eliminated and the area restored with native vegetation.

All ESHA buffers should be planted and maintained in native vegetation. Accordingly, the Commission notes that habitat restoration activities, including ongoing maintenance and monitoring, would be allowable within ESHA buffers. Also, the construction of trails and associated structures (e.g., fences and signs) would be allowed within ESHA buffers, where necessary to connect the proposed trail network. In order to implement the buffer scheme identified above, the Commission imposes Special Condition 10. Furthermore, the few instances where fuel modified native plant restoration is proposed would be acceptable, with the understanding that no deviations from the proposed fuel modification plan that result in additional fuel modification impacts within buffers or ESHA would be allowable. In order to assure that the final fuel management plan is consistent with the requirements of this permit, the Commission imposes Special Condition 12.

ii. Connectivity Areas

In some cases, the area adjacent to the ESHA that must be protected cannot be described simply in terms of a linear setback or buffer. Rather, there are areas which act as corridors between two areas of ESHA where only limited types of development that are consistent with the protection of ESHA would be allowed. For instance, significant development within the connective corridor between Marblehead Canyon and the Western Canyon, that includes the Trident Canyon, must be avoided as proposed by the applicant in order to protect the adjacent ESHA. Similarly, the area between the main and east branches of Marblehead Canyon must be protected, as is proposed by the applicant. As explained above, there would be significant adverse impacts to gnatcatcher habitat if development were allowed to occur in these areas, significantly degrading the areas.

Uses within these connectivity buffers would be strictly controlled. Habitat restoration would be allowed within these connectivity buffer areas, as is proposed. The restoration would enhance the habitat for wildlife and improve the connective function of the habitat. Day use trails or passive park with native vegetation would be allowed, where necessary to connect the trail system and provided that night lighting would be avoided. Trails and any park areas would need to be located as far away from the ESHA as possible at the outer edges of the buffer areas. Also, the limited quantity of fuel modified native plant restoration (e.g. native perennial grassland) proposed by the applicant could be allowed because these areas are at the outer perimeter of buffer areas and in most cases are completely outside of buffers. The proposed central detention basin (proposed Lot K) would also be allowed within the connective corridor because its construction would be one time and brief and it would be planted with native upland, riparian and wetland vegetation that will provide wildlife habitat. Residential and commercial development, roads and other infrastructure, active parks and other higher intensity uses would not be allowed within ESHA or ESHA buffers, setbacks or corridors.

As noted above, the applicant is proposing to install subsurface utilities at Location 10 identified on Exhibit 19c. The utility lines would connect the proposed water quality basin and sewer facilities from the bluff top, down the bluff face, to facilities that exist along El Camino Real. The proposed storm drain and sewer line would be constructed using trenching that would require surface disturbance. In total, about a 150 foot long by 20 foot wide area, within a proposed 30 foot wide easement, would be temporarily disturbed by the trenching.

Once the pipes are placed, the area would be backfilled and restored with native vegetation along with the remainder of the bluff face that is proposed to be revegetated. There would be no permanent surface development.

As noted elsewhere in these findings, Commission staff recommended that some of the area to be disturbed be considered ESHA based largely on the use of this area by California gnatcatcher (Exhibit 26). While the canyons, which contain substantial gnatcatcher habitat, are appropriately designated ESHA, the Commission finds that the bird use area between Drainage B and the Western Canyon is not ESHA. The area is largely unvegetated and is primarily used as a movement corridor between the canyons. Although the area is important for the functioning of the adjacent ESHA and although it provides some feeding opportunities for birds as they move between ESHA areas, the area itself does not rise to the level of ESHA because of the general lack of vegetation that could support gnatcatchers and the transient use the gnatcatchers make of the area. Rather, the area presently serves as connective habitat that is necessary to maintain as open space to prevent impacts that would significantly degrade the ESHA located in Drainage B and the Western Canyon. The area will not functionally become ESHA until the area is restored by the proposed project.

The applicant is proposing measures to ensure that gnatcatcher are not disturbed by the proposed trenching activity. These measures are described more fully in the applicant's habitat management plan and include avoiding construction during the breeding season as well as avoiding construction when the birds are using the area. The applicant is also proposing to avoid impacts to all saltbush plants that are present in the construction area. These saltbush plants are the vegetation in this location that would most likely be used by gnatcatchers. In addition, once the construction is completed, the area is proposed to be restored with native vegetation that would enhance the quality of the habitat compared with the current condition. If the proposed measures are followed, the Commission would not expect the activity to cause a significant disruption to the ESHA within Drainage B or the Western Canyon.

In a letter dated February 17, 2003, the applicant submitted an alternatives analysis that identifies alternatives to the proposed trenching. Various alternatives are considered including new alignments for the utilities or use of construction methods that do not necessitate surface disturbance, such as jacking and drilling. The applicant concludes that there are no truly feasible alternative alignments for the utilities. However, the proposed jacking and drilling may be feasible.

The jacking/drilling alternative would require construction of pits at the top and bottom of the bluff. Also, jacking or drilling would have a longer construction period (6 to 12 weeks) than the proposed trenching (1 to 2 weeks). The applicant expresses preference for the proposed trenching method because of the shorter construction period which will reduce construction-related disturbances to nearby ESHA. The Commission concurs with the applicant's analysis (in addition to finding that the work, as conditioned, is compatible with, and will not significantly degrade, the adjacent ESHA), and imposes Special Condition 10, which implements the habitat protection and enhancement measures proposed by the applicant.

Also, the applicant is proposing a park comprised of irrigated turf (Lot I) within the central wildlife corridor adjacent to the central detention basin (Lot K). This park would be in the middle of an area restored to coastal sage scrub or coastal bluff scrub and adjacent to a detention basin proposed to be vegetated with riparian and wetland species in order to create significant wildlife habitat. The grassy park will encourage picnicking, informal sports (frisbee, volleyball, kickball, etc.), sunbathing, and other uses that will result in the presence of numerous people and their pets for relatively long periods, especially on weekends and holidays. Irrigation will result in the

establishment of Argentine ants and the type of use will encourage the presence of human adapted species, such as crows and gulls and small mammalian predators and scavengers, all of which can contribute to the degradation of nearby native habitats. The Commission finds that siting an irrigated grassy park within a restored wildlife corridor that connects ESHA is in conflict with Section 30240(b) of the Coastal Act. However, an interpretive trail with short dead-end branches to benches at view points near the coastal bluff would be appropriate and non-disruptive to habitat values. Therefore, the Commission imposes Special Conditions 10 and 15.

c. Other Measures to Protect and Enhance ESHA

i. Landscaping and Revegetation

The proposed project includes revegetation within the proposed open spaces, landscaping of the common areas within the commercial and residential subdivision, as well as landscaping along proposed roads. The use of non-native and invasive plant species within new development can cause adverse on-site and off-site impacts upon natural habitat areas. Non-native and invasive plant species can directly colonize adjacent natural habitat areas. In addition, the seeds from non-native and invasive plant species can be spread from the developed area into natural habitat areas via natural dispersal mechanisms such as wind or water runoff and animal consumption and dispersal. These non-native and invasive plants can displace native plant species and the wildlife which depends upon the native plants. Non-native and invasive plants often can also reduce the biodiversity of natural areas because –absent the natural controls which may have existed in the plant's native habitat- non-native plants can spread quickly and create a monoculture in place of a diverse collection of plant species.

The applicant's proposed landscape plan is substantially comprised of native plant species, however, non-native plants would be planted in some areas such as within the residential lots, interior landscaping in the commercial center and along roads and within medians. The applicant has expressed some commitment to using native plants to the maximum extent feasible as well as avoiding the use of invasive plant species.

The placement of any non-native invasive plant species within the development (which could potentially spread to the natural habitat areas) is a threat to the biological productivity of adjacent natural habitat and would not be compatible with the continuance of those habitat areas. Therefore, the Commission must ensure conformance with the applicant's commitments and must place strict controls on the use of vegetation within the development. The controls must apply to present and future landscaping associated with the development.

The proposed project involves new development within a previously undeveloped area. Under these circumstances it is possible to minimize impacts related to the spread of non-native and invasive plant species. One method of minimizing impacts is to require that any landscaping within common area lots, open space lots, parks, and vegetated buffer areas consist of plants native to coastal Orange County that are appropriate to the natural habitat type. Strict use of regionally native plants within the common areas lots, open space lots, parks and vegetated buffer areas is particularly important due to the proximity of these areas to sensitive habitat areas and the potential for these plants to disperse into the sensitive habitat areas. Therefore, the Commission imposes Special Condition 11 which requires the permittee and all successors in interest to use plants that are native to coastal Orange County and the habitat type within all vegetated areas located outside of the non-open space lots in the regional commercial development and the individual residential lots. Native plants used for landscaping shall be obtained, to the maximum extent practicable, from seed and vegetative sources on the project site.

Meanwhile, Special Condition 11 does allow the use of non-native plant species within the non-open space lots in the regional commercial development and the residential lots so long as those non-native species are also non-invasive. Avoiding the use of invasive species within the commercial development and the residential lots reduces the risk that adjacent habitat areas would be overtaken by non-native plants. Prohibition of the use of invasive plants species within the commercial development and the residential lots combined with the native habitat buffer areas which encircle and separate the residential and commercial development from the habitat areas minimizes the risk that non-native plants will spread into and displace adjacent sensitive habitat. However, the Commission recognizes that landscaping within the individual residential lots tends to change continuously as individual property owners tailor their property in accordance with their preferences. Successor(s) in interest to the common areas may not be familiar with the types of plants that are native to the habitat type and must be used in the common areas and buffers. In addition, those plant species that are considered invasive and non-invasive may not be well known to commercial property owners, homeowners and owner(s) of the common areas. Therefore, the Commission requires that the permittee develop plant lists that identify those plant species that are prohibited and those that are allowable. The plant lists would identify the native plant species that must be used for planting in the common areas. These same species may be used -and are encouraged to be used- within the residential lots and commercial areas. The plant lists must also identify a representative list of the non-native plant species that are common to gardens that may be used within residential lots. The plant lists will provide an easy reference for anyone undertaking landscaping within the development. The plant lists must be reviewed and approved by the Executive Director and may be modified from time to time as deemed necessary by the Executive Director and in accordance with amendments or new permits as deemed necessary by the Executive Director.

Special Condition 11 requires the permittee to submit for review and approval by the Executive Director final landscaping and erosion control plans for the entire project (e.g. open spaces, parks, trail corridors, common open spaces, graded and disturbed areas, and the commercial and residential development). These plans must conform with all requirements of the permit. In order to assure the landscape plans conform with the other resources agencies requirements, the plans must be reviewed and approved by those agencies prior to submittal to the Executive Director.

Special Condition 11 also requires the permittee and successor in interest to maintain the required landscaping in good growing condition throughout the life of the development. Furthermore, in order to assure that the landscaping is successfully established and to assure that the other landscaping requirements are in place, Special Condition 11 requires the permittee or successor in interest, five years from the date of the completion of installation of landscaping, to submit for the review and approval of the Executive Director, a landscape monitoring report, prepared by a licensed Landscape Architect or qualified Resource Specialist, that certifies the on-site landscaping is in conformance with the landscape plan approved pursuant to the Commission's approval. If the landscape monitoring report indicates the landscaping is not in conformance with or has failed to meet the performance standards, the permittee, or successors in interest, shall submit a revised or supplemental landscape plan for the review and approval of the Executive Director. The permittee or successor in interest shall implement the supplemental landscaping plan approved by the Executive Director and/or seek an amendment to this permit if required by the Executive Director.

ii. Lighting

The proposed project would introduce new artificial lighting to the project area. Artificial lighting can adversely impact sensitive habitat areas by distracting feeding and breeding activities of birds and other animals. This impact can be minimized by directing lighting away from sensitive

habitat area. Therefore, the Commission imposes Special Condition 13 which requires the permittee to submit and comply with a lighting plan which demonstrates that all lighting within the residential and commercial development shall be directed away from the habitat areas on the project site. The lighting plan must be accompanied by a biological analysis which documents the effectiveness of the lighting plan at protecting sensitive habitat from artificial lighting.

iii. Perimeter Walls, Fencing, Gates, Safety Devices and Boundaries

Some of the new occupants of the residential development are likely to keep domesticated animals such as dogs and cats. If not restrained, these domesticated pets can enter sensitive wildlife areas where they can disturb the breeding efforts of natural wildlife, compete with natural wildlife for food or disturb their feeding activities. In some cases, domesticated pets can hunt natural wildlife. The applicant has proposed to prohibit outdoor pets by inserting the prohibition into the covenants, conditions and restrictions for the development. While an important protection, this proposal has a high likelihood of non-compliance. As an added measure of protection and in order to reduce disturbances, efforts must be made to confine pets to the residential area. The proposed project includes perimeter fencing and walls which can serve this purpose. The Commission imposes Special Condition 14 which requires the permittee to modify the walls, fencing and gates that are associated with the residential and commercial development which face upon the open spaces to use designs and materials that will satisfactorily deter the passage of domestic pets over or through the structures. However, as noted above, it is important to design the open space and park areas in a manner that allows the free circulation of wildlife through those areas. Accordingly, any other walls, fences, gates, safety devices and boundaries associated with the open spaces and parks must be designed to allow the ingress, egress and traversal of the habitat areas of the site by wildlife, including the coyote. The revised fencing plan must be accompanied by a biological analysis documenting the effectiveness of the revised fencing at deterring passage of domestic pets and allowing the free circulation of wildlife through the open spaces and parks.

Also, some residents and visitors using the trail network and parks are likely to be accompanied by their domestic pets, such as dogs. Off-leash pets could enter habitat restoration areas causing disturbance to those habitat areas. In addition, waste generated by pets can be a source of pollution that can have adverse impacts on native habitat. Therefore, the parks and trails need to be managed in a manner that encourages pet owners to control their pets in a manner consistent with the protection of habitat. The applicant has indicated that the City would likely implement controls relative to pets within parks. These controls need to be extended to the trail network as well. Therefore, the Commission imposes Special Conditions 4 and 10. Special Condition 4 requires submittal of a management and maintenance program for proposed parks, trails, open spaces, public facilities, for the review and approval of the Executive Director. This management program may be a component of the revised habitat management plan required by Special Condition 10. The management and maintenance program must identify appropriate domestic pet controls and services such as, but not limited to, leashing requirements, signage, restricted access areas (i.e. no pet areas), barrier plantings, domestic animal control service, and pet waste management stations (i.e. receptacles and bags).

d. Section 30250

The proposed project involves a property subdivision and construction of new residential and commercial development. Section 30250 of the Coastal Act requires that such development occur where it would not have significant adverse effects, either individually or cumulatively, on coastal resources.

The proposed project would result in impacts to coastal sage scrub. Notwithstanding the consistency or inconsistency of these impacts with Section 30240 of the Coastal Act, such impacts should be minimized in order to assure that there are not significant adverse effects on coastal resources. Impacts associated with habitat connectivity, edge effects and the need to prevent high intensity development adjacent to sensitive habitat areas, and the change in intensity of use of the site are most significant at the project site.

There are two kinds of local connectivity issues at the Marblehead site: 1) direct issues such as fragmentation of and intensity of uses adjacent to gnatcatcher habitat use areas (e.g. the Trident Canyon and area between the main and east branches of Marblehead Canyon), and 2) general fragmentation issues such as raptor foraging, coyote access, and dispersal movement of any wildlife across the larger areas of the site. The first of these relates to the adjacency impacts under Section 30240(b) of the Coastal Act. As discussed above, higher intensity development such as housing, commercial development, active parks, and other infrastructure would not be allowable within these areas. The second type of fragmentation relates to individual or cumulative adverse impacts to coastal resources. Development must be designed with measures to ensure that there are no individual or cumulative significant adverse impacts. For instance, the presence of the proposed 313 residential units as well as the commercial development and other uses will make the site less available for wildlife and will block movement and use by such valuable animals as the coyote and several species of raptors, not to mention the gnatcatcher. Presently, these and other wildlife have potential use of the entire 201 acre site. The proposed development would narrow this use area to approximately 110 acres. In addition to narrowing the area usable by wildlife, the project would significantly intensify use of the site from an open space area with low levels of human activity to residential and commercial uses as well as passive and active recreational areas that have high levels of human activity. This change in intensity of use of the site would introduce significant vectors of disturbance for wildlife. Impacts from the loss of habitat linkages due to physical impediments (e.g. houses, fences and roads), noise, light, domestic animals, and other human activity will intensify at the site. Measures to ensure the development does not have a significant individual or cumulative adverse impact on coastal resources would include maximizing the quantity of open space provided on the site and improving the quality and function of the wildlife habitat that will remain on the site. Recognizing the need to address individual and cumulative adverse impacts, the U.S. Fish and Wildlife Service and the California Department of Fish and Game have required the applicant to avoid impacts to existing patches of CSS to the maximum extent feasible, as well as requiring the applicant to restore a significant quantity of habitat on the site. In this case, the applicant is proposing to preserve about 16 acres of upland and wetland habitat and to create and restore about 76 acres of upland and wetland habitat. The Commission would also require that the individual and cumulative adverse impacts that would be associated with the change in intensity of use of the site could be avoided by maximizing the quantity of open space on the site, minimizing habitat fragmentation and encroachment of high intensity development into and between sensitive habitat areas and improving the overall quality of habitat that would remain on the site in the developed condition, as is proposed by the applicant.

Also, in order for any of the natural habitats to maintain their existing biodiversity, it is important to maintain coyotes in the system. In the absence of coyotes, these habitats would be subject to heavy predation from domestic and feral cats and other small predators causing avian diversity to plummet.[35] The applicant's biological studies indicate that coyotes forage but do not den on the project site. Rather, the coyote den in open space areas located inland of Interstate 5 and occasionally forage on the project site. The coyote travel to the site via several routes,

[35] Crooks, K.R. and M.E. Soulé. 1999. Mesopredator release and avifaunal extinctions in a fragmented system. Nature 400:563-566.

including a nearby golf course which flanks both sides of the freeway and has a freeway underpass. Coyote have also been found to use the Avenida Vista Hermosa freeway overpass and the freeway underpass at Avenida Pico. The coyote access the project site at multiple locations. If coyotes are to remain in the system, the various habitats on site must be connected with open space corridors and access to these habitat areas must remain unobstructed such that coyote can continue to access the site and circulate through it. Since coyote that are present in urban settings tend to be nocturnal, lighting from the developed areas must be strictly controlled such that the open space areas and corridors for circulation remain dark spaces. In order to assure that coyote and other wildlife can circulate through the site, the Commission imposes Special Conditions 13 and 14.

Marblehead is currently used as a foraging area for several species of birds of prey. The EIR documented the presence of northern harriers, Cooper's hawks, red-tailed hawks, and American kestrels.[36] During an agency visit in April, 2000, Commission staff observed a white-tailed kite foraging and a loggerhead shrike perched on a pine snag. Also a winter period bird survey submitted by the applicant documents the presence of Sharp-shinned Hawk, Red-shouldered Hawk, Red-tailed Hawk, American Kestrel, and Burrowing Owl. There are undoubtedly other diurnal and nocturnal avian predators that forage on the site. Most recently, the applicant has submitted a 'breeding season survey' to document whether raptors are nesting on the project site. This survey included five site visits between May and July 2001. The study indicates that Cooper's hawk, red-tailed hawk, and American kestrel were observed to forage at the site . However, the survey did not detect any occupied or defended nest sites or feeding young. Therefore, the survey makes a determination that conditions at the site are not currently conducive to nesting. This may be a result of a lack of tall trees for raptor perching and nesting on the project site. However, it remains that the site is utilized as foraging area. Various biological surveys of the site have documented use of the site by a variety of raptor species. Maximizing the quantity of open space area on the site, including protecting ESHA and adjacent areas and drainages on the property and the provision of non-ESHA mitigation would protect these habitats and insure the continued presence of raptors at the site.

7. Conclusion

The applicant has sited and designed the proposed project to avoid direct impacts to ESHA. In addition, with a few exceptions, the applicant has proposed the establishment of appropriate buffers and connectivity areas. In those cases where the Commission has found that the proposed buffers and connectivity areas are inadequately sized or inappropriately managed, the Commission has imposed special conditions to implement changes that assure consistency with Section 30240 and 30250 of the Coastal Act. As conditioned, the Commission finds the development consistent with Sections 30240 and 30250 of the Coastal Act.

D. WETLANDS

There are 5.21 acres of wetlands in the project area (on-site and off-site) consisting of alkali marsh, alkali meadow, seasonal wetland, and mulefat scrub. These wetland areas are not subject to tidal inundation.

Wetlands provide critical habitat, nesting sites, and foraging areas for many species, some of which are threatened or endangered. In addition, wetlands serve as natural filtering mechanisms to help remove pollutants from storm runoff before the runoff enters into streams and rivers leading to the ocean. Further, wetlands serve as natural flood retention areas.

[36] City of San Clemente, 1998, op. cit.

Another critical reason for preserving, expanding, and enhancing Southern California's remaining wetlands is because of their scarcity. As much as 75% of coastal wetlands in southern California have been lost, and, statewide up to 91% of wetlands have been lost.

The applicant has submitted a map of ESHAs that identifies the wetlands on the project site as ESHA. The Commission would concur that the existing wetlands on the project site in the coastal zone constitute ESHA.

1. Direct Wetlands Impacts

Section 30121 of the Coastal Act states:

> *"Wetland" means lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens.*

Section 30233(a) of the Coastal Act states, in relevant part:

> *(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:*
>
> *(1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.*
>
> *(2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.*
>
> *(3) In wetland areas only, entrance channels for new or expanded boating facilities; and in a degraded wetland, identified by the Department of Fish and Game pursuant to subdivision (b) of Section 30411, for boating facilities if, in conjunction with such boating facilities, a substantial portion of the degraded wetland is restored and maintained as a biologically productive wetland. The size of the wetland area used for boating facilities, including berthing space, turning basins, necessary navigation channels, and any necessary support service facilities, shall not exceed 25 percent of the degraded wetland.*
>
> *(4) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.*
>
> *(5) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.*
>
> *(6) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.*
>
> *(7) Restoration purposes.*
>
> *(8) Nature study, aquaculture, or similar resource dependent activities.*

The applicant is requesting final approval for the impacts to sensitive habitat that occurred when 1,900 linear feet of bluffs along El Camino Real was stabilized (Emergency Coastal Development Permit 5-90-274-G). The stabilization included grading the bluff face and creating compacted stabilization fills (i.e. engineered buttress fills). These activities caused impacts to 0.1 acres (4,356 square feet) of wetlands located at the mouths of the canyons/tributaries which intersect the bluff face.

Other than the direct impacts to wetlands that already occurred under the emergency grading, there are no other direct impacts to wetlands proposed in the coastal zone. However, the proposed project would result in some wetland fill impacts located outside the coastal zone. Specifically, there would be 0.55 acres of impacts to mulefat wetlands which would occur for grading to construct the commercial center. However, the remainder of wetlands located outside the coastal zone -about 1.69 acres- would be preserved. The impacts to 0.55 acres outside the coastal zone would be mitigated through the creation of 1.72 acres of wetlands and 2.90 acres of riparian scrub habitat within the wetland detention basins and basin slopes located in the coastal zone.

The proposed project would also result in impacts to 0.44 acres of ephemeral drainages on the project site. These impacts are proposed to be mitigated by the applicant through the creation of 1.72 acres of wetlands and 2.90 acres of riparian scrub habitat within the proposed storm water detention basins located in the coastal zone. According to the applicant, these ephemeral drainages are not considered wetlands under the Coastal Act. No information has been submitted to the Commission which would cause the Commission to disagree with the applicant's determination.

The impacts to ephemeral drainages and to wetlands outside the coastal zone may necessitate authorization from the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, the California Department of Fish and Game, and the Regional Water Quality Control Board, among others. Also, the applicant has obtained approvals from the California Department of Fish and Game for the impacts to ephemeral drainages. However, the project has been revised since the date of the last approval. Accordingly, revised approvals may be necessary. In order to assure that these approvals do not conflict with or otherwise modify the proposal as approved by the Commission and to assure that any differences are reconciled in an appropriate way, the Commission imposes Special Condition 27 and Special Condition 28, which require the applicant to submit evidence of approval from relevant agencies prior to issuance of the permit and requires a permit amendment where necessary to reconcile the various approvals.

Emergency grading to stabilize the bluffs along El Camino Real caused the dredging of wetlands as defined in Section 30108.2 of the Coastal Act. The purpose of the impact was to stabilize the bluffs to prevent landslides and closure of El Camino Real and to assure public safety. Section 30233 of the Coastal Act governs the dredging and filling of wetlands and establishes eight enumerated uses for which such impacts are allowable. Dredging and/or filling of wetlands for bluff stabilization is not one of the allowable uses enumerated.

However, it could be argued that the work at the impacted areas was performed as part of and/or in support of an incidental public service. At the time the emergency grading was authorized, the applicant and the City argued that the bluff stabilization was necessary for public safety and to prevent the closure of El Camino Real, a public roadway and major coastal access route.

The bluff stabilization which occurred under the emergency permit allowed the City to re-open the existing roadway with the same quantity of traffic lanes as existed prior to the closure of the road. The bluff stabilization did not change the existing quantity of traffic lanes nor did it make

possible the addition of traffic lanes. Furthermore, based upon review of the geologic information available, the Commission's geologist determined that the proposed bluff stabilization was the least environmentally damaging feasible alternative. The applicant has proposed to designate a portion of the 1.72 acres of wetlands to be created within the detention basin as mitigation to address the direct impacts to wetlands that occurred under the emergency grading. In order to assure the proposed mitigation is implemented, the Commission imposes Special Condition 10.

The Commission finds that the dredging and/or fill of wetlands that occurred under the emergency coastal development permit is consistent with Section 30233(a)(5) of the Coastal Act. Furthermore, as noted in the 'Geologic Stability' section of these findings, Section 30235 of the Coastal Act mandates approval of the bluff stabilization as necessary to protect the existing road. Therefore, the Commission approves permanent authorization of the wetland impacts that occurred during the 1990 emergency grading.

2. Wetlands Ecology

Section 30231 of the Coastal Act states that:

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

Section 30240 of the Coastal Act states that:

> *(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.*
>
> *(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 those areas, and shall be compatible with the continuance of those habitat and recreation areas.*

a. Wetland Buffers

The Marblehead project site consists of a bluff and bluff top terrace incised by several canyons. A majority of the wetlands are located within the canyon bottoms. However, there are a few wetlands along the bluff top as well. As discussed above, the existing, on-site wetlands constitute ESHA and, as long as it is not inconsistent with the more specific wetland provisions of Section 30233, must therefore be accorded the same protections that Section 30240 provides for any other ESHA.

The proposed project involves mass grading of the subject site in order to prepare the site for the residential and commercial development as well as parks and trails. This development has the potential to adversely impact wetlands habitat during and after construction. For instance, during construction, direct encroachments into the habitat could disturb (remove, trample, etc.) the habitat. Grading surrounding lands could lead to sedimentation of the wetlands. In

addition, noise could adversely impact wildlife which utilize the wetland habitat. Post construction, the presence of humans living in close proximity to the wetlands can lead to disturbances from light, noise, domestic animals, over-irrigation and invasion of habitat areas by non-native, invasive plants which may be planted in the developed areas of the site.

Buffer areas are undeveloped lands surrounding wetlands. Buffer areas serve to protect wetlands from the direct effects of nearby disturbance. In addition, buffer areas can provide necessary habitat for organisms that spend only a portion of their life in the wetland such as amphibians, reptiles, birds, and mammals. Buffer areas provide obstructions which help minimize the entry of domestic animals and humans to wetlands. Buffers also provide visual screening between wetland species that are sensitive to human impacts, such as lighting. Buffers can also reduce noise disturbances to wetland species from human development. The Commission has commonly found that that a minimum 100 foot buffer needs to be established around wetlands in order to protect those wetlands from disturbance as required by Section 30231 and 30240 of the Coastal Act.

The Commission finds that in most cases a minimum 100 foot buffer (measured horizontally) would be appropriate for the wetlands at the project site (herein 'wetland buffer'). This wetland buffer is appropriate for the site and is consistent with past actions made by the Commission. The wetlands on the project site flow through the bottoms of various canyons and drainages. These canyons and drainages, in and of themselves, provide natural buffers for the wetlands. The steeper slopes of the canyons and drainages provide a natural physical impediment that serves to protect the wetlands. However, significant disturbances within the canyons and drainages would focus impacts toward the wetlands located in the bottom of those canyons and drainages. For instance, significant ground disturbing activities within the canyons and drainages would generate sedimentation that would flow toward the wetlands. Similarly, light and noise impacts occurring in the canyons and drainages would focus toward the wetlands. Accordingly, to the maximum extent practicable, significant development within the canyons should be minimized. In order to achieve this, the wetland buffer should be no less than 100 feet wide in most cases. At this site, a 100 foot wide wetland buffer incorporates the more steep portions of the canyons and drainages, thus limiting development in this area. In most cases, the 100 foot buffer extends to the top of the canyon slope.

In some areas, most notably the eastern slope of the main Marblehead Canyon, the top of the canyon slope lies beyond the 100 foot wetland buffer. Beyond 100 feet, the sides of the canyons and drainages slope gently, however. While there would be some benefit to avoiding development within these areas (both in terms of biological resource protection and avoidance of landform alteration), it would not be necessary to preserve these areas completely intact as portions of the wetlands buffer. Rather, the 100 foot wetland buffer, in combination with the preservation of other areas that are designated as terrestrial ESHA and ESHA buffer, and preservation of the areas that the Commission has identified as being significant landforms, would achieve adequate protection of the wetland habitat from significant degradation, per Section 30240(b), as well as from significant disruption of habitat values, per Section 30240(a), and be adequate to maintain the biological productivity and quality of the wetlands, per Section 30231 of the Coastal Act.

Except as identified below, the area within the 100 foot wetlands buffer must contain no development and experience no disturbance as a result of adjacent development. Uses consistent with the protection of the wetlands may be allowed within the buffer. For instance, habitat restoration may occur within the buffer area so long as the restoration is compatible with the wetlands[37]. In addition, where it isn't feasible to locate trails elsewhere, trails may be allowed

[37] It should also be noted that fuel modification plants, while they might be allowed in the terrestrial ESHA buffer zones, should be kept out of the wetland buffer zones. Wetlands are special places that depend heavily upon moisture gradients that are reflected in

within the wetland buffer so long as they are confined to the outer edges of the buffer and no artificial lighting is used. The boundary of residential and commercial lots should conform with the wetlands buffer so that no portion of the residential or commercial lot is within the buffer.

The applicant identifies a wetland buffer which varies but is generally no smaller than 100 feet in width. Exceptions include two proposed utility corridors that converge near the mouth of Marblehead Canyon at El Camino Real. These 'encroachments' into the buffer would not be considered significant because the development proposed would require one-time trenching and the area would be restored with native vegetation upon completion of the work. In addition, at the upper end of Marblehead Canyon, the applicant is proposing to place bridge pilings for the proposed Avenida Vista Hermosa bridge within 25 feet of wetlands. Similarly, the proposed location is the least disruptive to coastal resources and would not be considered a significant encroachment.

In addition, the applicant has proposed grading, construction of trails, utilities, and water quality infrastructure (i.e. detention basin) adjacent to a small isolated wetland at proposed Lot C next to Avenida Pico. None of these development activities would occur within the wetland ESHA. In addition, the Commission finds that the wetlands in this area are uniquely situated such that a 50 to 100 foot wide buffer would be appropriate. The deep trench with steeply sloping sides as well as the proposed low intensity uses surrounding the wetland would afford increased protection to these wetland and ESHAs. Where feasible, the buffer should be maintained at 100 feet. However, the buffer may be reduced to as little as 50 feet in the proposed instances.

Section 30231 of the Coastal Act requires that the biological productivity and quality of coastal waters be maintained through, among other means, the maintenance of a protective natural buffer area. Section 30240(b) of the Coastal Act requires that development in areas adjacent to environmentally sensitive habitat areas, such as the on-site wetlands, must be sited and designed to prevent impacts which would significantly degrade those areas. Certain proposed encroachments are consistent with these requirements as they do not result in adverse impacts to wetlands that would significantly degrade those areas or to a reduction in the biological productivity or quality of the waters. In addition, the applicant's proposed wetland buffers conform with wetland buffers typically required by the Commission. With assurances that the development will be constructed in the manner proposed, and additional assurances regarding future protection of the wetlands in perpetuity, the proposed project could be found consistent with Section 30231 or 30240(b) of the Coastal Act. Accordingly, the assurances are: Special Condition 1 which mandates preservation of habitat, including the wetlands, within open spaces and parks; Special Condition 4 which requires the applicant to prepare an appropriate habitat maintenance and management plan; Special Condition 5 which places requirements on the proposed subdivision that will ensure that the land is permanently reserved for conservation and that the landowners must manage and maintain the habitat in an appropriate way; Special Condition 8 and Special Condition 9 which requires the applicant to implement certain construction phase measures to protect the habitat; Special Condition 10 which requires the applicant to submit a final habitat management plan that incorporates all the requirements of the permit; Special Condition 11, which requires that appropriate native vegetation is planted; Special Condition 12 which prohibits fuel modification within wetland buffers; Special Condition 13 which prevents illumination of habitat areas, including wetlands, with artificial lighting; Special Condition 14 which requires that barriers between developed areas and the habitat are designed to discourage incursions into the habitat by domestic pets; Special Condition 16 which requires the applicant to implement water quality best management practices for the developed site that will protect habitat, wetlands and coastal waters; Special Condition 17 which requires

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their transition to upland habitat. Therefore, while a fuel modified plant palette may be allowed in an upland habitat ESHA buffer zone, wetland buffers should be planted with a plant palette that reflects natural transitional habitat.

the applicant to comply with certain setbacks from the wetland in the construction of the Avenida Vista Hermosa bridge; Special Condition 18 which requires the submittal of revised plans that incorporate all of the requirements of the special conditions; Special Condition 25 that assures future development at the site is reviewed for consistency with the requirements of this permit; and Special Condition 32, which requires the applicant and any and all successors in interest who may sell or sell an interest in the property of the requirements of this permit.

b. Shading Impacts

The proposed project involves the construction of the Avenida Vista Hermosa bridge within the coastal zone that spans the existing wetlands on the project site. A second bridge was also proposed to create a temporary construction crossing that would be turned into a permanent pedestrian footbridge near the mouth of Marblehead canyon. Although this second bridge was removed from the proposal, the Commission has found that the bridge would improve public access and circulation through the site and is conditioning the project to re-incorporate the pedestrian bridge. Thus, the impact from this pedestrian bridge is analyzed below.

Bridges cast shadows upon the wetlands below them. This shading can have impacts upon the vegetation communities that are a part of the wetlands. Such impacts must be reviewed for consistency with Section 30231 and 30240 of the Coastal Act. The applicant has submitted an analysis of shading impacts prepared by Glenn Lukos Associates titled "Revised Shading Study Associated with Two Proposed Bridges, Spanning Existing Wetlands on the Marblehead Coastal Site, San Clemente, California", dated December 4, 2001.

According to this shading analysis, impacts to the wetlands from shading caused by the bridge deck at Avenida Vista Hermosa would not be measurable. The biological analysis makes this determination by comparing the proposed bridge to reference sites where there are bridges with similar height and orientation characteristics over wetlands. In this case, the applicant compared the proposed bridge to one located over the San Mateo Creek at Interstate 5. The study found that there was no measurable difference in vegetative cover between the wetlands that are shaded by the bridge and the wetlands that are outside the shading. This is largely attributed to the high span of the bridge over the wetlands and the limited period during the day when any one area is shaded by the bridge. Similarly, the proposed bridge would have a high, clear span over the wetlands (about 61-70 feet) which will cast a moving shadow over the wetlands vegetation. Since no area of vegetation would be entirely deprived of sunlight, the applicants' biologist has concluded that impacts from shading by the proposed bridge deck would not be significant.

Also, the proposed bridge would have six, seven foot diameter columns to support the bridge. These columns would also cast a shadow on the wetlands. As with the bridge deck, shading from the columns would move throughout the day and would not generate a significant impact upon the wetland vegetation. Although the shading impact is not expected to measurably effect the wetland vegetation, the applicant's study assumes that shading from these columns would impact 0.015 acres of wetland.

Also, the required pedestrian foot bridge will only have an eight foot elevation over the wetland surface. Due to the low height and the width of the bridge, shading from the bridge deck over the wetlands is expected to be complete. This shading would cause 0.005 acres of impacts upon wetland vegetation.

According to the applicant's study, the shading impact would not change the hydrological or biogeochemical function of the wetlands. However, in the case of the pedestrian foot bridge, the shading would cause some loss of wetland vegetation. However, these losses to wetland

vegetation cover are not anticipated to decrease the biological productivity or the quality of these wetland areas nor is it anticipated to have any effect on the ability of these wetlands to contribute to maintaining optimum populations of marine organisms. Furthermore, the shading is not anticipated to significantly disrupt the habitat values of the wetlands. Therefore, the Commission finds that the proposed project is consistent with Section 30231 and 30240 of the Coastal Act as these policies apply to shading effects on wetlands at the site. Nevertheless, the applicant is proposing to off-set any potential impacts on the 0.02 acres (871 square feet) of wetlands affected by shading by creating 0.20 acres (8,712 square feet) of alkali marsh on-site within Marblehead Canyon (0.11 acres) and the westerly canyon (0.09 acres).

Finally, the proposed bridge could be designed in a manner that would provide appropriate habitat for bats. Bats would forage for insects in the wetlands and surrounding restored habitat. If such a design element is feasible, it could significantly enhance the value of the ESHA on site. Therefore, the Commission encourages the applicant to design the bridge with these elements. Therefore, the Commission imposes Special Condition 17.

c. Wetlands Hydrology

The applicant's submittal contains various documents which describe the hydrology of the wetlands on the project site and the impacts the proposed development would have upon wetlands hydrology. These studies show that the alkali wetlands at the site are supported primarily by ground water. Their continued viability accordingly requires that development not significantly alter either the amount or quality of ground water that is delivered to the wetlands. Obviously, reductions in ground water supplied to the wetlands could have significant impacts to hydrophytic vegetation. Less obviously, significant increases in the ground water supplied to the wetlands could have impacts as well. This is because these are alkali wetlands, and support a particular ecosystem adapted to high salinity water. Significant increases in the input of low-salinity ground water has the capacity to alter these ecosystems.

To address these issues, the applicant has submitted a number of hydrologic and biologic studies. The water budget model submitted by the applicant uses climatic data developed by Drs. Douglas Inman and Scott Jenkins at Scripps Institute of Oceanography that show that southern California experiences both wet and dry climate periods that vary on a decadal time scale. From 1948 to 1977, southern California was in a relatively dry period; and from 1977 to the present, the climate has been relatively more wet. As it is not known whether or not the climate may shift to a drier period once more, the water budget analysis was performed for both parts of the climate cycle.

The principal conclusions that emerge from the applicant's analysis are that: 1) the varying climate patterns in southern California cause considerable variation in the ground water supply to the wetlands at the site; and 2) the development will not reduce the volume of ground water available to the wetlands. In fact, the model predicts a significant increase. During dry climate periods, the predicted increase is 77 acre-feet per year, or 157% of the pre-development ground water recharge. During wet climate cycles, such as the present time, the predicted increase is 66 acre-feet, or an 83% increase over the pre-development condition. These increases, though large, are smaller than the interannular variation in ground water recharge. They are, however, superimposed on the natural variation, and so are significant.

In addition to affecting the quantity of ground water on the project site, development has the capacity to alter the flow paths of ground water, potentially affecting the quantity of ground water that is actually available to the wetlands. The project site is underlain by two types of geologic materials that differ substantially in their hydrologic properties. The Capistrano Formation, bedrock at the site, is nearly impermeable and has only a very limited capacity to hold water in

fractures. Overlying the Capistrano Formation over most of the site are marine and non-marine terrace deposits that contain appreciable amounts of gravel, sand and silt. These deposits are much more permeable to ground water. Accordingly, ground water tends to percolate through the terrace deposits and flow along the bedrock/terrace deposit contact, ultimately discharging to the surface in canyon and bluff faces. A map prepared as part of the analysis shows the topography of the bedrock surface beneath the terrace deposits, based on geologic borings and other data. The bedrock surface dips gently toward the sea, and shows no evidence of channels or other features that might concentrate ground water. Because grading into the bedrock is proposed, the capacity exists to alter ground water flow paths. The applicant also provided a map depicting the post-project condition. This map, shows that grading can be performed in such a way to preserve the natural ground water flow paths and, in the southwestern part of the property, to divert ground water toward Marblehead Canyon.

The analyses submitted contain several recommendations that will help to provide flow paths for ground water. These include: 1) in areas where cuts are to extend into the Capistrano Formation, the Capistrano Formation will be overexcavated to a depth of five feet. The base of the excavation will be graded to direct groundwater toward the canyons, and the lower one foot of the excavation will be filled with sand or gravel derived from the marine terrace deposits. Compacted fills suitable for foundations will then be placed above the sand and gravel. This sand and gravel will provide a permeable blanket beneath the compacted fills, to allow for groundwater movement; 2) a recharge trench will be excavated at the lowermost end of the excavation, in order to provide a reservoir and diffuse source for ground water discharge to the canyons.; 3) the subterranean cutoff wall that diverts water away from the unstable portion of the bluff overlooking El Camino Real at the northwestern edge of the property is to be pierced by a solid PVC pipe, equipped with a valve, to supply water to Wetland Area A. These recommendations are important to maintain ground water flow to the wetlands at the site, and through Special Conditions 8.B, 18 and 19 the Commission requires the applicant to implement these recommendations in the development of the project site.

To summarize, the total amount of ground water available to the wetlands will not decrease as a result of development, and may, in fact, increase substantially. Any large increase in ground water recharge may reduce the salinity of the alkali wetlands. However, the applicant has submitted data that indicate that the alkali-adapted ecosystems in Orange County are able to tolerate a wide range of salinities. Accordingly, with the implementation of the recommendations relative to grading the site, no adverse impact to the wetlands is anticipated. Thus, the proposed project is not anticipated to decrease the biological productivity or the quality of these wetland areas nor is it anticipated to have any effect on the ability of these wetlands to contribute to maintaining optimum populations of marine organisms. Furthermore, the fluctuation in ground water supply is not anticipated to significantly disrupt the habitat values of the wetlands.

d. Ground Water Quality

Increases in ground water recharge as a result of development may decrease the salinity of water available to the wetlands, as explained above. Because of the large uncertainties in the estimates of changes in ground water discharge, it is not possible to predict accurately the magnitude of these changes. Further, the relationship between increases in ground water recharge and wetland salinity is not necessarily linear because some of the increase in ground water may be held in storage, and because evaporation of ground water as it is discharged to the wetlands will vary seasonally.

The expected decreases in wetland salinity may be compensated for, to some degree, by increases in the dissolved solids that could result from the percolation of ground waters through

artificial fills. Artificial fills that consist of material derived from the Capistrano Formation will contain significant amounts of the mineral gypsum. Gypsum consists of calcium sulfate and is easily dissolved by ground water. Because of the relatively impermeable nature of the Capistrano Formation bedrock, little ground water penetrates the formation. Nevertheless, the Capistrano Formation bedrock is responsible for the saline nature of the wetlands at the site. Fills derived from the formation (particularly the lower, unoxidized part of the formation) will consist of loosened material that will be somewhat permeable. As water percolates through such fills, it will dissolve gypsum and its salinity will increase, perhaps substantially. Approximately one third of the cuts planned for the site involve the Capistrano Formation bedrock. The applicant's analyses recommend that fills derived from these cuts be placed on the east side of the property (beneath the commercial zone and lots 23 through 32). Ground water at these locations will drain south and east of the site, and will not enter the wetlands on site.

Again, the applicants biological analyses present data that indicate that the alkali-adapted ecosystems in Orange County are able to tolerate a wide range of salinities. Accordingly, with the implementation of the recommendations relative to grading the site, no adverse impact to the wetlands is anticipated. Thus, the proposed project is not anticipated to decrease the biological productivity or the quality of these wetland areas nor is it anticipated to have any effect on the ability of these wetlands to contribute to maintaining optimum populations of marine organisms. Furthermore, the fluctuation in ground water salinity is not anticipated to significantly disrupt the habitat values of the wetlands.

3. Conclusion – Wetlands

The subject application seeks permanent authorization for the impacts to wetlands which occurred during the emergency grading of the site in the early 1990s. The Commission finds that the stabilization that caused the impacts are mandated under Section 30235 of the Coastal Act but can be found consistent with Section 30233(a)(5) of the Coastal Act as necessary for incidental public service purposes. Other potential impacts upon wetland relate to shading impacts, hydrology impacts and potential changes to the salinity of groundwater discharged to the wetlands under the developed condition. However, the Commission could find that the shading impacts would have no impact on the biological productivity or the quality of the wetlands nor have any effect on the ability of these wetlands to contribute to maintaining optimum populations of marine organisms. Furthermore, the shading is not anticipated to significantly disrupt the habitat values of the wetlands. In addition, the Commission has not identified any information which would contradict the applicant's conclusions regarding hydrology and groundwater impacts. With the implementation of the proposed mitigation measures, at minimum, the Commission finds that adverse impacts to wetland hydrology and groundwater salinity would not be significant.

E. LANDFORM ALTERATIONS

1. Landform Alterations to Drainages/Canyons

Section 30251 of the Coastal Act states in relevant part:

> *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.

Section 30251 of the Coastal Act requires that landform alteration be minimized in new development. One purpose of minimizing landform alteration is to maintain the aesthetic qualities of the coastal zone. Minimization of landform alteration and grading also addresses other Chapter 3 Coastal Act objectives such as protecting habitat and water quality which are discussed elsewhere in these findings. Techniques to minimize landform alteration include designing new subdivisions, such as the proposed project, to avoid changing significant landforms and avoiding geologically hazardous areas such as landslides and steep slopes where significant grading would be required to develop those areas. Furthermore, the topography of the site should dictate the layout of the subdivision so that significant grading is not necessary to construct roads and flat pads for buildings. Finally, once a subdivision is designed to avoid development upon significant geographic features and geologic hazards, the foundation systems of any structures on sloping areas should consider multi-level pads and pile foundations so that large single pads for multiple houses, which require significant quantities of grading, are not necessary.

At the subject site, the application of these site design principles would translate into designing the subdivision and roads to follow site contours. In addition, development within drainages and canyons should be avoided while also implementing a setback from those areas. Canyon edge setbacks have several purposes, including minimizing visual impacts of placing development at prominent locations (such as along canyon edges) and to avoid geologic hazards that are commonly present in sloping terrain. For setbacks, the Commission has commonly required a minimum 10 to 15 foot setback from the crest of the slope of a canyon[38]. Where a road to accommodate reasonable circulation through the development is necessary, bridges should be used so that no filling of the drainages/canyons is necessary.

As described by the applicant, a total of 1,101,800 cubic yards of cut and 1,070,800 cubic yards of fill for a total of 2,172,600 cubic yards of grading would occur within the coastal zone[39]. Exhibit 9 shows the proposed cut and fill areas associated with the development. It should be noted that these estimates of total grading may underestimate the total amount of grading that would be necessary at the site. The applicant's geologic report contains recommendations for remedial grading, which may be necessary for stabilization of landslides, colluvium, and existing fills. In addition, in order to maintain ground water flow paths such that wetlands in the canyon bottoms will continue to be supplied by ground water, the geologic report recommends overexacavation of some areas of cut, in order to replace relatively impermeable materials with more permeable materials. No estimates of the total remedial grading necessary to accomplish these tasks are available, but remedial grading will likely add several hundred thousand cubic yards of grading to the project total.

Approximately 132.47 acres (66%) of the 201 acre portion of the site within the coastal zone would be graded. Large areas of cut and fill are proposed to create terraces for the construction of homes (such grading would maximize the number of ocean view lots within the development) and the commercial development. Additionally, some fill of canyons/drainages (or portions thereof) is proposed to construct an extension of Avenida Vista Hermosa, water quality management infrastructure (e.g. detention basins), public trails, and public park areas.

The applicant has submitted several maps to aid the Commission's analysis of the amount of proposed canyon fill. These maps, produced through analysis of slope and change in slope

[38] See Statewide Interpretive Guidelines and the certified Land Use Plan for the City of San Clemente
[39] An additional 809,000 cubic yards of grading would occur outside the coastal zone in the construction of the commercial development.

angle, were an attempt to arrive mechanically at a "top of slope" line consistent with Coastal Act definition of bluff edge. This definition, as spelled out in California Code of Regulations, Title 14, § 13577 (h) (2), states that:

> *Bluff line or edge shall be defined as the upper termination of a bluff, cliff, or seacliff. In cases where the top edge of the cliff is rounded away from the face of the cliff as a result of erosional processes related to the presence of the steep cliff, the bluff line or edge shall be defined as that point nearest the cliff beyond which the downward gradient of the surface increases more or less continuously until it reaches the general gradient of the cliff. In a case where there is a steplike feature at the top of the cliff face, the landward edge of the topmost riser shall be taken to be the cliff edge.*

Unfortunately, the Computer-Aided-Design (CAD) software employed in producing these maps was not capable of applying this definition in a meaningful way. However, other maps submitted by the applicant contain, respectively, Commission Staff[40] and Applicant-interpreted determinations of the top edge of the slope. The applicant-derived top-of-slope line was arrived at by use of criteria that were believed consistent with the City of San Clemente certified LUP[41], whereas the Commission Staff's top-of-slope line was arrived at by the criteria spelled out in Title 14, CCR § 13577 for the definition of the top edge of a coastal bluff. The analyses differ in that: 1) the applicant chose the top edge of the slope to lie at the point where the slope attains a 30% grade, whereas Commission Staff chose the top edge of slope as the point at which the slope increases more-or-less continuously; this point is generally at less than a 30% grade; and 2) the applicant discounted any part of a canyon that was less than 10 feet deep, thus drawing the top-of-slope line across the heads of canyons; whereas Commission Staff included the entire canyon as lying within the top-of-slope line. Both analyses show that considerable portions of canyons and drainages are to be filled.

More specifically, as shown in Exhibit 11, this grading would result in the filling of the upper tips of one smaller canyon (Drainage 'D' herein called the "Trident Canyon"), the filling of approximately 1,000 linear feet of the approximately 2,300 linear foot long Drainage C (herein called the "Western Canyon") and approximately 1,000 linear feet of the approximately 1,600 linear foot long eastern branch of Drainage E (herein called the "eastern branch of Marblehead Canyon"). Additionally, the tip (approximately 30 linear feet) of Drainage A would be filled and the tip (approximately 350 linear feet) of Drainage B (total of 700 feet long) would be filled. In addition, various spurs of the main branch of Marblehead Canyon are proposed to be filled or otherwise graded.

Any grading results in some amount of landform alteration. Nevertheless, a certain amount of grading is necessary in order to prepare sites for development. Under Section 30251 of the Coastal Act, the potential to minimize landform alteration must be considered. One way of analyzing the significance of the landform alteration is in terms of the quantity of grading and/or the amount of cut or fill that would occur in any one area. Another way of analyzing the significance is to consider the overall dimensions of the landform to be altered and the form that the area will have upon completion of the grading. However, these more quantitative methods are not the sole criteria by which the significance of the landform alteration can be judged. Rather, certain other more subjective criteria must also be considered such as: 1) the visual appeal of the landform; 2) the location of the landform with respect to the public's visual enjoyment of the landscape feature; 3) the unique qualities of the landform feature; and 4) the

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[40] Commission staff produced a map identifying a top of slope line which was published as 'Exhibit 32' in the March 2001 staff report. Many of the applicant's exhibits reference this "Exhibit 32" top of slope line. Since that time, an updated top of slope line has been generated by Commission staff. This updated line is shown on Exhibit 11 of this staff report.

[41] While an LUP has been certified for the City of San Clemente, no LUP has been certified for the subject site. The certified LUP contains a definition of 'coastal canyon/bluff' which defines these features as "Those features having vertical relief of ten feet or more. "

extent to which preservation of natural landforms can accomplish multiple objectives such as, but not limited to, preserving habitat, preserving appealing vistas, and addressing water quality issues. This is not an exhaustive list of criteria by which the significance of landform alteration can be analyzed, but does represent the types of criteria that were considered in determining the significance of the landform alteration occurring on the proposed project site. As noted above, there are five general areas where landform alteration is an issue at the project site. The significance of the landform alteration at each of these areas will be discussed using some or all of the criteria identified above, as deemed relevant by the Commission in each case.

At Drainage A, the applicant is proposing to fill approximately the most inland 30 feet of the drainage. Drainage A is very shallow and there is nothing particularly remarkable in terms of visual appeal about the drainage. Therefore, the proposed fill of the drainage does not represent a substantial landform alteration issue.

Drainage B is a shallow, linear drainage feature that is approximately 10 to 15 feet deep. The proposed project would grade the inland 350 linear feet of the feature. In the area to be filled, the drainage ranges from approximately 10 to one (1) foot deep. Similar to Drainage A, Drainage B is very shallow and does not have significant visual appeal. Accordingly, the proposed fill of the drainage does not represent a significant landform alteration issue. However, the drainage does contain coyote bush scrub of which some –the seawardmost area- has been mapped as occupied by California gnatcatcher. As discussed elsewhere in these findings, this habitat is considered ESHA under the Coastal Act. The applicant is proposing to avoid the ESHA and a buffer area within Drainage B.

The Western Canyon (Drainage C) is a long, linear, deep to shallow canyon that extends 2,300 feet inland from the bluffs along El Camino Real. The canyon has a maximum depth of 30 feet, becoming more shallow at its inland reach. The boundaries of the canyon/drainage are well-defined, even at its more shallow depths. Wetlands, coastal sage scrub, Blochman's dudleya and California gnatcatcher are present in the canyon. The proposed project would grade the upper, more shallow areas of the canyon for the construction of roads and higher density housing and retain the deeper, more habitat rich areas of the canyon. The steep slopes, sinuous path and relatively lush vegetation of the deeper areas of the Western Canyon make this canyon visually appealing as a canyon landform. Public trails and park area are proposed to be sited along the rim of the canyon to take advantage of the canyon's intrinsic qualities. The deeper portions of the canyon also contain significant habitat, thus, preservation of the deeper areas of the canyon achieves habitat preservation goals of the Coastal Act. The grading of the deeper canyon areas would constitute significant landform alteration. Accordingly, the applicant is proposing to avoid any significant development within these deeper canyon areas.

The shallower portions of the Western Canyon are less remarkable. As the canyon becomes more shallow, the wetlands disappear and give way to annual grassland and coyote bush scrub habitat. These vegetated areas may occasionally provide habitat and foraging area for wildlife, but are not particularly high in habitat value nor is the area situated within a habitat corridor. The shallower canyon areas also lack the visual appeal of the deeper portions of the canyon. Therefore, the Commission finds that the filling of the inland, more shallow portions of the Western Canyon would not constitute an unacceptable landform alteration.

Drainage D is located between the Western Canyon and Marblehead Canyon along the bluffs facing El Camino Real. The drainage is trident-shaped and the boundaries are well-defined. The drainage is up to 30 feet deep, with the majority being 20 feet deep or less. The applicant is proposing to fill the upper, shallower tips of the Trident Canyon for the construction of houses, park and public road and parking area for the park. The applicant is proposing to avoid filling the main body of the canyon (i.e. those parts that are 10+ feet deep). The Trident Canyon

would be considered a significant landform for several reasons. First, the canyon has a relatively unique trident shape that is visually appealing. Second, trails and park area are proposed to be situated to utilize the feature as an interesting visual attraction. Third, the bottom of the canyon has native needlegrass grassland habitat that is ESHA. In addition, burrowing owl and California gnatcatcher have been documented utilizing the canyon. Gnatcatcher territories with breeding pairs accompanied by dependent fledglings have been recorded in the adjacent canyons on both east and west sides of the Trident Canyon in 2001 and in historical observations over the last ten years. Accordingly, the canyon is located in a habitat corridor that connects two core habitat areas for California gnatcatcher. Thus, preservation of this significant landform would achieve multiple Coastal Act objectives.

The current plan proposes to retain the deeper parts of the canyon and to fill the shallower inland tips for houses and a public road and parking lot. While the shallower parts of the Trident Canyon are an integral part of the overall landform feature, it would be difficult to argue that the fill of these shallow areas would constitute significant landform alteration within the meaning of Section 30251 of the Coastal Act. Ideally, the entire landform should be preserved. Nevertheless, such preservation is not mandated by Section 30251 of the Coastal Act. Furthermore, while a majority of the Trident Canyon is within a habitat corridor that must be protected pursuant to Section 30240 of the Coastal Act, the inland tips of the canyon that are proposed to be graded are outside the connective corridor. Thus, the proposed fill of the tips of the Trident Canyon is approvable under Section 30251 and 30240 of the Coastal Act.

The main branch of Marblehead Canyon (Drainage E) transects the entire project site from El Camino Real to Interstate 5. Other than the bluffs along El Camino Real, this canyon is the most prominent landform on the project site. The canyon is generally 50 to 60 feet deep and ranges from approximately 400 to 900 feet wide (measuring rim to rim) with well-defined boundaries. There are several spurs of the main body of the canyon that have varying dimensions. There is also a secondary branch ('east branch' discussed below) that extends from the main body of the canyon. Marblehead Canyon is visually appealing as a canyon and open space area. The walls of the canyon are steep to gentle with undulations that follow the sinuous canyon bottom. There are wetlands, coastal sage scrub, grasslands, and open canopy woodlands in the canyon. A large variety of wildlife, including California gnatcatcher and raptors utilize the habitat. Vantages from the canyon rim afford views through the canyon with 'blue water' views of the Pacific Ocean. The depth and width of the canyon create an open space area within which there is a sense of isolation from the surrounding urban environment. Along the western side of the main branch of Marblehead Canyon, the proposed project would grade the upper wall and rim of the canyon and fill certain spurs off that side of the canyon. The grading would create pads for roads and single family residences. In addition, a proposed public trail which would run the length of the canyon would be constructed on the graded slope. There are some instances where the grading along the western side of the canyon would not be considered significant and others where such grading would be substantial landform alteration.

On the west side of the main branch of Marblehead Canyon, there is a spur (herein 'Spur E1') that would be graded and filled for the proposed development. Fill of this spur would not be considered significant landform alteration (Exhibit 11). Spur E1 is located within the area of proposed residential lots 78-89. In terms of width and depth, Spur E1 is presently the largest of the spurs off the west side of Marblehead Canyon and measures about 300 feet by 400 feet and approximately 30 feet deep. This spur has relatively steep sides and is well-defined. Vantages from the rim of this spur include the spur itself and the main body of the canyon. However, a majority of the depth of this spur is attributable to a soil stockpile from the emergency bluff grading that was placed up to the edge of the spur. Therefore, this spur is artificially deep and well-defined. When considering the natural contours of the area, the spur is shallower and less dramatic. Accordingly, the spur doesn't contribute significantly to the character of the canyon.

Therefore, the Commission finds that grading and filling of Spur E1 is not substantial landform alteration.

On the west side of the main branch of Marblehead Canyon, seaward of Spur E1, there are a series of smaller spurs that are approximately 30 feet deep (herein 'Spur E2' and 'Spur E3'). The canyon rim around Spur E2 would be graded for the construction of homes and the trail along the western wall of Marblehead Canyon, however the main body of that spur would remain ungraded. Furthermore, the applicant is proposing to avoid any grading within Spur E3. These spurs are at the confluence of the main branch and east branch of Marblehead Canyon. These spurs contribute to the volume and visual interest of the main body of the canyon. Furthermore, these spurs contain significant habitat area and are part of the core habitat for gnatcatcher. Avoiding the fill of these spurs helps protect core habitat areas and thus addresses multiple objectives of the Coastal Act. Therefore, the Commission finds that if these areas were to be filled or significantly altered, such alteration would be considered significant landform alteration under Section 30251 of the Coastal Act. However, the applicant is proposing to avoid this type of significant landform alteration and the proposed grading in this area would not be inconsistent with Section 30251 of the Coastal Act.

The grading and fill of a large area located on the east side of the main branch of Marblehead Canyon also is proposed. This area is located in the footprint of the proposed Avenida Vista Hermosa extension and the commercial development. This area, approximately 1300 feet long and up to 350 feet wide, consists of two spurs (herein 'Spur E4' and Spur 'E5') and the intervening ridge and a broad portion of the eastern slope of Marblehead canyon, all located well below the top of slope as defined by Staff. These spurs and ridges have gentle slopes that make them less well defined than other features of the canyon. The top of slope in this area likewise is less well-defined than in other areas. Accordingly, this area does not contribute volume or visual depth to the canyon. Thus, these landforms do not contribute significantly to the scenic qualities of Marblehead Canyon. Furthermore, this area does not contain any significant habitat area nor are they within a significant habitat corridor or a portion of a core habitat area. Thus, the grading and filling of Spurs E4 and E5 would not be considered unacceptable landform alteration, even though it constitutes the fill of a relatively large area of the eastern slope of Marblehead Canyon.

As described elsewhere, there is a significant canyon feature which branches east off of the main branch of Marblehead Canyon (herein 'east branch'). The east branch is about 1,600 feet long, 300 to 400 feet wide, and 30 to 60 feet deep. The rim of the east branch is well-defined. The proposed project would fill or otherwise grade approximately 1,000 linear feet of this canyon. The grading would create pads for the commercial development, the proposed extension of Avenida Vista Hermosa, the construction of single family residences and infrastructure, and the creation of an overlook park.

The landform alteration occurring on the eastern branch of the Marblehead Canyon would occur by both cut and fill. The canyon becomes more shallow from its seaward end to its northern end. In addition, the canyon narrows in width along its axis. As the canyon becomes more narrow and shallow, its features become less distinctive. In the deeper and wider area of the canyon within the residential development, applicant is proposing to contour the area to mimic the shape of a natural drainage feature. This grading would involve the placement of up to 40 feet of fill within the portion of the drainage to be graded. In the commercial area, the canyon would be graded by cutting down approximately 20 feet and filling 20 feet. The portion of the canyon in the commercial area is more narrow within the commercial area than in the residential area.

The wider, deeper, more distinctive seaward portions of the east branch (generally located

seaward of the proposed Avenida Vista Hermosa extension) are significant features of the landscape. The slopes are steep to gentle with the canyon body as a whole being visually appealing. The wider, deeper portions of the canyon also contribute significantly to the volume and visual depth of the canyon.

Ideally, the fill of the east branch in the residential area should be avoided. However, the applicant has stated that some fill of the canyon in this area is necessary in order to allow the connection of utilities that would support the development in this area to the detention basin system that would serve the eastern residential enclave. In addition, some fill is necessary for the construction of the roads. The applicant has designed the residential lots, road network and utilities in this area to minimize the alteration of the east branch. Also, although the proposed grading plan would result in some fill of the canyon in this area, that fill will be designed to retain natural-appearing drainage contours. Therefore, the Commission finds that the applicant is minimizing alteration of the canyon landform. Furthermore, the applicant has proposed a view park and trail along the rim of this canyon that would provide new public vantages of the main body of the canyon and the Pacific Ocean from this area.

The narrower, shallower, less distinctive portions of the east branch (within the footprint of proposed Avenida Vista Hermosa and the commercial development) are not significant landforms. These shallower areas do not contribute significantly to the visual appeal of the canyon system on the project site. In addition, these areas do not contain significant habitat. Also, although there may be alternatives which would avoid the fill of the shallower areas, such as using a bridge for Avenida Vista Hermosa, and redesign of the commercial development, there would be no significant benefit in terms of protecting important landforms to such avoidance. Therefore, the Commission finds that filling the shallow areas of the east branch of Marblehead Canyon are acceptable.

The Commission finds that the proposed project minimizes landform alteration. Therefore, the Commission finds that the proposed project is consistent with Section 30251 of the Coastal Act, as it pertains to landform alteration.

2. Scenic Resources

Section 30251 of the Coastal Act states in relevant part:

> *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...*

The project site is visible to the public from the Interstate 5 freeway. Presently, there are views of the coast across the site. These are some of the last views the public traveling north along this major highway have of the coastline for several hundred miles. Furthermore, these views are some of the only views the public has of the coastline from the highway in San Clemente. In addition, there are existing public views of some of the canyons on the site. While the proposed project would interfere with some of these existing views, the project has been revised by the applicant to retain significant open space areas.

The canyons on the project site have aesthetic qualities that are increasingly unique in coastal Orange County and San Clemente. Drainages and canyons similar to those on the project site were once common geographic features along Orange County's coastline, much of which is characterized by coastal bluffs with canyons and drainages intersecting the bluff face. However, intense urban development along the Orange County coastline has caused the fill or

substantial alteration of these geographic features. Elsewhere in San Clemente, the coastal canyons have been developed with residential and other urban development. In some cases, these drainages and canyons were filled or so substantially altered for development that they are unrecognizable as a drainage or canyon. In other cases, houses are perched at the top of the canyon slopes or within the canyons themselves. In addition, ornamental landscaping and associated appurtenant structures are found on the slopes and within the canyons. The visual quality of these other canyons has been substantially degraded over time. However, with the exception of the mouths of the canyons that were graded in the early 1990's, the canyon landforms are substantially intact at the subject site. The canyon slopes are covered by a mixture of coastal sage scrub, grassland, and open canopy woodlands. The canyon bottoms contain alkali and freshwater wetlands. Birds and other wildlife are found within these canyons.

While the proposed project would cause some landform alteration, the Commission has found that such alteration is minimized in the proposed project. Substantial areas of natural canyons are proposed to be retained. Furthermore, all of the canyon areas that provide significant wildlife habitat and connectivity area are proposed to be preserved.

The proposed project would enhance the public's ability to partake of views to and along the ocean compared with the existing condition. For instance, the proposed project includes view points available to the public within the proposed commercial development. In addition, the proposed project has public view points within the proposed bluff park, along the bluff trail, and along the trails that follow the canyon rims. These view opportunities are presently not available to the public but would be made available under the proposed project.

There is a prominent 'peninsula' that protrudes into the canyon area that is located between the east branch and the main stem of Marblehead canyon. As is discussed elsewhere in these findings, placing high intensity development in this location (such as housing) would have significant adverse impacts upon biological resources. In addition to the biological impacts, placing intense development on this prominent land feature would have adverse visual impacts. The use of this peninsula for housing or similar intense development would change the natural open space character of the canyon and destroy the visual appeal of the area. The applicant has recognized the visual and biological importance of this peninsula area and is proposing to make that area a part of the proposed open space area. A view park and trails providing viewing, access and recreation opportunities.

3. Water Quality Effects of Landform Alterations on Ephemeral Drainages

Landform alteration may impact the quality of surface waters through such means as reducing the area of pervious surfaces and altering natural drainage, filtration, and infiltration patterns. Under existing conditions, the watershed is characterized by a moderately sloping marine terrace and deeply incised canyons formerly described above in the staff report. Most of the on-site surface water drains towards El Camino Real, while a small portion discharges to the Prima Deshecha Channel and an even smaller portion to the Segunda Deshecha Channel. The project site contains several sub-area watersheds that are hydraulically contained on site, and thus do not receive pollutants from off-site surface waters. Additionally, the site receives surface drainage run-on from portions of the Interstate 5 Freeway (I-5), as well as the Marblehead Inland development located inland of the I-5.

The proposed project would grade or fill portions of non-wetlands, ephemeral drainages. These drainages, which for purposes of water quality terminology can be called natural hydrologic features, were formed by both surface water and ground water flows. Grading and filling natural hydrologic features raises significant water quality issues, including 1) the loss of the natural water filtration mechanisms that provide water quality, quantity, and conveyance benefits to the

coastal environment; and 2) an inherent conflict with the "Management Measures" in the Plan for California's Nonpoint Source Pollution Control Program (NPS Plan).

Natural drainage ways provide treatment, infiltration, and attenuation of runoff, all of which are mechanisms that protect and enhance coastal water quality. According to a federal NPS pollution guidance document[42], the preservation of natural drainage features is important because "...riparian areas, wetlands, and vegetative buffers serve as filters and trap sediments, nutrients, and chemical pollutants... [and] may also have the added benefit of providing long-term pollutant removal capabilities without the comparatively high costs usually associated with structural controls." (*Justification of Watershed Protection Management Measure*, from the "g-Guidance" published by NOAA and the EPA)

The drainages on the Marblehead site were formed over time by the conveyance of surface water runoff as well as from the flow of groundwater through the subsurface. Surface water runoff enters the drainages by sheet flow, is slowed by the vegetation, and may be filtered as sediments fall out of suspension and plants phytoremediate pollutants. Runoff may also be infiltrated into the soil and treated as the water moves through the substrate. The flow of water through natural hydrologic features also helps maintain physical parameters of water, including temperature, dissolved oxygen, and salinity. Accordingly, substantially grading or filling the drainages would result in the loss of these important water quality functions.

The proposed project would result in the alteration of the east branch of Marblehead canyon as well as alteration of the smaller drainage features such as the upper tips of the Trident Canyon, Drainage A, Drainage B and the various spurs of Marblehead canyon. Nevertheless, a significant portion of each of these drainages is proposed to be retained. The treatment, infiltration, and attenuation of runoff, provided by these drainages will remain substantially intact.

4. Landform Alterations to Bluffs

The subject application requests final approval for the grading to the bluffs along El Camino Real that was conducted in the early 1990s under emergency coastal development permits. The bluffs were graded to abate hazards to life and property. Prior to the emergency grading, the bluffs along El Camino Real had near-vertical bluff faces. The emergency bluff stabilization project graded the bluff face into a less steep (1.5:1 to 2:1) stepped bluff face. The character of the bluff landform has been significantly changed. However, the creation of 1.5:1 slopes rather than 2:1 slopes, where feasible, reduced the amount of grading needed along the bluff face. In addition, the graded bluff face was contoured with rolling undulations to decrease the manufactured appearance. The grading that occurred was the minimum necessary to stabilize the emergency situation according to the Commission's geologist at that time. Accordingly, landform alteration was minimized. The visual impact of the landform alteration will be further minimized by landscaping the bluff face with native vegetation that is suitable to the habitat type, as is proposed by the applicant. Furthermore, the applicant has expressed some willingness to use colorized materials in the proposed reconstruction of the terrace and down drains that are part of the bluff stabilization system. In order to assure the implementation of this mitigation, the Commission imposes Special Conditions 18 and 22.

With the additional visual impact mitigation, the Commission finds the grading to the bluffs that occurred under the emergency coastal development permit to be consistent with Section 30251 of the Coastal Act.

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[42] Section 6217(g) of Coastal Zone Act Reauthorization Amendments, 16 U.S.C. § 1455b(g), requires NOAA and the EPA, in consultation with other federal agencies, to publish and periodically revise a NPS pollution Management Measures Guidance document known as the "g-Guidance." California's NPS Plan is based on this document.

F. VISUAL RESOURCES AND COMMUNITY CHARACTER

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.*

Section 30253 of the Coastal Act states, in part:

> *New development shall:*
>
> *...(5) Where appropriate, protect special communities and neighborhoods which, because of their unique characteristics, are popular visitor destination points for recreational uses.*

1. Color Schemes and Materials, Vegetation Screening, Heights and Setbacks

The proposed project would construct single family residences and commercial structures upon the flat mesa top areas surrounding the canyons and proposed open spaces on the project site. If this proposed development is not carefully screened there would be adverse impacts upon public views to and along the shoreline and the area would have less appeal as a visitor destination point for recreational uses, for which the open spaces, parks, trails and other visitor serving amenities are intended.

In urbanized areas such as San Clemente, open spaces and parks can contribute to the visual quality of coastal areas by breaking up continuous expanses of development. One attraction that a visitor to the site may seek is an escape from the urban environment. Given plans to preserve open space and provide parks and trails, a person visiting the site would expect to view a more naturally appearing area largely free of urban encroachment. However, as proposed, the residential and commercial development would be a prominent feature within the viewsheds available from proposed trails and public park areas.

In order to reduce the visual impact of the residential and commercial development, vegetation may be planted to screen the area from public vantages. Trees and shrubs can break up continuous lines of walls and buildings. In addition, the choice of building materials and colors can control the appearance of the development from public vantages. Therefore, in order to reduce the visual impact of the development, the Commission imposes Special Conditions 11, 18 and 22.

Special Condition 11 requires the applicant to submit a visual enhancement plan and revised, final landscape plans and requires the applicant and/or successors in interest to plant and maintain vegetation in specified locations around the residential and commercial development that will soften views of the developed area from public vantage points. Vegetation to be planted must comply with fuel modification requirements of the relevant fire authority. The condition also requires the applicant to plant shrubs and groundcover as would be present in a natural environment. Trees, shrubs and groundcover should be grouped or spaced at intervals

which mimic natural conditions. In combination with trees of various species and heights, these shrubs and groundcover would result in a variable canopy that would minimize a 'hedge-like' appearance. The goal of the condition is to require vegetation that softens views of the development from public vantages while appearing as natural as possible.

Also, Special Condition 23 and 24, requires that the development conform with setbacks from proposed slopes. The setbacks are necessary to ensure that structures do not loom over or have a negative presence along trails and adjacent to open spaces and parks. The setbacks would also serve geologic and fire hazard avoidance purposes.

In addition, Special Condition 22 requires the applicant to construct the development such that all wall and building exteriors that are visible from, face upon, or are constructed within proposed parks, open spaces and trails shall be finished in earth tones including deep shades of brown, gray and green, with no white, light or bright colors except as minor accent features. Special Condition 18 requires final plans to be submitted that comply with this requirement.

Also, the proposed project would result in the construction of single family homes with roof line that are 24 to 29 feet above proposed grade. Within the regional commercial center, proposed heights range from 35 to 59 feet above proposed grade. The proposed structures are scaled to be consistent with the character of the surrounding developed community. In addition, the structures are sited and sized such that they do not have an overwhelming presence adjacent to open spaces and trails. In order to assure the development is constructed as proposed, the Commission imposes Special Conditions 18, 23 and 24.

Once constructed, Coastal Act Section 30610(a) and (b) states that additions to existing single family homes and other structures may occur without a coastal development permit. However, Section 30610(a) and (b) also provides that the Commission may, through regulation, identify those types of additions which have a risk of substantially adversely effecting coastal resources. Sections 13250 and 13253 of the California Code of Regulations further provides that the Commission may impose special conditions requiring a permit for development which might otherwise be considered exempt. Additions to the existing residences or commercial buildings could result in taller structures. Taller structures may adversely effect coastal resources because they could be out of scale with the community and more visible from public viewing areas. In addition, additions or other development may be inconsistent with the requirements identified above related to setbacks and color and materials. In order to assure that the Commission may review any such proposals for development, the Commission imposes Special Condition 25. Special Condition 25 notifies all present and future landowners of land within the project that repair and maintenance and additions to the single family homes and other structures approved under this permit require a coastal development permit, unless the Executive Director determines that no permit is required.

The proposed project would have adverse impacts upon the visual quality of scenic coastal areas when viewing the residential development from trails and public areas. These visual impacts can be mitigated with vegetation and appropriate building materials and color schemes. In addition, the future heights of the buildings may be managed through the coastal development permit process. The Commission has imposed special conditions addressing these impacts. Therefore, as conditioned, the Commission finds the proposed project is consistent with Sections 30251 and 30253 of the Coastal Act.

2. <u>Coastal Recreation Commercial Lot 352</u>

The applicant is proposing to create a 1.0 acre lot near the corner of Avenida Pico and El Camino Real that would be used for coastal recreation commercial purposes. At this time, the

proposal only includes creation of the lot and grading the lot to prepare it for development. No commercial structures are proposed at this time. This commercial lot would be located seaward of the primary activity area of the proposed ocean view park as well as adjacent to the Blochman's dudleya reserve. Due to the location of the lot, development on this site has the potential to significantly and adversely impact public views from the proposed ocean view park as well as proposed trails on the site. Development contemplated for this site should be designed to concentrate the structures on an area of the site where they would not substantially and adversely impact public views. In addition, it is important to create a lower profile structure such that it will not have an imposing and negative presence on the park and open space areas. Development of the site will also need to comply with the biological buffering requirements established in this permit . Therefore, the Commission imposes Special Condition 21.

3. Avenida Vista Hermosa Bridge

The proposed Avenida Vista Hermosa Bridge would span Marblehead canyon. Without appropriate mitigation, the proposed bridge would cause adverse visual impacts. For instance, if the bridge were inappropriately colored and textured it would have adverse impacts upon views from public trails and other public vantages. In addition, if the bridge rail were designed inappropriately, pedestrians and motorists using the bridge would not be able to enjoy the significant views down the canyon and toward the Pacific Ocean that the bridge would afford.

In order to assure that the bridge is visually compatible with the character of surrounding areas, the Commission imposes Special Condition 17. Special Condition 17 requires the applicant to submit final revised plans for the bridge that would demonstrate the structure would be constructed with materials that have been colored with earth tones and textured to be compatible with the canyon. In addition, the Commission would encourage the applicant to use decorative accents (e.g. stamped patterns), where feasible, to add to the visual interest of the bridge.

The applicant has proposed to use The Commission has reviewed a variety of bridge rail systems which would minimize the public view impacts caused by bridge rails. In a letter dated June 29, 2001 to the California Department of Transportation (Exhibit 11), the Commission expressed a preference for the use of either the "Alaska" , "Wyoming", or "Type 80" rail systems. For bridges where views from the bridge are important, as is the case at the subject site, the "Alaska" rail type would be preferred. In order to reduce the adverse impact the proposed project would have upon public views to and along the coast, the Commission imposes Special Condition 17 which requires the applicant to revise the plans for the proposed bridge to include a rail system which minimizes impacts upon public views through and from the bridge. The plans are to be reviewed and approved by the Executive Director and the applicant shall implement the approved plan. As conditioned, the Commission finds the proposed project consistent with Section 30251 of the Coastal Act.

G. ACCESS AND RECREATION

Section 30210 of the Coastal Act 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.*

Section 30212.5 of the Coastal Act 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.*

Section 30213 of the Coastal Act states, in relevant part:

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

Section 30221 of the Coastal Act states:

> *Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.*

Section 30222 of the Coastal Act states:

> *The use of private lands suitable for visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation shall have priority over private residential, general industrial, or general commercial development, but not over agriculture or coastal-dependent industry.*

Section 30223 of the Coastal Act states:

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

Section 30252 of the Coastal Act states:

> *The location and amount of new development should maintain and enhance public access to the coast by (1) facilitating the provision or extension of transit service, (2) providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads, (3) providing nonautomobile 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.*

1. <u>Land Use – Public Amenities and Visitor Serving Commercial</u>

As noted in the project description the applicant is proposing open space areas, a bluff park, trails and bikeways as part of the proposed development (Exhibit 12). The public access features proposed include dedication of an 12.81 acre "bluff" park, an active recreational park including 2.62 acres which are located in the coastal zone, creation of a 1.0 acre parcel for visitor-serving commercial uses, 4.1 miles of publicly accessible trails including circulation

around the Western Canyon, Marblehead Canyon, along the bluff top and on the graded bluff face along El Camino Real, and through the proposed parks and residential development. Pedestrian and bicycle trails and pathways are also proposed within or adjacent to proposed Avenida Vista Hermosa, Avenida Pico and El Camino Real. The bluff park would incorporate several 'turf' areas that could be used for picnics and recreation. In addition, the portion of the bluff park near Avenida Pico would include other facilities such as bathrooms, picnic tables, children's play equipment, half-court basketball and public parking.

As noted in the project description, the trails are proposed to be constructed by the applicant. The proposed park areas and amenities would be developed in a shared manner. The applicant would dedicate the public park land to the City in fee title and would initially contribute $2 million to the City to fund construction of the parks. Final park master plans would be prepared for approval by the City. If costs for construction of the parks in accordance with the final park master plans exceed the initial $2 million contribution, the applicant would fund the balance for completion of the parks. Except for habitat restoration occurring within the park land being dedicated to the City (which the applicant would undertake), the City would be responsible for building the parks and all amenities including landscaping.

Based on the classification of land uses at the project site identified on proposed Tentative Tract No. 8817, use of land on the 201.38 acre portion of the project site within the coastal zone would consist of approximately 31% (61.93 acres) residential [of which the applicant indicates 5.26 acres is open space], 11.1% (22.33 acres) regional commercial, less than 1% (1 acre) visitor serving commercial, 13% (26.34 acres) public open space of which 10.91 acres are public roads and the remainder is park area, and 44.6% (89.78 acres) other open space consisting of habitat areas, detention basins and perimeter open space.

The project site is the last large area of undeveloped land along the coast within San Clemente as well as the last area of undeveloped land between the southern coastal border of Orange County and the Dana Point Headlands. The site is also among the largest, undeveloped, privately owned areas of land within coastal Orange County. The subject site does not have ocean frontage itself; however, it is across the street from a public beach area (North Beach). The project site is the last undeveloped area with a vacant bluff top that has expansive views of the Pacific Ocean. Most of the other bluff top areas in San Clemente are developed as residential areas.

The Coastal Act places a priority on both providing public access and public recreation opportunities and protecting and enhancing biological habitat. The project site has significant canyons, drainages and bluff top areas that are sensitive and require protection and enhancement. These habitat areas are essentially un-developable land within which very limited types of development may occur such as habitat restoration and passive recreation. The presence of these habitat areas places some constraints on the development of the remainder of the site with more intense uses such as active recreation, commercial, and residential development.

The flat bluff top areas of the project site with views of the Pacific Ocean are the lands that are most suitable to support lower cost coastal recreational uses as encouraged under Sections 30213, 30221 and 30223 of the Coastal Act or to provide visitor serving commercial recreation facilities encouraged under Section 30222 of the Coastal Act. Comparable opportunities to advance the public access and recreation policies of the Coastal Act are not available elsewhere in the San Clemente area because of earlier residential development.

Compared with previous proposals for the site, the current project represents an overall improvement with respect to public access and recreational opportunities. For instance, in one

previous proposal (5-99-260), the applicant had proposed construction of residential development along a majority of the bluff top, thus excluding the public from these areas that are highly suitable for public access and recreation. In the current project, the applicant has pulled the residential development back from the bluff edge, in order that a public park (including restored habitat), trail network, and public roadways could be constructed to provide access to the bluff top. Accordingly, the public is afforded the opportunity to recreate along the bluff top.

The proposed public parks, trails and open spaces amount to about 58% of the land area within the proposed development. These are high priority uses under the Coastal Act. The proposed construction of these park and trails and the preservation and restoration of open space are the primary features upon which approval of this project is based. Without these elements of the proposal, the Commission could not find the development, particularly the residential use, consistent with the Coastal Act. In order to assure that the land is restricted to the uses proposed, the Commission imposes Special Condition 1 which requires the placement of open space and public access restrictions over the corresponding areas of land.

Furthermore, the proposed ocean view park areas are proposed to be granted in fee to the City. Special Condition 2 ensures implementation of this aspect of the applicant's proposal. The City of San Clemente has indicated it will accept all of the land identified in Special Condition 2. However, the City does not wish to accept the identified lands until the applicant, at minimum, grades the site and installs necessary utilities. In addition, contrary to prior indications and depending upon the outcome of negotiations between the City and the applicant, the applicant may undertake the actual construction of the park facilities, rather than leaving the construction of the park facilities up to the City. If the applicant were to construct the park facilities, the City would not accept the park lands until those facilities are constructed. Similarly, the City does not want to accept public streets proposed by the applicant until the street facilities are completed and certified acceptable by the City. In order to accommodate the above situation, Special Condition 2 requires an offer of dedication to the City, rather than actual dedication of the land to the City, prior to issuance of the coastal development permit. In the event that the City does not wish to accept the identified lands, the offer required by the condition allows for another public agency or non-profit entity acceptable to the Executive Director to accept the proposed public lands.

The implementation of an offer to dedicate, rather than actual fee title dedication, prior to issuance of the permit, creates the possibility that future unforeseen circumstances could cause the City to reject the offer. If the City were to reject the offer in the future the proposed public lands may not enter the public domain in a timely manner. In order to assure the applicant works with the City, or another entity if need be, to assure the lands do enter the public domain, the special condition requires the applicant to complete the land dedication prior to occupancy of the 200th residential unit or within 4 years of issuance of the coastal development permit, whichever comes first. The applicant has indicated their agreement to the deadline.

The Commission also imposes Special Condition 3 which requires that public access easements are to be offered over the proposed trails that pass through lands which have not been identified by the applicant for public ownership. In addition, the Commission imposes Special Condition 15, which requires the applicant to assure the construction of the proposed trails and park facilities.

As noted in the project description, the applicant has only developed preliminary plans relative to amenities for the park and trail network. Final plans are to be developed through a public hearing process at the local level. These plans must be submitted to the Executive Director to ensure consistency with this approval. The final plans must identify all proposed amenities,

including their location, design, and materials. In order to assure adequate support facilities for visitors, the final plans must include restroom facilities at the park in the area of Avenida Pico, as is proposed, as well as at the park access point between the Western Canyon and Marblehead canyon. The plans must also include a signage program that will ensure the public is adequately directed to the public amenities available throughout the site, as well as provided with information about the habitat and actions necessary to protect that habitat. All proposed facilities must be designed to be consistent with the measures identified elsewhere in these findings to protect biological resources. In addition, those facilities must be designed to minimize or avoid the obstruction of public views. Therefore, the Commission imposes Special Conditions 15 and 18.

The proposed trails and other public amenities are a key component of the project that allows approval of the development under the Coastal Act. In order to assure that these facilities are constructed in a timely manner and to ensure that the higher priority uses are made available to the public prior to or concurrent with the lower priority uses, the Commission imposes Special Condition 7. Special Condition 7 requires the applicant to submit a revised construction phasing plan that places highest priority on the construction and opening of the public amenities on the site. The condition requires modifications to the applicant's proposed phasing plan as this phasing plan does not appropriately prioritize the completion of public amenities and habitat restoration. The special condition establishes deadlines by which trails, parks and habitat restoration must be completed and open to the public. The applicant has opined that, in certain cases, on-going construction activity associated with the approved development would cause unsafe conditions for trail and park users if certain trails and parks were constructed and opened to the public prior to completing other development authorized in those areas. In other cases, the planned phasing of construction of roads and utilities would interfere with constructing and opening certain public facilities in those same areas. The special condition is responsive to the construction phasing issues raised by the applicant while also assuring that public facilities are constructed and opened to the public in a timely way. Special Condition 7 identifies the timing by which trails, roads, parking areas, parks and habitat restoration must be undertaken. The condition allows the Executive Director to review and approve, or disapprove if necessary, interim-level construction plans for public amenities in areas where there will be temporary interference between construction activity for the residential and commercial development and associated infrastructure and the construction and public use of required public access facilities. Special Condition 7 also identifies a final deadline by which trails, parking areas, roads, parks and restoration must be undertaken. The applicant has indicated their agreement with the deadlines established in the special condition.

In addition, the Commission imposes Special Condition 32, which requires that the applicant and any and all successors-in-interest to the property notify and obtain acknowledgement from any buyers of the property or portions thereof of the requirements under this permit, particularly those related to the provision and opening of trail, parks and other public amenities, as well as the implementation of the final habitat management plan, prior to the occupation of any residential or commercial structure authorized by this permit.

The importance of making the proposed public amenities available to the public and the completion of the habitat restoration cannot be overstated in terms of ensuring the consistency of the project with the Coastal Act. The ownership, management and maintenance of the public amenities and open space areas must be carried out in a manner that assures their continued availability and usefulness as a public resource. In order to confirm that the resources will be owned, managed and maintained in a responsible, high quality manner, and that the resources will remain in the public domain, the Commission imposes Special Condition 4. Special Condition 4 requires the applicant to submit a plan for review and approval of the Executive Director that identifies proposed ownership and management responsibilities of the public

amenities and open spaces. The plan must also include a maintenance and funding program that will be adequate to maintain the amenities and open spaces. Also, in order to work congruently with Special Condition 1, Special Condition 4 incorporates a requirement that the applicant identify management and maintenance activities associated with the approved development. A plan identifying the management and maintenance activities must be submitted by the applicant for the review and approval of the Executive Director. The management and maintenance activities to be identified and which the Executive Director could approve in the plan would be limited to those that involve a minimum amount of work and that would not have any potential to adversely impact coastal resources. An amendment or new permit would not be required for the activities identified in the plan approved by the Executive Director.

The proposed regional commercial center and 1.0 acre coastal recreational commercial lot are important features of the project that contribute to consistency of the proposed project with Coastal Act policies which encourage the provision of visitor serving commercial development in the coastal zone. If the commercial development within these areas were to shift toward general commercial or industrial use, the project could not be considered consistent with the Coastal Act policies upon which the development's original approval was based. In order to prevent such conversion, the Commission imposes Special Condition 21 and Special Condition 24. Special Condition 24 requires that uses on the main pedestrian level of the regional commercial center must be visitor serving. Special Condition 21 requires that the proposed 1.0 acre commercial lot (352) be used for visitor serving commercial uses. However, Special Condition 21 also allows use of Lot 352 for active public recreation and support facilities, passive public recreation and support facilities, open space, habitat restoration, and water quality improvement facilities as well, because these uses would also be consistent with Coastal Act goals.

2. Problematic Turf Areas and Trails

The applicant is proposing to create 'turf' areas at selected locations within the development including at the proposed bluff park. These turf areas would provide so-called 'blanket space' for picnics and attendant play (e.g. frisbee, ball toss, etc.). As proposed there would be three turf areas between the Western Canyon and Marblehead canyon and some additional turf area within the portion of the park near Avenida Pico and at the proposed inland terminus' of the Western Canyon and east branch of Marblehead canyon.

The first turf area described above would be between the Western Canyon and Marblehead canyon immediately adjacent to a proposed access road and public parking area and between the Western Canyon and the westernmost fork of the Trident Canyon. A second turf area is located just east of the first turf area, also located next to the road and parking lot, but between the western and central tines of the trident. These turf areas would provide blue water views of the Pacific Ocean framed by the Trident Canyon. A third turf area, also between the Western Canyon and Marblehead canyon, would be located seaward of the central detention basin and along the bluff top and surrounded by habitat restoration. This third turf area would be accessed via the proposed trail network which includes connections from the access road and parking area mentioned above. Due to its location along the bluff top, the third turf area would provide dramatic, unobstructed upcoast and downcoast views of the coastline including San Clemente pier.

While the proposed turf areas are situated in attractive locations for public access, viewing and recreation purposes, some of them are also within areas that are important ESHA buffers and habitat connectivity areas. Uses within buffers and habitat connectivity areas must be strictly controlled to ensure that those uses do not disrupt the buffering and connective function of the

area. The first turf area, adjacent to the Western Canyon, is within the 50 foot ESHA buffer. The other problematic turf area is the third one described above that is along the bluff top, seaward of the detention basin, and surrounded by proposed-to-be-restored connective habitat. Placing active play areas within buffers and connective area would disrupt the biological usefulness of the buffer and connective habitat. There are certain circumstances where it is appropriate to limit public access to the right to pass and repass where the fragility of the natural resources in the area are an issue. The above identified turf areas are located in fragile biological areas and would cause an impact upon ESHA that is inconsistent with Section 30240 of the Coastal Act. Thus, these turf areas are inappropriately located because these areas would attract more intensive use that would be disruptive to the habitat. Therefore, the Commission imposes Special Conditions 10 and 15.

The Commission would not seek to entirely exclude recreational uses within the areas identified above. Rather, the Commission would limit those uses to more passive activities such as trails. These trails could be lined with occasional benches and overlooks so that the public has the opportunity to linger and enjoy the view. This more passive use within the habitat and buffer areas would minimize disruption to those habitat areas.

While trails may be less disruptive to habitat than turf play areas, there are certain instances where trails passing through habitat would be undesirable. Plans submitted indicate the applicant is proposing to construct a trail that would cross through ESHA located within the slot canyon generally contained by proposed Lot C. This trail provides an important connection between the trail network originating in the eastern residential enclave with the proposed park near Avenida Pico. Due to the topography of the area, the ESHA that the trail passes through would be highly susceptible to disturbance from a trail. Accordingly, the trail needs to be relocated to circumvent, rather than pass through the ESHA. However, for pedestrian circulation purposes and to maintain a natural trail experience. The trail should remain on-site without requiring direct interface with Avenida Pico. In order to avoid the ESHA and to maintain a proper trail experience, the trail should be routed through the outermost feasible part of the ESHA buffer and then descend through proposed Lot D to the proposed park at Avenida Pico. Therefore, the Commission imposes Special Condition 10 and 15.

Therefore, the Commission finds that with the above described changes to the project, the Commission finds the development consistent with the public access and biological resource protection policies of the Coastal Act.

3. Trail Connectivity

The proposed project includes an extensive 4.1 mile network of public trails. The proposed trail system will provide coastal visitors with the opportunity to recreate at the site and enjoy views and natural open space. A recent modification to the applicant's proposal removes a previously proposed pedestrian bridge that would have connected the park area at Avenida Pico with the trail network and park area along the bluffs. An alternative trail alignment is now proposed that would require existing the site along El Camino Real and then re-entering the site further down the road. This change was apparently implemented to minimize instances where the trail network would cross ESHA. However, as noted in the 'Biological Resources' section of these findings, the pedestrian bridge could be found consistent with the ESHA protection policies of the Coastal Act. The proposed trail alignment is far less desirable from a trail connectivity and experience standpoint. Therefore, the Commission imposes Special Condition 15 which requires the applicant to modify the trail network to return to the trail alignment that includes the pedestrian bridge.

4. Pedestrian and Vehicle Circulation and Parking

The proposed project includes residential development that would increase the resident population in the area with attendant traffic and parking demands. In addition, the proposed project includes a commercial component which would increase traffic in the project area and create parking demands. The proposed project also includes a public park which would have even higher parking demands if developed with amenities that would draw people to use them.

The public access and recreation policies of the Coastal Act, including Section 30252, require that new development provide adequate circulation and parking and facilitate transit service to assure that public access to the coast is not adversely impacted by the new development. For instance, increases in traffic associated with the development can adversely impact the public's ability to use traffic-impacted roads to access the coast. In addition, if adequate parking or public transportation to serve the development is not available, on-street public parking and/or public parking lots may be used to support the development. Such use of public parking facilities by the new development would displace members of the public trying to access the coast from those public parking facilities, resulting in adverse impacts to coastal access.

a. Traffic

The FEIR and Addendum FEIR address project related impacts upon traffic and parking. These documents show that the proposed project would increase traffic demand in the project area. According to the Traffic Analysis prepared by Austin-Foust Associates, Inc. in Appendix 15.4 of the FEIR the proposed project would result in a "capacity deficiency" at Avenida Pico west of Interstate 5. The Traffic Analysis states that Avenida Pico is targeted for widening from four to six lanes under the City's Regional Circulation Financing and Phasing Program (RCFPP) which would mitigate the deficiency. The Traffic Analysis goes on to state that further study confirms the need to implement the widening. The Traffic Analysis also states that the proposed project, in combination with other development approved in the area (outside the coastal zone), would cause the level of service (LOS) to exceed "D", indicating an adverse impact at those intersections.

The applicant is proposing several off-site and on-site mitigation measures to address adverse traffic and circulation impacts. These measure include the payment of fees to the City for off-site improvements at Avenida Pico west of Interstate 5. These fees would be included in a pool of funds from other projects contributing to the adverse conditions at Avenida Pico and Interstate 5 that are being collected by the City. In addition, on-site measures include the construction of Avenida Vista Hermosa from Interstate 5 to Avenida Pico and intersection improvements at proposed Avenida Vista Hermosa and Avenida Pico. The Traffic Analysis concludes that the proposed measures would provide adequate capacity to serve the proposed development which would avoid adverse impacts upon public access to the coast.

In addition to automobile circulation elements, the proposed project also does provide for non-automobile circulation within the development. For instance, the proposed project includes off-street and on-street pedestrian and bicycle paths and lanes. In addition, these pedestrian and bicycle access improvements can facilitate use of the existing Metrolink train station in the North Beach area across El Camino Real from the proposed bluff park. These proposed measures would facilitate public access to the coast and non-automobile circulation within the development. In order to assure implementation of the proposed mitigation measures, the Commission imposes Special Condition 30.

b. Regional Commercial Center Parking

The proposed project includes 141,506 square feet of commercial space within the coastal zone. The proposed project also includes 1,732 parking spaces within the coastal zone which would serve the proposed development. This commercial space and parking within the coastal zone would be contiguous with 533,737 square feet of commercial space and 992 parking spaces located outside the coastal zone. In total, the commercial development within and outside the coastal zone would have 675,243 square feet of commercial space with 2,724 parking spaces. Taking into account the entire commercial development and the entire quantity of proposed parking, the commercial center would provide 4 spaces per 1,000 square feet of commercial area.

The Commission has commonly required that commercial development provide one parking space for each 50 square feet of public service area for restaurants and one parking space for each 225 square feet of general commercial. The proposed development has 58,416 square feet of commercial space proposed for use as restaurants. There are no figures provided by the applicant which identify the amount of restaurant public service area there would be within the 58,416 square feet of restaurant space. However, conservatively identifying all 58,416 square feet of restaurant space as public service area, the project restaurant space within the coastal zone would require approximately 1,168 parking spaces. The remaining 83,090 square feet of commercial development within the coastal zone would have a demand of approximately 369 parking spaces. In total, using the Commission's commonly used parking guideline, the commercial development within the coastal zone would have a demand of 1,537 parking spaces. The proposed development provides 1,732 parking spaces within the coastal zone. Of course, this parking demand is likely an overestimate since the public service area within the restaurants will likely be just a portion of the total 58,416 square feet of total floor space.

The analysis above is conducted ignoring the fact that the proposed regional commercial center includes a significant quantity of commercial space (533,737 square feet) outside of the coastal zone. This additional commercial space will draw upon the reservoir of proposed parking located in the coastal zone. If one were to apply the Commission's common parking guidelines to the entire center (both inside and outside the coastal zone), the total demand using the Shopping Center guideline of 5 parking spaces per 1,000 square feet, would yield a demand of about 3,376 parking spaces. The total quantity of parking spaces (inside and outside the coastal zone) is 2,724 parking spaces. Therefore, using the Commission's common parking guideline, the proposed development would be underparked by about 650 parking spaces.

The applicant has submitted a parking analysis that takes into account the actual proposed uses, the anticipated periods of peak usage, and the fact that parking is proposed to be available to all uses on a shared basis. The applicant's parking analysis also looks at other parking standards, such as those used by the City of San Clemente. Using the shared parking analysis, the proposed development is anticipated to require 3.6 parking spaces per 1,000 square feet of retail. This ratio is comparable to other similarly sized commercial centers in the region with a similar array of uses, such as the Irvine Spectrum Center, which provides 3.6 spaces per 1,000 square feet. Since the proposed commercial center provides 4 spaces per 1,000 square feet, the center would have 146 excess parking spaces. In addition, using the City of San Clemente's parking standards, the center would have 300 excess parking spaces.

Based on the applicant's parking analysis, the Commission finds that the proposed regional commercial center would have adequate on-site parking. Since the parking relies upon shared use to meet parking demand, the Commission imposes Special Condition 24 which requires the applicant to provide evidence of a reciprocal parking agreement which demonstrates that all uses

within the commercial center will have access to all parking spaces proposed by the applicant. In addition, the proposed commercial center may be constructed in phases, such that all of the proposed parking would not be available when the sub-phase opens. In order to assure that each phase of the development is adequately parked, the Commission imposes Special Condition 24 that requires the applicant to demonstrate to the Executive Director that adequate parking is provided in advance of opening each phase of the commercial center. Finally, since there is an excess of parking available, the Commission requires the applicant to allow the general public to park in the parking lot, as proposed, to access the public amenities provided in the development.

c. Parking for Parks and Trails

Section 30212.5 of the Coastal Act requires that public facilities including parking areas be distributed throughout an area to mitigate overcrowding and overuse of any single area by the public. Section 30213 encourages lower cost visitor and recreational facilities. Section 30252 of the Coastal Act requires the provision of adequate parking or public transportation to serve the development. The proposed project would have public park area on-site. These public areas would serve the occupants of the proposed development and the general public. Use of the parks will generate a parking demand. The proposal includes parking lots within the proposed parks as well as on-street public parking spaces.

The proposed park parking lots would contain a total of 55 parking spaces. Of these 55 spaces, 14 would be located within the parking lot that would serve the public park area near Avenida Pico; 21 spaces would be located within the parking lots that would serve the parks and trails between the Western Canyon and the central detention basin; and the remaining 20 spaces would be located in the parking lot proposed to serve the sports park at the northern corner of the site.

Also, based on the applicant's submittal, there would be approximately 550 on-street parking spaces within the development. The applicant indicates that 379 of these on-street parking spaces would be provided for use by residents only. Parking within these spaces would be controlled through the use of signage. The remaining 171 on-street parking spaces would be available to the general public. These 171 spaces are located along the streets proposed to be publicly owned within the residential area as well as along some of the streets proposed to be privately owned. The parking is generally located near parks and trail access points. In order to assure that the on-street and park parking lots remain open to the general public, the Commission imposes Special Condition 1.

As described in the project description and discussed more fully below, all of the proposed streets, whether publicly or privately owned, would be open to the general public. Nevertheless, the applicant is proposing to restrict use of a majority of the parking available along those streets for use by residents. In some instances, the restriction of parking for resident only uses would not have an adverse impact on the ability of the public to access the proposed public trails and parks. For instance, in the western residential enclave there would be ample parking available, as proposed. Therefore, the restriction of parking along proposed Streets CCCC, DDDD and FFFF within that residential enclave is not anticipated to have a significant adverse impact. Similarly, proposed Streets OOOO, PPPP, QQQQ, RRRR and SSSS within the proposed higher density residential enclave next to the Shorecliffs Middle School would not lead to any proposed trail or canyon overlook, thus parking could be restricted. However, within the central and eastern residential enclaves, the proposed restrictions on parking would have an adverse impact. In these other areas, the streets proposed to be restricted provide access to overlooks of the canyon as well as access to the central trail network. The Commission finds that parking along

these streets must be available to the general public at all times. Therefore, the Commission imposes Special Condition 1.

d. Public Use of Residential Streets

The applicant is proposing public streets as well as privately maintained, publicly accessible streets. This street network would provide access to the various public amenities on the project site. These publicly accessible facilities are an essential component of the overall public access benefit of the proposed project. Accordingly, the Commission requires assurances that these facilities remain open to the public without restriction throughout the life of the development. Therefore, the Commission imposes Special Condition 1.

5. Conclusion - Access

The proposed project would have adverse traffic impacts which require the implementation of mitigation measures. Therefore, the Commission imposes Special Condition 30 to assure compliance with the applicants proposal. The proposed project also includes public facilities to which supporting parking would need to be assured. The proposed project also includes pedestrian and bicycle ways which contribute to the overall public access program offered and to which public access would need to be assured. Finally, the Commission is requiring the applicant to implement certain changes to the public access and recreation facilities and is also requiring the applicant to develop final plans for review and approval of the Executive Director. Therefore, the Commission imposes Special Condition 1, 2, 3, 4, 7, 15, 18, 21, 24 and 32. With conditions, the Commission finds the proposed development consistent with the public access and recreation policies of the Coastal Act.

H. GEOLOGIC STABILITY

New blufftop development poses potential adverse impacts to the geologic stability of coastal bluffs and to the preservation of coastal visual resources. Coastal bluffs in the City of San Clemente are composed of slide-prone bedrock, which is subject to block toppling, and unconsolidated surface soils, which are subject to sloughing, creep, and landsliding.

Section 30235 of the Coastal Act states, in relevant part:

> *Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply...*

Section 30253 of the Coastal Act states, in relevant part:

> *New development shall:*
>
> *(l) 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, geologic 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.*

1. **Bluff Stabilization**

There are approximately 2,600 linear feet of 70 to 100 foot high bluffs on the project site facing upon El Camino Real between the mouth of Marblehead Canyon and the southwestern corner of the project site next to the Colony Cove residential area. There are also an additional 350 linear feet of lower elevation (approximately 30 feet high) bluffs which face upon El Camino Real between the mouth of Marblehead Canyon and the southeastern corner of the project site. These bluffs are coastal bluffs, however, they are no longer subject to wave energy because the Capistrano Shores mobile home park, railroad tracks and El Camino Real all stand between the Pacific Ocean and the base of the bluffs.

The coastal bluffs at the subject site have been subject to mechanical weathering and landsliding. Bluff material from this weathering and landsliding periodically fell on El Camino Real, requiring lane and road closures. At this location, El Camino Real is a linkage between upcoast and downcoast segments of Pacific Coast Highway, and thus is a major coastal access route. In order to address the lane and road closures and to address public safety issues, approximately 1,900 linear feet of the bluffs southwest of the mouth of Marblehead Canyon were graded in 1990 under Emergency Coastal Development Permits 5-90-122-G and 5-90-274G. This grading operation decreased the slope angle from near vertical to a 1.5:1 to 2:1 slope. In addition, surface drains and sub-drains were installed to address hazards from ground water. The applicant is proposing to make this emergency grading permanent under this application.

At the time the emergency grading was contemplated, the applicant demonstrated to the Commission that the unstable bluffs posed an imminent danger to life and property. Stabilization of the bluffs was necessary to protect the road and kept it open for public access. Therefore, the stabilization of the bluff was necessary to protect an existing structure. Furthermore, bluff stabilization was necessary to protect pedestrians and motorists from falling blocks of soil, hence it was necessary to protect life and property.

A 1991 environmental impact report prepared after the fact discusses several bluff stabilization methods contemplated for the Marblehead bluffs. These stabilization methods included construction of a reinforced earth or crib wall, a retaining wall, a buttress fill, installation of a protective mantle (e.g. gunite or shotcrete), a limited grading alternative, and the cut slope (1.5:1 to 2:1 slope) grading alternative that was eventually implemented. The various wall alternatives were not pursued due to their substantial visual impacts. However, as described in emergency CDP 5-90-122-G, the limited grading alternative was initially pursued at the site. This alternative primarily involved removal of large blocks of unstable soil along the bluff. However, this alternative did not substantially address the stability issue. Therefore, the proposed-to-be-made-permanent cut slope grading alternative was implemented as this method was found to address both the stability issue and would allow for contour grading of the slope to minimize visual impacts to the maximum extent practicable.

As noted in the project description, a drainage system composed of terrace drains and down drains were installed to control erosion along the graded bluff. At the time, these drains were constructed as temporary features due to some uncertainty over the final grading plan for the bluff stabilization system. Over time, these temporary structures have cracked and broken and thus, are not controlling erosion as intended. These drainage systems are an integral part of the bluff stabilization system. Without these drains, water would flow uncontrolled over the slope, causing erosion that would undermine the stability of the graded bluffs. It should be noted that, since the proposed development includes substantial setbacks from the bluff edge, the proposed new development does not rely on continued maintenance of the bluff stabilization system. Rather, it is necessary to protect the integrity of the bluff stabilization system through

the repair and replacement of the drains because that system protects the existing road below.

The applicant's geologic analyses demonstrate that the portion of the bluff overlooking El Camino Real that was graded under emergency permits in 1990, has a factor of safety of greater than 1.5 (static). The most northern section of this bluff, however, was not graded and has a factor of safety of approximately 1.0. According to the applicant's analyses, in order for development to achieve a factor of safety of 1.5 in this area, it must be set back between 85 and 120 feet from the bluff edge, as is proposed for the current design. Nevertheless, the bluff face itself will continue to have a very low factor of safety, and can be expected to fail through both surficial and global landslides. Stabilization of this slope through grading would not be consistent with the Coastal Act, as the area is habitat for a sensitive plant species (i.e. Blochman's dudleya) that is now known to be ESHA, and that habitat would be compromised by grading. The applicant proposes, however, to minimize the existing instability of the bluff by the installation of a cutoff wall, that would deflect ground water away from the bluff face and toward Drainage "B," where it could be carried away by subdrains installed in the canyon fill. Because an area of alkali wetlands (Wetland Area A) exists near the bluff face, and because the integrity of that wetland could be compromised if it were deprived of ground water contributions, a solid PVC pipe would penetrate the cutoff wall and carry ground water directly to the wetland. As proposed, the unrepaired portion of the bluff overlooking El Camino Real will remain unstable and subject to landslide. The development will not, however, increase instability and may, in fact, increase the stability somewhat through collection and redirection of ground water. This redirection of ground water is an important mitigation measure because ground water recharge is foreseen to increase post-development as a result of residential irrigation. In order to assure that this recommendation is implemented, the Commission imposes Special Conditions 8.B., 18 and 19.

The record of coastal development permit applications and Commission actions has shown that geologic conditions change over time and that predictions regarding site stability based upon the geologic sciences are inexact. Even though there is evidence that geologic conditions change, the Commission must rely upon the applicant's information which states that the site is safe for development. Therefore, while the above recommendations are anticipated to adequately address slope stability issues at the site, there remains the possibility of landslide and erosion. Accordingly, the Commission imposes a standard waiver of liability condition through Special Condition 20. By this means, the applicant is notified that the project is being built in an area that is potentially subject to bluff erosion that can damage the applicant's property. The applicant is also notified that the Commission is not liable for such damage as a result of approving the permit for development.

Also, the applicant has submitted slope stability analyses and seismic stability analyses for the proposed project. The results of these analyses are found in the geologic reports listed in Appendix A. These reports contain several important design recommendations for the construction of cut and fill slopes. Especially important are the following:

1) Cut slopes into the Capistrano formation be stabilized using a stabilization fill

2) Subdrains be installed in the backcut of any stabilization fill that exposes the bedrock/terrace deposit contact

3) Geogrid reinforcement be used to achieve the required factor of safety within the manufactured (fill) slope in cross-section L-L'.

These and other recommendations for the construction of cut and fill slopes are outlined in the geologic reports listed in Appendix A. In order to assure that this recommendation is

implemented, the Commission imposes Special Conditions 18 and 19.

In terms of slope stability, the Commission finds that the development, including the emergency grading, is consistent with Section 30253 of the Coastal Act with the incorporation of the geologists recommendations into the project. Therefore, the Commission imposes Special Conditions 8.B, 18 and 19.

2. Foundation Designs

Foundation designs for both residential and commercial structures are discussed in a general way in the applicants' submittal, however, no final foundation plans were submitted by the applicant. The purpose of requesting the applicant to supply foundation plans was to ascertain whether the development could take place without being subject to, or contributing to, geologic instability at the site, in accordance with section 30253 of the Coastal Act. Of particular concern is the highly expansive and severely corrosive nature of the soils at the site. In place of actual foundation designs, the applicant supplied a document titled Geotechnical recommendations for the design of foundations for the residential and commercial buildings, Marblehead Coastal Property, tentative tract 8817, City of San Clemente, California, Coastal development permit 5-99-260 by Leighton and Associates dated August 31, 2000. Foundation design parameters were supplied by the applicant which identify the allowable bearing capacities for foundation footings and geotechnical parameters for post-tensioned foundation slab design. The Commission finds that these design parameters are adequate, and the structures would be consistent with section 30253 if built in accordance with the recommendations by Leighton and Associates. In order to assure that the geologists recommendations are incorporated, the Commission imposes Special Conditions 18 and 19 which requires the applicant to incorporate the geologists recommendations into their plans and to submit final plans that incorporate the geologists recommendations, for review and approval of the Executive Director.

3. Stability of Detention Basins on Canyon Slopes

Each of the three proposed detention basins would be located on the slopes of the existing canyons or near the coastal bluff along El Camino Real. The stability of the detention basins during periods of "rapid drawdown" following their filling through a storm event is a potential issue. When reservoir slopes become saturated, the reduction in effective stress within the soils decreases slope stability. This effect is counteracted to a large degree in a filled reservoir by the buttressing effect of the weight of the water directed against the slope. A potentially hazardous condition occurs during "rapid drawdown," that is, when the water level drops rapidly (faster than the pore water can drain out of the soil). During rapid drawdown, effective stress may still be low, while at the same time the buttressing effect of the water mass has been removed. The proposed detention basins are to be lined with relatively impermeable material derived from the Capistrano Formation, bedrock at the site, such that saturation of the slope soils would be minimal. Further, analyses submitted by the applicant indicate that slopes associated with each of the three detention basins possess a factor of safety in excess of 1.5 (static) and 1.1 (pseudostatic) for saturated soil conditions. Accordingly, the Commission finds that the detention basins would be stable under rapid drawdown conditions. In order to assure that the detention basins are stable, the Commission imposes Special Conditions18 and 19 that requires the applicant to submit final plans and that incorporate the geologists recommendations. In addition, the Commission imposes Special Condition 18 and 19 that require the applicant to construct the basins consistent with the geologist's recommendations. With conditions, the Commission finds the basins consistent with the requirements of Section 30253 of the Coastal Act.

4. Off-site Effects of Added Groundwater on Colony Cove

An increase in the amount of infiltrated ground water is expected to result from the proposed development, largely resulting from irrigation. Ground water will tend to flow downward through the relatively permeable terrace deposits and the upper, weathered, part of the Capistrano Formation bedrock, then flow down slope along the terrace deposit/bedrock contact. The terrace deposit/bedrock contact slopes to the southwest, and would in places be graded toward the on-site canyons, so most of the groundwater would either recharge into the canyons, out of the bluff face above El Camino Real, or (to a much lesser extent) along the slopes above Avenida Pico. Due to the potentially large increase in the volume of ground water, however, some may move upslope and cross the northern property line near the northwestern corner of the property, potentially increasing ground water levels beneath the Colony Cove development to the north. An increase in ground water levels could affect the stability of that site, potentially reducing slope stability. Accordingly, staff has determined that additional mitigation measures would be necessary to assure that the proposed development would not contribute significantly to instability of the site and adjoining sites.

In a letter dated January 6, 2003, the applicant's geotechnical consultants, LGC, have recommended mitigation measures to address the groundwater issue. In summary, a drain previously proposed to run behind a buried cutoff wall to be placed parallel to proposed Street EEEE at the northwestern corner of the property would be extended to run approximately 1000 linear feet along the northern property line (between the cul-de-sacs at the ends of proposed Streets EEEE and CCCC). This drain would collect water that could potentially cross the property line and impact Colony Cove, eliminating any potential groundwater associated impacts from this development on slope stability at Colony Cove. In order to assure that the proposed development would not contribute to geologic instability in surrounding areas, the Commission requires the applicant to undertake the development in accordance with the recommendations of their geotechnical consultants. Therefore, the Commission imposes Special Conditions 18 and 19. With conditions, the Commission finds the project would not contribute to the instability of surrounding areas, in compliance with Section 30253 of the Coastal Act.

5. Conclusion – Geologic Stability

There are areas of geologic instability on the project site. However, the applicant has proposed to avoid the unstable areas and/or proposed mitigation measures to address the geologic instability. The Commission is requiring the applicant to comply with the proposed mitigation measures. With conditions, the Commission finds the project consistent with Section 30253 of the Coastal Act.

I. SHORELINE SAND SUPPLY

Section 30233(d) of the Coastal Act states:

> *(d) Erosion control and flood control facilities constructed on water courses can impede the movement of sediment and nutrients which would otherwise be carried by storm runoff into coastal waters. To facilitate the continued delivery of these sediments to the littoral zone, whenever feasible, the material removed from these facilities may be placed at appropriate points on the shoreline in accordance with other applicable provisions of this division, where feasible mitigation measures have been provided to minimize adverse environmental effects. Aspects that shall be considered before issuing a coastal development permit for such purposes are the method of placement,*

time of year of placement, and sensitivity of the placement area.

Section 30235 of the Coastal Act states:

> *Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fish kills should be phased out or upgraded where feasible.*

There are indicators that beach width is declining in San Clemente[43]. A study by the City of San Clemente states that the decline in beach width is attributable largely to a decline in the supply of sand discharged from San Juan Creek, which is upcoast of San Clemente. Another contributing factor is the isolation of the bluffs from the beach by the railroad tracks that are built seaward of the bluff. The bluffs are thought to have been a major contributor of sand to San Clemente's beaches.

The proposed project would entail development within a coastal drainage that presently supplies sand to the beach. The applicant has provided a detailed analysis of sediment yield, sediment transport, channel stability, and sand replenishment to the beach. Sediment yield, the volume of sediment produced from the watersheds on the site, was estimated using five different techniques that are outlined in their study. Each method has limitations, and some (such as the Universal Soil Loss Equation) are known to yield inaccurate results in arid settings such as at the project site. Unfortunately, however, actual measurements of sediment yield are not available, in part because meaningful values would require monitoring over many years to normalize for annual variation in precipitation patterns.

The estimates of sediment yield derived from these five methods vary by more than an order of magnitude (for example, from 150 to 2709 cubic yards of sediment per year for pre-development conditions). All of the models agree, however, that sediment yield will decrease markedly as a result of development; the average of all models shows a decrease from 111 to 34 cubic yards of sand per year as a result of development. This assessment is based in part on very limited data (3 samples) characterizing the grain size distribution of soil samples at the site, and accordingly may be of limited accuracy. The mean of the values arrived at by the five modeling methods is 77 cubic yards per year. Although this amount is negligible compared to the volume of sand needed to sustain a beach, it would be an appropriate value to use in establishing a mitigation program. Using the mean value above, about 5775 cubic yards of sand would be lost over an estimated 75-year economic life of the project.

Although the sediment yield results vary, they do indicate that relatively little sand-size sediment is produced from the site at the present time. Further, the analyses indicates that much of the sand that is produced does not make it to the beach, because of limited sediment transport capacity of Marblehead Canyon, low hydraulic capacity of the culverts under El Camino Real, build-up of sediment within the culverts, and flow restrictions resulting from rip-rap at the culvert outlets. Nevertheless, it is clear that the development will result in a reduction in the amount of sand delivered to the beach.

However, as part of the emergency grading of the bluffs on the project site in the early 1990s, the applicant stockpiled approximately 30,000 cubic yards of "beach quality" sand within the

[43] City of San Clemente, Beach Ad Hoc Committee, "The State of San Clemente's Coastal Zone and Beaches", undated.

area of the former sewage treatment plant. The sand was stockpiled with the intent of excavating that sand, at the time the subject site was developed, for use in beach sand replenishment projects within the City. The 30,000 cubic yards of sand would have been equivalent to about 390 years-worth of sand (30,000 divided by 77) which would have been well in excess of the 5,775 cubic yards of sand that is estimated to be lost to the beaches over the economic life of the project now proposed. However, since stockpiling this material, sensitive biological resources have been found on and adjacent to this sand stockpile. A portion of the sand stockpile has been found to be environmentally sensitive habitat area (ESHA). The excavation of the sand would require significant amounts of grading within the ESHA and ESHA buffer. This kind of grading would not be resource dependent and would significantly degrade the ESHA. Therefore, grading to extract the sand would not be consistent with Section 30240 of the Coastal Act.

The stockpile of sand is located along the lower western wall within the main body of Marblehead Canyon. Presently, the stockpile is stable and is not causing significant sedimentation of the canyon bottom wetlands. In addition, the applicant is proposing to re-vegetate the stockpile with CSS in order to enhance the habitat that presently exists. However, there are no existing or proposed hardened structures that would prevent natural erosive processes from carrying sand from this stockpile to the beach over time. In this case, due to the presence of sensitive habitat, it is preferable to leave the stockpile in place and allow natural erosion to carry sand to the beach over time.

Also, the Commission notes that the applicant has directly assisted the City in their effort to address beach sand replenishment in the City. In a letter from the applicant dated February 21, 2003, the applicant indicates they have contributed about $73,000 to the City to help develop a sand replenishment program.

Recognizing the applicant's efforts above and the circumstances surrounding the sand stockpile, the Commission finds the proposed project is consistent with Sections 30233(d) and 30235 as they pertain to shoreline sand supply.

J. WATER QUALITY

Section 30231 of the Coastal Act states:

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

The proposed project would result in the subdivision and grading of the 201.38 acre portion of the project within the coastal zone as well as the construction and use of single family residences, commercial buildings, roads, parking lots, parks, trails and open space areas. The implementation of the project would result in two phases where potential impacts upon water quality would occur: 1) the construction phase; and 2) the post-construction phase including the commitment and use of a 201.38 acre area for commercial, residential, park and open space purposes. Construction phase impacts include erosion and sedimentation of coastal waters during grading. Post construction, the development would result in an increase in impervious surfaces, which in turn decreases the infiltrative function and capacity of existing permeable

land on site. The reduction in permeable area therefore leads to an increase in the volume and velocity of dry-weather and storm water runoff that can be expected to leave the site. Run-off from commercial and residential development would be commonly polluted with petroleum hydrocarbons including oil and grease from vehicles; heavy metals; synthetic organic chemicals including paint and cleaners; soap and dirt from washing vehicles and patio areas; dirt and vegetation from yard and grounds maintenance; litter; fertilizers, herbicides, and pesticides; and bacteria and pathogens from animal waste. These pollutant laden waters would leave the developed site, enter the storm drain system and ultimately be discharged to coastal waters. The discharge of these pollutants to coastal waters can cause: eutrophication and anoxic conditions resulting in fish kills and diseases and the alteration of aquatic habitat, including adverse changes to species composition and size; excess nutrients causing algae blooms and sedimentation increasing turbidity which both reduce the penetration of sunlight needed by aquatic vegetation which provide food and cover for aquatic species; disruptions to the reproductive cycle of aquatic species; and acute and sublethal toxicity in marine organisms leading to adverse changes in reproduction and feeding behavior. These impacts reduce the biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes and reduce optimum populations of marine organisms and have adverse impacts on human health.

Water quality in the City of San Clemente has been subject to degradation in recent years. For instance, according to a recent study titled The State of San Clemente's Coastal Zone and Beaches by the San Clemente Beach Ad Hoc Committee, San Clemente's beaches have been closed on many occasions as a result of water pollution. For instance, the Orange County Health Care Agency reports that Poche Beach, located immediately upcoast of the project site, was posted with a water contamination warning, attributed to urban runoff, for at least a month during 2001. The Ad Hoc Committee study and the long term water contamination warning at Poche Beach point to the need to ensure that new development is constructed in a manner which controls polluted run-off and treats the run-off so that coastal waters are not adversely impacted.

1. Construction Phase

The proposed project would grade approximately 132.47 acres of the 201 acre portion of the project site within the coastal zone. Land disturbing activities, such as grading, expose soil to erosion and dispersion by wind and water. At the project site, soil erosion would cause water quality impairments to coastal waters and excessive siltation of existing wetland habitat. Furthermore, poor construction management practices would lead to the release of pollutants such as fertilizers, pesticides, petroleum products, and other construction materials to sensitive upland habitat areas and wetlands.

The applicant has submitted a document titled Preliminary Stormwater Management Plan dated December 4, 2001, which briefly describes proposed construction phase erosion, sediment and pollution controls. However, no final plan has been submitted. The preliminary plan describes a basic strategy of protecting disturbed areas of soil through minimization of soil disturbance and the duration of exposure, controlling surface runoff, trapping sediment on-site, inspecting and maintaining water pollution controls, and minimizing the steepness of slopes. Non structural controls include establishing a designated area for disposal of wastes and chemical pollutants. Temporary structural controls to be used include silt fences, gravel bag barriers, drainage system outlet protection, sediment basins and traps, erosion control landscaping, gravel construction entrance, and runoff diversion and interceptor swales.

In order to avoid adverse water quality impacts associated with construction, the Commission requires the applicant to avoid impacts to wetlands and sensitive upland habitat; install

temporary barriers between construction areas and sensitive habitats; to avoid grading and construction within dedicated open space areas, to re-vegetate disturbed areas; to store and dispose of construction materials, equipment, debris and waste in a manner which protects water quality; to prohibit construction activity during certain periods to minimize impacts upon sensitive wildlife; to use best management practices (BMPs) and good housekeeping practices (GHPs) to contain construction materials, chemicals, debris and sediment on the project site; and require that the applicant prepare erosion, sediment and runoff control plans and grading plans. Therefore, the Commission imposes Special Conditions 8, 9 and 16.

2. Post Construction Phase

In order to identify for the Commission the non-structural, routine structural and special structural BMPs the applicant is proposing to use to address post-construction water quality impacts from the proposed development, the applicant has submitted the Marblehead Coastal Water Quality Plan (WQP) (Exhibit 14) prepared by RBF Consulting dated November 28, 2001, with subsequent amendments to the document outlined in the list of substantive file documents. The applicant's proposed water quality plan is designed with the "treatment train" approach in mind, and includes source and treatment control Best Management Practices (BMPs). The applicant has been granted a 401 water quality certification from the Regional Water Quality Control Board, San Diego Region (Exhibit 22).

The proposed WQP uses four primary methods of nonpoint source pollution (NPS) prevention: 1) source control Best Management Practices (BMPs); 2) structural treatment BMPs; 3) low flow diversions, and 4) 'end of pipe' controls. As defined in the WQP, source control BMPs are techniques that attempt to prevent the introduction of pollutants to the watershed and thus to runoff. Structural treatment BMPs[44], as defined in the WQP, treat, infiltrate, or filter runoff and are located near the source of pollution. The third feature of this treatment train are two low flow diversion systems, one that will divert runoff from the residential area and one that will divert runoff from the commercial development to the San Clemente Wastewater Treatment Facilities for treatment. The "end-of-pipe" treatments, as defined by the applicant, are structural BMPs that filter storm water and nuisance runoff at the storm drain termini.

a. Water Quality Management of Residential Development including Roads

i. Summary of Proposed System

In the residential area, the applicant has proposed both source control and structural treatment practices. All common area landscaping would be planted with drought tolerant, non-invasive native vegetation to reduce the need for pesticide, herbicide, and fertilizer use. Efficient irrigation systems would be used in common area landscaping in the residential area to limit nuisance flows. Educational materials regarding these and other good housekeeping/source control methods in the garden and around the home would be distributed to all homeowners at the time of purchase and regularly by the homeowners association.

Structural treatment devices include storm drain inserts, trash racks (or equivalent), and three extended detention basin with wetland vegetation treatments. The detention basins include inlet energy dissipaters, a sediment forebay, wetland vegetation treatments, and design specifications to ensure a 40-hour residence time and to meet the 85th percentile requirements. The three extended detention basins will capture the runoff from the entire residential area, including residential streets. The detention basins would also occasionally handle runoff from the commercial development and some inland developed areas when the capacity of the

[44] This is a project-specific definition of 'structural treatment BMPs'. Structural BMPs can also refer to mechanical treatment devices which are not located near the source of pollution. However, this definition is not used in the applicant's WQP.

capture and diversion system within the commercial area is exceeded. Water will drain from these basins through stormdrains, and through continuous deflection separator (CDS) units to separate out any large particulates and trash that may have bypassed the storm drain inserts and detention basins. Low flows would be diverted to the municipal wastewater treatment plant for treatment prior to discharge through the offshore wastewater outfall. Any flows in excess of low flows would be discharged to the beach via existing storm drain culverts that pass under El Camino Real. Unlike the diversion system for the commercial area (discussed below), first flush from the residential area would not be captured and sent to the wastewater treatment plant. Rather, first flush would be captured and treated by the vegetation-lined detention basins where suspended solids would settle prior to discharge to the beach via the storm drain culverts. The detention basins would also function as flood control devices controlling the volume and velocity of storm runoff.

ii. Analysis and Modifications of WQP for the Residential Development

As noted above, the runoff from the developed residential site is anticipated to contain petroleum hydrocarbons including oil and grease from vehicles; heavy metals; synthetic organic chemicals including paint and cleaners; soap and dirt from washing vehicles and patio areas; dirt and vegetation from yard and grounds maintenance; litter; fertilizers, herbicides, and pesticides; and bacteria and pathogens from animal waste. The proposed water quality treatment system would control runoff in a manner that would reduce the quantity of pollutants leaving the developed site. However, in order to assure the project is consistent with Section 30231 of the Coastal Act with respect to water quality, the Commission is requiring some changes to the water quality plan, as outlined in Special Condition 16. For instance, the WQP must be modified to assure the complete diversion of nuisance flows to the wastewater treatment facility; to require the applicant to provide efficient irrigation systems throughout the development and the use of native, drought tolerant plants to the maximum extent feasible throughout the development in order to minimize the use of irrigation on a permanent basis. The Commission is requiring the applicant to assure all existing and future landowners are aware of the requirements by requiring the conditions of the permit to appear as covenants, conditions and restrictions on the use of the property.

b. Water Quality Management of Commercial Development

i. Summary of Proposed System

The water quality management system of the commercial development includes source control measures, structural treatment devices, and diversion of nuisance flows and up to the first flush (0.8 inch rainfall in this location) to the municipal wastewater treatment facility for treatment.

Source control measures include regular street and parking lot sweeping, regular sweeping of delivery areas and loading zones, spill control measures, distribution of educational materials to commercial tenants, minimizing pesticide and fertilizer usage, litter control, and regular inspection and maintenance. The WQP also includes a prohibition on certain land uses within the regional commercial center including any use involved with manufacturing processes, vehicle repair, sales or service (including fueling), cleaning facilities, laundry cleaners or laundromats, hospitals or surgery/wellness centers, veterinary clinics, animal hospitals or animal boarding facilities.

Structural treatment devices include catch basin and storm drain inlet inserts, trash racks, bars or grated inlet covers, and elevated and covered trash receptacles. In addition, 'low flows' and first flush from storm events would be diverted to the municipal wastewater treatment facility for treatment. First flush would be captured in an underground storage tank system located under

the commercial development for controlled release to the wastewater treatment facility. Release of water to the treatment plant would be regulated electronically by City operators. Furthermore, any runoff that exceeds the capacity of the underground storage facility or diversion system would be sent to the detention basins in the residential area. Finally, end of pipe treatment includes the installation of CDS units.

Also, as noted elsewhere in these findings, the applicant is proposing to grade and reserve a 1.0 acre lot (Lot 352) for visitor serving commercial purposes adjacent to the proposed park at Avenida Pico. No commercial structures are proposed for this site at this time. The proposed WQP does not include any treatment for runoff from this site.

ii. Analysis and Modifications of WQP for the Commercial Development

As noted above, the runoff from the developed commercial site is anticipated to contain petroleum hydrocarbons including oil and grease from vehicles; heavy metals; synthetic organic chemicals including paint and cleaners; soap and dirt from washing vehicles and patio areas; dirt and vegetation from grounds maintenance; litter; fertilizers, herbicides, and pesticides; and bacteria and pathogens from animal waste. The proposed water quality treatment system would control runoff in a manner that would reduce the quantity of pollutants leaving the developed site. However, in order to assure the project is consistent with Section 30231 of the Coastal Act with respect to water quality, the Commission is requiring that the water quality plan incorporate some changes and assurances. For instance, the Commission is requiring the applicant to fully mitigate impacts associated with grease generated from the proposed restaurants; that trash receptacles and dumpster areas be designed to prevent entrainment of pollutants in runoff. Therefore, the Commission imposes Special Condition 16.

c. Water Quality Management of Perimeter Roads - Avenida Pico and El Camino Real

A letter from RBF Consulting to California Coastal Commission, dated April 26, 2002, and the updated water quality plan exhibit submitted February 14, 2003, describes the proposed treatment of the perimeter roads: Avenida Pico and El Camino Real. Both of these roads would be widened to accommodate the increase in traffic from this development.

i. Summary of Plan for Avenida Pico

Drainage on the portion of Avenida Pico that is within the project site flows in two directions, toward the northeast and to the southwest with the division point just northeast of the proposed intersection with proposed Avenida Vista Hermosa.

The southwesterly drainage area totals 8.5 acres and encompasses runoff from Avenida Pico, a portion of proposed Avenida Vista Hermosa, a proposed public parking lot (Lot E) accessible from Avenida Pico for the public park, and open space along the perimeter of the development. The applicant proposes to treat runoff up to the 85th percentile storm event with storm drain inlet inserts and a Continuous Deflection Separation (CDS) unit. In addition, the water quality plan exhibit depicts construction of two bioswales as part of this treatment train, one within the public park (Lot F) between a parking lot for the park (Lot E) and Avenida Pico, and the second adjacent to or within Lots SSS and VVV next to Avenida Pico. Nuisance flows from the Avenida Pico drainage area would not be diverted to the wastewater treatment plant as is proposed elsewhere in the project area.

ii. Analysis and Modifications of WQP for Avenida Pico

The proposed development includes widening 2,100 linear feet of Avenida Pico by 23 feet. The widening would consist of increasing the width of the southbound vehicle lane from 20 feet to 28 feet (to accommodate 2 lanes), plus a 7 foot wide bike lane and an 8 foot wide sidewalk. In addition, the proposed project increases the intensity of use of the site and surrounding roadways, with accompanying increases in pollution.

The applicant is proposing to treat all of the runoff from the portion of Avenida Pico to be widened along the frontage of the site. However, since final designs have not been submitted it is unclear whether the proposed treatment would meet the 85th percentile requirements. The Commission finds that runoff from all new road surfaces shall be required to be filtered, infiltrated or otherwise treated in accordance with the 85th percentile requirement. Therefore, the Commission imposes Special Condition 16 that requires the applicant to design appropriate BMPs to treat, filter, or infiltrate runoff from all new road development and to submit a final water quality management plan demonstrating compliance with this requirement.

iii. Summary of WQP for El Camino Real

Runoff from the proposed El Camino Real widening would be filtered by catch basin and storm drain inlet inserts and CDS units fitted with oil absorbent pads. In addition, any low flows would be diverted to the wastewater treatment plant for treatment. The applicant states that, due to limited space between the proposed to be widened roadway and the bluff along El Camino Real, installation of a bioswale to treat runoff from the portion of El Camino Real within the project area would require grading of the bluff face and the construction of retaining walls. The applicant has indicated that the proposed BMPs provide the maximum practicable approach.

iv. Analysis and Modifications of WQP for El Camino Real

The post-project drainage pattern for El Camino Real is not clear in the applicant's submittal. However, this road is presently near-level, with a very slight slope away from the proposed storm drains. In order to assure that runoff from El Camino Real is treated, filtered or infiltrated, it is important that the applicant design the expansion of El Camino Real to drain runoff toward the proposed treatment measures.

Nuisance flows typically originate from irrigated landscaped areas or areas where wash-down activities occur. Due to the absence of proposed irrigated landscaped areas on the site along El Camino Real (the bluffs would be landscaped with native vegetation that does not require permanent irrigation) and potential wash-down areas within the project site along El Camino Real, nuisance flows are anticipated to be nominal. Furthermore, except for extremely small rainfall events that would create runoff from the roads below the low flow threshold, the low flow diversion is not expected to provide significant treatment to runoff from this portion of the development.

Also, the Commission concurs with the applicant's determination that installation of bioswales along the toe of the bluff to filter runoff from El Camino Real would not provide enough of a water quality benefit to warrant grading and construction of retaining walls along the bluff face. This kind of development would cause significant erosion and have adverse visual and habitat impacts. Therefore, the Commission requires that runcff be directed toward treatment systems, including treatment of runoff by catch basin and storm drain inlet inserts, CDS units, and low flow diversions. Therefore, the Commission imposes Special Condition 16.

d. Parks, Trails and Open Space

i. Summary of WQP for Parks, Trails and Open Space

Except for some selected locations, runoff from the proposed parks, trails and open spaces would be captured and treated by the treatment system for the residential and commercial areas and perimeter roads. The areas not receiving treatment include the open space habitat area at the southwestern corner of the site along the bluffs (all or portions of proposed Lot G), the Blochman's dudleya reserve near the corner of Avenida Pico and El Camino Real (proposed Lot H), and a portion of the active park at the northwest corner of the site (portion of proposed Lot MM). Initial plans submitted by the applicant also excluded the public park and parking lot at Avenida Pico (Lots E and F) and some perimeter open space areas along Avenida Pico. A letter dated April 26, 2002, submitted by the applicant proposes treatment of runoff from Lots E and F and some excluded perimeter open spaces in conjunction with treatment of runoff from Avenida Pico.

ii. Analysis and Modifications of WQP for Parks, Trails and Open Space

Some park areas are proposed to be landscaped with turf that is often managed with chemical pesticides, herbicides and fertilizers. Trash is also an issue at parks. Trash and chemicals often become entrained in runoff and contribute to water pollution. In order to minimize such impacts, the Commission requires that the WQP be modified to include provisions to control trash and minimize the use of chemical pesticides, herbicides, and fertilizers to the maximum extent practicable in all recreational open space/parks proposed at the project site. The use of Integrated Pest Management strategies to control pests is to be encouraged. Therefore, the Commission imposes Special Condition 16.

e. Maintenance of BMPs

i. Summary of Proposed Maintenance

Proposed maintenance and maintenance responsibilities for water quality BMPs are described in the WQP in Exhibits 9 and 10 dated February 5, 2002, prepared by GeoSyntec. The WQP outlines the recommended maintenance for source controls (public education, trash receptacles, street sweeping, landscape irrigation systems, and pesticide fertilizer management) and structural treatment BMPs (racks, bars, and grates at inlets; catch basin insert filters and adsorbents; CDS units; underground detention and storage; wetland detention basins; and diversion systems).

ii. Analysis and Modifications of WQP Relative to Maintenance of BMPs

The proposed inspection and maintenance programs for BMPs are preliminary in nature and would need to be updated upon full occupation and operation of the development when the types of inspection and maintenance procedures that are appropriate on this site become clearer. The inspection and maintenance plan states that "frequencies [of structural BMP inspection and maintenance] are subject to change based on inspection and review." The Commission finds that this type of adaptive maintenance is appropriate; however, any changes must be submitted to the Executive Director for review and approval. The Commission also is requiring the applicant to provide assurances related to the establishment and maintenance of wetland vegetation within the detention basins. Therefore, the Commission imposes Special Condition 16.

f. Storm Water Quality Monitoring Plan

The "Marblehead Stormwater Quality Monitoring Plan" was designed by GeoSyntec Consultants and described in the February 5, 2002, Addendum Sheet to the Marblehead Coastal Water Quality Plan dated November 28, 2001.

i. Summary

The stated purpose of the monitoring plan is "...to document the effectiveness of the water quality controls or Best Management Practices (BMPs) described in the Marblehead Coastal Water Quality Plan." The constituents to be addressed in the monitoring plan include pathogen indicators, toxic chemicals (e.g. trace metals, pesticides), and trash and debris. As designed, this water quality monitoring program would begin after development has been completed and would monitor only storm flows. If data demonstrated that "trigger" conditions were met, a reevaluation of the overarching Water Quality Plan would occur (trigger conditions are exceedences in the water quality objectives that were set by this study).

ii. Analysis and Modifications of WQP Relative to the Stormwater Quality Monitoring Plan

The proposed WQP mitigates the proposed development's impacts upon water quality through a treatment train of non-structural and structural BMPs. The effectiveness of the WQP is reliant upon continual maintenance of these BMPs. A water quality monitoring plan is important to assure that the WQP is effectively mitigating water quality impacts caused by the development and to assure that deficiencies are addressed. However, in order to assure the monitoring plan is consistent with Section 30231 of the Coastal Act, certain changes and assurances in the plan are required. For instance, the Commission is requiring the applicant to provide baseline data so that the relative effectiveness of BMPs can be analyzed. In addition, monitoring of the quality of water discharged from the site needs to be implemented, with a contingency plan to correct deficiencies in the plan. Therefore, the Commission imposes Special Condition 16.

g. Water Quality Impact Mitigation Standards

In order to find the proposed development consistent with the water and marine resource policies of the Coastal Act, the Commission is requiring the incorporation of the proposed Best Management Practices, with certain modifications, which are designed to control the volume, velocity and pollutant load of stormwater leaving the developed site.

Critical to the successful function of post-construction structural BMPs in removing pollutants in stormwater to the Maximum Extent Practicable (MEP), is the application of appropriate design standards for sizing BMPs. The majority of runoff is generated from small storms because most storms are small. Additionally, storm water runoff typically conveys a disproportionate amount of pollutants in the initial period that runoff is generated during a storm event. Designing BMPs for the small, more frequent storms, rather than for the large infrequent storms, results in improved BMP performance at lower cost.

The Commission finds that BMPs would likely be required to be designed to assure that post-development peak runoff rates and average volume from the developed site shall not exceed pre-development levels for the 2-year 24-hour storm runoff event. Furthermore, post-construction structural BMPs (or suites of BMPs) shall be designed to treat, infiltrate or filter the amount of stormwater runoff produced by all storms up to and including the 85th percentile, 24-hour storm event for volume-based BMPs, and/or the 85th percentile, 1-hour

storm event, with an appropriate safety factor (i.e., 2 or greater), for flow-based BMPs. Therefore, the Commission imposes Special Condition 16.

3. Summary

Without mitigation, the proposed project would have significant adverse impacts upon coastal waters. The applicant has proposed certain construction phase and post-construction phase mitigation measures. The Commission has analyzed these proposed measures and determined that some modifications to the plan are required to assure compliance with the Coastal Act. As modified by Special Condition 8, 9 and 16, the Commission finds the development consistent with Section 30231 of the Coastal Act as it pertains to the protection of water quality through the use of best management practices.

K. ARCHEOLOGICAL/CULTURAL RESOURCES

Section 30244 of the Coastal Act states:

> *Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.*

The project site is largely undeveloped and due to its favorable location along the coast, may have been the site of pre-European occupation by Native Americans. Accordingly, it is possible that archeological/cultural deposits may exist on the site such as skeletal remains and grave-related artifacts, traditional cultural sites, religious or spiritual sites, or artifacts.

According to a 1998 EIR prepared for development of the project site, several cultural resource investigations of the Marblehead site have occurred over time, including investigations in 1974, 1979, 1989, and 1990. These investigations revealed the presence of one cultural resource site, CA-ORA-1258, along the bluffs on the Marblehead site that overlook El Camino Real. A subsequent study performed in 1996 failed to relocate CA-ORA-1258. In addition, a field reconnaissance conducted in November 2002 could not relocate CA-ORA-1258. The 1996 and 2002 studies surmise that the emergency grading that occurred in 1990 destroyed much of CA-ORA-1258. However, a 1991 focused EIR prepared by the City to document impacts from the emergency grading indicates that the emergency grading was monitored by a professional observer and that no archeological resources were found during the grading[45]. No other archeological sites have been recorded on the Marblehead property, according to the 1998 EIR and the 1996 and 2002 reports on the property.

Although CA-ORA-1258 hasn't been relocated in the most recent field reconnaissance of the site, scattered evidence of archaeological resources have been found. For instance, the survey conducted in 1996 found a small basalt denticular flake in the vicinity of the bluffs that may have been a tool. Most recently, the survey conducted in November 2002 found four flaked stone artifacts in the vicinity of the reported location of CA-ORA-1258.

The presence of artifacts on the soil surface are suggestive of the presence of subsurface archeological sites. Accordingly, Commission staff requested that the applicant design a subsurface investigation program that would assist in determining whether subsurface archeological sites are present. Commission staff reasoned that it would be preferable to implement a testing program in advance of grading at the site because once grading commences, it would be costly to stop the grading operation, if archeological sites were

[45] Ed Almanza and Associates, 1991, "Response to Comments, Environmental Impact Report", August 1991.

discovered while grading, to undertake testing and implement mitigation. However, if a testing program were undertaken in advance of grading and sites were found, then there would be ample time to design an investigation and mitigation program as well as allow more time for reconfiguration of the development to avoid resources, if that type of mitigation were deemed appropriate. However, it was acknowledged that a testing program could never fully identify all archeological sites that may be present because it would be necessary to entirely excavate the site to make this determination. Nevertheless, this kind of testing would reduce the likelihood of an unexpected discovery during the grading operation.

In response, a letter report dated February 20, 2003, from the applicant's archeologist, states that the minimal quantity of surface remains (e.g. artifacts, midden, etc.) found is a strong indicator that sub-surface cultural deposits are not present on the site. The applicant's archeologist contends that the artifacts found at the site are not suggestive of any seasonal or longer term occupation of the site. Rather, the artifacts found could have been dropped by a Native American traversing what is now the property. The letter acknowledges that discovery of cultural deposits during grading is possible, but states that such discovery is highly unlikely. This statement contrasts with the conclusions of the 1996 survey of the site which stated that discovery of resources is highly likely. However, the applicant's archeologist contends that the conclusions of the 1996 survey are flawed because that surface reconnaissance effort was far less detailed than the 2002 surface reconnaissance. The more detailed 2002 survey found no significant surface indications of sub-surface deposits. Hence, the determination that subsurface resources are unlikely. There has been no contrary assessment of the need for pre-grading, subsurface testing provided to the Commission.

Although deemed unlikely by the applicant, the discovery of cultural deposits is possible during grading. Accordingly, the February 2003 letter from the archeologist includes an archeological monitoring program including preliminary identification of proposed treatment measures if cultural deposits are found. While the proposed monitoring program contains reasonable measures, some changes are necessary to ensure that the development is carried out consistent with the requirements of Section 30244 of the Coastal Act.

For instance, the proposed monitoring plan states that a Native American monitor will be present in the project area when archeological monitoring and investigation is underway. Monitors should be viewing the actual grading rather than simply 'in the area'. Furthermore, the monitoring plan does not sufficiently identify how archeologists and Native American monitors will be selected. In order to assure that all project grading that has any potential to uncover or otherwise disturb cultural deposits is monitored at all times by qualified archeologists and Native Americans, the monitoring plan must be modified to assure that archaeological monitor(s) are qualified by OHP standards. In general, qualified archaeologists must meet the standards for archeologists set by the Secretary of Interior, and they must have experience in California archaeology including experience in the region of this project. Furthermore, Native American monitor(s) with documented ancestral ties to the area appointed consistent with the standards of the Native American Heritage Commission (NAHC) must be selected to monitor all project grading. There must be sufficient monitors on site at all times to allow monitoring of all grading for which monitoring is deemed necessary. The Commission also requires the permittee to notify the archeological and Native American monitors of the requirements and procedures established by this permit relative to cultural resources. Monitors must be provided a copy of the special conditions, the revised monitoring plan, and any other plans required by the conditions and which have been approved by the Executive Director. The permittee must provide this information in a way that all monitors, including monitors that may join ad hoc, are aware of the requirements and procedures outlined in the permit.

Also, the proposed monitoring plan states that, if an archeological site is found, work would stop

within the site boundary plus a minimum 15 meter wide buffer, to be determined at the discretion of the archeologist. If an archeological site is found, the area of work stoppage identified in the monitoring plan may not be adequate to assure that a full range of investigation and mitigation measures can be pursued. Therefore, the monitoring plan must be modified to provide that if any cultural deposits are discovered, all construction that has any potential to uncover or otherwise disturb cultural deposits and all construction that may prejudice the ability to identify appropriate investigation measures and allow full consideration of all mitigation options must be halted. If cultural deposits are discovered, an investigation to determine the significance of the resources must be undertaken. If the resources are determined to be significant by the Executive Director a supplementary investigation and mitigation plan must be prepared for review and approval of the Executive Director. Mitigation measures to consider are to include, but are not limited to, recovery and reburial, in-situ preservation and avoidance of cultural deposits.

Also, the monitoring plan identifies some procedures related to finding human remains. The procedures outlined in the plan may prejudice negotiations between the MLD and the landowner. Therefore, the monitoring plan must be modified to comply with applicable State and Federal laws. Procedures outlined in the monitoring plan must not prejudice negotiations between the landowner and the MLD regarding the manner of treatment of human remains. For instance, monitoring plan would allow scientific study of the remains. However, the MLD may determine that such testing is inappropriate. The monitoring plan should not pre-determine that scientific testing is allowed. In addition, the monitoring plan suggests that recovery and reburial of remains is the preferred treatment. However, negotiations with the MLD as well as the cultural resources mitigation plan that must be approved by the Executive Director may provide for other types of mitigation including avoidance and in-situ preservation. Also, the monitoring plan identifies certain time frames within which the MLD must conduct reburials and ceremonies. The time frames identified in the monitoring plan are insufficient and do not allow time for appropriate negotiations to be conducted and plans developed. Therefore, these time frames need to be removed from the monitoring plan. The monitoring plan also requires that the archeologist be allowed to attend reburial events and ceremonies. The MLD may wish for greater privacy, therefore, the plan should be modified so that attendees to such events are not pre-determined. Finally, the range of investigation and mitigation measures to be considered in the event of discovery of remains shall not be constrained by the approved development plan.

Once cultural resources are found, work is stopped, and a determination that the cultural resources found are significant, the applicant may only recommence work after submittal of supplementary archeological plan that addresses investigation and mitigation. The supplementary plan must be prepared by a qualified professional in consultation with the project archaeologist(s), the Native American monitor(s), the Most Likely Descendent (MLD) when State Law mandates identification of a MLD. The supplementary plan must be peer reviewed and must also obtain review from the State Office of Historic Preservation and the Native American Heritage Commission if those agencies are able to provide review in a timely way. The supplementary plan must identify proposed investigation and mitigation measures. The range of investigation and mitigation measures considered is not to be constrained by the approved development plan. Mitigation measures considered may range from in-situ preservation to recovery and/or relocation. A good faith effort shall be made to avoid impacts to cultural resources through methods such as, but not limited to, project redesign, capping, and placing cultural resource areas in open space. Modifications to the development plan may be necessary in order to implement mitigation. The mitigation plan must be reviewed and approved by the Executive Director. Therefore, the Commission imposes Special Condition 26.

As conditioned, the Commission finds the proposed development is consistent with Section 30244 of the Coastal Act.

L. LOCAL COASTAL PROGRAM

Section 30604(a) of the Coastal Act provides that the Commission shall issue a coastal permit only if the project will not prejudice the ability of the local government having jurisdiction to prepare a Local Coastal Program which conforms with Chapter 3 policies of the Coastal Act. The Commission certified the Land Use Plan for the City of San Clemente on May 11, 1988, and certified an amendment approved in October 1995. On April 10, 1998, the Commission certified with suggested modifications the IP portion of the Local Coastal Program. The suggested modifications expired on October 10, 1998. The City submitted a second IP in June 1999. That submittal was subsequently withdrawn in October 2000. All documents certified by the Commission excluded the project site, therefore, there is no certified LUP or IP for the project site.

The proposed development, as conditioned, is consistent with the Chapter Three policies of the Coastal Act. Therefore, the Commission finds that the proposed development would not prejudice the ability of the City to prepare a certified local coastal program consistent with the Chapter Three policies of the Coastal Act.

M. CONSISTENCY WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Section 13096 of Title 14 of the California Code of Regulations requires Commission approval of coastal development permits to be supported by a finding showing the permit, 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 which the activity may have on the environment.

The proposed project has been conditioned in order to be found consistent with the biological, public access, hazard, water quality and archaeology policies of Chapter Three of the Coastal Act. The mitigation measures which apply to the project include: Special Condition 1 places open space restrictions and public access requirements over corresponding areas of land; Special Condition 2 requires fee dedication of the proposed park lands to the City; Special Condition 3 requires that trail easements be offered over the proposed trail network; Special Condition 4 requires the development of a final maintenance and management program for the proposed parks and habitat areas; Special Condition 5 places certain requirements on the proposed subdivision; Special Condition 6 puts certain procedures in place relative to renumbering on the final tract map; Special Condition 7 requires a revised construction phasing plan that prioritizes development of the public access and recreation facilities and the habitat restoration; Special Condition 8 identifies construction related responsibilities such as habitat and water quality protection requirements; Special Condition 9 requires the design of construction staging areas and fencing in a manner that protects habitat; Special Condition 10 requires the applicant to submit a final habitat management plan that complies with the recommended habitat buffers and other identified changes to the plan; Special Condition 11 identifies requirements on landscaping and vegetation used in the development; Special Condition 12 identifies requirements relative to fire hazards and fuel modification; Special Condition 13 requires lighting to be designed to avoid impacts on habitat areas; Special Condition 14 identifies requirements related to walls, fences and other barriers to prevent impacts on habitat; Special Condition 15 identifies requirements related to public access and recreation facilities; Special Condition 16 identifies the requirements relative to water quality impact mitigation; Special Condition 17 places some requirements on the design of the proposed bridge at Avenida Vista Hermosa; Special Condition 18 requires submittal of final revised plans that conform with the requirements of the permit; Special Condition 19 requires

conformance with proposed geotechnical recommendations; Special Condition 20 the applicant to assume any risks associated with the development of the property; Special Condition 21 identifies requirements related to the proposed 1.0 acre coastal commercial lot; Special Condition 22 identifies requirements regarding the appearance of structures; Special Condition 23 places restrictions on the height and siting of the residential structures; Special Condition 24 identifies parking, height and setback requirements for the regional commercial development; Special Condition 25 establishes certain procedures related to future development of the property; Special Condition 26 establishes requirements and procedures regarding the possible discovery of archeological resources during grading; Special Conditions 27 and 28 require evidence of final approvals from other agencies; Special Condition 29 requires the applicant to demonstrate their legal ability to comply with all conditions; Special Condition 30 requires the applicant to comply with the proposal as conditioned herein; Special Condition 31 requires the applicant to comply with certain requirements associated with after-the-fact development; Special Condition 32 establishes requirements and procedures in the event the applicant sells the property or portions thereof; Special Condition 33 requires the applicant to allow inspections of the site during development; and Special Condition 34 requires a deed restriction to be recorded against the property which notifies all landowners, present and future, of the terms and conditions of this permit. The required mitigation measures will minimize all significant adverse effects which the activity will have on the environment.

As conditioned, there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned, can be found consistent with the requirements of CEQA.

N. UNPERMITTED DEVELOPMENT

Unpermitted development has been carried out on the subject site without the required coastal development permit. According to Exhibit 3 of the Marblehead Coastal Resource Management Plan dated October 1997, approximately 58,000 cubic yards of soil was stockpiled in the between the Western Canyon and Marblehead Canyon in association with the stabilization of bluffs upcoast of the project site at Colony Cove. Coastal Development Permits 5-94-256, 5-94-256A, and 5-94-256-G, which authorized the grading at Colony Cove did not authorize the stockpile of any soils on the Marblehead site and Commission staff have not been able to locate any coastal development permit approving this stockpile. In addition, although grading was permitted in emergency permits (5-90-122-G and 5-90-274-G) granted for bluff stabilization on the project site, there were certain unanticipated impacts to biological resources associated with those activities. Furthermore, the emergency permits 5-90-122-G and 5-90-274-G required a follow-up permit in order to allow the grading authorized to remain in place. Approval of this permit will resolve all issues related to the identified after-the-fact or otherwise unpermitted development on the site. To ensure that the matter of unpermitted development is resolved in a timely manner, Special Condition 31 requires that the applicant satisfy all conditions of this permit that would provide mitigation for the impacts associated with the above described development and which are prerequisite to the issuance of this permit within one year of Commission action, or within such additional time as the Executive Director may grant for good cause.

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

APPENDIX A

SUBSTANTIVE FILE DOCUMENTS AND OTHER APPROVALS

Plans

Barratt American Homes 2001, "Marblehead Coastal 7000 S.F. Lot Product", 5 p. plans depicting site plan and elevations for single family residences dated October 7, 2001

Bucilla Brooklyn Architecture 2001, "5000 S.F. Lots, Single Family Detached, Marblehead Coastal, San Clemente, California, Barratt American", 5 p. plans depicting site plan and elevations for single family residences dated November 6, 2001

KMA Architecture and Engineering 2001, "Marblehead Promenade at San Clemente", 20 p. plans depicting site plans and elevations of commercial center dated December 6, 2001

RBF 2003, "Marblehead Coastal, Amended Tentative Tract No. 8817, City of San Clemente, County of Orange, California", Sheets 1 and 2, dated February 14, 2003, Prepared by RBF of Irvine, California.

RBF 2003, "Marblehead Coastal Amended Residential Site Plan #97-16, City of San Clemente, County of Orange, California", Sheet 2, plot date February 14, 2003.

RBF 2003, "Revised Coastal Development Permit Application and Amended Project Description", dated February 14, 2003, plus Attachment A.

RBF 2002, "Marblehead Coastal, CDP Application No. 5-01-288", 16 p. briefing booklet with exhibits dated November 6, 2002.

RBF 2002, "Marblehead Coastal, Revised Coastal Development Permit Application and Amended Project Description, California Coastal Commission Submittal October 7, 2002, Revised October 25, 2002", binder including cover letter dated October 25, 2002 with attachments "A" through "E".

RBF 2002, "Marblehead Coastal, CDP 5-01-459, California Coastal Commission Resubmittal", binder including cover letter dated February 5, 2001 with attachments identified as attachments "1" through "12" dated February 5, 2002.

RBF 2001, "Marblehead Coastal, Amended Tentative Tract No. 8817, City of San Clemente, County of Orange, California", Sheets 1 and 2, dated December 6, 2001, Prepared by RBF of Irvine, California.

RBF 2001, "Marblehead Coastal Ocean View Park Landscape Concept Plan Amended Residential Site Plan #97-16, City of San Clemente, County of Orange, California", Sheet 3, dated December 5, 2001, prepared by RBF of Irvine, California.

RBF 2001, "Marblehead Coastal Landscape Concept Plan Amended Commercial Site Plan, City of San Clemente, County of Orange, California", dated December 5, 2001

RBF 2001, "Marblehead Coastal Landscape Concept Plan Amended Residential Site Plan #97-16, City of San Clemente, County of Orange, California", Sheet 2, dated December 5, 2001

RBF 2001, "Marblehead Coastal Amended Residential Site Plan #97-16, City of San Clemente, County of Orange, California", Sheet 2, plot date December 6, 2001.

RBF 2001, "Marblehead Coastal Attachments", binder of miscellaneous attachments identified as attachments "A" through "R", dated December 6 2001

Robert Hidey Architects 2001, "Marblehead Coastal 6000 S.F. Lot Product", 5 p. plans depicting site plan and elevations for single family residences dated November 7, 2001

Scheurer Architects 2001, "Marblehead Coastal Single Family Cluster Homes", 4 p. site plans and elevations dated December 5, 2001

Environmental Impact Reports

Ed Almanza and Associates 1991, "Marblehead Coastal Bluffs Emergency Grading Program Focused Environmental Impact Report (SCH No. 90011085)", dated April 15, 1991 with Response to Comments dated August 1991

David Evans and Associates, Inc. 2000, "Addendum to Final Environmental Impact Report" dated February 2000

David Evans and Associates, Inc. 1998, "Final Environmental Impact Report, Marblehead Coastal, General Plan Amendment 96-01, Specific Plan 95-02, Tentative Tract Map (SCH No. 95091037)", prepared for the City of San Clemente prepared June 1998 and adopted August 5, 1998.

Biology, Hydrology and Water Quality

City of San Clemente 2002, "Updated Biological Resources Information to Support Special 4(d) Rule Interim Habitat Loss Mitigation Plan of the Marblehead Coastal Development", 16 p. report, dated January 24, 2002

Exponent 2002, "Additional explanation to the California Coastal Commission of soil infiltration processes for pre- and post-grading conditions, Marblehead Ccastal Project, San Clemente, CA", 3 p. Report dated 3 April 2002 and signed by D. Hamilton (CE 42210).

Exponent, Inc. 2001, "Water balance for the revised Marblehead Coastal project site (San Clemente, California) due to multi-decadal shifts in rainfall patterns and development", 47 p. dated 4 December 2001 and signed by D. L. Hamilton (CE 42210).

Exponent 2001, "Response to comments dated 22 February 2002 from the California Coastal Commission on the water balance for the revised Marblehead Coastal Project", 5 p. Report dated 5 March 2001 and signed by D. Hamilton (CE 42210).

GeoSyntec Consultants 2002, "Attachment 5 of Marblehead Coastal Resubmittal (February 5, 2002): Addendum Sheet to the Marblehead Coastal Water Quality Plan Previously Dated November 28, 2001", dated February 5, 2002.

GeoSyntec Consultants 2001, "Stormwater Quality Evaluation Report for the Marblehead Coastal Development, San Clemente, California" dated January 3, 2001.

Glenn Lukos Associates 2003, "A1 and A2 vegetation.", Letter from Tony Bomkamp to John Dixon dated March 17, 2003.

Glenn Lukos Associates 2003, "Revised Gnatcatcher Use Area Line Along Western Edge of Dudleya Reserve at Marblehead Coastal Site, San Clemente, California", 2 p. memorandum plus attachments dated February 13, 2003.

Glenn Lukos Associates 2003, "Addendum to Protection and Enhancement Plan for Upland ESHA for Marblehead Coastal, San Clemente, California", 19 p. report plus attachments dated February 13, 2003.

Glenn Lukos Associates 2003, "Protection and Enhancement Plan for Upland ESHA for Marblehead Coastal, San Clemente, California", 19 p. report plus attachments dated February 2003.

Glenn Lukos Associates 2002, "Revisions to vegetations mapping at Marblehead Coastal.", letter from Tony Bomkamp to John Dixon dated December 12, 2002.

Glenn Lukos Associates 2002, "Marblehead Coastal Revised Vegetation Mapping Habitat Descriptions and Revised ESHA Boundaries", 8 p. report plus attachments dated October 10, 2002

Glenn Lukos Associates 2002, "Additional Information Intended to Address ESHA determination for Marblehead Coastal Site, San Clemente", 7 p. letter dated August 12, 2002 and signed by T. Bomkamp

Glenn Lukos Associates 2002, "Fire Protection Requirements and Potential Effects on California Gnatcatcher, Marblehead Coastal, San Clemente, California", 7 p. letter to USFWS and CDFG dated July 16, 2002

Glenn Lukos Associates 2002, "Marblehead Coastal Habitat Management Plan Conformance with Orange County Fire Authority Requirements", 2 p. letter dated May 3, 2002 and signed by T. Bomkamp.

Glenn Lukos Associates 2002, "Water quality functions of the upper reaches of ephemeral drainages on Marblehead coastal site, San Clemente, California", 4 p. letter report dated 27 March 2002 and signed by T. Bomkamp.

Glenn Lukos Associates 2002, "Burrowing Owl Survey, Marblehead Coastal, Orange County", 4 p. letter report dated March 6, 2002 and signed by T. Bomkamp

Glenn Lukos Associates 2002, "Expanded information on alkali marsh habitats in southern Orange County", 8 p. letter report dated 5 March 2002 and signed by T. Bomkamp.

Glenn Lukos Associates 2002, "Evaluation of Biological Resource Issues Noted in January 4, 2002 Letter from California Coastal Commission Related to Development of the Marblehead Coastal Site, San Clemente, California", 8 p. letter dated February 4, 2002 and signed by T. Bomkamp

Glenn Lukos Associates 2002, " Results of Expanded Coyote Surveys on the Marblehead Project Site, City of San Clemente, Orange County, California", 10 p. letter to RBF Consulting dated February 4, 2002 and signed by T. Bomkamp

Glenn Lukos Associates 2001, "Revised Shading Study Associated with Two Proposed Bridges, Spanning Existing Wetlands on the Marblehead Coastal Site, San Clemente, California", 6 p. letter to RBF Consulting dated December 4, 2001 and signed by T. Bomkamp.

Glenn Lukos Associates 2001, " Results of Coyote Surveys on the Marblehead Project Site, City of San Clemente, Orange County, California", 7 p. letter to RBF Consulting dated December 4, 2001 and signed by T. Bomkamp

Glenn Lukos Associates 2001, "Submittal Requirements of Coastal California Gnatcatcher Surveys on the Marblehead Project Site, City of San Clemente, Orange County, California", letter report to U.S. Fish and Wildlife Service dated August 17, 2001.

Glenn Lukos Associates, "Shading Study Associated with Proposed Bridges Spanning Existing Wetlands on Marblehead Coastal, San Clemente, California", letter to RBF Consulting

Glenn Lukos Associates 2000, "Changes to Upland Coastal Scrub Vegetation on Marblehead Coastal Site between 1976 and 2000", letter to RBF Consulting dated September 28, 2000 and affiliated documentation compiled and submitted by RBF Consulting dated September 29, 2000.

Glenn Lukos Associates 2000, "Wetlands Avoidance of 'Area A'", letter to RBF Consulting dated September 20, 2000

Glenn Lukos Associates 2000, "Wetlands Avoidance of 'Area C'", letter to RBF Consulting dated September 20, 2000

Glenn Lukos Associates 2000, "Hydrological Requirements of Alkali Marsh and Alkali Meadow Vegetation on Marblehead Site, San Clemente, California", letter to RBF Consulting dated August 22, 2000.

Klein-Edward Professional Services 2001, "Breeding Season Surveys for Raptors on the Marblehead Coastal Site – 2001", letter report to R.J. Meade Consulting dated August 21, 2001.

Klein-Edwards Professional Services 2001, "Discussion of Raptor Use of the Marblehead Coastal Project Site", letter to R.J. Meade Consulting dated February 5, 2001

Klein-Edwards Professional Services 2001, "Preliminary Results of Winter Raptor Survey for the Marblehead Coastal Project", letter to R.J. Meade Consulting dated January 31, 2001

Lawson & Assoc Geotechnical Consulting 2003, "Response to e-mail question by Mr. John Dixon regarding geologic materials below proposed storm drain and sewer alignments adjacent to El Camino Real, Marblehead Coastal Project, San Clemente, California (California coastal development permit application 5-01-459)", letter from Tim Lawson to Jim Johnson (MT No. 1, LLC) dated March 17, 2003.

Leighton and Associates 2000, "Assessment of Pre and Post Development Groundwater Conditions Utilizing Site-Specific Data, Marblehead Coastal Project, City of San Clemente, California", letter to MT No. 1, LLC dated August 22, 2000

Leighton and Associates 2000, "Anticipated Groundwater Conditions, Marblehead Coastal Project, City of San Clemente, California", letter (Project No. 881898-009) to MT No. 1, LLC dated June 15, 2000.

MT No. 1, LLC, "Installation of Utilities and Replacement of Existing Terrace Drains and Down Drains on Slope Adjacent to El Camino Real (Marblehead Coastal Project), letter from Jim Johnson to Karl Schwing, undated except for reference to February 17, 2003 and received March 18, 2003.

MT No.1, LLC, "Marblehead Coastal – February 27, 2003 Meeting Follow-up", letter from Jim Johnson to Karl Schwing dated March 7, 2003.

Natural Resource Consultants 1997, "Biological resources assessment of the 250-acre Marblehead coastal site located in the City of San Clemente, County of Orange, California", biological report prepared for David Evans & Associates dated December 4, 1997 (revision of September 26, 1996 report).

Rancho Mission Viejo 2000, "Confirmation of Available Mitigation Lands and Credits", letter to MT No. I, LLC dated July 7, 2000

RBF 2003, "San Clemente Beach Replenishment Program", 1 p. letter dated February 21, 2003.

RBF 2003, "Habitat Management Plan Update, February 14, 2003, (313 du plan)", 8 p. insert plus exhibits dated February 14, 2003.

RBF 2003, "Water Quality Plan Update, February 14, 2003 (313 du plan)", 1 p. insert plus exhibit dated February 14, 2003.

RBF 2002, "Small Mammal Passable Fencing", 1 p. letter plus exhibit dated November 27, 2002

RBF 2002, "Revised Marblehead Hydrology Analysis", 2 p. letter plus exhibit dated November 20, 2002.

RBF 2002, "Habitat Management Plan Update", 9 p. insert plus exhibits dated October 25, 2002.

RBF 2002, "Water Quality Plan Update", 1 p insert plus exhibit dated October 24, 2002.

RBF 2002, "Proposed Water Quality Treatment along Project Perimeter Streets" , letter from Mike Burke to California Coastal Commission dated April 26, 2002.

RBF 2002, "Existing sewer system capacities"; letter from Michael H. Nihan to the California Coastal Commission dated April 18, 2002.

RBF Consulting 2001, "Marblehead Coastal: Preliminary stormwater management plan", report dated 4 December 2001 and signed by B. Phillips (RCE 38635) and D. de Chambeau (RCE 57924).

RBF 2001, "Marblehead Coastal Project: Habitat Management Plan", dated 28 November 2001.

RBF 2001, "Marblehead Coastal Water Quality Plan", dated November 28, 2001; Addendum Sheet received April 17, 2002; Revision dated April 18, 2002; Revised Exhibit 8 'Marblehead Stormwater Quality Monitoring Plan by GeoSyntec Consultants; Exhibit 9 Recommended Maintenance Activities by GeoSyntec Consultants; Exhibit 10 Proposed Responsibility and Funding for Marblehead Coastal Development Water Quality Best Management Practices
RBF 2000, "Marblehead Coastal Project, Preservation, Restoration and Management Plan for Wetlands, Sage Scrub and Other Upland Habitats", dated July 7, 2000

RBF 1997, "Marblehead Coastal Resource Management Plan", dated October 1997 and revised January 1998.

RECON 2002, "Letter Describing the Select Plan Palette for Fire Risk Reduction at the Marblehead Coastal Project – San Clemente, California (RECON Number 2733M)", 2 p. letter to CDFG and USFWS dated July 16, 2002 and signed by M. Dodero.

RECON 2001, "Year 6 Annual Report for the Blochman's Dudleya Translocation Plan for Marblehead Bluffs", 31 p. biological report dated October 11, 2001 and signed by M. Dodero.

RECON 2000, "Blochman's dudleya Translocation Project at Marblehead Bluff", letter to California Coastal Commission dated June 19, 2000

R.J. Meade Consulting 2000, Memorandum from R.J. Meade Consulting to California Coastal Commission regarding coastal sage scrub, on-site and off-site mitigation, and environmentally sensitive habitat areas dated November 28, 2000.

Roberts, F.M. 2000, "Alkali Wetlands within the Marblehead Development Project", letter to San Clemente Citizens for Responsible Development dated February 29, 2000

Roberts, Fred M., Jr. 1991, "1991 Biological Assessment Update Marblehead Coastal Project Site, San Clemente, California", 9 p. biological report prepared for Ed Almanza & Associates dated January 23, 1991 by Fred M. Roberts, Jr. contained within Appendix E of Marblehead Coastal Bluffs Emergency Grading Program Focused Environmental Impact Report (SCH No. 90011085) prepared by Ed Almanza and Associates dated April 15, 1991

Geology, Landform Alteration and Sand Supply

Lawson and Associates 2003, "Geotechnical Review of the Updated Grading Plan for Marblehead Coastal, Dated February 4, 2003, Amended Tentative Tract 8817, City of San Clemente, California", 2 p. geotechnical letter dated 10 February 2003 and signed by Tim Lawson (CEG 1821, RCE 53388).

Lawson and Associates 2003, "Response to Verbal Questions by Mr. Mark Johnsson, Geologist on the Staff of the California Coastal Commission Regarding Potential Subsurface Water Flow from the Proposed Development (California Coastal Development Permit Application 5-01-459) to the Neighboring Colony Cove Community", 2 p. geotechnical letter dated 6 January 2003 and signed by T. Lawson (CEG 1821 PE 53388).

Lawson and Associates 2002, "Response to a verbal question raised by the staff of the California Coastal Commission regarding the stability of the detention basins during rapid drawdown, Lusk Marblehead, Amended Tentative Tract 8817, City of San Clemente, California", 1 p. geotechnical letter report dated 19 March 2002 and signed by T. Lawson (CEG 1821 RCE 53388).

Lawson & Associates 2002, "Geotechnical Review of the Proposed 314 Grading Plan for Marblehead Coastal, Amended Tentative Tract 8817, City of San Clemente, California", 5 p. letter to Jim Johnson, MT No. I, LLC dated October 25, 2002.

Lawson and Associates 2001, "Geotechnical review of the proposed grading plan for Marblehead Coastal, Amended Tentative Tract 8817, City of San Clemente, California", 36 p. geotechnical report dated 19 October 2001 and signed by T. Lawson (CEG 1821 PE 53388).

Leighton and Associates 2000, "Recommendations for Slope Setbacks, Marblehead Coastal, Tentative Tract Map 8817/Site Plan Permit 97-16, City of San Clemente, California", Letter to MT No. 1, LLC dated April 12 2000.

Leighton and Associates 2000, "Response to California Coastal Commission Review Sheet dated May 17, 2000, Marblehead Coastal, Tentative Tract Map 8817, Coastal Development Permit Application 5-99-260, City of San Clemente, California", Letter to MT No. 1, LLC dated June 15, 2000.

Leighton and Associates 2000, "As-Graded Geotechnical Report of Rough Grading Operations Emergency Bluff Stabilization – Phase I, Marblehead Coastal, City of San Clemente, California", geologic report (Project No. 881898-009) dated June 15, 2000.

Leighton and Associates 2000, "Geotechnical Review of Bluff Stability and Wetlands Along El Camino Real, Marblehead Coastal, Tentative Tract Map 8817/Site Plan Permit 97-16, City of San Clemente, California", Letter to MT No. 1, LLC dated June 15, 2000.

Leighton and Associates 2000, " Geotechnical Review of Alternatives 1 and 2, for the Existing Season Wetland, Wetland Avoidance Plans, Marblehead Coastal, Tentative Tract Map 8817/Site Plan Permit 97-16, City of San Clemente, California", letter to MT No. 1, LLC regarding Impact Area C dated June 6, 2000 and revised June 15, 2000.

Leighton and Associates 2000, "Review of the Bluff Slope and Proposed Retaining Wall Along North El Camino Real on the Boundary of the Dudley [sic] Reserve, Marblehead Coastal Property, Tentative Tract 8817, City of San Clemente, California", letter to MT No. 1, LLC dated August 22, 2000.

Leighton and Associates 2000, "Geotechnical Review of Foundation Options for the Residential and Commercial Buildings Proposed at the Marblehead Coastal Property, Tentative Tract 8817, City of San Clemente, California, Coastal Development Permit 5-99-260", letter to MT No. 1, LLC dated August 22, 2000

Leighton and Associates 2000, "Geotechnical Recommendations for the Design of Foundations for the Residential and Commercial Buildings", letter to MT No. 1, LLC dated August 31, 2000

Leighton and Associates 2000, "Response to Item E of the California Coastal Commission letter dated August 11, 2000, Pertaining to the Marblehead Coastal Property", letter to MT No. 1 LLC which addresses geotechnical feasibility of avoiding wetland impacts at Drainage A dated September 18, 2000.

Leighton and Associates 2000, "Response to Item F of the California Coastal Commission letter dated August 11, 2000, Pertaining to the Marblehead Coastal Property", letter to MT No. 1 LLC which addresses geotechnical feasibility of avoiding wetland impacts at Impact Area C dated September 18, 2000.

Leighton and Associates 2000, "Estimated Remedial Quantities Pertaining to the Grading of Marblehead Coastal Property, Tract 8817, City of San Clemente, Coastal Development Permit 5-99-260", letter to MT No. 1 LLC dated September 14, 2000

MT NO. 1, LLC, 2003, "Installation of Utilities and Replacement of Existing Terrace Drains and Down Drains on Slope Adjacent to El Camino Real (Marblehead Coastal Project)", 5 p. letter dated February 17, 2003

RBF 2002, "Revised Earthwork Volume – Cut and Fill Map", 1 p map dated October 25, 2002.

RBF Consulting 2002, "Marblehead Coastal 5-01-459, Reply to staff notice on incomplete action (1-4-02)", 6 p. report dated 5 February 2002 and signed by M. H. Nihan.

RBF Consulting 2002, "Marblehead Coastal Sediment Study", 6 p. report dated April 2002 and signed by D. de Chambeau (RCE 5794).

RBF Consulting 2002, "Coastal Development Permit application 5-01-459, Marblehead Coastal, San Clemente", 2 p. letter report dated 3 May 2002 and signed by M. J. Burke.

RBF Consulting 2002, "Coastal Commission staff top of slope (Exhibit 32): Comparative analysis of outside and within TOS", 1 sheet, dated 3 May 2002.

RBF Consulting 2002, "Applicant submitted top of slope (Post-1990 Topo): Comparative analysis of outside and within TOS", 1 sheet, dated 3 May 2002.

RBF Consulting 2002, "Marblehead Coastal: Change in slope analysis with "top of slope" delineated", 1 sheet, dated 3 May 2002.

RBF Consulting 2002, "Marblehead Coastal: Slope analysis with "top of slope" delineated", 1 sheet, dated 3 May 2002

RBF Consulting 2002, "Marblehead Coastal: Illustrative site plan with top of slope" delineated", 1 sheet, dated 3 May 2002

Other Miscellaneous Reports

Firewise 2000, Inc. 2003, "Updated Fuel Treatment Location Map", 1 p. map dated February 21, 2003.

Firewise 2000, Inc. 2003, "Updated Fuel Treatment Location Map", 1 p. map dated February 14, 2002 [sic].

Firewise 2000, Inc. 2002, "Conceptual Fuel Management Plan for the Marblehead Coastal Development Amended Tentative Tract No. 8817", 20 p. report dated 27 November 2002.

Keith Companies 2003, "Archeological monitoring and treatment of potential sub-surface cultural resources (Marblehead Coastal Development Project)", 5 p. report dated February 20, 2003.

Keith Companies 2002, "Archeological Survey, Marblehead Coastal Project Area, San Clemente, Orange County, California", 23 p. report dated November 2002.

RBF 2003, "Marblehead Coastal Regional Commercial Center Parking Analysis", 9 p. report plus exhibits dated February 21, 2003.

Resource Agency Letters/Approvals

U.S. Fish and Wildlife Service & California Department of Fish and Game 2002, "Request for Determination of an Amendment to the Special 4(d) Rule Interim Habitat Loss Mitigation Plan (IHLMP) for the Marblehead Coastal Development Project, City of San Clemente, California", letter to the City of San Clemente dated August 30, 2002

U.S. Fish and Wildlife Service & California Department of Fish and Game 2002, "Conditional Concurrence with the Special 4(d) Rule Interim Habitat Loss Mitigation Plan (IHLMP) for the Marblehead Coastal Development Project, MT No. 1, LLC, City of San Clemente, California", letter to the City of San Clemente dated February 22. 2002

U.S. Fish and Wildlife Service & California Department of Fish and Game 2000, "Conditional Concurrence with the Special 4(d) Rule Interim Habitat Loss Mitigation Plan (IHLMP) for the Marblehead Coastal Development Project, MT No. 1, LLC, City of San Clemente, California", letter to the City of San Clemente dated August 17, 2000

U.S. Fish and Wildlife Service & California Department of Fish and Game 1998, "Draft Environmental Impact Report, Marblehead Coastal General Plan Amendment 96-1, Specific Plan No. 95-02, Tentative Tract Map, Site Plans, Conditional Use Permit, and Sign Exception Permit", 6 p. letter dated March 20, 1998

California Department of Fish and Game, 2002, "Amendment No. 1 to Lake and Streambed Alteration Agreement (SAA) No. 5-378-99 for the Marblehead Coastal Project", dated March 13, 2002

California Department of Fish and Game 2000, Streambed Alteration Agreement#5-378-99, dated December 20, 2000

California Department of Fish and Game 2000, "Comments on the Marblehead Coastal Project Wetland Delineation", letter to California Coastal Commission dated August 29, 2000

California Department of Fish and Game 2000, "Comments on the Marblehead Coastal Project Wetland Delineation", letter to California Coastal Commission dated June 26, 2000

Letters/Reports/Approvals from City of San Clemente

City of San Clemente 2002, Construction of public access improvements, 3 p. letter dated February 2, 2002

City of San Clemente 2002, "Marblehead Coastal CDP 5-01-459", 2 p. letter to California Coastal Commission regarding water supply dated January 23, 2002

City of San Clemente 2001, Action of the City Council of the City of San Clemente, California, Agenda Item No. 7-A, Marblehead Coastal Resubmittal Briefing dated September 26, 2001

City of San Clemente 2000, "SERRA Land Outfall", 1 p. letter to California Coastal Commission dated September 8, 2000

City of San Clemente 2000, "Reclaimed Water Availability", 1 p. letter to California Coastal Commission dated September 8, 2000

City of San Clemente 2000, "Beachfront land dedication to public entity", letter to the California Coastal Commission dated July 3, 2000

City of San Clemente Design and Architectural Review, General Plan Amendment 96-02, Specific Plan 95-02, Tentative Subdivision TTM 8817 and amendment, Planned Residential/Commercial Development Approval, Site Plan Permit 97-16 and amendment, Site Plan Permit 99-16, Conditional Use Permit 99-17 and Sign Exception Plan 99-18

Other Agency Letters/Approvals

California Regional Water Quality Control Board 2002, "Marblehead Coastal Development 401 Water Quality Certification Amendment", dated February 19, 2002

California Regional Water Quality Control Board 2000, "Order for Standard Certification", dated August 1, 2000

Native American Heritage Commission 2002, "Review of Cultural Resources Study Coastal Development Permit Application 5-01-459, Marblehead, San Clemente, Orange County", 2 p. letter plus attachment dated November 4, 2002.

Orange County Fire Authority 2002, "Marblehead Coastal", 1 p. letter dated August 23, 2002

Orange County Fire Authority 2002, "Marblehead Coastal", 2 p. letter dated May 2, 2002.

Coastal Development Permit Application Files

A-80-7433; 5-90-122-G; 5-90-274 (Lusk Company); 5-90-274-G (Lusk Company); 5-94-256 (City of San Clemente), 5-94-256A (City of San Clemente), and G5-94-256 (City of San Clemente); 5-94-263 (Lusk Company); 5-97-136 (Marblehead Coastal, Inc.); 5-99-260 (MT No. 1 LLC)

5-03-013 (MT No. 1 LLC)

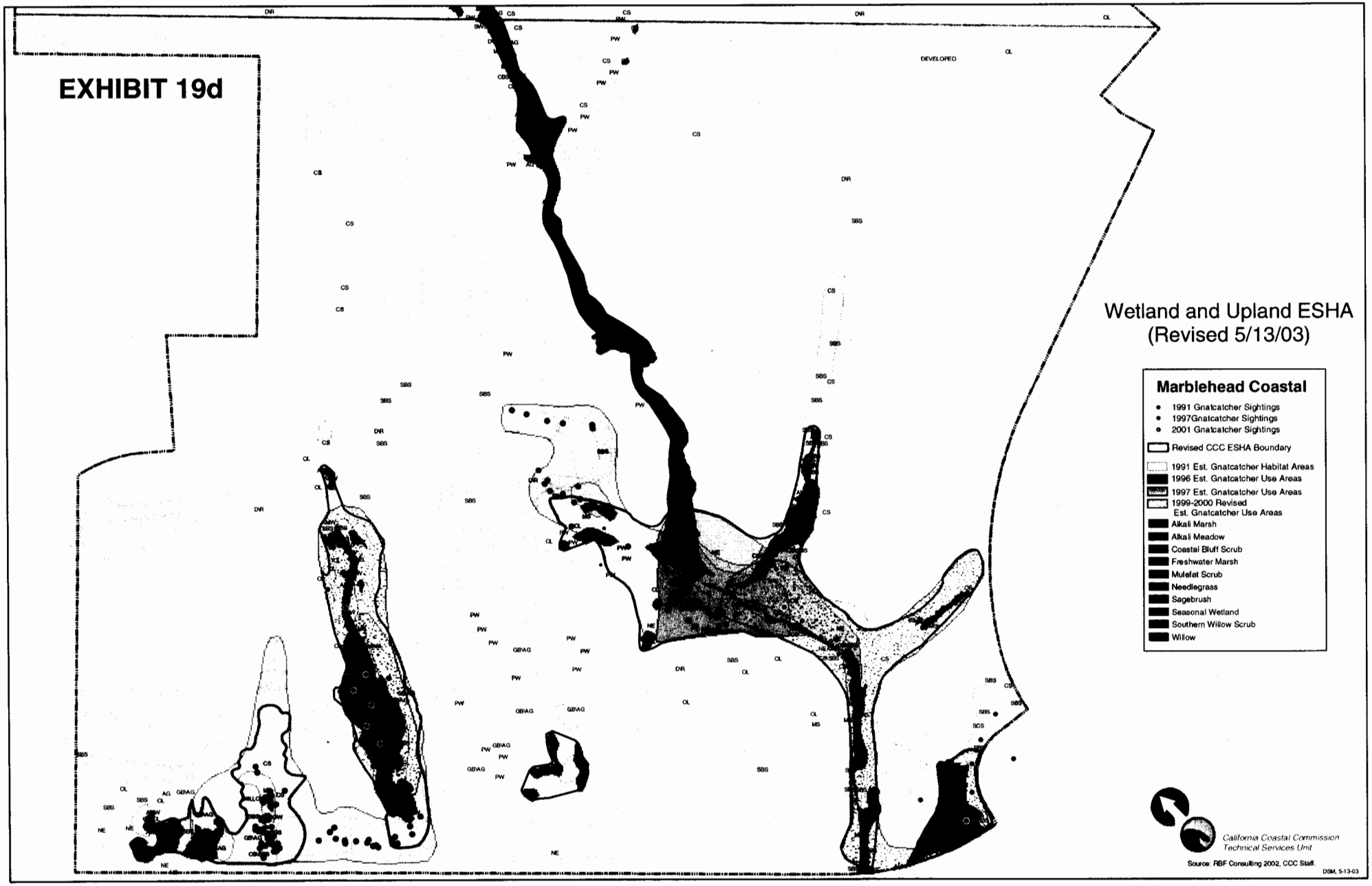
Marblehead Coastal

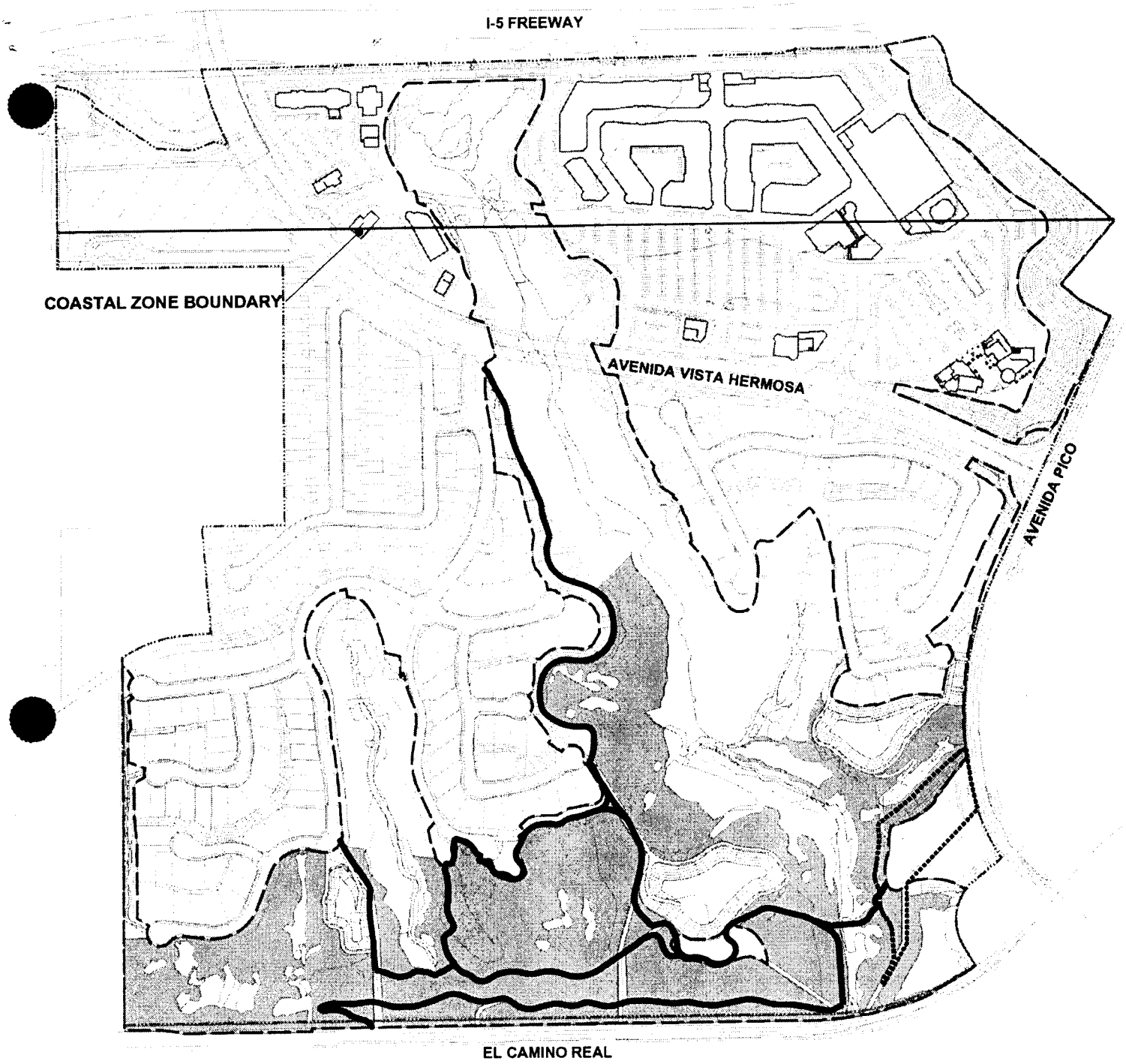
List of Exhibits

Exhibit	Description
1*	Location
2*	Aerial View of Project Site with Major Landform Features Labeled
3*	Existing Site Conditions
4*	Proposed Subdivision
5*	Proposed Residential Site Plan (original in color)
6*	Proposed Floor Plans and Elevations for Single Family Residences
7*	Commercial Center Site Plan and Grading
8*	Commercial Center Landscaping, Elevations, and Misc. details
9*	Proposed Grading
10*	Cross Section of Marblehead Canyon (Existing and Proposed Condition)
11*	Landform Alteration Based on Staff Identified Top of Slope Line (original in color)
12*	Public Amenity Plan (original in color)
13*	Cross sections of the site showing remaining areas of controversy
14*	Proposed Water Quality Plan
15*	Vegetation Communities (original in color)
16*	Vegetation Communities Impact Plan
17*	Vegetation Communities Present at time of Emergency Grading
18*	On-Site Mitigation Plan (Habitat Management Plan) (original in color)
19a*	Map of Wetland and Upland Environmentally Sensitive Habitat Areas (ESHAs) – Staff Edition dated 03-19-2003 (original in color)
19b*	Wetlands and 100 foot buffer Relative to Limits of Grading and Development (original in color)
19c*	Upland ESHA Buffer Analysis (original in color)
19d	Wetland and Upland ESHA Designation Adopted by the Commission
20*	Streambed Alteration Agreement from CDFG
21*	Special 4(d) approval of Interim Habitat Loss Management Plan from California Department of Fish and Game and U.S. Fish and Wildlife Service
22*	Regional Water Quality Control Board Approval
23*	Letter from Orange County Fire Authority
24*	Fuel Management Plan (original in color)
25*	Memorandum regarding ESHA by Dr. John Dixon dated 03-26-2003 (w/o exhibits)
26*	Memorandum regarding ESHA by Dr. John Dixon dated 12-18-2002 (w/o exhibits)
27	First Phase Habitat, Trail and Park Phasing Plan
28	Applicant's recommended modifications to Special Condition 10

*Denotes exhibits that are incorporated into the findings but are not reproduced as part of this document. See staff report dated March 26, 2003 for copy of exhibit.

EXHIBIT 19d


Wetland and Upland ESHA
(Revised 5/13/03)
Marblehead Coastal
1991 Gnatcatcher Sightings
1997Gnatcatcher Sightings
2001 Gnatcatcher Sightings
Revised CCC ESHA Boundary
1991 Est. Gnatcatcher Habitat Areas
1996 Est. Gnatcatcher Use Areas
1997 Est. Gnatcatcher Use Areas
1999-2000 Revised
Est. Gnatcatcher Use Areas
Alkali Marsh
Alkali Meadow
Coastal Bluff Scrub
Freshwater Marsh
Mulefat Scrub
Needlegrass
Sagebrush
Seasonal Wetland
Southern Willow Scrub
Willow
DEVELOPED
California Coastal Commission
Technical Services Unit
Source: RBF Consulting 2002, CCC Staff.
DSM, 5-13-03



LEGEND

- PROPERTY LINE
- HMP BOUNDARY
- MULTI-PURPOSE RECREATION TRAIL AND TRAIL LINKAGE (PHASE 1)
- PUBLIC PARK (PHASE 1)
- RESTORED/CREATED COASTAL SAGE SCRUB (APPROXIMATELY 37 AC. FOR PHASE 1) PER HMP EXHIBIT 2 DATED 2/14/03

1 ACRE

4/02/03

0' 250' 500'

EXHIBIT# 27
Page 1 of 1
Application Number:
5 - 0 3 - 0 1 3
California Coastal Commission

FIRST PHASE
HABITAT, TRAIL & PARK PHASING PLAN

W.10.A

APPLICANT'S PROPOSED REVISIONS TO SPECIAL CONDITIONS
MARBLEHEAD COASTAL
WEDNESDAY, APRIL 9, 2003

REVISIONS RELATED TO UTILITY TRENCHING

- Modify Special Condition 10.B.2., as follows:

Upland ESHA shall have 100-foot wide (horizontally) buffers, where feasible. The minimum buffer width shall be 50 feet wide (horizontally). There shall be no development, including grading, within 50 feet of ESHA boundaries and no grading within 50 feet of coastal bluff scrub, Blochman's dudleya populations, native grasslands and those stands of CSS within gnatcatcher use areas, with these exceptions: a) One-time, brief (lass then 30 days) grading to construct the western-most detention basin may take place within 50 feet of CSS; b) One-time, brief, (less than 30 days, grading is construct the eastern detention basin; c) grading and subsequent construction of approved development within 50 feat of ESHA adjacent to the slot canyon (proposed Lot C); d) one-time trenching and placement of utilities within 50 feet of ESHA located at the mouth of Marblehead canyon; e) Grading adjacent to the gnatcatcher use area next to the existing central soil stockpile (i.e. in the vicinity of proposed Lots 90 to 106 in proposed Tract 8817) may take place within 50 feet of CSS; f) Grading along the upper edges of the western canyon; and along the western edge of Drainage B, g) Brief trenching to install storm drain and sewer along the east side of the western detention basin~~, h) placement of the drill rig to allow construction of utilities under the ESHA located~~; **h) brief, one-time trenching for sewer and storm drain in ESHA and** on the bluff face ~~along El Camino Real~~**, provided no sensitive vegetation is disturbed**; i) Construction of approved trails and associated structures; j) Habitat maintenance and restoration activities. In no case shall grading or other soil disturbance (Including driving of vehicles), other than for habitat restoration activities and construction and maintenance of trails and associated appurtenances, take place closer than 20 feat from ESHA boundaries.

- Modify Special Condition 10.B.10., as follows:

~~There shall be no underground infrastructure within ESHA, if the infrastructure requires surface soil disturbance for its construction. Jacking or tunneling shall be utilized for the installation of the proposed utilities that cross ESHA at the western detention basin (Lot T).~~

Received at Commission Meeting
APR - 9 2003
From: Rick Zbur

COASTAL COMMISSION
5-03-013
EXHIBIT # 28
PAGE 1 OF 2

W.10.A

APPLICANT'S PROPOSED REVISIONS TO SPECIAL CONDITIONS
MARBLEHEAD COASTAL
WEDNESDAY, APRIL 9, 2003

REVISIONS RELATED TO BLUFFTOP PARK

- Modify Special Condition 10.B.4., as follows:

  ~~All turf within the 50 foot ESHA buffer identified on Exhibit 19 shall be eliminated. These areas shall be planted with native vegetation appropriate to the habitat type.~~

- Modify Special Condition 15.B.1.ii., as follows:

  ~~Turf shall~~ not be ~~installed within the proposed turf area (Lot 1) seaward of the central detention basin. In place of turf, the area shall be re-vegetated with plants native to coastal Orange County and appropriate to the natural habitat type. In addition to appropriate vegetation.~~ Lot 1 shall include a recreational trail along the bluff edge and vista points including seating and interpretive signs. Only wildlife resistant trash receptacles shall be utilized within Lot 1;

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APR - 9 2003

From:_____

COASTAL COMMISSION
5-03-013

EXHIBIT # 28
PAGE 2 OF 2

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APR - 9 2003

From: Pacific Ocean