DRAFT

Initial Study and Negative Declaration for the

Ritz-Carlton Laguna Niguel Proposed Expansion Project




APRIL 2009

PREPARED FOR:

City of Dana Point
33282 Golden Lantern
Dana Point, CA 92629

PREPARED BY:

DUDEK
605 Third Street
Encinitas, CA 92024

INITIAL STUDY AND NEGATIVE DECLARATION

for the

RITZ-CARLTON LAGUNA NIGUEL PROPOSED EXPANSION PROJECT

City of Dana Point, California

Prepared for:

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Dana Point, California 92629

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CITY OF DANA POINT
33282 Golden Lantern
Dana Point, CA 92629-1805
(949) 248-3564

NEGATIVE DECLARATION

PROJECT DESCRIPTION:

RITZ-CARLTON HOTEL EXPANSION

The Ritz-Carlton Hotel is proposing additions and upgrades to the structure and site. The proposed additions and upgrades include the creation of 27 new guest rooms through the conversion of existing meeting space, infill additions between wings of the hotel, and new detached casitas, a new meeting space addition, meeting room alterations, and enhancements to the hotel's exterior hardscape, landscape, pool, and guestroom patio areas.

Although designed no higher than the height of the existing hotel, areas of expansion exceed current height limitations, and a variance is requested to address the difference between the proposed structure height and the maximum height established by current Zoning Code standards.

Additionally, an amendment to a previously approved conditional use permit is requested to the shared parking program approved in 1999. The amendment accounts for the reapportionment and addition of the different uses associated with the hotel operation.

PROJECT ADDRESS/LOCATION: 1 Ritz Carlton Drive/The Ritz-Carlton Hotel is situated on a single parcel approximately 500 feet west of the intersection of Pacific Coast Highway 1 and Niguel Road/Ritz Carlton Drive. (See Regional (Fig. 1) and Vicinity (Fig. 2) Map in attached Initial Study)

Name of project proponent:
SHC Laguna Niguel I, LLC
c/o Strategic Hotels & Resorts, Inc.
200 West Madison Street, Suite 1700
Chicago, Illinois 60606

FINDING: The City of Dana Point has conducted an environmental review of the above described project pursuant to the Guidelines for Implementation of the California Environmental Quality Act and the environmental review protocol of the City of Dana Point. As a result of this review and the Initial Study prepared for the project, the City finds that the proposed Ritz-Carlton Hotel expansion and upgrades could not have a significant effect on the environment.

TABLE OF CONTENTS

Section **Page**

APPENDICES

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Page

LIST OF FIGURES

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INITIAL STUDY ENVIRONMENTAL CHECKLIST

1. **Project title:** Ritz-Carlton Laguna Niguel Proposed Expansion Project

2. **Lead agency name and address:**

   City of Dana Point
   33282 Golden Lantern
   Dana Point, California 92629

3. **Contact person and phone number:**

   Kurth Nelson
   City of Dana Point
   949.248.3572

4. **Project location:**

   The Ritz-Carlton Hotel is situated on a 150-foot bluff approximately 500 feet west of the intersection of Pacific Coast Highway 1 and Niguel Road/Ritz Carlton Drive, in the City of Dana Point (City), Orange County, California (Figures 1 and 2). There are existing residential uses to the south and east of the project site, with views over the southern portion of the hotel property. To the northeast across Ritz Carlton Drive is an existing commercial center, which is adjacent to an Orange County public parking lot serving Salt Creek Beach Park. Salt Creek Beach Park lies to the north; it is a developed park providing public access to the beach. To the west of the hotel property is a natural bluff with sandy beach below.

5. **Project sponsor's name and address:**

   SHC Laguna Niguel I, LLC
   c/o Strategic Hotels and Resorts, Inc.
   200 West Madison Street, Suite 1700
   Chicago, Illinois 60606

6. **General Plan designation:** Visitor/Recreation Commercial (V/RC)

7. **Zoning:** V/RC

8. Description of project:

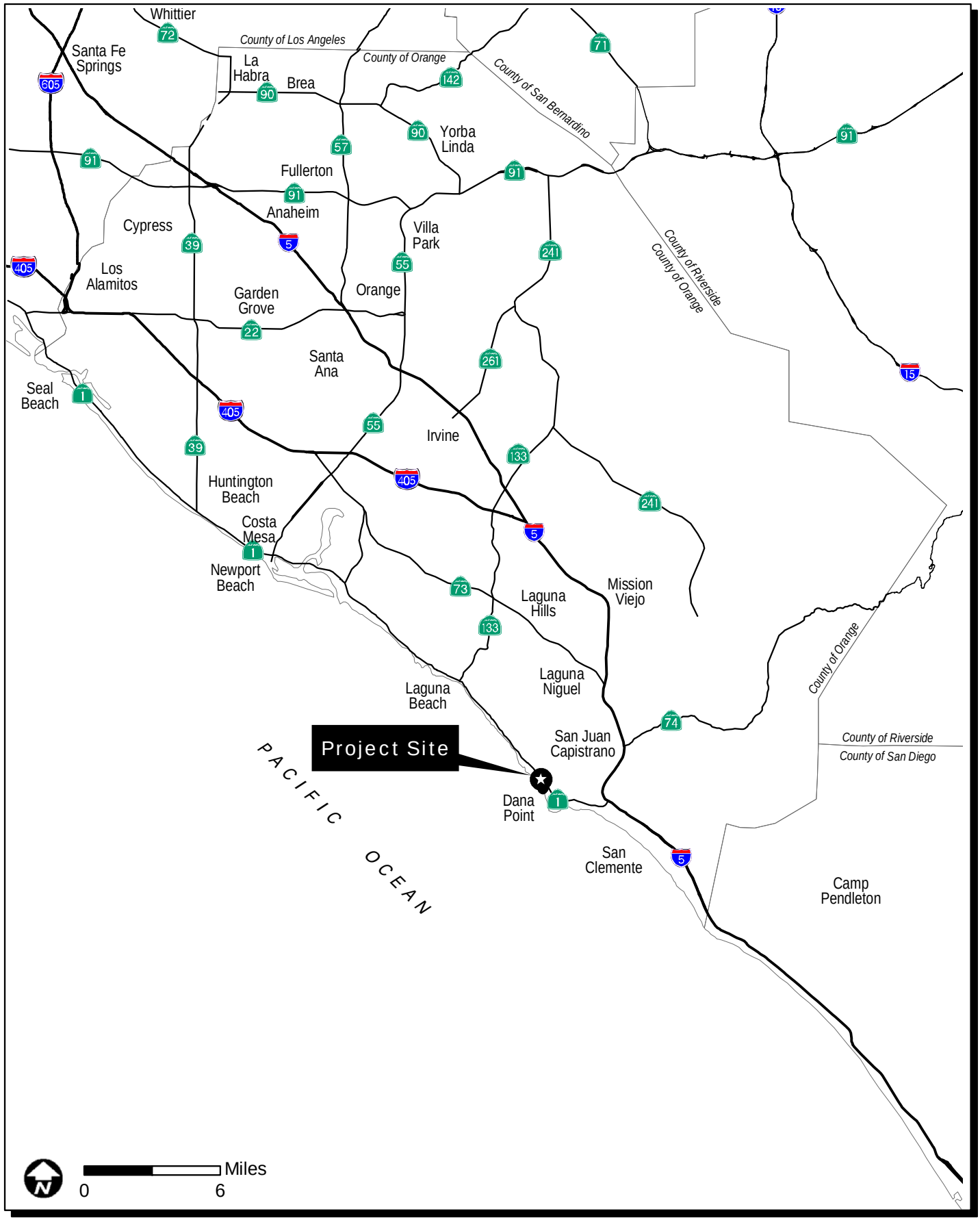
The Ritz-Carlton Laguna Niguel Proposed Expansion Project (proposed project) proposes to upgrade the existing Ritz-Carlton Hotel located in Dana Point. The proposed changes, which would add approximately 30,396 square feet to the existing hotel, include a new meeting space addition, new guest rooms, meeting room alterations, resort enhancements, and other minor conversions (Figure 3).

The City has a certified Local Coastal Program; however, the original coastal development permit (CDP) for the Ritz-Carlton Hotel was issued by the California Coastal Commission prior to certification of the Local Coastal Program. As a result, the California Coastal Commission retains jurisdiction for the original CDP and any amendments thereto. In addition, the Ritz-Carlton Hotel must process a site development permit and obtain approval in concept for the amendment to the original CDP from the City prior to processing the CDP amendment with the California Coastal Commission. Additionally, a variance from the City's current height regulations would also be processed since the hotel was approved under different height standards through Orange County. Lastly, an amendment to the minor conditional use permit for the shared parking program originally permitted by the City in 1999 is also necessary to address the additional rooms and change in area to the different uses at the Ritz-Carlton Hotel. The only land uses in the immediate area which may generate heightened public sensitivity to changes within the hotel property are the adjacent residential uses. The proposed changes include the following:

New Meeting Space. An addition to the existing structure above the loading dock containing an estimated 15,200 square feet of meeting rooms, pre-function space, valet storage, office, restrooms, and outside balconies.

New Guest Rooms. The proposed project would add 27 guestrooms to the existing 393 guestrooms. These new guestrooms include the following: (1) three detached private casitas, (2) four new oceanfront guestrooms accessed through the existing three-story breezeway connecting the central core of the hotel and Monarch Wing 1, (3) three new oceanfront guestrooms accessed through the existing four-story breezeway connecting Dana Wings 1 and 2, (4) three new oceanfront guestrooms accessed through the existing four-story breezeway connecting Monarch Wings 1 and 2, and (5) 14 new oceanfront guestrooms on two levels through the conversion of the existing plaza and pavilion conference/banquet areas.

Resort Enhancement. Enhancement and upgrades of various hardscape, landscape, and amenities around the pool areas and on the patios of the ground-floor oceanfront rooms.



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Ritz-Carlton Laguna Niguel Proposed Expansion Project - IS/ND

Regional Map

FIGURE 1

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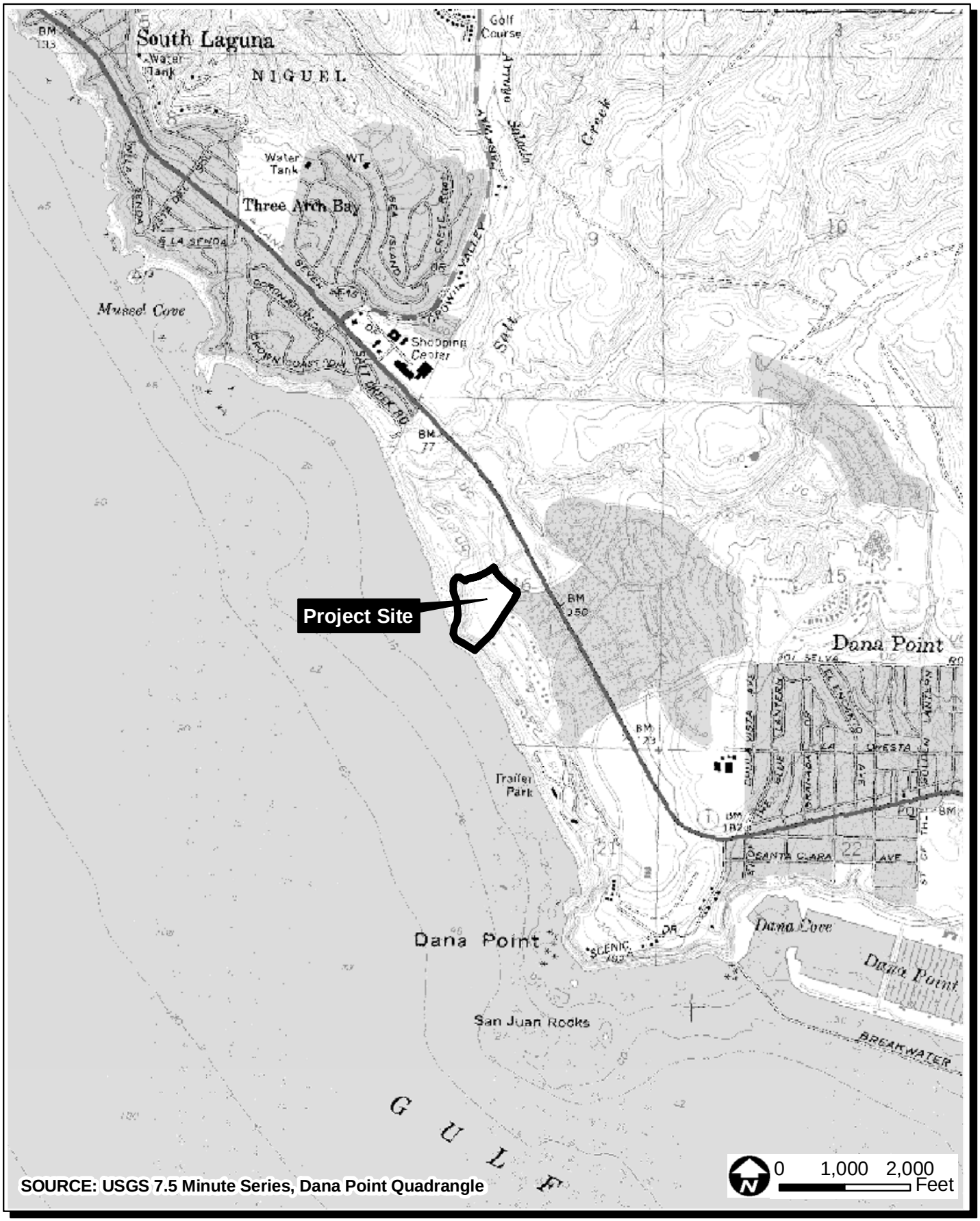

SOURCE: USGS 7.5 Minute Series, Dana Point Quadrangle

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Ritz-Carlton Laguna Niguel Proposed Expansion Project - IS/ND

Vicinity Map

FIGURE 2

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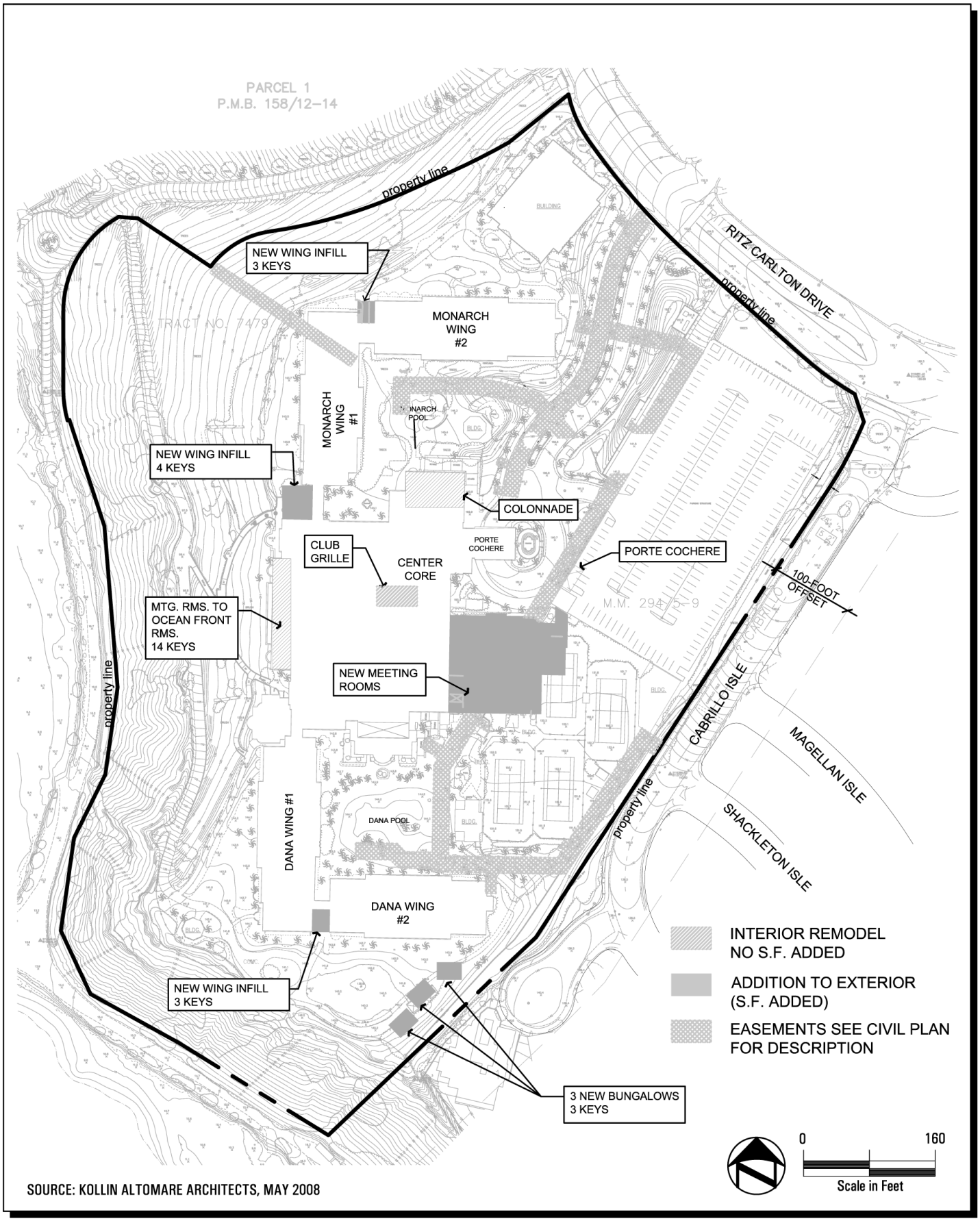

SOURCE: KOLLIN ALTOMARE ARCHITECTS, MAY 2008

Ritz-Carlton Laguna Niguel Proposed Expansion Project - IS/ND

Site Plan

FIGURE 3

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Porte Cochere. Addition of a porte cochere near the loading dock area.

Club Grill Conversion. Conversion of the existing club grill into a service corridor, linking the kitchen, food and beverage storage areas, group registration, and board room.

Terraces. Addition of several ocean view terraces.

Meeting Room Alterations. Conversion of the existing Terrace and Colonnade meeting rooms and adjacent vestibule into one large break-out space for pool related events, estimated at 3,000 square feet.

Ocean Lighting. The project would include five type ocean lighting (OL) fixtures installed on the side of the existing gazebo in a manner and with finishes that make it blend with the ocean side of this structure. The tightly controlled beam of light would operate between dusk and midnight, and would illuminate only the rocks at Dana Point. The ocean lighting would be operated with a timing mechanism that would be coordinated with tidal variations, and would not be operated under winter high tide conditions when the rocks are expected to be submerged beneath the water's surface. Lighting would not be visible from inland views.

Construction Activities and Hours. Construction would include the removal of existing concrete along with some minor grading. Construction equipment would be used intermittently depending on the construction phase. All grading would occur between the hours of 7:00 a.m. and 5:00 p.m. Monday through Friday in accordance with City regulations. All other construction activities would occur between the hours of 7:00 a.m. and 8:00 p.m. Monday through Saturday. Construction is prohibited on Sundays and federal holidays. Construction equipment may include dozers, scrapers, front-end loaders, dump trucks, blades, and rollers. Delivery trucks would also be used.

9. Surrounding Land Uses and Setting:

The proposed project site is the existing Ritz-Carlton Hotel, located at 1 Ritz Carlton Drive. The hotel is situated on a 150-foot bluff top approximately 500 feet west of the intersection of Pacific Coast Highway 1 and Niguel Road/Ritz Carlton Drive, and east of the Pacific Ocean. The approximately 17.6-acre hotel property is developed and landscaped, with various meeting/banquet facilities and guest amenities. Existing structures on the project site include 393 hotel rooms and suites; a core area consisting of administrative offices, gift and jewelry shops, salon, meeting rooms, and executive offices; recreation facilities consisting of 4 tennis courts, 2 pool areas, and landscaped areas; and a split level parking garage.

There are existing residential uses within the Niguel Shores community to the south and east of the project site that have views over the southern portion of the hotel property. Residences within Niguel Shores, across Cabrillo Isle have views of the hotel. To the northeast across Ritz Carlton Drive is an existing commercial center, which abuts a public parking lot serving Salt Creek Beach Park. Salt Creek Beach Park lies to the north; it is a developed park providing public access to the beach. To the west of the hotel property is a natural bluff with sandy beach below. Within the project vicinity, there is existing residential development north of Salt Creek Beach Park; the homes have views of the Ritz-Carlton Hotel site. The primary focal point of these views, however, is of the Pacific Ocean to the west. The St. Regis Monarch Beach Resort and Spa is approximately 1/3 of a mile north of the project site located on the east side of Pacific Coast Highway. The Dana Point Headlands project is under construction on the coast approximately 0.5 mile to the south. The Headlands project would include 118 homes and 68-acres of habitat. A major redevelopment of Dana Point Harbor is in the planning stages.

10 Other public agencies whose approval may be required:

California Coastal Commission – Coastal Development Permit

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklist on the following pages.

☐ Aesthetics/Lighting	☐ Agricultural Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology/Soils
☐ Hazards	☐ Hydrology/ Water Quality	☐ Land Use/Planning
☐ Mineral Resources	☐ Noise	☐ Population/Housing
☐ Public Services	☐ Utilities/Service Systems	☐ Transportation
☐ Recreation	☐ Mandatory Findings of Significance	

DETERMINATION (To be completed by the Lead Agency):

On the basis of this initial evaluation:

☒ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Kurth Nelson, City of Dana Point

Date

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

    a. Earlier Analysis Used. Identify and state where they are available for review.

    b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9. The explanation of each issue should identify:

   a. The significance criteria or threshold, if any, used to evaluate each question.

   b. The mitigation measure identified, if any, to reduce the impact to less than significance.

ENVIRONMENTAL CHECKLIST

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
I. AESTHETICS – Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐
II. AGRICULTURE RESOURCES – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?	☐	☐	☐	☒
III. AIR QUALITY – Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐
IV. BIOLOGICAL RESOURCES – Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☒	☐

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒
V. CULTURAL RESOURCES – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☒
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒
VI. GEOLOGY AND SOILS – Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to *Division of Mines and Geology Special Publication 42*.	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
VII. HAZARDS AND HAZARDOUS MATERIALS – Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h) Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐
VIII. HYDROLOGY AND WATER QUALITY – Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off site?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the flow rate or amount (volume) of surface runoff in a manner which would result in flooding on or off site?	☐	☐	☒	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood delineation map?	☐	☐	☐	☒
h) Place within 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☒	☐
k) Result in an increase in pollutant discharges to receiving waters? Consider water quality parameters such as temperature, dissolved oxygen, turbidity and other typical stormwater pollutants (e.g., heavy metals, pathogens, petroleum derivatives, synthetic organics, sediment, nutrients, oxygen-demanding substances, and trash)	☐	☐	☒	☐
l) Result in significant alteration of receiving water quality during or following construction?	☐	☐	☒	☐
m) Could the proposed project result in increased erosion downstream?	☐	☐	☒	☐
n) Result in increased impervious surfaces and associated increased runoff?	☐	☐	☒	☐
o) Create a significant adverse environmental impact to drainage patterns due to changes in runoff flow rates or volumes?	☐	☐	☒	☐
p) Tributary to an already impaired water body, as listed on the Clean Water Act Section 303(d) list? If so, can it result in an increase in any pollutant for which the water body is already impaired?	☐	☐	☒	☐
q) Tributary to other environmentally sensitive areas? If so, can it exacerbate already existing sensitive conditions?	☐	☐	☒	☐
r) Have a potentially significant environmental impact on surface water quality to either marine, fresh, or wetland waters?	☐	☐	☒	☐
s) Have a potentially significant adverse impact on groundwater quality?	☐	☐	☒	☐
t) Cause or contribute to an exceedance of applicable surface or groundwater receiving water quality objectives or degradation of beneficial uses?	☐	☐	☒	☐

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
u) Impact aquatic, wetland, or riparian habitat?	☐	☐	☒	☐
IX. LAND USE AND PLANNING – Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒
X. MINERAL RESOURCES – Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒
XI. NOISE – Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
XII. POPULATION AND HOUSING – Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XIII. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
i) Fire protection?	☐	☐	☒	☐
ii) Police protection?	☐	☐	☒	☐
iii) Schools?	☐	☐	☐	☒
iv) Parks?	☐	☐	☐	☒
v) Other public facilities?	☐	☐	☐	☒
XIV. RECREATION				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒
XV. TRANSPORTATION/TRAFFIC – Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☐	☒	☐
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☒	☐
f) Result in inadequate parking capacity?	☐	☐	☒	☐
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☒

Environmental Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XVI. UTILITIES AND SERVICE SYSTEMS – Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒
XVII. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	☒
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☐	☐	☒
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

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DISCUSSION OF ENVIRONMENTAL IMPACTS

I. Aesthetics—Would the project:

a. Have a substantial adverse effect on a scenic vista?

Less Than Significant Impact. The City identifies scenic resources located in Monarch Beach, the "Headlands," the Capistrano Beach area, and the following City parks: Pines Park, Palisades Gazebo Park, Louise Leyden Park, Lantern Bay Park, Heritage Park, Blue Lantern Lookout Point, and Salt Creek Beach Park (City of Dana Point 1991).

Various policies have been adopted to preserve these visual assets. Since the proposed project is not visible from any of the scenic resources identified in the Conservation/Open Space Element of the City's General Plan, the project would not affect these scenic resources. The proposed project would result in the expansion of facilities to the Ritz-Carlton Hotel. While many of the proposed expansions are located in areas where the existing structure contains height and mass, the new meeting rooms are proposed in a location containing a small amount of enclosed space only one story high with little mass and above the existing loading dock area. The new meeting rooms would be added onto the northern portion of the hotel's central core on the second level (ground level at the hotel's main entrance). Neither the proposed meeting room expansion nor the other expansions creating the new guestrooms would exceed the existing height of the hotel, which now partially occupies some of the views from the adjacent homes to the southeast. The proposed improvements to the Ritz-Carlton Hotel would not have a substantial adverse effect on a scenic vista since the expansions at the hotel would not exceed the height of the existing structure, and are not visible from any of the Scenic Overlooks identified in the City's General Plan.

b. Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway.

Less Than Significant Impact. State Route 1, a designated state scenic highway, runs in a northwest/southeast direction within one-third of a mile of the project site. Current views of the Pacific Ocean from State Route 1 are mostly obstructed by existing residential development and landscaping, as well as partially by the existing hotel. Proposed additions and improvements to the hotel would not substantially damage scenic resources, trees, rock outcroppings, historic buildings, or a scenic highway as they would not exceed the height of the existing hotel, nor would they be visible from State Route 1. Therefore, impacts would be less than significant.

c. Substantially degrade the existing visual character or quality of the project site and its surroundings?

Less Than Significant Impact. Two key observation points (KOPs) were selected to represent the visual conditions and that will occur as a result of the project (Figure 4A). These KOPs were selected based on the viewshed from which the major area of expansion is likely to be seen. Most views of the project site from surrounding areas are generally blocked, or are obstructed by existing development, terrain, elevations, and vegetation. Site visits to nearby Scenic Overlooks determined that only locations within the Niguel Shores community would have views to the proposed major expansion area on the east side of the hotel. Both KOPs are located in the Niguel Shores community and are represented in the attached simulations.

KOP No. 1 (Figure 4B) is a view looking northwest towards the project site from Magellan Isle. Currently, views from this location are mostly of the roof line of the hotel's center core area, and the southernmost portion of the Dana Wing 2 of the hotel, with some trees and vegetation visible just above the masonry wall along the southeastern property line. Coupled with the fact that the finished grade of the hotel's center core is approximately 16 feet lower than that of KOP No. 1, and the presence of the aforementioned vegetation and masonry wall, a majority of the hotel is obstructed from view. With the addition of the proposed meeting rooms, views from KOP No. 1 would continue to consist of the hotel roof line and surrounding vegetation, with no substantial change in visual character. The proposed casitas would not be visible from the KOP No. 1 on Magellan Isle due to the significant change in grade between the two locations and view obstruction created by the existing masonry walls, vegetation, and residential structures.

KOP No. 2 (Figure 4C) was the second location chosen for the visual simulation because of the potential visibility of the project improvements. Located along Shackleton Isle, just southeast of the intersection with Cabrillo Isle, this view looks northwest toward the hotel. Currently, views from this location reveal the roof line of the center core area of the hotel and various vegetation found on the project site. From this location, a minimal amount of the existing structure is visible. Due to the closer proximity of the proposed meeting room expansion to KOP No. 2, a slight increase in the total amount of viewable hotel area from this location would result, which mostly consists of roofline views. However, as previously stated, the height of the meeting rooms will not exceed the overall height of the hotel structure.

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Ritz-Carlton Laguna Niguel Proposed Expansion Project - IS/ND

Visual Simulations Index Map

FIGURE 4A

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KOP 1: Existing view looking northwest from Magellan Isle

KOP 1: Visual Simulation

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Ritz-Carlton Laguna Niguel Proposed Expansion Project - IS/ND

KOP 1 Visual Simulation

FIGURE 4B

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KOP 2: Existing view looking northwest from Shackleton Isle

KOP 2: Visual Simulation

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Ritz-Carlton Laguna Niguel Proposed Expansion Project - IS/ND

KOP 2 Visual Simulation

FIGURE 4C

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Potential aesthetic impacts may occur on a temporary basis during the construction activities as a result of stockpiling, construction equipment and personnel within the construction zones. These temporary disturbances and staging areas would be restored to their original state once the renovations and additions have been completed.

Although visible from surrounding areas, the change in visual character is not substantially adverse. Therefore, less than significant impacts would occur.

d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less Than Significant Impact. The only additional lighting associated with the proposed project would be the minimal lighting associated with the three casitas, which would be similar to the lighting of the existing hotel rooms and which would not emit enough light to cause a significant impact, and the dusk-to-midnight small beam of light illuminating rocks just off the Dana Point coastline. The ocean lighting would operate with a timing mechanism that would be coordinated with tidal variations, and would not be operated under winter high tide conditions when the rocks are expected to be submerged beneath the water's surface. The dusk-to-midnight lighting would include attaching lighting fixtures to the existing gazebo which would focus a concentrated beam of light aimed specifically at a cluster of rocks just offshore. The ocean lighting plan is included as Appendix A. The lighting system would be located on the upper portion of the most westward facing elevation of the existing gazebo structure and would be directed towards the ocean. Five type OL light fixtures would be attached to the gazebo in a manner and painted with colors that would blend into the ocean side of this structure, producing little to no visual effects. The light generated by this system would be focused on a group of rocks located offshore and would not create glare or illuminate the surrounding residences, beach, or coastline. The ocean lighting would not be operated under tide conditions where the rocks are beneath the water's surface. The ocean lighting system would not generate a substantial amount of light or glare which would adversely affect day or nighttime views. The lighting associated with the additional rooms and meeting space would be minimal. Therefore, effects related to light and glare associated with the proposed project, including both the overall hotel lighting as well as the proposed ocean lighting, would be less than significant.

II. Agricultural Resources—Would the project:

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. According to the State of California Department of Conservation (CDC), Division of Land Protection "Orange County Important Farmland Map," the proposed project site does not contain Prime Farmland, Unique Farmland or Farmland of Statewide Importance (CDC 2008). Therefore, the project would not result in impacts to prime farmland, unique farmland, or farmland of statewide importance.

b. Conflict with existing zoning for agriculture use, or a Williamson Act contract?

No Impact. The proposed project site is not zoned for agricultural use and is not subject to a Williamson Act. Therefore, no conflict with a Williamson Act would occur and no impacts would occur.

c. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?

No Impact. As described in responses II-a and II-b, no portion of the project is located within or adjacent to existing agricultural areas, nor would facilities necessary for project implementation or operation result in the conversion of farmland to non-agricultural use. Therefore, conversion of existing farmland to urban uses would not occur.

III. Air Quality—Would the project:

This section discusses the impacts to air quality and is based partly on information from the *Traffic Impact Analysis for the Ritz Carlton Expansion* (Kimley-Horn 2007) and the associated Addendum Letter (Kimley-Horn 2009). The project proposes expansions within the hotel's current boundaries and involves minimal improvements. The proposed project would not have any significant impact on air quality.

a. Conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact. The project site is located within the South Coast Air Basin, which is governed by the South Coast Air Quality Management District (SCAQMD). It is the responsibility of the SCAQMD to ensure that state and federal ambient air quality standards are achieved and maintained in the Basin. Health-based air

quality standards have been established by California and the federal government for the following criteria air pollutants: ozone (O_3), CO, NO_2, particulate matter with a diameter of 10 microns or less (PM_{10}), sulfur dioxide (SO_2), and lead (Pb).

A plan to meet the federal standard for ozone was developed in 1994 during the process of updating the 1991 state-mandated plan. This local plan was combined with plans from all other California non-attainment areas having serious ozone problems and used to create the California State Implementation Plan (SIP). The SIP was adopted by the Air Resources Board after public hearings on November 9–10, 1994, and was forwarded to the Environmental Protection Agency (EPA) for approval. After considerable analysis and debate, particularly regarding airsheds with the worst smog problems, EPA approved the SIP in mid-1996.

The proposed project relates to the SIP and/or RAQS through the land use and growth assumptions that are incorporated into the air quality planning document. These growth assumptions are based on each City's and the Orange County General Plan. If a proposed project is consistent with its applicable General Plan, then the project is assumed to have been anticipated in the regional air quality planning process. Such consistency would ensure that the project would not exceed regional projections relative to air quality impacts.

Because the project is consistent with the City's general plan, it does not conflict with the applicable air quality plan for the region. Therefore, impacts would be less than significant.

b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less Than Significant Impact. Air quality impacts are usually considered in terms of short-term and long-term impacts. Short-term impacts are usually the result of construction or grading operations. Long-term impacts are associated with the build-out (operational) condition of the proposed project. The SCAQMD CEQA Air Quality Handbook (1993) states that any projects in the SCAB with daily emissions that exceed any of the thresholds should be considered as having an individually and cumulatively significant air quality impact. The project's daily emissions do not exceed any of the thresholds of the SCAQMD CEQA Air Quality Handbook.

The project would introduce minimal additional traffic to the immediate area, and impacts are not expected to be adverse. As described in the traffic study as supplemented

by the February 9, 2009 Addendum Letter, the project would generate only an additional 221 daily trips (Kimley-Horn 2009). Traffic on local streets averages approximately 20,000–30,000 trips per day (Kimley-Horn 2007). Traffic generated by the proposed project would be negligible and would not trigger any of the significance thresholds established for criteria pollutants.

The proposed project includes 30,396 square feet of additional floor area and does not include any major earthwork, only minor site preparation. Therefore, impacts to air quality from construction emissions and operation of the project would be less than significant.

Greenhouse gas (GHG) emissions would be associated with both the construction and operational phase of the proposed project through the use of construction equipment and the generation of additional vehicle trips, respectively. Current State of California guidance and goals for reductions in GHG emissions are generally embodied in Assembly Bill No. 32 (AB-32), which establishes a goal of reaching 1990 levels by 2020 and describes a process for achieving that goal.

The proposed project would not represent a substantial contribution to cumulative GHG emissions for State-wide GHG emission reduction strategies. Construction emissions of greenhouse gases would be short-term, and operational emissions would be minimal. As a result, the project would not result in any impediments towards achieving the emission reduction targets that are currently established. Therefore, impacts would be less than significant.

c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard?

Less Than Significant Impact. The South Coast Air Basin is currently in a non-attainment status for ozone and suspended fine particulates. The proposed project would result in only minimal increases in traffic volumes in the area—221 additional trips a day—thus producing a negligible increase in net emissions associated with the project. The project does not involve changes in diesel truck or bus routes, or changes in the natural environment. The construction of hotel amenities would therefore not result in individual project-related impacts, a cumulatively considerable net increase in emissions, or contribute to a new violation or increase the frequency or severity of existing air quality violation standards.

d. Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. Pollutant concentrations are not substantial because of the limited construction activity. In addition, the duration of exposure is limited due to the short term nature of the construction activities. Dust control measures would be employed to reduce construction effects on surrounding populations. Emissions would occur only during the construction phase and are limited to on-site equipment. Since impacts exposing sensitive receptors to a substantial pollution concentration are limited in scope and temporary in nature, impacts would be less than significant. Post-construction traffic generated by the proposed project would not result in any traffic delays creating increased vehicle idling times resulting in pollutant concentration. Therefore, impacts both during and after construction would not result in substantial pollutant concentrations.

e. Create objectionable odors affecting a substantial number of people?

Less Than Significant Impact. The proposed project would generate a limited amount of diesel exhaust from the operation of construction equipment. Operation of construction equipment would be limited due to the limited amount of grading proposed. Such exposures would be short-term and/or transient since they would occur during the construction phase only, and would not reach levels of significance. Therefore, the proposed project would create a less than significant amount of objectionable odors that could affect a substantial number of people.

IV. Biological Resources—Would the project:

This section discusses the impacts to biological resources and is based on the *Biological Resources Letter Report for the Ritz-Carlton Laguna Niguel Proposed Expansion Project* (Dudek 2009), which is included as Appendix B. The proposed project is not expected to have significant impacts on biological resources.

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service ?

Less Than Significant Impact.

Hotel Improvement Impacts. Implementation of the proposed hotel improvements is anticipated to have no effect on natural biological resources. All impacts would occur on

previously developed land and no impacts would occur in native habitats. All of the hotel improvements are planned within the existing hotel development; therefore, they would not impact existing biological resources. A large majority of the on-site vegetation is comprised of professionally maintained ornamental landscape, including various native and non-native trees, shrubs, and turf. A total of 63 species of vascular plants were found on the project site, 17 of which were native and 46 of which were non-native. No special status plant species were found or are expected to be on site. Along the ocean-front cliff and between the hotel and beach, coastal bluff scrub is present. This bluff vegetation is subject to windy coastal conditions and is located in rocky soil with little water holding capacity. Hotel improvements would not affect the area containing coastal bluff scrub, and improvements would be limited to non-sensitive areas. 17 species of wildlife were found on the project site, none of which were special status species. Moreover, the project site is not located in an area identified as biologically sensitive (City of Dana Point 1991) This lack of diversity reflects the general developed aspect of the project site, and as such no impacts on sensitive species would result from the hotel improvements.

Ocean Lighting Impacts. The area of proposed illumination is anticipated to be minimal in size and would emit no more than 1.5 footcandles. In addition, the proposed light source would be only one of many sources of lighting in the general background of the immediate area, and therefore would occur within the matrix of other light sources and light fixtures. As a result, the light fixtures themselves would not stand out among other light sources in the area. Additionally, because the zone of illumination from the planned lighting is minimal in both size and intensity, it is not anticipated to have a significant impact on biological resources.

There is no potential for significant impacts to bats, sea turtles, insects, and amphibians because the area to be lit does not support sea turtles or amphibians, and is not a habitat area for bats or insects. Similarly, no impacts to snowy plover are expected because snowy plover nest in dry sand, and the proposed lighting would not impact the sand.

Grunions, which spawn on the beach from March through August, would not be affected because their spawning area—the beach—would not be illuminated as part of the proposed project. Furthermore, Grunion spawn 2–4 days after the full moon, therefore the beach is usually at one of its brightest points during Grunion spawning. Also, grunion eggs are normally covered by sand. Initially, the eggs are covered by 2–3 inches of sand, but subsequent to the outgoing tide, the eggs are typically covered by 8–16 inches of sand, ensuring that they would not be subject to any harmful light sources. It is wave action and agitation, not light exposure, which are the most important factors in the

hatching of the eggs. Moreover, lighting has been shown to actually have a positive effect on larval young grunion (Dudek 2009).

The ocean lighting plan would not disrupt biological rhythms or interfere with the behavior of nocturnal animals. The proposed light source would be integrated into the general background of the area, which already includes a myriad of light sources and is currently lit by both surrounding development and existing beach facilities. As a result, the change in overall illumination would be very small and unnoticeable.

Similarly, the lighting plan is not expected to have significant impacts on migrating fish. First, the area that would be illuminated is not a primary migration area for fish. Second, the effected area is small, and the amount of light is no more than 1.5 footcandles. Third, the light is aimed at the rocks, and very little light would spillover onto the immediate surrounding water. The small amount of light that may potentially hit the water would be further attenuated by particulate matter and wave agitation in the water, therefore it is unlikely that the light would impact fish. The ocean lighting would operate with a timing mechanism that would be coordinated with tidal variations, and would not be operated under winter high tide conditions when the rocks are expected to be submerged beneath the water's surface.

There would not be any significant impacts to migrating birds. There is only an extremely small area that would be lit, and that area that would be lit is not a primary migration area for birds. Moreover, the proposed lighting would be within a matrix of existing light sources as viewed by migrating birds. These lights would not occur above existing lights or lower than existing lights on the face of the bluff.

The proposed project would not have a significant impact on aquatic invertebrates. Nearly all of the studies that have found an impact have focused on freshwater organisms in low oxygen content lakes with relatively clear water, not marine organisms with cloudy and agitated conditions. Light penetration would be greater in clear lakes with low concentrations of dissolved oxygen content and algae: in contrast, the extremely small area of ocean water that could potentially have indirect light spillover from the proposed project's light source would be in the ocean, with highly dissolved oxygen content and cloudy waters. As a result, any light on the ocean water from the proposed project would be dispersed as it enters the water, attenuating its effect. Absorption or attenuation of the minimal light would occur as soon as light enters the water column. Moreover, the water column is in constant flux, due to wave action. This flux increases the amount of particulate matter in the water column and thus increases the light attenuation.

Reduced oxygen is not a threat in the area to be lit. Even if there were an increase in phytoplankton due to lack of zooplankton foraging in this area, it would not result in reduced oxygen. The zone of illumination is small and would be compensated for by wave action redistributing phytoplankton concentrations and by oxygenating the water by wave agitation.

As a result of the foregoing analysis, impacts on sensitive species resulting from ocean lighting are anticipated to be less than significant.

b. Have a substantial adverse effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

No Impact. No riparian habitat exists on the project site, and ornamental landscaping occupies most of the vegetation on the property except for the coastal bluff. Coastal Bluff Scrub is present on the property and exists along the oceanfront cliff-face of the bluff between the hotel and beach, but would not be impacted by the proposed improvements. Therefore, impacts would not occur.

c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. There are no sensitive wetland communities on the project site. Therefore, no impacts would occur.

d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less Than Significant Impact. On-site ornamental vegetation includes various native and non-native tree, shrubs, and turf which usually occur in parks, greenbelts, and other landscaping. This cover-type has the potential to provide nesting and roost sites for raptors, and possible movement corridors for mammalian or bird migration (Dudek 2009). A total of 17 species of wildlife were recorded on the project site: 14 birds, 1 mammal, and 2 reptiles. The low animal diversity reflects the developed nature of the site. No raptors or nesting birds were observed on site or within 100 feet of the proposed hotel improvement work areas. No special status animals were found during the on-site survey, therefore implementation of the proposed hotel improvements are not anticipated

to cause impacts to special status wildlife. Therefore, impacts would be less than significant.

e. Conflict with any local policies or ordinance protecting biological resources, such as a tree preservation policy or ordinance?

No Impact. The Conservation Element of the Dana Point General Plan includes objectives and policies concerned with protecting the biological resources of the City (City of Dana Point 1991). Since the proposed improvements would be constructed on already developed land, the project would not conflict with any of the policies under Goal 3 (Conserve natural plant and animal communities) and no impacts would occur. No other local polices or ordinances protecting biological resources are applicable to the proposed project.

f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional or state habitat conservation plan?

No Impact. The proposed project does not impede upon a habitat conservation plan, natural community conservation plan, or any other locally approved regional or state habitat conservation plans. Furthermore, there are no habitat conservation plans (HCPs), natural community conservation plans (NCCPs), or other approved conservation plans applicable to the project site, therefore, no impacts would occur.

V. Cultural Resources—Would the project:

This section discusses the impacts to cultural resources and is based on the City's General Plan Conservation Element. The project proposes expansions within the hotel's current site boundaries and consists of minimal construction and scope of work. Overall, the proposed project is not expected to have any significant impacts on cultural resources due to the existing developed nature of the site.

a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

No Impact. According to the Dana Point General Plan Conservation Element, four areas of historic relevance are recorded within the City (City of Dana Point 1991). None of the identified sites are located on or in the vicinity of the proposed project site. Because the project site is devoid of historical resources (all structures are less than 25 years old), no impacts are anticipated.

b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

No Impact. The Orange County area has been a prime focus for human occupation since Native American hunter-gatherers first arrived in the region. According to the Dana Point General Plan, there are seven cultural sites known to occur within the Dana Point City Limits (City of Dana Point 1991). Most of the sites are located in and around the center of the City, and none are identified within the project site. In addition, the project site has previously been disturbed by grading and soil compaction activities. The proposed improvements would not involve substantial excavation activities, and the minor site grading required would be primarily within areas of fill placed during the original construction of the hotel. Therefore, the project is not expected to cause a substantial adverse change to the significance of an archaeological resource pursuant to Section 15064.5 of CEQA. No impacts are anticipated.

c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

No Impact. No impacts to paleontological resources would result due to the fact that no deep excavations into native geologic features would result. Therefore, no impacts to unique paleontological resources, sites, or unique geologic features would occur.

d. Disturb any human remains, including those interred outside of formal cemeteries?

No Impact. See response V-b.

VI. Geology and Soils—Would the project:

This section discusses the impacts to geology and soils and is based on findings within the *Preliminary Geotechnical Investigation for the Proposed Hotel Expansion of the Ritz-Carlton Laguna Niguel* (Ninyo and Moore 2007), which is included as Appendix C. The project proposes expansions within the hotel's current site boundaries and consists of minimal construction and scope of work. The proposed project is not expected to have significant impacts related to geology and soils.

a. Expose people or structures to potential substantial adverse effects, including risk of loss, injury or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or

based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Less Than Significant Impact. Due to its location within seismically active Southern California, the proposed project site could be affected by local fault zones. Alquist-Priolo earthquake fault zones (A-P zones) have been established for the majority of these faults and fault zones. The Newport-Inglewood Fault, located approximately 2 miles southwest of the project site, is the closest known potentially active fault. The project site is not located within any Earthquake Fault Zone delineated by the State of California for the hazard of fault surface rupture. The surface traces of any active or potentially active faults are not known to pass directly through, or toward the project site. Therefore, the potential for surface rupture due to faulting occurring beneath the site during the design life of the proposed structure are not anticipated, and impacts would be less than significant.

ii. Strong seismic ground shaking?

Less Than Significant Impact. The site is located in a seismically active area, as is the majority of Southern California. The most significant seismic hazard at the site is considered to be shaking caused by an earthquake occurring on a nearby or distant active fault. The Newport-Inglewood Fault is the closest known potentially active fault. Based on the Geotechnical Investigation (Ninyo and Moore 2007), the potential for deep-seated rotational or block-glide landslides due to earthquake ground shaking is considered low. The proposed project's construction is considered feasible from a geotechnical standpoint, provided that recommendations in the report are incorporated into the design plans and implemented during construction. These recommendations include guidelines regarding: compaction, material for fill, and soils corrosion. In addition, plans and specifications would be reviewed by a qualified geotechnical engineer prior to construction to ensure that appropriate design measures are employed to address the potential for ground shaking. Therefore, it is not anticipated that the project would expose people or structures to potential substantial adverse effects related to ground shaking.

iii. Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Liquefaction of soils can be caused by ground shaking during earthquakes. Research and historical data indicate that loose, relatively clean, granular soils are susceptible to liquefaction, whereas the stability of the majority of clayey silts, silty clays and clays is not adversely affected by ground

shaking. Liquefaction is generally known to occur in saturated cohesion-less soils at depths shallower than approximately 50 feet. According to Seismic Hazards Zones Maps published by the State of California, the site is not mapped within an area considered susceptible to liquefaction (Ninyo and Moore 2007). Based on the site groundwater and geologic conditions, the potential for liquefaction is considered low. It is not anticipated that the project would expose people or structures to potential substantial adverse effects.

iv. Landslides?

Less Than Significant Impact. The Ritz-Carlton Hotel currently occupies the project site and is not identified as being located within an area susceptible to landslide hazards in the Safety Element of the City's General Plan (City of Dana Point 1991). Landslide hazard areas are generally considered to exist when substantial slopes are located on or immediately adjacent to a subject property. The existing property is approximately 150 feet above mean sea level (AMSL).

Due to the steep condition of the natural bluffs at the site, there is a potential for bluff area landslides. Previous studies indicate that the orientation of bedding of the rock formations consists of an overall east-west trending strike and a northerly dip in the range of 30 to 70 degrees (Ninyo and Moore 2007). This bedding orientation is considered neutral with respect to the orientation of the bluff faces and reduces the probability of a landslide occurring along bedding planes. The modified bluffs at the site have been graded to flatter inclinations and are landscaped and have a low potential for landsliding.

There is a potential for the project site to be affected by earthquake-induced landslides. Potential earthquake-induced landslides that may be anticipated to affect the natural bluffs on the site would include shallow rockfalls and debris slides. Based on the geologic structure, the potential for deepseated, rotational or block-glide landslides due to earthquake ground shaking is considered low. Project design includes an approximate 2:1 slope gradient, vegetation on the slopes, and drainage devices. Based on the fact that impacts to the natural bluff are avoided, and measures have been included in the project design to avoid bluff failure, a less than significant impact due to bluff area landslides is expected to occur.

b. Result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. Short-term erosion effects during the construction phase of the project would be avoided through implementation of proper Best Management Practices (BMPs) included as part of the Water Quality Management Plan (WQMP) required for the project and prior to permit issuance. The project site consists of numerous existing structures on graded pads with no substantial areas of exposed soil. Project construction involves only minor site preparation with no substantial grading or exposure of soils. The contractor would be required to comply with standard engineering practices for erosion control, and a qualified soils engineer would monitor soil compaction during construction. Standard measures include overexcavation, recompaction, deep foundations, and special foundation design. Therefore, impacts would be less than significant.

c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less Than Significant Impact. The project's geotechnical evaluation (Ninyo and Moore 2007) includes recommendations addressing temporary construction dewatering, compaction, material for fill, retaining walls, street pavement, and soil erosion. Incorporation of these recommendations as features of the project would ensure potential geologic and soil related impacts would be less than significant. The potential for liquefaction and anticipated impacts are discussed in response VI-a (iii).

d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Less Than Significant Impact. The hotel site is located at the southeastern end of the San Joaquin Hills, an area underlain by sedimentary rock units of the Monterey and Capistrano formations. Background materials reviewed indicate that much of the near-surface, terrace deposit soils on site consists of coarse, sandy materials which are considered to have a low potential for expansion. In addition, the project site is underlain by sandstone, siltstone, shale, and mostly well consolidated conglomerate (Ninyo and Moore 2007). According to the City of Dana Point Geotechnical/Seismic Hazards Map, soils on site have a low expansion potential. Impacts would be less than significant.

e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No Impact. The Ritz-Carlton Hotel is currently being serviced by the municipal sewer system provided and maintained by the South Coast Water District and would not require the use of septic tanks or alternative wastewater disposal. Therefore, no impacts are expected.

VII. Hazards and Hazardous Materials—Would the project:

a. Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?

Less Than Significant Impact. The proposed project would not involve the use of explosives or acutely hazardous materials. The proposed project would not involve the routine transport, use, or disposal of hazardous materials. On-site use and storage of hazardous materials would be limited to small amounts of common chemicals used for landscaping and maintenance. During the construction period, standard BMPs, as required by the City Engineer as standards for permit issuance, would be applied to ensure that all hazardous materials (i.e., construction equipment fuel) are stored properly and that no hazards occur during this phase of the project. Therefore, impacts would be less than significant.

b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less Than Significant Impact. No hazardous materials aside from small amounts of everyday household cleaners and common chemicals used for landscaping and maintenance are anticipated to be located on-site. Through the implementation of BMPs, as required by the City Engineer as standards for permit issuance, adverse impacts would not occur in the event of accidental conditions. Therefore, impacts would be less than significant.

c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within 0.25 mile of an existing or proposed school?

Less Than Significant Impact. The proposed project site is not located within 0.25 mile of an existing or proposed school. No hazardous materials aside from small amounts of

common chemicals used for cleaning, landscaping and maintenance are anticipated to be located on-site. Impacts would be less than significant.

d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. The project site is not included on a list of hazardous material sites, and therefore would not result in a significant hazard to the public or to the environment.

e. For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

No Impact. The proposed project is not located within an airport land use plan or within 2 miles of a public airport or public use airport, and therefore would not result in a safety hazard for people residing or working in the project area.

f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

No Impact. The project is not located within the vicinity of a private airstrip and would not result in a safety hazard for people residing or working in the project area.

g. Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?

No Impact. The development of additional structures is not anticipated to result in any construction-related road closures that would impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. No impacts would result.

h. Expose people or structures to a significant risk of loss, injury or death involving wildlands fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Less Than Significant Impact. The project site is located adjacent to Salt Creek Beach Park, a Orange County-maintained coastal park comprised of developed recreational and landscaped areas. Construction at the project site would comply with City codes, and the

risk of wild fire from this area would be low. Therefore, impacts would be less than significant.

VIII. Hydrology and Water Quality—Would the project:

This section discusses the impacts to hydrology and water quality. The project proposes expansions within the hotel's current boundaries and consists of minimal construction and scope of work. The proposed project is not expected to have significant impacts related to hydrology and water quality.

a. Violate any water quality standards or waste discharge requirements?

Less Than Significant Impact. Construction at the project site is not expected to violate any water quality standards or waste discharge requirements. Construction activities associated with the proposed project could result in wind and water erosion leading to sediment-laden discharges to nearby water resources. Sediment transport to the Pacific Ocean to the west of the project area could result in degradation of water quality. The project would require a WQMP which must include BMPs to address potential water quality and drainage impacts both during and following construction. The City currently maintains a Municipal Storm Water Discharge Permit from the Regional Water Quality Control Board. Conditions of that permit include design requirements and BMPs on new development to avoid or reduce water quality impacts resulting from urban runoff. Design measures and/or BMPs would be required as standards for permit issuance. Therefore, effects on water quality and waste discharge would be less than significant.

b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the projection rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted?

Less Than Significant Impact. Construction of the proposed project would slightly increase the amount of impervious surfaces due to the construction of new structures on land previously undeveloped. Existing landscape coverage on site totals 48%, with proposed improvements covering only 2% of the site. Given this small increase in impervious surface, impacts to local groundwater recharge would be less than significant.

c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a steam or river, in a manner which would result in substantial erosion or siltation on or off site?

Less Than Significant Impact. The proposed project would introduce impervious surfaces consisting of three casitas and infill additions in areas that are now permeable ground. Impervious surfaces, such as those mentioned above, intercept rainfall and convey flow that would otherwise naturally infiltrate into the soil. The existing drainage pattern would not change but the runoff amounts would increase slightly.

Increases in peak runoff rates and volumes resulting from changes in impervious surfaces and drainage patterns would not be substantial. Any erosion and siltation resulting from altered drainage on site would be controlled via post-construction BMPs, as stipulated in the WQMP required for the project prior to the issuance of any permit. Therefore, impacts would be less than significant.

d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site?

Less Than Significant Impact. Improvements would not substantially alter runoff patterns, volumes or velocity. Changes to impervious surfaces are minimal and any potential flooding hazard would be minimized by proper drainage design; therefore, impacts would be less than significant.

e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Less Than Significant Impact. The project is not expected to generate a substantial amount of runoff and would not exceed the capacity of existing or planned stormwater drainage systems or result in substantial additional sources of polluted runoff. Therefore, impacts would be less than significant.

f. Otherwise substantially degrade water quality?

Less Than Significant Impact. See VIII-a. Impacts would be less than significant.

g. Place housing within a 100-year flood hazard area as mapped on a federal flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

No Impact. According to the City's Open Space for Public Health and Safety Map, the proposed project area is not located in any flood zone area; therefore, it is not considered a flood hazard. Per FEMA floodplain mapping, the project site is located in zone X, which is designated as "areas determined to be outside of the 0.2% annual chance floodplain." Therefore, there would be no impact.

h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

No Impact. According to the City's Flood Hazard Area Map contained in the General Plan's Public Safety Element, the proposed project site is not located within the 100-year flood zone; therefore, no impacts are anticipated to occur.

i. Expose people or structures to a significant risk or loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

No Impact. The project site is located on top of a coastal bluff and is not directly downstream or in the path of any levees, dams, rivers or lakes that could potentially cause damaging floods. Therefore, no people or structures would be at significant risk of flooding, and no impacts would occur.

j. Result in inundation by seiche, tsunami or mudflow?

Less Than Significant Impact. Due to the elevation of the project site (approximately 150 feet AMSL) and its location on top of the coastal bluff, impacts due to inundation by seiche, tsunami, or mudflow would be considered less than significant.

k. Result in an increase in pollutant discharges to receiving waters? Consider water quality parameters such as temperature, dissolved oxygen, turbidity and other typical stormwater pollutants (e.g., heavy metals, pathogens, petroleum derivatives, synthetic organics, sediment, nutrients, oxygen-demanding substances, and trash)

Less than Significant Impact. See response to VIII-a. Current use of the proposed project site is guest accommodations. No change to this status would occur with the proposed expansion. Pollutants such as heavy metals, pathogens, petroleum, and

derivatives are not associated with or used on site. Therefore, impacts due to pollutant discharge into receiving waters would be less than significant.

l. Result in significant alteration of receiving water quality during or following construction?

Less Than Significant Impact. See response to VIII-a. Implementation of project improvements would be conducted in accordance with both construction and post-construction BMPs contained in the required WQMP and using appropriate erosion control techniques. Consequently, there would be no significant alteration of receiving water quality during or following construction, and impacts would be less than significant.

m. Result in increased erosion downstream?

Less Than Significant Impact. See response to VIII-a. Project construction would include necessary Best Management Practices and erosion control measures, thus limiting the amount of runoff from the site. Since proper BMPs would be implemented, as required by the approved WQMP for the project and as standards for permit issuance, an increase in erosion downstream would not take place. Therefore, impacts would be less than significant.

n. Result in increased impervious surfaces and associated increased runoff?

Less Than Significant Impact. See response to VIII-b. Improvements extending beyond the existing hotel footprint would increase the footprint by approximately 2%. An increase to impervious areas would occur, but the 2% increase is minimal and would not produce a significant increase in runoff from the project site. Therefore, impacts to associated runoff would be less than significant.

o. Create a significant adverse environmental impact to drainage patterns due to changes in runoff flow rates or volumes?

Less Than Significant Impact. Proposed improvements to the current hotel would not affect runoff flow rates or volumes due to the minimal scope of proposed enhancements. Drainage patterns would not be affected due to the existing storm drain system already in use on-site. Therefore, impacts to drainage patterns and runoff rates would be less than significant.

p. Tributary to an already impaired water body, as listed on the Clean Water Act Section 303(d) list? If so, can it result in an increase in any pollutant for which the water body is already impaired?

Less Than Significant Impact. Per the Clean Water Act Section 303(d), runoff from the project site does not flow to an impaired body of water. Therefore, no resulting increase would occur to an already impaired body of water.

q. Tributary to other environmentally sensitive areas? If so, can it exacerbate already existing sensitive conditions?

Less Than Significant Impact. Given that runoff from the project site does not flow into a tributary or any other environmentally sensitive areas, there is little chance that already existing conditions would be exacerbated. Therefore, less than significant impacts are anticipated.

r. Have a potentially significant environmental impact on surface water quality to either marine, fresh, or wetland waters?

Less Than Significant Impact. Proposed expansions to the hotel would be subject to water quality control measures contained in the WQMP required prior to the issuance of any permit for the project, and implemented prior to the commencement of any grading or construction activities. Therefore, the project would not result in significant impacts to marine, fresh, or wetland waters.

s. Have a potentially significant adverse impact on groundwater quality?

Less Than Significant Impact. Although the project would slightly reduce groundwater quantities, the proposed project would not result in changes in the quality of groundwater. Therefore, no significant adverse effects would result.

t. Cause or contribute to an exceedance of applicable surface or groundwater receiving water quality objectives or degradation of beneficial uses?

Less Than Significant Impact. See response to VIII-a. Proposed additions to the existing hotel structure are not expected to cause or contribute to groundwater degradation and would not affect beneficial uses.

u. Impact aquatic, wetland, or riparian habitat?

Less Than Significant Impact. See response to VIII-r.

IX. Land Use and Planning—Would the project:

a. Physically divide an established community?

No Impact. The project would not involve the extension of a roadway or a proposed use that could potentially divide a community, nor would any housing be removed as part of the proposed improvements. The proposed project would consist of renovating and expanding the existing structure. Therefore, no impacts would occur.

b. Conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Less Than Significant Impact. The proposed project is consistent with the General Plan Land Use Element's designation for the project site, which is zoned as Visitor/Recreation Commercial or V/RC. In addition, according to the Open Space for Preservation of Natural Resources map, the project site is located in an area that is "unaffected" (City of Dana Point 1991), meaning no biologically, culturally, archaeologically sensitive areas exist on site. The proposed project is in conformance with the policies outlined in the City of Dana Point Zoning Code, which also serves as the City's local coastal program since it was ratified by the California Coastal Commission in November 1997. The proposed project is thus consistent with the policies established by the California Coastal Act. These policies focus on the protection of coastal resources and the regulation of development in the coastal zone, and they encourage well-planned and orderly development which is compatible with resource protection and conservation.

Although the current height of the hotel is in accordance with the original Orange County approval and the California Coastal Commission's original conceptual approval, and the existing structure and the proposed improvements would not exceed the existing hotel's height, the current hotel and some areas of expansion exceed the City's current height regulations. Even though the design of the improvements observes the maximum height of the current hotel, the proposal nonetheless requires a variance from current City height regulations by which the proposed project must be assessed.

The City's current height standards were adopted in 1997, rendering the height of the hotel structure nonconforming. The Ritz-Carlton Hotel was originally approved in 1982 under the jurisdiction of Orange County. Subsequent to Orange County's approval and in accordance with their original conceptual approval of a hotel for the site, the California

Coastal Commission issued a specific coastal development permit allowing the height of the current hotel. This current height is in accordance with the height limitations imposed on the site by the original conceptual approval of the California Coastal Commission, which anticipated a hotel on the site. Although the proposed additions to the Ritz-Carlton Hotel require a variance from the City's current height restrictions, the height of the additions associated with the project would not exceed the height of the existing structure in accordance with the previous California Coastal Commission approvals for the structure. Since the proposed height variance request complies with the original approval for the structure and does not appreciably change the visual character of the surrounding area, the impacts would be less than significant.

The proposed project also requires an amendment to the minor conditional use permit associated with the shared parking program approved for the Ritz-Carlton Hotel in 1999. Further discussion of the shared parking program is contained in Section XV-f.

No other policies or requirements relating to avoidance or mitigation of an environmental effect would apply to the project; consequently, impacts would be less than significant.

c. Conflict with any applicable habitat conservation plan or natural community conservation plan?

No Impact. The proposed project site is not within an area covered by an HCP or NCCP; therefore, no impacts would occur.

X. Mineral Resources—Would the project:

a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact. According to the Generalized Mineral Land Classification Map of Western Orange County, the project site is not located in an area designated as containing significant mineral resources (MRZ-2). Additionally, according to the Conservation Element of the General Plan, the site is located outside of areas designated as MRZ-2 (City of Dana Point 1991). Therefore, the project would have no impact on a known mineral resource.

b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact. See response X-a.

XI. Noise—Would the project result in:

This section discusses the impacts to noise and draws upon the findings within the *Traffic Impact Analysis for the Ritz Carlton Expansion* (Kimley-Horn 2007) and the associated Addendum Letter (Kimley-Horn 2009). The project proposes expansions within the hotel's current boundaries with a minimal scope of work and is not expected to have significant impacts on noise.

a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant Impact. According to Figure N-2 of the City's General Plan Noise element, the project site lies adjacent to the 60 Community Noise Equivalent Level (CNEL) noise contour (City of Dana Point 1991). Noise associated with the proposed project would include short-term construction noise. Noise generated by construction, including trucks and other equipment, would temporarily impact nearby sensitive receptors. Construction noise would be kept to a minimum to avoid disturbing hotel guests and sensitive receptors. All grading would occur during the hours of 7:00 a.m. to 5:00 p.m. Monday through Friday in accordance with the City's Municipal Code. All other construction activities would occur during the hours of 7:00 a.m. to 8:00 p.m. Monday through Saturday. Construction is prohibited on Sundays and federal holidays. Construction equipment may include dozers, scrapers, front-end loaders, dump trucks, blades, rollers, and similar equipment. Delivery trucks would also be used.

Traffic generated by the proposed improvements would be minimal and consist of 221 daily trips. Niguel Road and Pacific Coast Highway are four lane roads located adjacent to the project site. Each carries approximately 18,000 and 34,000 average daily trips, respectively. The addition of 221 trips, (15 trips during the morning peak hour and 16 trips during the evening peak hour) would not result in increases in noise that would be perceptible above ambient noise levels. Therefore, the project would not generate direct noise impacts or contribute substantially to cumulatively considerable noise impacts in the project area, and project generated noise would not exceed the standards established by the City's General Plan. Therefore, impacts would be less than significant.

b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact. Heavy equipment used during the grading and construction activities may generate minimal ground vibration. However, the proposed

project would not result in exposure of people to excessive groundborne vibration or groundborne noise levels. Groundborne vibration is associated with pile driving, demolition and blasting, none of which are necessary or anticipated as part of this project. Therefore, impacts would be less than significant.

c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Less Than Significant Impact. Traffic associated with the proposed project improvements would add approximately 221 daily trips (15 trips during the morning peak hour and 16 trips during the evening peak hour) to local traffic volumes. Niguel Road and Pacific Coast Highway are located adjacent to the project site, with traffic counts of approximately 18,000 and 34,000 average daily trips respectively. The addition of 221 trips each day to the adjacent roadways would not create noise sufficient to result in a potentially significant impact. The project proposes no change in uses associated with the existing hotel. The proposed improvements would simply expand the area of some of the existing uses at the hotel; specifically guest rooms and conference/banquet facilities. This expansion, however, would not significantly increase ambient noise levels in the project vicinity as the expansions create indoor space and exterior noise levels would not generate any potentially significant impact. Therefore, impacts would be less than significant.

d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Less Than Significant Impact. Construction activities near the existing residential areas to the south and east of the site would generate some temporary daytime noise. However, noise sources associated with construction, repair, remodeling, or grading of any real property are exempted from the City's noise ordinance, provided said activities do not take place between the hours of 8:00 p.m. and 7:00 a.m. on weekdays, including Saturday, or at any time on Sunday or a Federal holiday. Construction impacts would be temporary and are not expected to be sustained for long periods of time. Consequently, project construction would not result in a substantial temporary or periodic increase in ambient noise levels. Impacts would be less than significant.

e. For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The proposed project site is not located within an airport land use plan or within 2 miles of a public airport or public use airport.

f. For a project located within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The proposed project is not located within the vicinity of a private airstrip and would not expose people residing or working in the project area to excessive noise levels.

XII. Population and Housing—Would the project:

a. Induce substantial population growth in an area, either directly (e.g., by proposing new homes and business) or indirectly (e.g., through extension of roads or other infrastructure)?

No Impact. The proposed project includes the construction of guest rooms/casitas and expansion of conference/banquet facilities, and would use existing roads and infrastructure. In addition, the minimal improvements would not result in a substantial increase in additional employees, which could indirectly affect population growth. Therefore, no impacts to population and housing would occur.

b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

No Impact. The proposed project consists of additions to an existing structure and three small, detached casitas, at a full service hotel/resort and would not displace existing housing. Therefore, there would be no impact.

c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No Impact. The proposed project would not displace existing housing or cause residents to be displaced. Therefore, there would be no impact.

XIII. Public Services

a. Result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:

i. Fire protection?

Less Than Significant Impact. The Orange County Fire Authority provides fire protection and safety services for the City. The nearest fire station is OCFA Fire Station #30 located at 23831 Stonehill Drive. The design of the proposed project must comply with Fire Department requirements and standards to ensure access is provided. The project would not result in an increase in call volume or an increase in response to the area. The proposed project would not involve the closure of any surface streets that would increase the response time for Fire Protection services. Therefore, impacts to response times would be less than significant.

ii. Police protection?

Less Than Significant Impact. Police protection services for the City are provided by the Orange County Sheriff's Department. The Sheriff's Department operates out of Dana Point's City Hall, located at 33282 Golden Lantern, Dana Point, California 92629. The project would not result in an increase in call volume or an increase in response time to the area. Less than significant impacts related to police protection or services would be anticipated with implementation of the proposed project.

iii. Schools?

No Impact. See also XII. The proposed project consists of expansion of hotel uses and does not propose permanent housing; thus, it would not increase the local population. Therefore, there would be no additional demand placed on nearby schools.

iv. Parks?

No Impact. See also XII. The proposed project would not generate an increase in population, and therefore would not increase demand for parkland.

v. Other public facilities?

No Impact. The proposed project consists of the addition of guestrooms and conference/banquet facilities at an existing hotel intended for visitor use. The increase in square footage of this visitor serving use would not result in substantial increases in demand for public facilities and therefore would not impact other public services.

XIV. Recreation—Would the project:

a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Less Than Significant Impact. The proposed project would not affect the use of existing neighborhood and regional parks or recreational facilities. The proposed project would not generate population growth that would result in increased use of existing recreational facilities, require the construction of supplemental recreational facilities, or preclude the implementation of planned facilities. Therefore, impacts would be less than significant.

b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact. See response XIV-a.

XV. Transportation/Traffic—Would the project:

This section discusses the impacts on local traffic and draws upon the findings within the *Traffic Impact Analysis for the Ritz Carlton Expansion* (Kimley-Horn 2007) and the associated Addendum Letter (Kimley-Horn 2009), as well as a revised parking analysis (Kimley-Horn 2008). These documents are all included as Appendix D. The project proposes expansions within the hotel's current boundaries with a minimal scope of work and is not expected to have significant impacts on traffic circulation.

a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads or congestion at intersections?

Less Than Significant Impact. The addition of project traffic would not cause a change in level of service (LOS) from acceptable to unacceptable nor would project traffic cause an increase in the volume to capacity ratio (V/C) of 0.010 or more, both of which are impact criteria for the City. Project traffic would cause an increase in V/C of 0.002, thus, the project traffic would not result in a significant impact on daily roadway operation. The studied roadway segments would operate at LOS C or better on a 24-hour basis under cumulative plus project traffic conditions, with the exception of roadway segment of PCH south of Niguel Road, which would continue to operate at LOS F. Cumulative projects identified in the traffic impact analysis together would generate about 56,858 daily trips, with 4,524 of these trips during morning peak hours and 5,609 trips during the evening peak hours.

The proposed project would add approximately 30,396 square feet of area to the hotel, which would include 27 guest rooms, and conference/banquet facilities. The Traffic Impact Analysis (Kimley-Horn 2007) as supplemented by Kimley-Horn's February 9, 2009, Revised Project Addendum Letter, concluded that the project would generate 221 additional daily trips, using trip generation rates from the Trip Generation publication of the Institute of Transportation Engineers (7th Edition). The Orange County Congestion Management Program (CMP) states that a traffic impact analysis is required only for proposed developments generating 1,600 or more daily trips. Since the proposed project would only generate 221 daily trips, it is not required to comply with the CMP traffic impact analysis guidelines.

The proposed improvements would not significantly increase the traffic load in the area. Therefore, operational impacts would not cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system; therefore, impacts would be less than significant.

b. Exceed, either individually or cumulatively, a level of service standard established by the County Congestion Management Agency for designated roads or highways?

Less Than Significant Impact. See response XV-a.

c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

No Impact. The proposed project is not within the impact area of an Airport Land Use Compatibility Plan and does not include components that would alter air traffic patterns.

It would not, therefore, result in a change of air traffic patterns or result in substantial safety risks. Therefore, there would be no impacts.

d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact. The proposed project does not include the development or redesign of any roadways that would pose a hazardous threat due to a design feature. No impacts are expected.

e. Result in inadequate emergency access?

Less Than Significant Impact. A revision to the fire master plan for the Ritz-Carlton Hotel has already been approved by the Orange County Fire Authority, ensuring emergency access is provided to the site. The proposed project would not involve the closure of any surface streets that would increase the response time for emergency services. Therefore, impacts to emergency access would be less than significant.

f. Result in inadequate parking capacity?

Less Than Significant Impact. The Ritz-Carlton Hotel currently has a parking supply of 853 spaces. Re-striping to provide the required number of handicap parking spaces would occur as part of the proposed project, however, and as a result the parking supply would be reduced to 847 spaces. The hotel formerly received approval of a shared parking program by the City in 1999. An addendum to the shared parking program was completed in 2007, to account for differences between the forecasted improvements in the 1999 program, and the actual size of the fitness center addition and spa renovations while at the same time accounting for the loss of 54 parking spaces in the parking structure dedicated to hotel storage. The current proposal would add 27 guest rooms and new conference/banquet facilities to the hotel. An amendment to the previously approved shared parking program would be sought based on the updated parking analysis conducted by Kimley-Horn and Associates (2008). Kimley-Horn's parking analysis utilized the same rationale as the original shared parking program and associated addendum which relies on the fact that multiple uses associated with the hotel (guest rooms, restaurants/lounges, spa, conference facilities, etc.) are primarily used by guests of the hotel, and recaptures, on a permanent basis, the 54 parking spaces currently dedicated to hotel storage. The rationale also factors in a percentage of non-guest use of the hotel's restaurants/lounges, conference and banquet facilities uses. Kimley-Horn's analysis accounts for the parking demand created by the proposed expansion coupled with the

parking demand of the existing hotel and its various uses determining that, once complete, the hotel would have a maximum parking demand of 837 parking spaces (Kimley-Horn 2008). When compared to the existing parking supply, there would be a surplus of no less than 10 parking spaces at any time. Given this information, it has been determined that adequate parking would be provided. The need to provide additional parking structures is not necessary; therefore, project implementation would have a less than significant impact on parking.

g. Conflict with adopted policies, plans or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

No Impact. Project implementation would not conflict with adopted policies, plans, or programs supporting alternative transportation within the City. Impacts are not expected to occur.

XVI. Utilities and Services Systems—Would the project:

This section discusses the impacts on local utilities and service systems. The project proposes additions within the current site boundaries. Thus, overall impacts would be minimal and would not have significant impacts on local utilities and service systems.

a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Less Than Significant Impact. The proposed project's scope consists of improvements and additions to the existing hotel structure on a fully developed site. The proposed project would not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board. Stormwater runoff impacts are discussed in Section VIII a. The City requires the control and treatment of stormwater runoff to mitigate the effects of new construction/development. The City of Dana Point, including the subject property, is located within the service area of the South Coast Water District (SCWD). The proposed project would continue utilizing existing municipal facilities to accept the sewage flows generated from the proposed project. The existing sewage collection and treatment systems have adequate capacity to accommodate the proposed expansion at the hotel. No significant impacts would occur to either the existing collection or treatment facilities. Further, project implementation does not include uses that would necessitate treatment beyond that currently provided. Therefore, the raw sewage generated by the proposed project would not exceed wastewater treatment requirements established by the Santa

Ana Regional Water Quality Control Board. Therefore, impacts on wastewater treatment facilities would be less than significant.

b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Less Than Significant Impact. See response XVI-a.

c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Less Than Significant Impact. See response XVI-a.

d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Less Than Significant Impact. The project would not necessitate substantial additional water supplies beyond what is currently available to the site. The proposed improvements are below the threshold for requiring a water supply assessment, and the small increase in demand can be accommodated with existing supplies. The project is consistent with the City's General Plan Land Use Element and would not create demands for water that exceed the parameters upon which the water supply and distribution is based. Although new entitlements are required to implement the project, existing water supplies are adequate to ensure the provision of adequate fire flows and domestic water service to the site. Therefore, impacts on water supply would be less than significant.

e. Result in determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Less Than Significant Impact. Refer to response XVI-a.

f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Less Than Significant Impact. The proposed hotel expansion project is not of a scale that would generate substantial quantities of solid waste, and therefore would not significantly impact solid waste services or facilities. The project would be required to

comply with the City of Dana Point Municipal Code for solid waste management and sanitation regulation, including construction waste and recycling requirements during project construction. Since the project is consistent with the site's General Plan designation and would be required to comply with City codes and requirements, including solid waste reduction and recycling requirements, impacts to solid waste disposal facilities are anticipated to be less than significant.

g. Comply with federal, state and local statutes and regulations related to solid waste?

No Impact. The project would comply with federal, state and local statutes and regulations related to solid waste during both construction and operation. No impacts would result.

XVII. Mandatory Findings of Significance

a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of rare or endangered plants or animals, or eliminate important examples of the major periods of California history or prehistory?

No Impact. The proposed project would not result in any significant impacts to biological resources. There are no known significant cultural resources located within the project site. Therefore, no impacts to known resources would occur as a result of the project.

b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effect of past projects, the effects of other current projects, and the effects of probable future projects.)

No Impact. No long-term significant impacts are associated with the project. There may be short-term impacts occurring during construction, but none of those impacts are significant and would not result in the overall impacts of the project being cumulatively considerable. The proposed project is not considered significant when taking into account current and future projects, including the Headlands, the 28 single-family attached units immediately south of the St. Regis Monarch Beach Resort and Spa, and the Dana Point Town Center – all of which have been previously assessed under CEQA, and calculated into the potential build-out of the City in the Land Use Element of the General Plan. Additionally, since the impacts of the proposed expansion at the Ritz-Carlton Hotel are

less than significant and would represent less than a 10% increase in the existing area of the hotel at the fully developed site, when considered cumulatively with other projects, the proposed project would have no impacts that are individually limited, but cumulatively considerable.

c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant Impact. The project would result in environmental impacts. However, it was determined through this Initial Study that the project's potential impacts would not cause substantial adverse effects on human beings either directly or indirectly. Therefore, impacts are considered less than significant.

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SUPPORTING INFORMATION SOURCES

California Department of Conservation. 2008. Farmland Mapping and Monitoring Program. Accessed May 16. Accessed via: http://www.conservation.ca.gov/dlrp/fmmp/Pages/Index.aspx

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Kimley-Horn and Associates, Inc. 2007. *Traffic Impact Analysis for the Ritz Carlton Expansion.* February.

Kimley-Horn and Associates, Inc. 2008. *Revised Parking Analysis for Ritz Carlton Laguna Niguel Hotel with Expansion.* November.

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Ninyo and Moore. 2007. *Preliminary Geotechnical Investigation for the Proposed Hotel Expansion of the Ritz-Carlton Laguna Niguel.* August.

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APPENDIX A

Ocean Lighting Plan

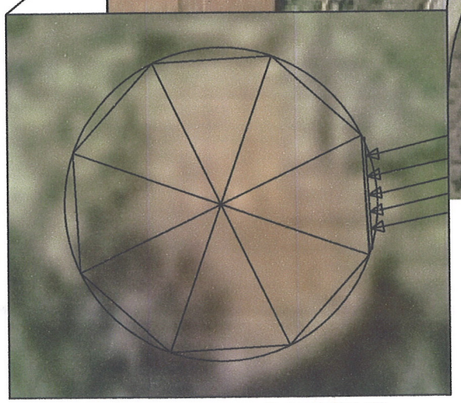
RITZ CARLTON RESORT
LAGUNA NIGUEL, CALIFORNIA

OCEAN LIGHTING RE-EVALUATION

- LIGHTING DRAWINGS

REVISED 4/10/09

Yarnell Associates LLC
ARCHITECTURAL LIGHTING DESIGN



GAZEBO - REFER TO SHEET LT3

1 PLAN VIEW
SCALE: NO SCALE

TRUE NORTH PROJECT NORTH

NOTE:
FOOTCANDLE (fc) VALUES SHOWN ARE POINT BY POINT CALCULATIONS ASSUMED AT SEA LEVEL. CALCULATIONS INCLUDE A .72 FACTOR TO ACCOUNT FOR MAINTENANCE, LAMP DEPRECIATION, LIGHT LOSS FACTOR, ETC.

OCEAN LIGHTING PLAN

Drawn by -	JEN
Checked by -	BEY
Original -	10.16.08
Revisions -	04.10.09

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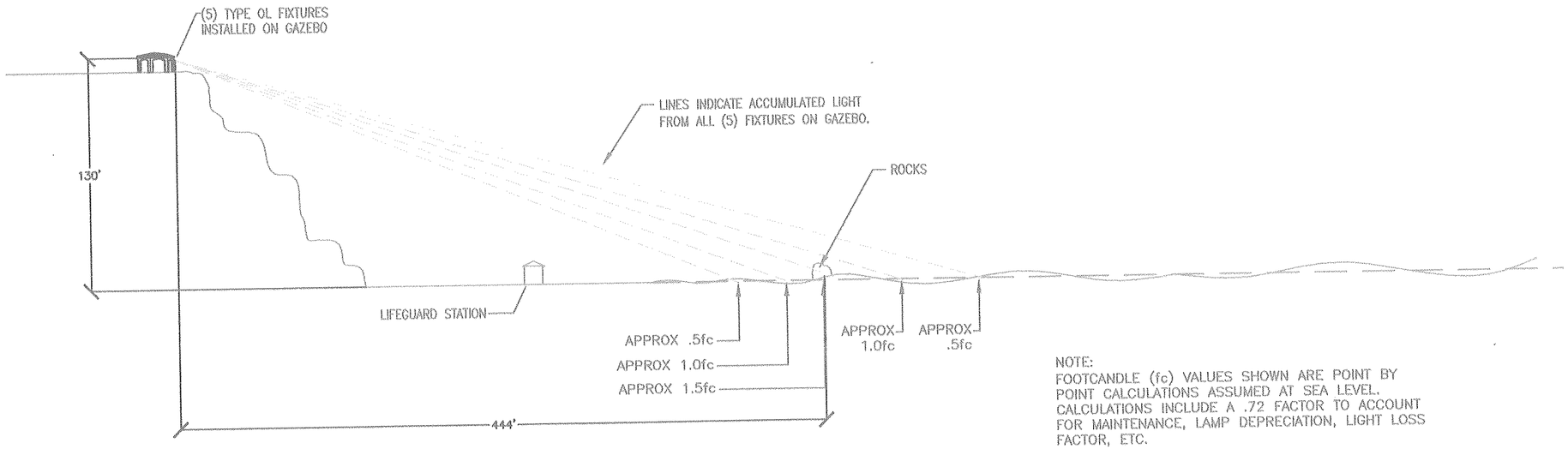
OCEAN LIGHTING RE-EVALUATION
Ritz Carlton Resort
Laguna Nigel, CA

LT1



NOTE:
FOOTCANDLE (fc) VALUES SHOWN ARE POINT BY POINT CALCULATIONS ASSUMED AT SEA LEVEL. CALCULATIONS INCLUDE A .72 FACTOR TO ACCOUNT FOR MAINTENANCE, LAMP DEPRECIATION, LIGHT LOSS FACTOR, ETC.

1 SECTION VIEW
SCALE: NO SCALE

OCEAN LIGHTING SECTION

Drawn by -	JEN
Checked by -	BEY
Original -	10.16.08
Revisions -	04.10.09

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OCEAN LIGHTING RE-EVALUATION
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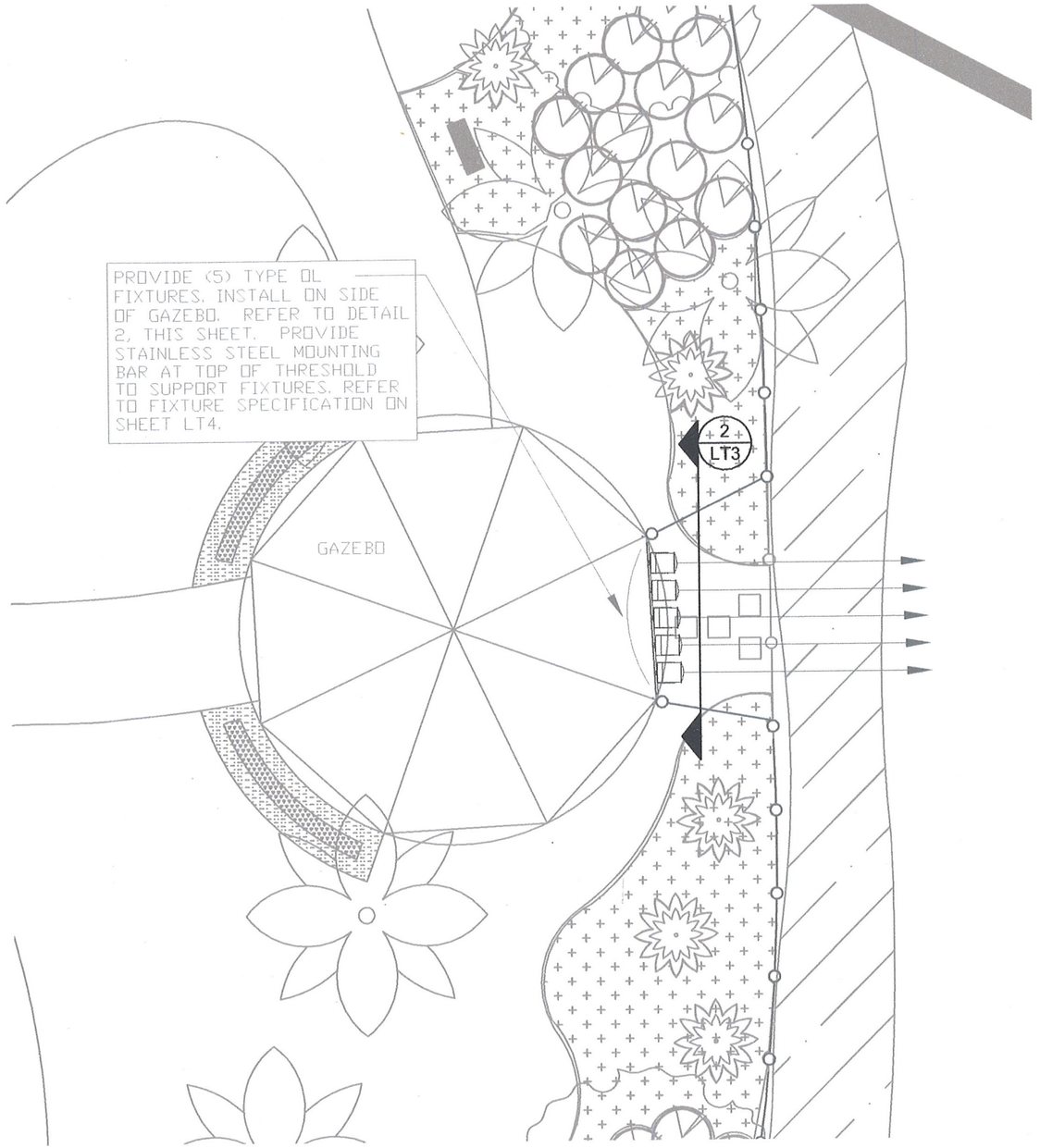
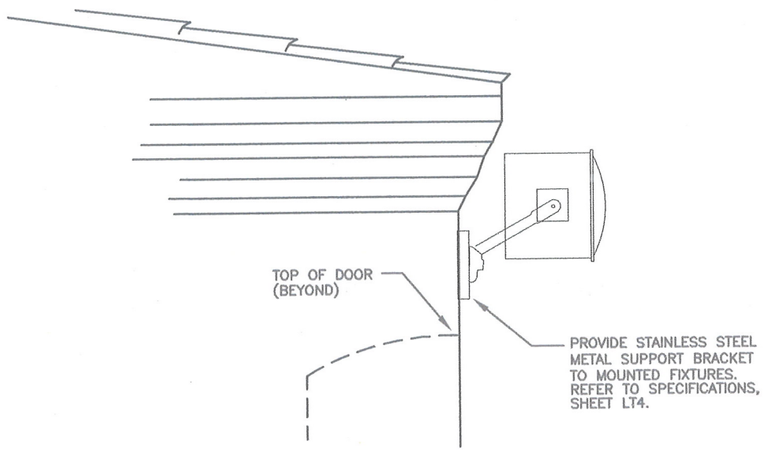
Laguna Nigel, CA

LT2

2 ELEVATION - PHOTO
SCALE: NO SCALE



1 SECTION VIEW
SCALE: 1/8" - 1'0"



3 FIXTURE MOUTING DETAIL
SCALE: NO SCALE

OCEAN LIGHTING SECTION

Drawn by - JEN
Checked by - BEY
Original - 10.16.08
Revisions -

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Laguna Nigel, CA

LT3

DIVISION 16
ELECTRICAL

SECTION 16505
ARCHITECTURAL LIGHT FIXTURES

TYPE	DESCRIPTION	MANUFACTURER	LAMP	VOLTS	NOTES
OL	Nominal 14 ½" diameter, narrow spot fixture, galvanized stainless steel fully gasketed housing, with powder coat finish, custom color to match finish of gazebo; spun aluminum, specular, polished anodized reflector made from .051" thick 3002 aluminum. Beam angle shall be 3.9 degrees, field angle shall be 8.3 degrees with center beam candlepower intensity of 355,000 candela. Adjustable lampholder to soften light beam, ¼" thick tempered glass lens assembly with gasket within aluminum frame tethered to housing with safety chain, secured in place with captive latches around periphery to maintain the watertight seal; provide anti glare shield; high power factor electronic integral ballast, NRTL Listed for extreme wet locations adjacent to ocean salt air. Provide adjustable yolk for mounting to building surface, with 5' SOOW flexible cord. Contractor shall provide hidden junction box, and tie into resort control systems to allow for photocell on/ timeswitch off. All wiring and junction boxes shall be concealed and painted to match surrounding finishes of the gazebo. Provide stainless steel mounting bracket (coated with protective finish suitable for extreme wet location adjacent to ocean salt air) and bracing to support weight of all fixtures (each fixture weighs 33 pounds).	ARC Lighting #MBMF-39-MH-94-4200-ELEC-GR-SS-CF-AGS	(1) 39W MH GE: # 29698 CMH39/TC/U /942/G8.5	Verify voltage	

MINI-BMF

Our Mini-BMF is an excellent medium throw spotlight that can be configured specifically to the task at hand. When you need a tightly controlled beam of light without spill, glare, or stray light this is the tool to reach for. Many lamp, ballast, and optical choices can be made to insure the appropriateness of your selection. We'll be glad to assist you in the selection of the right options to insure your project is a success.

All too many long throw applications use generic floodlights and require much higher wattages to work. Using generic floodlights for spotlighting ends up creating discomfort due to glare or light pollution from spill light. Our products, however, encourage energy conservation by allowing lower wattage lamps to be incorporated. We further look to reduce light pollution in our environment as our precision light beam places light where you need it without creating unwanted glare or spill light.

The Mini-BMF is an excellent choice for facades, signs, monuments, atriums, museums, bridges, and applications that need light at 70 to 250 feet from the source. We also do very well providing security lighting of areas using this fixture as a search light.

ARC LIGHTING SYSTEMS INC.
5690 SARAH AVENUE
SARASOTA, FLORIDA 34233
TEL: 941-929-7044 FAX: 941-929-7094

1 TYPE OL
Tight Beamed Spot Light

FIXTURE SPECIFICATIONS

Drawn by - JEN
Checked by - BEY
Original - 10.16.08
Revisions - 04.10.09

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Ritz Carlton Resort
Laguna Nigel, CA

LT4

1 ROCK LOCATION
No Scale

AERIAL PHOTO OF ROCK LOCATION

Drawn by -	JEN
Checked by -	BEY
Original -	03.26.09
Revisions -	

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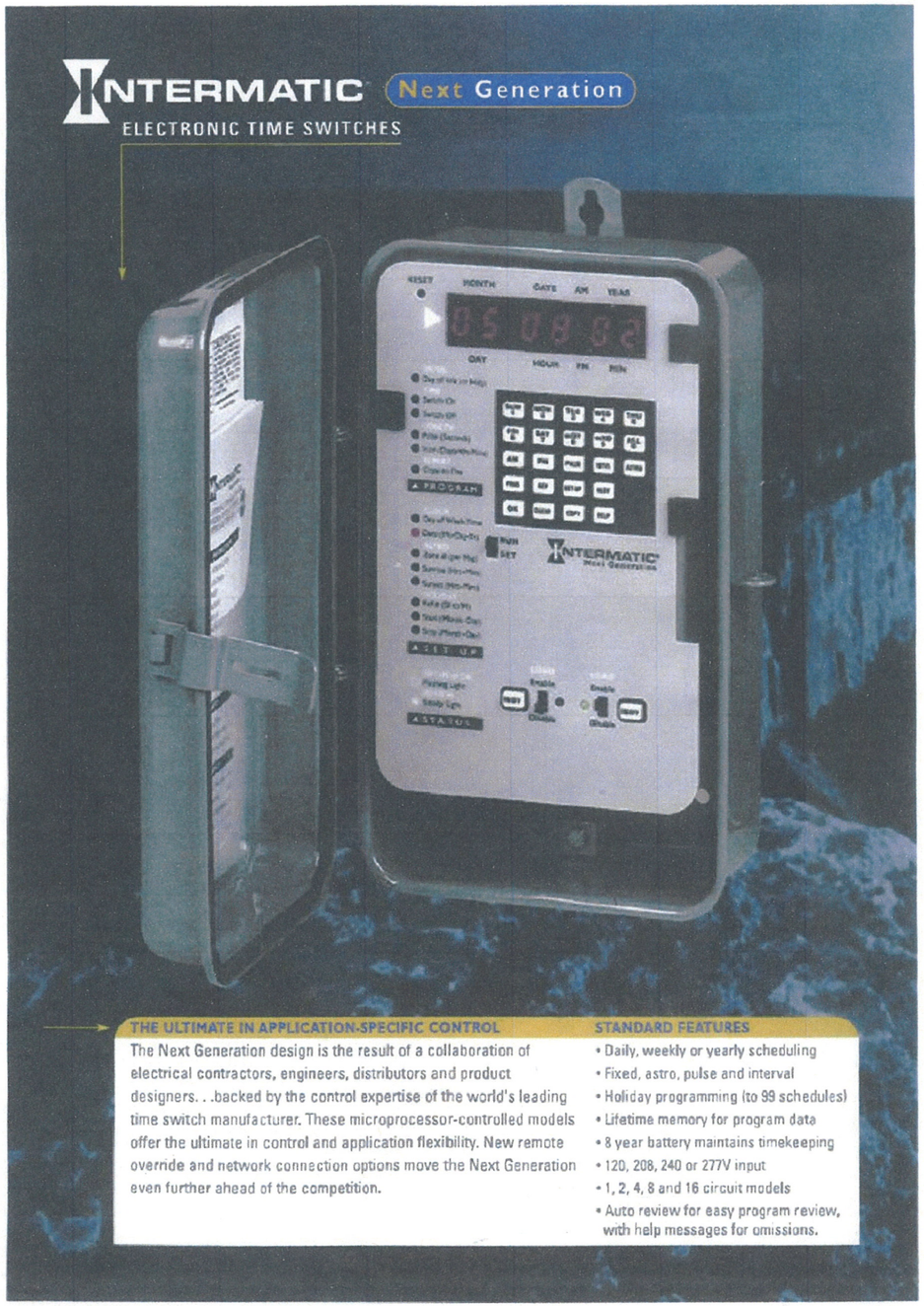
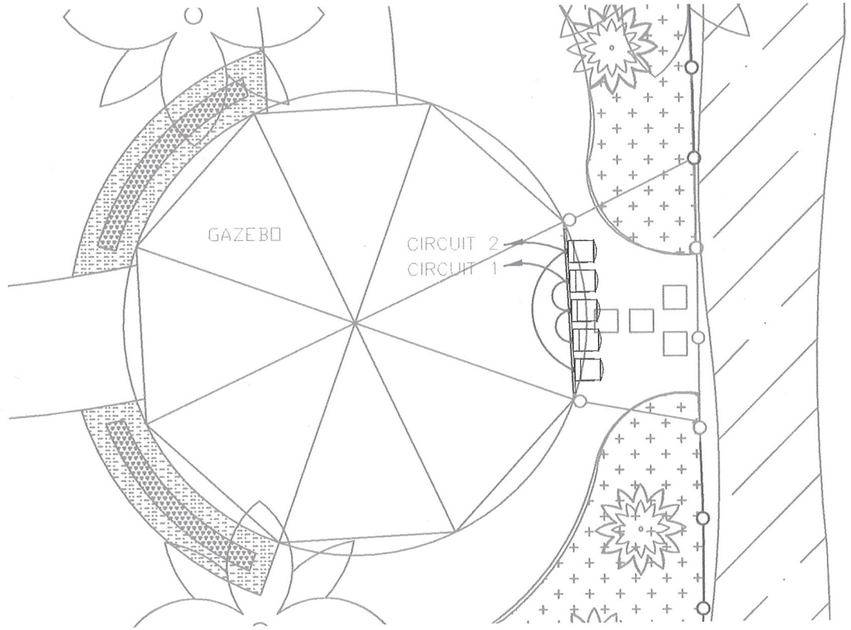
OCEAN LIGHTING RE-EVALUATION
Ritz Carlton Resort
Laguna Nigel, CA

LT5





NOTES:
CONNECT HOMERUNS SHOWN ABOVE TO NEW CONTROL SYSTEM (AS SPECIFIED THIS SHEET). COORDINATE EXACT LOCATION ON NEW CONTROL SYSTEM WITH OWNER'S REPRESENTATIVE.

CIRCUIT 1 – MIDDLE (3) FIXTURES AIMED AT CENTER POINT.

CIRCUIT 2 – OUTER (2) FIXTURES AIMED AT FLANKING POINT.

1 CONTROL PLAN
SCALE: 1/8" - 1'0"

Control Specification
For the Lighting of the Rocks off the point adjacent to the Ritz Carlton Laguna Niguel, a control system shall be purchased and installed which offers complete and programmed control of the lighting. Basic function of the system shall be to turn lights on at dusk and turn them off at a time not to exceed midnight on each normal day. Control device shall be further–programmable such that lights will not come on at known times of unusually high tide. The control system shall be programmed to insure that lights do not operate during the predictable high winter tide season. The control system shall allow for many other programming options including daily "non–standard" programs that may be desired for other known high tides.

Five fixtures are specified for the lighting of the rocks. These fixtures will be grouped in two groups of (3) and (2). While calculated light intensities are not expected to exceed 1.5 foot–candle at the rocks, if this intensity is exceeded, the control device can allow for operation of either the (3) or (2) fixtures to reduce the lighting intensity. Also, the two controlled circuits will insure that there is additional flexibility in control of the lighting.

Control system shall be:
Intermatic (or approved equal) Electronic Time Switch control device.

Control Device shall be the Intermatic Next Generation device which allows for
1. Daily, weekly or yearly scheduling
2. Fixed, astronomic coordination with daylight timing,
3. pulse and interval control
4. Holiday or special day programming to 99 unique schedules and 4000
5. Lifetime memory of programmed data
6. Battery Back–up of programmed control (battery guaranteed for 8 years)
7. 120, 208, 240 or 277 input
8. Two circuits of control available
9. Auto review for easy program review with help messages for ease of programming.

Next Generation control device shall be a microprocessor–controlled device which offers "to the minute" program flexibility. A remote over–ride will be supplied with the system to allow for special over–ride from the Chief Engineering Office. Control device shall also have the capability to be controlled from a network connection to computers located anywhere available to the cyber network.

CONTROL LOGIC

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Checked by -	BEY
Original -	10.16.08
Revisions -	04.10.09

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OCEAN LIGHTING RE-EVALUATION
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Laguna Nigel, CA

LT6

APPENDIX B

Biological Resources Letter Report

DUDEK

MAIN OFFICE
605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 760.942.5147 T 800.450.1818 F 760.632.0164

March 30, 2009 5259-01

Kurth Nelson
City of Dana Point
33282 Golden Lantern
Dana Point, California 92629

Subject: Biological Resources Letter Report for the Ritz-Carlton Laguna Niguel Proposed Expansion Project, City of Dana Point, California

Dear Mr. Nelson:

The 17.6-acre Ritz-Carlton Laguna Niguel property is located on a bluff top overlooking the Pacific Ocean. A major renovation was completed in 2004, and additional hotel facility improvements are currently proposed. This letter report documents the existing biological resources on site and potential impacts associated with the proposed improvements to the Ritz-Carlton Laguna Niguel property.

PROJECT LOCATION AND DESCRIPTION

The Ritz-Carlton Laguna Niguel (Hotel) is situated on a 150-foot bluff north of the Cabrillo Isle, approximately 500 feet west of Pacific Coast Highway 1 in the City of Dana Point (City), Orange County, California (Figure 1). The Hotel is within the USGS 7.5-minute series Dana Point Quadrangle Map, Section 16, Range 8 West, Township 8 South, SBBM (Figure 2).

The proposed changes, which would add approximately 30,396 square feet to the existing Hotel, include a new meeting space addition, new guest rooms, meeting room alterations, resort enhancements, and other minor conversions.

The City has a certified Local Coastal Program; however, the original coastal development permit (CDP) for the Hotel was issued by the California Coastal Commission prior to certification of the Local Coastal Program. As a result, the California Coastal Commission retains jurisdiction for the original CDP and any amendments thereto. In addition, the Hotel must process a site development permit and obtain approval in concept for the amendment to the original CDP from the City prior to processing the CDP amendment with the California Coastal Commission. A variance from the City's current height regulations would also be processed, since the Hotel was approved under different height standards through the County of Orange. Lastly, an amendment to the minor conditional use permit for the shared parking program originally permitted by the City in 1999 is also necessary to address the additional

rooms and change in area to the different uses at the Hotel. The only land uses in the immediate area which may generate heightened public sensitivity to changes within the Hotel property are the adjacent residential uses. The proposed changes are discussed below.

New Meeting Space. An addition to the existing structure above the loading dock containing an estimated 15,200 square feet of meeting rooms, pre-function space, valet storage, office, restrooms, and outside balconies.

New Guest Rooms. The proposed project would add 27 guestrooms to the existing 393 guestrooms. These new guestrooms include:

- Three detached private casitas
- Four new oceanfront guestrooms accessed through the existing three-story breezeway connecting the central core of the Hotel and Monarch Wing 1
- Three new oceanfront guestrooms accessed through the existing four-story breezeway connecting Dana Wings 1 and 2
- Three new oceanfront guestrooms accessed through the existing four-story breezeway connecting Monarch Wings 1 and 2
- Fourteen new oceanfront guestrooms on two levels through the conversion of the existing plaza and pavilion conference/banquet areas.

Resort Enhancement. Enhancement and upgrades of various hardscape, landscape, and amenities around the pool areas and on the patios of the ground-floor oceanfront rooms.

Porte Cochere. Addition of a porte cochere near the loading dock area.

Club Grill Conversion. Conversion of the existing club grill into a service corridor, linking the kitchen, F and B storage areas, group registration, and board room.

Terraces. Addition of several ocean view terraces.

Meeting Room Alterations. Conversion of the existing Terrace and Colonnade meeting rooms and adjacent vestibule into one large break-out space for pool related events, estimated at 3,000 square feet.

Ocean Lighting. The project would include five type ocean lighting (OL) fixtures installed on the side of the existing gazebo in a manner and with finishes that make it blend with the ocean

side of this structure. The tightly controlled beam of light would operate between dusk and midnight and would illuminate only the rocks at Dana Point. The ocean lighting would be operated with a timing mechanism that would be coordinated with tidal variations and would not be operated under winter high tide conditions, when the rocks are expected to be submerged beneath the water surface. Lighting would not be visible from inland views.

Construction Activities and Hours. Construction would include the removal of existing concrete along with some minor grading. Construction equipment would be used intermittently depending on the construction phase. All grading would occur between the hours of 7:00 a.m. and 5:00 p.m. Monday through Friday in accordance with City regulations. All other construction activities would occur between the hours of 7:00 a.m. and 8:00 p.m. Monday through Saturday. Construction is prohibited on Sundays and federal holidays. Construction equipment may include dozers, scrapers, front-end loaders, dump trucks, blades, and rollers. Delivery trucks would also be used.

Existing Conditions

The 17.6-acre Hotel site is developed and ornamentally landscaped, with various meeting/banquet facilities and guest amenities. Existing structures on site include hotel rooms and suites; a core area consisting of administrative offices, shops, meeting rooms, and executive offices; recreation facilities consisting of tennis courts, two pool areas, and landscaped areas; and a split-level parking garage. Access to the resort is via a private tree-lined driveway off of Ritz Carlton Drive. A paved pathway supported by retaining walls winds down the bluff-side from the Hotel to the beach.

South of the property is existing residential development. To the east is an existing commercial center and public beach parking lot for Salt Creek Beach. The developed and landscaped Salt Creek Beach Park lies to the north. West of the Hotel is a natural coastal bluff with sandy beach below.

METHODS

Literature Review

Prior to conducting the reconnaissance survey, special-status biological resources present or potentially present on site were identified through a literature search using the following sources: U.S. Fish and Wildlife Service (USFWS 2006), California Department of Fish and

Game (CDFG 2006 a–b, 2007 a–c), and California Native Plant Society's (CNPS) Inventory of Rare and Endangered Vascular Plants (2007 online database).

Field Reconnaissance

A general biological reconnaissance survey was conducted by Dudek biologist Thomas Liddicoat on February 12, 2008. The survey primarily focused around all the proposed Hotel improvement areas; however, the entire property was evaluated. Areas within 100 feet of proposed Hotel improvement work areas were also evaluated. A 100-scale (1 inch = 100 feet) aerial map with an over-lay of the proposed improvements design was utilized in the field during the survey to evaluate current site conditions (Figure 3). Vegetation mapping according to Gray and Bramlet (1992) nomenclature was performed. The survey was conducted on foot by walking meandering transects around all proposed impact areas plus the 100-foot buffer. This provided 100% visual coverage of all impact areas.

All notes on species and potential Hotel improvement impacts were documented directly in the field into a notebook or onto the aerial map. Binoculars (8.5 × 30) were used to identify wildlife species in the field. All plant and animal species either detected or observed were recorded directly in the field.

RESULTS

Vegetation and Land Covers

Owing to past and present land uses, a majority of the property is developed with large structures for hotel use. Professionally maintained ornamental landscaping occupies most of the vegetation on the property except for the coastal bluff. Ornamental vegetation contains various native and non-native trees, shrubs, and turf that typically occur in greenbelts, parks, and other landscaping. This cover-type has the potential to provide nesting and roost sites for raptors, and movement corridors for mammalian or bird migration (Gray and Bramlet 1992).

Coastal Bluff Scrub is also present on the property and is present along the oceanfront cliff-face of the bluff between the Hotel and the beach. This vegetation consists of exposed bluffs and cliffs with low plant cover that are exposed to salt and moisture laden winds along the cliffs immediately adjacent to the coast. The soil is usually rocky, poorly developed, and has limited water holding capacity. This vegetation is typically used as shelter and plant food for birds and small mammals. Plant species usually present in this cover-type include: *Artemesia Californica, Dudleya, Encelia californica, Eriogonum parviolium,* iceplants*, Opuntia*

prolifera, and *Rhus integrifolia* (Gray and Bramlet 1992). On-site plant species include: *Artemesia Californica, Dudleya lanceolata, Encelia californica, Eriogonum* spp., and multiple iceplant species.

Floral Diversity and Special-Status Plants

A total of 63 species of vascular plants were recorded on the Hotel property (Appendix A): 17 native (27%) and 46 non-native (73%). The low percentage of native plant diversity reflects the amount of developed and ornamentally landscaped areas on site. No special-status plants were detected during the survey or expected within the project area.

Animal Diversity and Special-Status Animals

A total of 17 species of wildlife were recorded on Hotel property (Appendix A): 14 birds, 1 mammal, and 2 reptiles. The low animal diversity reflects the developed aspect of the site. No raptors or nesting birds were observed on the property or within the 100-foot buffer. No special-status animals were detected during the survey or expected to occur.

CONCLUSION

Anticipated Project Impacts

Implementation of the proposed Hotel improvements is anticipated to have no effect on natural biological resources. Hotel improvements would increase the Hotel footprint by approximately 10% (19,680 square feet). All impacts would occur on previously developed land, and no impacts would occur in native habitats. All of the hotel improvements are planned within the existing Hotel development; therefore, they would not impact existing biological resources.

Special-Status Plants

Implementation of the proposed hotel improvements is not anticipated to cause impacts to special-status plants.

Special-Status Animals

Implementation of the proposed hotel improvements is not anticipated to cause impacts to special-status wildlife. There is potential for raptors to nest within landscaping trees; however, these trees are currently maintained and there is an abundance of existing human activity, so it is highly unlikely that they would occur there. Lack of resources and high human activity on

site indicate that the existing landscaped and greenbelt areas do no provide for wildlife movement or migration.

Ocean Lighting Impacts

The area of proposed illumination is anticipated to be minimal in size and would emit no more than 1.5 footcandles. In addition, the proposed light source would be only one of many sources of lighting in the general background of the immediate area, and therefore, would occur within the matrix of other light sources and light fixtures. As a result, the light fixtures themselves would not stand out among other light sources in the area. Additionally, because the zone of illumination from the planned lighting is minimal in both size and intensity, it is not anticipated to have a significant impact on biological resources.

There is no potential for significant impacts to bats, sea turtles, insects, and amphibians because the area to be lit does not support sea turtles or amphibians, and is not a habitat area for bats or insects. Similarly, no impacts to snowy plover are expected because snowy plover nest in dry sand, and the proposed lighting would not impact the sand.

Grunions, which spawn on the beach from March–August, would not be affected because their spawning area—the beach–would not be illuminated as part of the proposed project. Furthermore, Grunion spawn 2–4 days after the full moon; therefore, the beach is usually at one of its brightest points during Grunion spawning. Also, grunion eggs are normally covered by sand. Initially, the eggs are covered by 2–3 inches of sand, but subsequent to the outgoing tide, the eggs are typically covered by 8–16 inches of sand, ensuring that they would not be subject to any harmful light sources. It is wave action and agitation, not light exposure, which are the most important factors in the hatching of the eggs. Moreover, lighting has been shown to actually have a positive effect on larval young grunion (Dudek 2009).

The ocean lighting plan would not disrupt biological rhythms or interfere with the behavior of nocturnal animals. The proposed light source would be integrated into the general background of the area, which already includes a myriad of light sources and is currently lit by both surrounding development and existing beach facilities. As a result, the change in overall illumination would be very small and unnoticeable.

Similarly, the lighting plan is not expected to have significant impacts on migrating fish. First, the area that would be illuminated is not a primary migration area for fish. Second, the effected area is small, and the amount of light is no more than 1.5 footcandles. Third, the light is aimed at the rocks, and very little light would spill over onto the immediate surrounding water. The

small amount of light that may potentially hit the water would be further attenuated by particulate matter and wave agitation in the water; therefore, it is unlikely that the light would impact fish. The ocean lighting would operated with a timing mechanism that would be coordinated with tidal variations, and would not be operated under winter high tide conditions when the rocks are expected to be submerged beneath the water surface.

There would not be any significant impacts to migrating birds. There is only an extremely small area that would be lit, and that area is not a primary migration area for birds. Moreover, the proposed lighting would be within a matrix of existing light sources as viewed by migrating birds. These lights would not occur above existing lights or lower than existing lights on the face of the bluff.

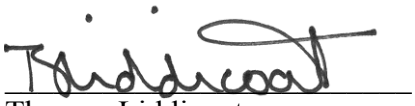
The proposed project would not have a significant impact on aquatic invertebrates. Nearly all of the studies that have found an impact have focused on freshwater organisms in low oxygen content lakes with relatively clear water, not marine organisms with cloudy and agitated conditions. Light penetration would be greater in clear lakes with low concentrations of dissolved oxygen content and algae: in contrast, the extremely small area of ocean water that could potentially have indirect light spillover from the proposed project's light source would be in the ocean, with highly dissolved oxygen content and cloudy waters. As a result, any light on the ocean water from the proposed project would be dispersed as it enters the water, attenuating its effect. Absorption or attenuation of the minimal light would occur as soon as light enters the water column. Moreover, the water column is in constant flux due to wave action. This flux increases the amount of particulate matter in the water column and thus increases the light attenuation.

Reduced oxygen is not a threat in the area to be lit. Even if there were an increase in phytoplankton due to lack of zooplankton foraging in this area, it would not result in reduced oxygen. The zone of illumination is small and would be compensated for by wave action redistributing phytoplankton concentrations and by oxygenating the water by wave agitation.

As a result of the foregoing analysis, impacts on sensitive species resulting from ocean lighting are anticipated to be less than significant.

In summary, current site conditions and the improvements proposed under the current project design would have no effect on existing biological resources. If you have any questions regarding the contents of this report, please contact me or Brock Ortega at 760.942.5147.

Sincerely,



Thomas Liddicoat

cc: Brock Ortega, Dudek
Brian Grover, Dudek

Att: Figures 1–3
Appendix A, Cumulative List of Species Observed on Site

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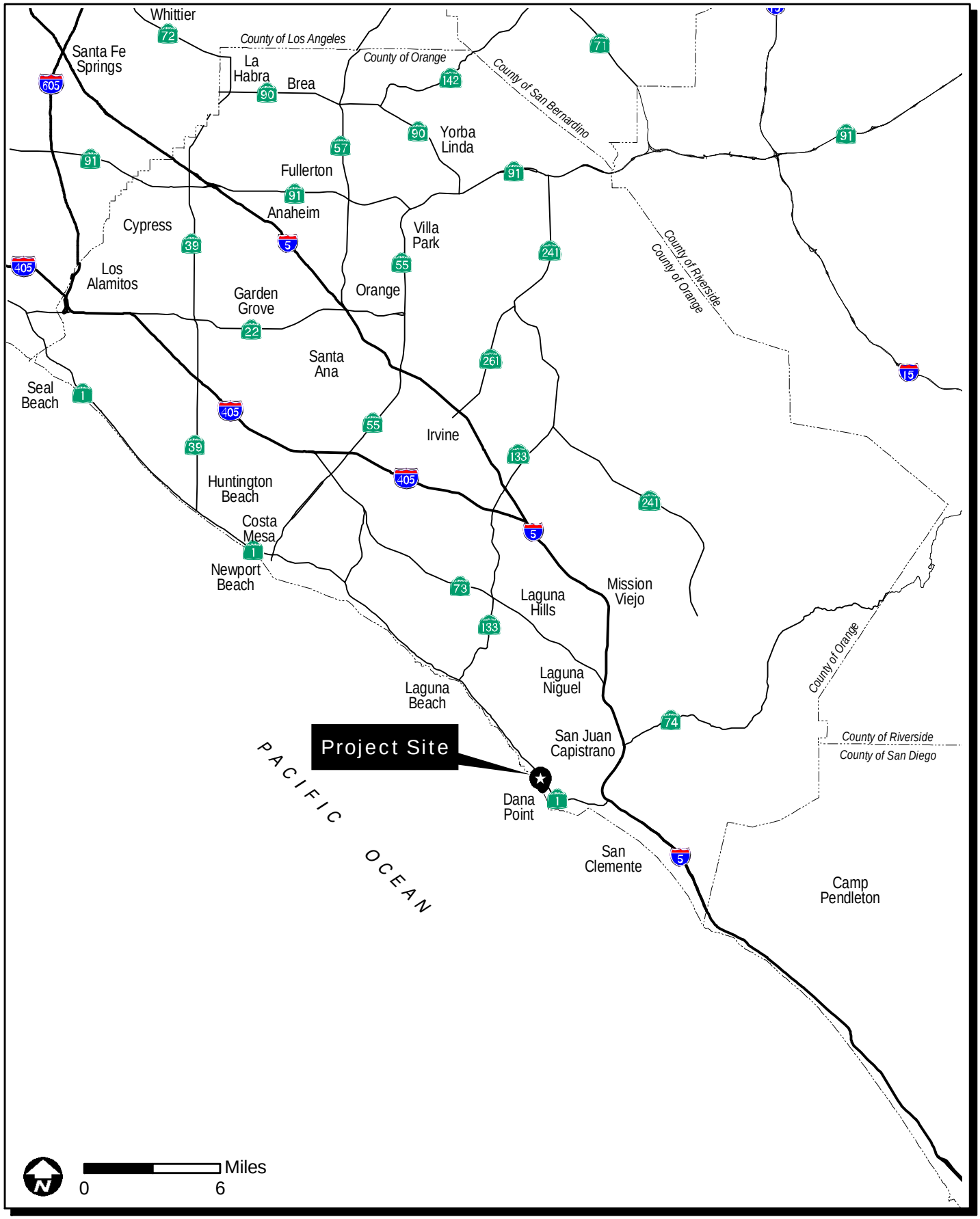

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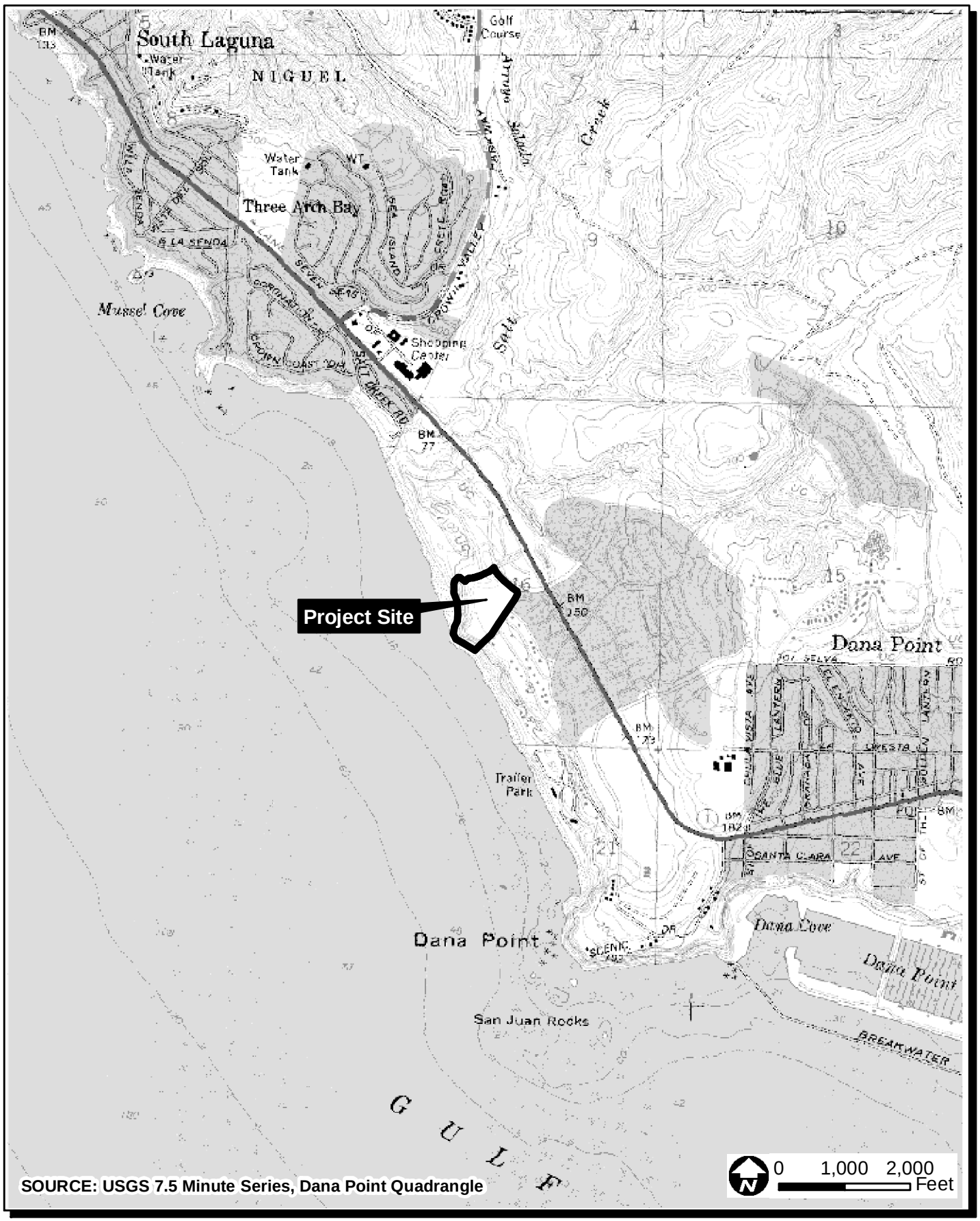
Ritz-Carlton Laguna Niguel Proposed Expansion Project

Regional Map

FIGURE 1



SOURCE: USGS 7.5 Minute Series, Dana Point Quadrangle

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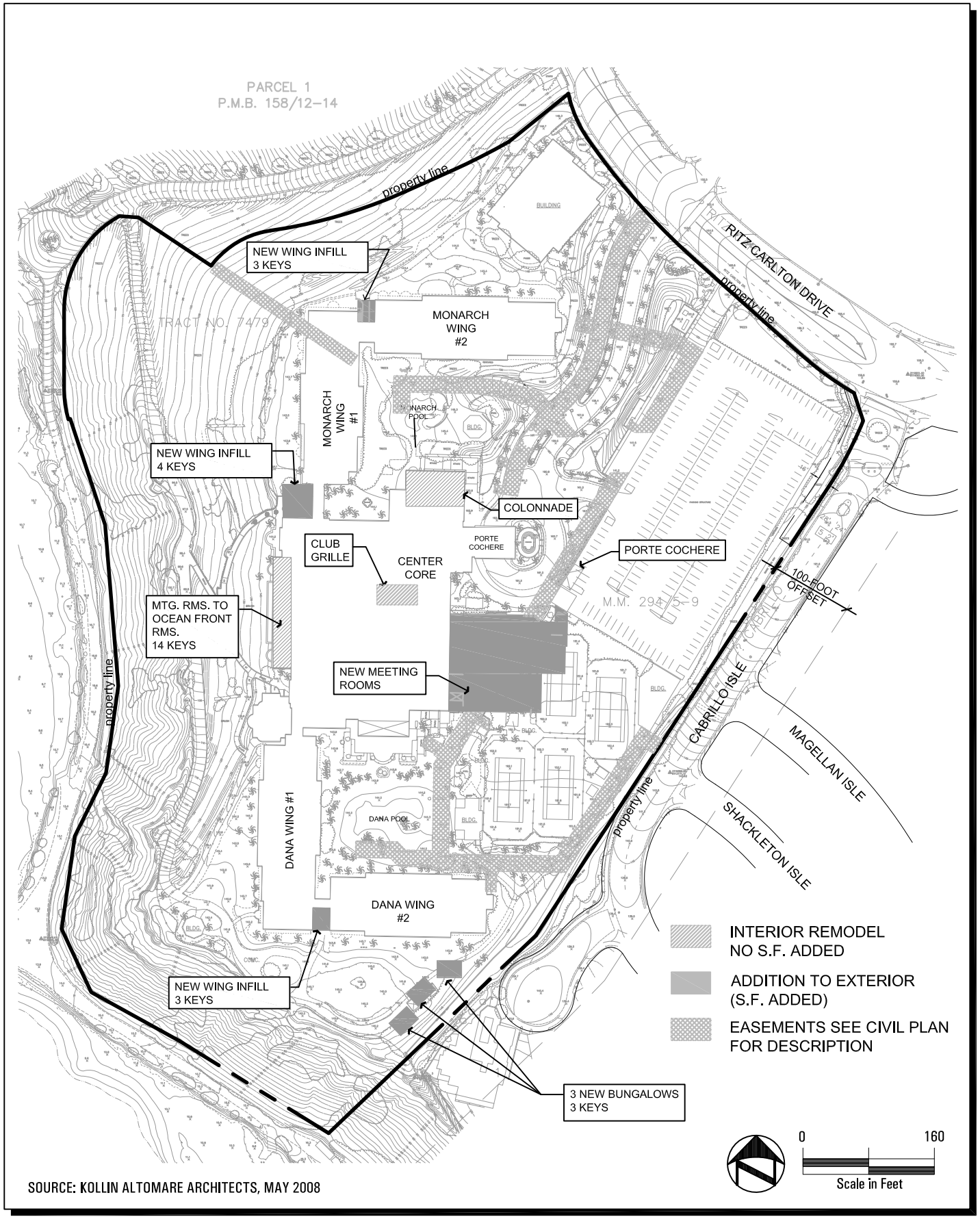
Ritz-Carlton Laguna Niguel Proposed Expansion Project

Vicinity Map

FIGURE 2



SOURCE: KOLLIN ALTOMARE ARCHITECTS, MAY 2008

Ritz-Calrton Laguna Niguel Proposed Expansion Project

Site Plan

FIGURE
3

APPENDIX A
Cumulative List of Species Observed on Site

VASCULAR PLANT SPECIES

CONIFERAE

***PINACEAE* – PINE FAMILY**

Pinus contorta – shore pine

ANGIOSPERMAE (DICOTYLEDONES)

***AIZOACEAE* – CARPET-WEED FAMILY**

* *Carpobrotus edulis* – Hottentot-fig
* *Drosanthemum floribundum* – rosea ice plant
* *Lampranthus spectabilis* – trailing iceplant
* *Mesembryanthemum crystallinum* – crystal ice plant

***ANACARDIACEAE* – SUMAC FAMILY**

Malosma laurina – laurel sumac
Rhus integrifolia – lemonadeberry

***APOCYNACEAE* – DOGBANE FAMILY**

* *Vinca major* – periwinkle

***ARACEAE* – ARUM FAMILY**

* *Zantedeschia aethiopica* – calla lily

***ARALIACEAE* – GINSENG FAMILY**

* *Hedera helix* – English ivy

***ASTERACEAE* – SUNFLOWER FAMILY**

Baccharis pilularis – coyote brush
Baccharis salicifolia – mule fat
* *Centaurea melitensis* – tocalote
* *Conzya canadensis* – horseweed
Encelia californica – California bush sunflower
* *Gazania* x *hybrida* – African daisy
Isocoma menziesii – coastal goldenbush
* *Osteospermum fruticosum* – African daisy
* *Sonchus oleraceus* – common sow-thistle

***BORAGINACEAE* – BORAGE FAMILY**

* *Echium fastuosum* – pride of Madeira

***BRASSICACEAE* – MUSTARD FAMILY**

Lepidium spp. – unidentified peppergrass

***CACTACEAE* – CACTUS FAMILY**

Opuntia littoralis – coastal prickly-pear

***CAPPARACEAE* – CAPER FAMILY**

Isomeris arborea – bladderpod

***CAPRIFOLIACEAE* – HONEYSUCKLE FAMILY**

* *Lonicera japonica* – Japanese honeysuckle

***CHENOPODIACEAE* – GOOSEFOOT FAMILY**

Atriplex californica – California saltbush

Atriplex lentiformis– big saltbush, quail brush

* *Atriplex semibaccata* – Australian saltbush

* *Chenopodium album* – lamb's-quarters

* *Salsola tragus* – Russian-thistle

***CRASSULACEAE* – STONECROP FAMILY**

Dudleya lanceolata – lanceleaf dudleya

***EUPHORBIACEAE* – SPURGE FAMILY**

* *Ricinus communis* – castor-bean

***FABACEAE* – PEA FAMILY**

* *Acacia cyclopis* – no common name

* *Acacia longifolia* – Sydney golden wattle

* *Acacia redolens* – no common name

Lotus scoparius – deerweed

* *Melilotus indica* – yellow sweet-clover

***GERANIACEAE* – GERANIUM FAMILY**

* *Erodium cicutarium* – red-stemmed filaree

* *Geranium* spp. – unidentified ornamental geranium

***LAMIACEAE* – MINT FAMILY**

* *Menta suaveolens* – apple mint

***MYOPORACEAE* – MYOPORUM FAMILY**

* *Myoporum* spp. – myoporum

***MYRTACEAE* – MYRTLE FAMILY**

* *Eucalyptus* spp. – eucalyptus

* *Metrosideros excelsus* – New Zealand Christmas tree

***NYCTAGINACEAE* – FOUR O'CLOCK FAMILY**

* *Bougainvillea spectabilis* – bougainvillea

***OLEACEAE* – OLIVE FAMILY**

* *Ligustrum japonicum* – Japanese privet

***PLUMBAGINACEAE* – PLUMBAGO FAMILY**

* *Limonium perezii* – sea lavender

***POLYGONACEAE* – BUCKWHEAT FAMILY**

Eriogonum fasciculatum – California buckwheat

Eriogonum parvifolium – seacliff buckwheat

***PRIMULACEAE* – PRIMROSE FAMILY**

* *Anagallis arvensis* – scarlet pimpernel

***ROSACEAE* – ROSE FAMILY**

* *Pyracantha* spp. – firethorn

***SOLANACEAE* – NIGHTSHADE FAMILY**

Lycium californicum – California box-thorn

***VERBENACEAE* – VERVAIN FAMILY**

* *Lantana camara* – lantana

* *Lantana montevidensis* – purple trailing lantana

ANGIOSPERMAE (MONOCOTYLEDONES)

***ARECACEAE* – PALM FAMILY**

* *Washingtonia robusta* – Mexican fan palm

***HEMEROCALLIDACEAE* – DAYLILY FAMILY**

* *Hemerocallis* x *hybrida* – daylily

***IRIDACEAE* – IRIS FAMILY**

* *Watsonia* spp. – watsonia

***LILIACEAE* – LILY FAMILY**

* *Agapanthus africanus* – lily-of-the-Nile

***POACEAE* – GRASS FAMILY**

* *Arundo donax* – giant reed
* *Cortaderia selloana* – pampas grass
* *Cynodon dactylon* – Bermuda grass
Distichlis spicata – salt grass
* *Polypogon monspeliensis* – rabbit's-foot grass
* Unidentified annual grasses – unidentified annual grasses

***STRELITZIACEAE* – BIRD OF PARADISE FAMILY**

* *Strelitzia reginae* – bird of paradise

WILDLIFE SPECIES -VERTEBRATES

BIRDS

***LARIDAE* – GULLS & TERNS**

Larus spp. – gull

***TROCHILIDAE* – HUMMINGBIRDS**

Calypte anna – Anna's hummingbird

***TYRANNIDAE* – TYRANT FLYCATCHERS**

Sayornis nigricans – black phoebe

***CORVIDAE* – JAYS & CROWS**

Corvus brachyrhynchos – American crow
Corvus corax – common raven

***TROGLODYTIDAE* – WRENS**

Troglodytes aedon – house wren

***TURDIDAE* – THRUSHES & BABBLERS**

Catharus guttatus – hermit thrush

***STURNIDAE* – STARLINGS**

* *Sturnus vulgaris* – European starling

***PARULIDAE* – WOOD WARBLERS**

Dendroica coronata – yellow-rumped warbler
Geothlypis trichas – common yellowthroat
Vermivora celata – orange-crowned warbler

***EMBERIZIDAE* – BUNTINGS & SPARROWS**

Melospiza melodia – song sparrow
Zonotrichia leucophrys – white-crowned sparrow

***FRINGILLIDAE* – FINCHES**

Carpodacus mexicanus – house finch

MAMMALS

***SCIURIDAE* – SQUIRRELS**

Spermophilus beecheyi – California ground squirrel

REPTILES

***IGUANIDAE* – IGUANID LIZARDS**

Sceloporus occidentalis – western fence lizard
Uta stansburiana – side-blotched lizard

* signifies an introduced (non-native) species

APPENDIX C

Preliminary Geotechnical Evaluation

PRELIMINARY GEOTECHNICAL EVALUATION
PROPOSED HOTEL EXPANSION
THE RITZ-CARLTON LAGUNA NIGUEL
1 RITZ CARLTON DRIVE
DANA POINT, CALIFORNIA

PREPARED FOR:
Dudek
111 Pacifica, Suite 230
Irvine, California 92618

PREPARED BY:
Ninyo & Moore
Geotechnical and Environmental Sciences Consultants
475 Goddard, Suite 200
Irvine, California 92618

August 9, 2007
Project No. 207118001

August 9, 2007
Project No. 207118001

Ms. Carolyn Schaffer
Dudek
111 Pacifica, Suite 230
Irvine, California 92618

Subject: Preliminary Geotechnical Evaluation
Proposed Hotel Expansion
The Ritz-Carlton Laguna Niguel
1 Ritz Carlton Drive
Dana Point, California

Dear Ms. Schaffer:

In accordance with your request and authorization, Ninyo & Moore has performed a preliminary geotechnical evaluation for the proposed expansion of The Ritz-Carlton Laguna Niguel in Dana Point, California. Our study was conducted in accordance with the scope of services presented in our subconsulting services agreement dated April 13, 2007.

We appreciate the opportunity to provide geotechnical consulting services to you.

Sincerely,
NINYO & MOORE

Michael E. Rogers, C.E.G.
Senior Project Geologist

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MICHAEL E. ROGERS
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Jalal Vakili, Ph.D., P.E.
Principal Engineer

REGISTERED PROFESSIONAL ENGINEER
JALAL VAKILI
No. C48550
6/30/10
CIVIL
STATE OF CALIFORNIA

MER/LTJ/JV/emp

Distribution: (1) Addressee
(4) Mr. Michael C. Cato, Sheppard Mullin

TABLE OF CONTENTS

Page

Table

Figures

1. INTRODUCTION

In accordance with your request and authorization, we have performed a preliminary geotechnical evaluation for The Ritz-Carlton Laguna Niguel hotel located at 1 Ritz Carlton Drive in Dana Point, California (Figure 1). The existing hotel is situated on a bluff top above the Pacific Ocean on the southwest side of the Pacific Coast Highway. We understand that an expansion project is planned for the hotel that will consist of additions to the existing facilities.

The purpose of our study was to evaluate the geologic and geotechnical conditions of the property and to make a preliminary assessment of potential geologic and seismic hazards relative to the proposed new improvements. Where appropriate, general recommendations to mitigate potential geologic hazards have been provided. Our study was performed for planning purposes. A detailed geotechnical evaluation that includes subsurface exploration and laboratory testing should be performed prior to design and construction of proposed improvements.

2. SCOPE OF SERVICES

Ninyo & Moore's scope of services has included review of background materials and geologic reconnaissance of the study area. Specifically, we have performed the following tasks:

- Review of readily available geotechnical-related documents on file with the City of Dana Point Planning Department and California Coastal Commission and review of reports, plans, and documents provided to us by other consultants involved with the project.
- Review of readily available geologic maps, seismic data, published geologic literature, stereoscopic aerial photographs, and geotechnical aspects of the City of Dana Point's General Plan.
- Discussion of past and current site conditions with the director of engineering from the Ritz-Carlton Hotel.
- Geotechnical site reconnaissance conducted on June 28, 2007, to observe and document the existing surface conditions and perform geologic mapping at the project site.
- Assessment of the general geologic conditions and seismic hazards affecting the area and evaluation of their potential impacts on the project.
- Compilation and analysis of existing geotechnical data pertaining to the site.

- Preparation of this report presenting the results of our study, as well as our conclusions and recommendations relative to the geotechnical aspects of the project's conceptual design and construction.

3. PROJECT DESCRIPTION

The Ritz-Carlton Laguna Niguel hotel has proposed an expansion project to remodel and construct additions to the existing facilities at the site. We understand that approximately 30,000 square feet of new floor area will be added on the approximate 17½-acre property. The principal facilities at the site currently consist of a main hotel complex, detached pavilion, parking structure, tennis courts, swimming pools, pavements, and associated hardscape and landscape improvements.

We understand that the proposed expansion project for the hotel will consist of a large addition on the east (landward) side of the hotel at the location of the existing tennis courts; smaller infill additions between wings of the hotel on the north, west, and south sides; addition of three bungalows on the south part of the property; interior remodeling of some areas; and provisions for access easements. A site plan of proposed improvements for the hotel expansion project is shown on Figure 2.

We anticipate that construction of proposed improvements would generally involve the following geotechnical aspects: demolition of existing improvements to accommodate the proposed additions, excavations for earthwork and/or new foundations, fill placement as needed for new fill areas, and surface drainage provisions. We anticipate that the project will also include construction of underground utilities, pavements, and associated hardscape and landscape improvements.

4. SITE DESCRIPTION AND BACKGROUND

The Ritz-Carlton hotel is situated on a coastal terrace above Salt Creek beach located approximately 1 mile north of the Dana Point headlands (Figure 1). Residential development borders the southeast side of the property, and the northeast side of the site is bounded by Ritz Carlton Drive (Figure 2). The northerly and westerly sides of the property are bordered by coastal bluffs.

The coastal bluffs are bounded by Salt Creek beach on the west and southwest sides and by the Salt Creek beach park area to the north. The coastal bluffs form a point between the west and southwest-facing bluffs due to a relatively more resistant rock unit (breccia) that exists at the point.

The site topography generally consists of a relatively level building pad area for the main hotel complex and moderately steep to steep coastal bluffs that descend on the north, west, and southwest sides of the site. The relatively level building pad area of the site has some variable topography, but much of it slopes gently toward the west and south with elevations that range from approximately 160 feet above mean sea level (MSL) near the northeast corner of the site to approximately 140 MSL near the south side of the bluff top area.

The coastal bluffs on the site descend at gradients varying from approximately 2:1 (horizontal to vertical) to approximately ½:1. The upper portions of the west-facing bluff were graded as part of the hotel development that occurred in the 1970s. A pedestrian access walkway from the bluff top to the beach separates the natural and modified portions of the west-facing bluff. The bluff area above the walkway is a 2:1 graded slope area that is landscaped and irrigated. An undeveloped, natural bluff still remains below the access walkway (Figure 2). Slope inclinations of this west-facing natural bluff range from approximately 1½:1 to ½:1. The northwest-facing bluff on the property was also graded as part of the hotel development and now consists of a 2:1 graded slope area that is landscaped and irrigated. Slope terrace drains have been provided for the modified bluff areas; the drains discharge into a storm drain system at the toe of the bluffs.

The southwest-facing bluff on the property is a natural bluff that has not been developed. Slope inclinations of this natural bluff range from approximately 1½:1 to ½:1. The upper portion of this bluff within the terrace deposits is generally less inclined than the steeper, lower bluff portions comprised of harder rock.

The toe areas of the bluffs below the site are bounded by a rip-rap revetment and paved access road for Salt Creek beach park. On the west and southwest sides of the site, adjacent to the beach front, the paved access road is built on a raised fill pad that is protected from wave erosion

by a rip-rap embankment. The toe of the bluffs along the west and southwest sides of the site along the roadway level range from approximate elevations of 15 to 20 feet MSL. Our review of aerial photographs and background documents indicates that this roadway was constructed prior to 1947 (an unpaved roadway and embankment are visible in 1947 photograph). We understand from representatives of the Ritz-Carlton that large storm waves do not typically reach the elevation of the roadway surface. The existing rip-rap revetment for the road was exposed to heavy storms in January 1983 and suffered little to negligible damage (Zeiser, 1990).

The existing facility includes a main hotel complex, detached pavilion building, a parking structure, tennis courts, swimming pools, pavements, and associated hardscape and landscape improvements. A driveway from Ritz Carlton Drive accesses the site along the northeast side. Vegetation consists of landscaped lawns, shrubbery, and trees around the hotel area. The graded bluff slopes are planted with various ground covers, shrubs, iceplant, and few trees. The natural bluff areas consist of some landscape plants and shrubs along the top of the bluff and native annuals and coastal chaparral on the bluff face. Some of the steeper bluff areas have sparse vegetation cover. The landscaped bluff edges along the north and south portions of the site have been graded with a berm such that surface runoff near the bluff edge flows away from the descending bluff. Area drains are provided to collect surface runoff at some locations landward from the bluff edge.

Seepage was observed on the west-facing, graded slope above the beach access walkway. The seepage has created an area of wet ground along the lower bluffs in the northwest corner of the property. Surface water from the seepage areas was flowing along small, earthen, landscape channels that had been provided to drain the seepage to a storm drain inlet at the toe of the slope area.

Prior to the hotel development the site was an undeveloped property, as shown on the aerial photographs on Figures 3 and 4. The site was developed by cutting the former bluff top area down and exporting the excavated soils to create a level building site. Initial site development activities occurred between approximately 1973 and 1984. The following general sequence of events is based on our background review:

- The site was partially rough-graded in 1973, including creation of the modified bluff areas on the west and northwest sides of the site (California Coastal Commission [CCC], 1982; Pacific Soils, 1981).

- The partially-graded site lay vacant from 1973 to 1980 during a period of permit approval (CCC, 1982).

- A geologic investigation was performed by Pacific Soils Engineering, Inc., in 1981.

- The CCC granted permission to continue with development of the project in 1982, with conditions that the remaining natural bluffs not be further graded.

- Precise grading was performed, and the hotel was built in about 1984.

- A shallow slump occurred on the west-facing, modified bluff area in early 1989. The slump was described as approximately 35 feet wide and 27 feet long and 4 to 5 feet deep. A remedial grading repair was performed and utilized geogrid-reinforced fill.

- The detached Pavilion structure located in the north part of the site adjacent to Ritz Carlton Drive was constructed in about 2000.

- A hotel renovation occurred in 2004. This work included construction of the "Spa" infill addition built on the west side of the hotel within the 25-foot bluff setback zone.

5. GEOLOGY

5.1. Regional Geology

The State of California is divided into geomorphic provinces defined by both rock type and geologic structure. The project site is located within the Peninsular Ranges Geomorphic Province of southern California. This geomorphic province encompasses an area that extends approximately 125 miles from the Transverse Ranges and the Los Angeles Basin south to the Mexican border, and beyond another approximately 775 miles to the tip of Baja California. The Peninsular Ranges province varies in width from approximately 30 to 100 miles and is characterized by northwest-trending mountain range blocks separated by similarly northwest-trending faults (Norris and Webb, 1990).

The predominant rock type that underlies the Peninsular Ranges province is a Cretaceous-age igneous rock (granitic rock) referred to as the Southern California batholith. Older Ju-

rassic-age metavolcanic and metasedimentary rocks and older Paleozoic limestone, altered schist, and gneiss are present within the province. Cretaceous age marine sedimentary rocks, and younger Tertiary-age rocks comprised of volcanic, marine, and non-marine sediments overlie the older rocks (Norris and Webb, 1990). More recent Quaternary sediments, primarily of alluvial origin, comprise the low-lying valley and drainage areas within the region, while Quaternary marine terrace deposits and beach deposits are present along the coastal areas.

Active northwest-trending fault zones in the Peninsular Ranges province include the Elsinore fault zone, San Jacinto fault zone, and the Newport-Inglewood fault zone. The active San Andreas fault zone is located northeast of the province within the adjacent Colorado Desert Geomorphic Province. The predominant major tectonic activity associated with these and other faults within this regional tectonic framework is right-lateral, strike-slip movement (Norris and Webb, 1990).

5.2. Site Geology

The hotel site is located at the southeast end of the San Joaquin Hills, an area underlain by sedimentary rock units of the Monterey and Capistrano formations. The hotel is situated on an elevated marine terrace formed during the Pleistocene Epoch when periods of glaciation caused sea level fluctuations, which created a series of terraces cut into the coastal bedrock by wave erosion. Shallow marine sediments were deposited on the wave-cut bedrock platforms while they were submerged beneath the ocean. As the sea level dropped several thousand years ago, the terraces emerged from the ocean. A regional geologic map is shown on Figure 5.

Based on our background review, approximately 35 to 70 feet of Quaternary age marine terrace deposit sands overlie Tertiary age sedimentary rock formations at the hotel site. The Tertiary age Monterey and Capistrano formations which underlie the terrace deposits generally consist of siltstones, shales, and a relatively erosion-resistant schist breccia which forms the point of land for the site (Pacific Soils, 1981). Previous studies and our geologic recon-

naissance indicate that the bedding orientation of the Monterey and Capistrano formations consist of an overall east-west trending strike and a northerly dip in the range of 30 to 70 degrees. Pervasive joint or fracture patterns were not discernable in the rock formations at the site. Geologic data reviewed indicate that some jointing is oriented with a north-south strike and steep dips of approximately 80 to 85 degrees to the east and west. Some sheared rock zones were observed in the Monterey formation shale along bedding planes.

Fill soils are present on the project site, related to grading activities from original site development. Talus deposits are present along the base of the coastal bluffs. Detailed descriptions of the geologic units at the site are presented below. A geologic map of the site showing the approximate distribution of the geologic units is shown on Figure 6.

5.2.1. Fill (Qaf)

Areas of compacted fill are present at the site from the previous site grading and development activities. Some fill soils were placed on the northern part of the site in 1973 during nearby tract development, which are derived from nearby bedrock and terrace deposit materials, and are generally less than 20 feet in thickness (Pacific Soils, 1981). Pacific Soils generally described these fills on their boring logs as sand, silty sand, clayey silt, clayey sand, and sandy clay. The fill area mapped by Pacific Soils is shown on Figure 6. Minor uncertified fill is associated with the access road at the toe of the bluffs (Pacific Soils, 1981).

Pacific Soils reported that approximately 426,000 cubic yards of soils were to be excavated and exported from the site as part of the planned site development in 1982 (Pacific Soils, 1982). Their report does not indicate how much fill was to be placed, and compaction reports by Pacific Soils were not available. A grading plan by Hunsaker and Associates used by Pacific Soils for their May 28, 1981, report indicates a cut of 426,795 cubic yards and fill of 1,687 cubic yards.

5.2.2. Talus Deposits (Qtal)

Accumulations of talus deposits are present at the base of the bluffs at the project site. These materials consist of poorly consolidated sand, silt, gravel, and some cobbles and boulders which have been deposited primarily due to erosion and gravity. The talus deposits are derived from the upslope rock formations and terrace deposits.

5.2.3. Marine Terrace Deposits (Qt)

The elevated terrace area of the hotel site is capped by marine terrace deposits (Pacific Soils, 1981). These shallow marine sediments are typically comprised of sands with some silt, gravel, and clay, along with incorporated rock fragments from the underlying bedrock platform. Prior to site development, Pacific Soils found that the terrace deposits varied in thickness from approximately 35 to 70 feet, and that the basal contact of the terrace includes a gravel layer that typically occurs between elevation 95 and 110 feet MSL. They describe the base of the terrace (top of the bedrock platform) as generally planar and dipping gently toward the ocean. MTGL encountered terrace deposits in borings they conducted in 1999 to the depths explored of 31½ feet. Terrace deposits were observed by Ninyo & Moore on the west and southwest-facing bluffs at the site and generally consist of brown and yellowish brown, medium dense to very dense, silty sand and gravelly sand.

5.2.4. Capistrano Formation (Tc)

The Capistrano formation exposed on the western bluff at the project site consists predominantly of a brownish gray to medium gray, soft, friable to moderately cemented, massive siltstone. An irregular lens of light brown, soft, poorly cemented sandstone was observed in the Capistrano formation at the northwest corner of the property. Bedding orientations observed on site indicate the overall bedding orientation of the Capistrano formation consists of an approximate east-west strike with a moderate dip ranging from approximately 30 to 40 degrees toward the north.

5.2.5. Monterey Formation (Tm)

Two facies of the Monterey formation were described by Pacific Soils during their geologic mapping at the site in 1981: a shale and siltstone facies that is present on the west-facing bluff and a breccia facies that is present on the southwest-facing bluff. This breccia unit was mapped by the California Division of Mines and Geology (CDMG) as part of the San Onofre Breccia formation (CDMG, 1974), but Pacific Soils included the breccia unit as part of the Monterey formation based on a comformable contact between the two facies.

The shale and siltstone facies is pale gray, white, and grayish brown; soft to moderately soft; weakly to moderately cemented; and moderately to well bedded. The breccia unit is a medium gray to brown, moderately soft to hard, moderately well cemented, massive breccia with a sand to sandy clay matrix supporting metamorphic rock clasts. (Pacific Soils, 1981). Bedding orientations observed on site during our recent site reconnaissance indicate the overall bedding orientation of the Monterey formation consists of an approximate east-west strike with a moderate to steep dip ranging from approximately 30 to 70 degrees toward the north.

5.3. Coastal Bluff

Coastal bluffs border the northwest, west, and southeast sides of the hotel site. The edge of the coastal bluff is defined as the upper termination of a coastal bluff. In a case where there is a step-like feature at the top of the coastal bluff (i.e., the beach access walkway on the west bluff), the landward edge of the top-most riser shall be considered the bluff edge (City of Dana Point, 2007). Where grading has altered a natural bluff, the edge of the bluff is considered as the upper boundary of the altered bluff. By this definition, the bluff edge is interpreted to be at the top of the natural bluff area on the south side of the site and transitions across the beach access walkway and along the top of the modified bluff on the west side of the hotel. The bluff edge is coincident with the west side of the hotel in areas where the slope descends from the edge of the building. The bluff edge is interpreted to be at the

top of the modified bluff on the northwest side of the site. The interpreted bluff edge is shown on the Site Geologic Map and 2006 Aerial Photograph, Figures 6 and 7, respectively.

As discussed above, the natural bluffs at the project site are comprised of marine terrace deposit sands underlain by siltstone, shale, and breccia of the Capistrano and Monterey formations. Marine terrace sands are present on the upper bluff areas. The lower southwestern bluff is predominantly comprised of the breccia facies of the Monterey formation and partly by Monterey shale exposed in the southern corner of the site. The lower western bluff area is comprised of shale and siltstone of the Monterey formation and by Capistrano formation siltstone. The modified northwestern bluff and modified portion of the western bluff are comprised of terrace deposits and fill soils.

The natural bluffs at the site are partially vegetated; some steeper areas and some areas of harder rock do not support growth. Some areas of shallow erosion on the bluffs were observed during recent site reconnaissance. An approximately 2-foot-high erosion scarp was observed at the bluff edge on the southwest-facing bluff. The terrace deposits in the southwest part of the site also exhibit erosion rills and gulleys. Areas of erosion were also observed on the lower bluffs. No significant landslide scars were observed. It was reported that a shallow debris slide occurred a few years ago on the west-facing bluff below the beach access path. This area is partially re-vegetated. No drainage devices were observed that outlet onto the bluff faces.

A review of aerial photographs and topographic maps was conducted as part of the evaluation of historic bluff conditions and bluff retreat. Aerial photographs dated 1929, 1947, 1952, 1972, 1975, 1979, 1987, 2002, and 2006; and topographic maps from 1968, 1982, and 2006 were reviewed. Selected aerial photographs are shown on Figures 3, 4, 7, 8, 9, and 10. Aerial photographs and maps reviewed are included in the Selected References. Landslides were not observed on the site in the photographs reviewed. A relatively large landslide that is reported to be north of the site in the Salt Creek beach park area is visible on the older aerial photographs. Landslides have not been mapped on the hotel property on geologic

references reviewed for this report. No evidence of deep-seated landslides or areas of severe erosion were observed during site reconnaissance.

5.4. Groundwater

Perched groundwater has been reported on top of the bedrock contact at the base of the terrace deposits (Pacific Soils, 1981). The perched groundwater encountered in exploratory borings on site typically occurs between elevation 95 and 110 feet MSL. Elevations of 95 to 110 feet MSL would correspond to an approximate depth of 30 to 45 feet below the relatively level building areas on site. Groundwater seepage was mapped at the ground surface in the northwest area of the site by Pacific Soils (1981) and by Ninyo & Moore during our recent field reconnaissance (Figure 6). Groundwater levels may be influenced by seasonal variations, precipitation, irrigation, soil/rock types, groundwater pumping, and other factors and are subject to fluctuations. Shallow, perched conditions may be present in places.

6. FAULTING AND SEISMICITY

6.1. Regional Seismicity

The site is located in a seismically active area, as is the majority of southern California. The numerous faults in southern California include active, potentially active, and inactive faults. As defined by the CGS, active faults are faults that have ruptured within Holocene time, or within approximately the last 11,000 years. Potentially active faults are those that show evidence of movement during Quaternary time (approximately the last 1.6 million years) but for which evidence of Holocene movement has not been established. An inactive fault is one that has not shown evidence of surface displacement during Quaternary time.

In general, potential hazards associated with seismic activity include ground surface rupture, strong ground motion, and seismically induced liquefaction and/or landsliding. Based on our background review and site reconnaissance, the ground surface in the vicinity of the site is not transected by known active or potentially active faults. The site is not located within a State of California Earthquake Fault Zone (Alquist-Priolo Special Studies Zone). However,

the site is located in a seismically active area, as is the majority of southern California, and the potential for strong ground motion at the site is considered significant. Figure 11 shows the approximate site location relative to the principal faults in the region. The coastal bluff portions of the hotel site are located within a State of California Seismic Hazards Zone (CDMG, 1999), which indicates there is potential for earthquake-induced landslide zones on the bluffs. These potential seismic hazard zones are discussed in more detail in the following sections.

Based on our document review, the active Newport-Inglewood Fault Zone is located approximately 2 miles southwest of the site. Other known principal active faults within approximately 30 miles of the project site include the San Joaquin Hills Blind Thrust, Palos Verdes, Coronado Bank, Rose Canyon, and Elsinore Fault Zone (Table 1). Based on the proximity and number of known active and potentially active faults within the general region, it is reasonable to expect a strong ground motion seismic event during the lifetime of structures for the proposed hotel expansion project.

Table 1 lists selected principal known active faults that may affect the subject site, the maximum moment magnitude (M_{max}) as published by the CGS (2003), the type of fault as defined in Table 16A-U of the California Building Code (CBC, 2001), and significant historic earthquakes that have occurred on the fault. The approximate fault to site distance was calculated by the computer program FRISKSP (Blake, 2001).

Table 1 – Principal Regional Active Faults

Fault	Approximate Fault to Site Distance miles (km)[1]	Maximum Moment Magnitude (M_{max})[2]	Fault Type[2]	Significant Historic Earthquakes[3]
Newport-Inglewood (Offshore)	1.8 (2.9)	7.1	B	-
San Joaquin Hills Blind Thrust	8.9 (14.4)	6.6	B	-
Newport-Inglewood (Los Angeles Basin)	14.9 (24.0)	7.1	B	M6.4 Long Beach, 3/10/1933
Palos Verdes	17.8 (28.6)	7.3	B	-
Coronado Bank	18.5 (29.8)	7.6	B	-
Elsinore (Glen Ivy)	22.9 (36.9)	6.8	A	M5, 5/15/1910
Elsinore (Temecula)	24.4 (39.3)	6.8	A	M5, 5/15/1910
Chino-Central Avenue (Elsinore)	25.9 (41.7)	6.7	B	-
Whittier	26.7 (42.9)	6.8	A	-
Rose Canyon	29.6 (47.7)	7.2	B	-
Puente Hills Blind Thrust	32.4 (52.1)	7.1	B	-
Elsinore (Julian)	41.4 (66.6)	7.1	A	
Sierra Madre	44.8 (72.0)	7.2	B	-
Cucamonga	44.9 (72.3)	6.9	B	-
San Jacinto-San Jacinto Valley	46.1 (74.2)	6.9	A	-
San Jacinto-San Bernardino	46.6 (75.0)	6.7	A	-
San Jacinto- Anza	49.8 (80.1)	7.2	A	-
San Andreas (San Bernardino- Coachella)	54.5 (87.7)	7.5	A	-
San Andreas- Mojave	57.6 (92.7)	7.4	A	M7.9 Fort Tejon, 1/9/1857

Notes:
[1] Blake, 2001.
[2] Cao, et al., 2003.
[3] Southern California Earthquake Center (SCEC), 2004.

6.2. Principal Regional Faults

The following sections include discussion of the principal active fault systems in the region of the project site, and as shown on Figure 11. Additional active fault systems in the region include blind thrust faults. Blind thrust faults do not have a surface trace because the rupture

surface is buried. Since they are buried at depth and do not have a mapped surface trace, the San Joaquin Hills and Puente Hills blind thrust faults are not shown on official State fault zone maps. These faults are, however, included in the State database of active faults to be considered during seismic evaluations.

Recent studies have reported the presence of the San Joaquin Hills blind thrust fault underlying the San Joaquin Hills, Newport Coast, and Newport Beach area northwest of the project site (Grant, 1999). The San Joaquin Hills blind thrust fault is considered to be located approximately 9 miles northwest of the project site and is considered capable of generating a M_{max} 6.6 earthquake (Blake, 2001; Cao, 2003). The active Puente Hills blind thrust fault underlies the northern Orange County and Los Angeles areas northwest of the project site (Blake, 2001; Dolan, 2003). The Puente Hills blind thrust fault is considered to be located approximately 32 miles northwest of the project site and is considered capable of generating a M_{max} 7.1 earthquake (Blake, 2001; Cao, 2003).

6.2.1. Newport-Inglewood Fault Zone – Rose Canyon Fault Zone

The active Newport-Inglewood fault zone is a significant tectonic structure in the Los Angeles Basin area and consists of a series of northwest-trending, right-lateral, strike-slip fault segments that extend from the southern edge of the Santa Monica Mountains southeast to offshore from the Dana Point area. The Newport-Inglewood fault zone was the source of the 1933 Long Beach earthquake with a measured magnitude (M) 6.4. The Newport-Inglewood fault is considered capable of generating about a M_{max} 7.1 earthquake. The fault is approximately 46 miles in length and has a slip rate of approximately 1 millimeter (mm) per year. The project site is located approximately 2 miles from the offshore portion of the Newport-Inglewood fault zone.

The offshore portion of the Newport-Inglewood fault zone forms a lineament with, and becomes the Newport-Inglewood–Rose Canyon Fault Zone. This portion of the fault zone lies offshore southwest and southeast of the project site and is poorly located in parts and not well-studied (Southern California Earthquake Center [SCEC], 2004).

Right-lateral, strike-slip movement characterizes this approximately 56-mile-long fault zone, which has a slip rate of approximately 1 to 2 millimeters (mm) per year.

The Rose Canyon fault is a right-lateral, strike-slip fault that is located southeast of the project site and extends offshore approximately 19 miles north from San Diego and La Jolla. The Rose Canyon fault is considered capable of generating a M_{max} 7.2 earthquake and has a slip rate of approximately 1.5 mm per year. The project site is located approximately 30 miles northwest of the Rose Canyon fault zone.

6.2.2. Palos Verdes Fault Zone - Coronado Bank Fault Zone

The active Palos Verdes fault extends approximately 50 miles from the Palos Verdes Peninsula to offshore (west) of the project site. This right-reverse fault has a slip rate of approximately 3 mm per year and is considered capable of generating about a M_{max} 7.3 earthquake. The project site is located approximately 18 miles east of the Palos Verdes fault zone.

The Palos Verdes fault zone continues southward as the Palos Verdes-Coronado Bank Fault Zone, which is located offshore from the project site, and extends a total length of approximately 106 miles. Rupture extending from one named section across to another is considered possible (SCEC, 2004). The active Coronado Bank fault is characterized as a right-lateral, strike-slip and normal fault, has a slip rate of approximately 2 to 3 mm per year, and is considered capable of generating about a M_{max} 7.6 earthquake. The project site is located approximately 18 miles northeast of the Coronado Bank fault zone.

6.2.3. Elsinore Fault Zone (Whittier and Chino-Central Avenue Faults)

The active Elsinore fault zone is a significant tectonic feature in Southern California and consists of a series of right-lateral, strike-slip fault segments that extend northwest through the communities of Julian, Temecula, Lake Elsinore, and Glen Ivy for a length of approximately 112 miles to Corona. The Elsinore fault zone was the source of a M_w 5 earthquake that occurred on the fault in 1910. The fault zone includes the active Whittier fault and Chino-Central Avenue fault branches which splay from the northwest

end of the zone. The Elsinore fault zone is described as an A-type earthquake source (Cao, 2003), is considered capable of generating an approximate M_{max} 6.8 earthquake, and has a slip rate of approximately 5 mm per year. The Glen Ivy segment of the Elsinore fault zone is located approximately 23 miles northeast of the project site.

The Whittier fault is a right-lateral, strike-slip fault that extends approximately 24 miles from the Corona area in the Santa Ana Canyon, where it splays from the Elsinore fault zone, northwest to Whittier Narrows. The Whittier fault is considered capable of generating a M_{max} 6.8 earthquake and has a slip rate of approximately 2.5 mm per year. The Whittier fault is located approximately 27 miles north of the project site.

The Chino-Central Avenue fault is a right-reverse fault that extends approximately 13 miles from the Corona area in the Santa Ana Canyon, where it splays from the Elsinore fault zone, northwest through the Chino Valley. The Chino-Central Avenue fault is considered capable of generating a M_{max} 6.7 earthquake and has an estimated slip rate of 1 mm per year. The Chino-Central Avenue fault is located approximately 26 miles north of the project site.

6.2.4. San Jacinto Fault Zone

The active San Jacinto fault zone is a significant tectonic feature in Southern California and consists of a series of right-lateral, strike-slip fault segments that extend northwest for a length of approximately 130 miles through the communities of Borrego Springs, Anza, Hemet, Loma Linda, and San Bernardino. The project site is located approximately 46 miles southwest of the San Jacinto Valley segment of the fault. The Coyote Creek segment of the fault, located at the southeast end of the fault zone, was the source of the 1968 M_{max} 6.5 Borrego Mountain earthquake. The San Jacinto fault zone is described as an A-type earthquake source (Cao, 2003) and has a slip rate of approximately 6 mm per year. The different segments of the fault, listed in Table 1, are considered capable of generating earthquakes in the range of M_{max} 6.7 to 7.2.

6.2.5. San Andreas Fault Zone

The San Andreas fault zone has long been recognized as the dominant seismotectonic feature in California. This right-lateral, strike-slip fault strikes northwest through the state from the Gulf of California to north of San Francisco. Two of California's three largest historic earthquakes, the 1906 San Francisco earthquake and the 1857 Fort Tejon earthquake, occurred along the San Andreas fault. The project site is located approximately 54 miles southwest of the San Bernardino segment of the fault and is located approximately 57 miles southwest of the Mojave segment of the fault which ruptured during the 1857 Fort Tejon earthquake. The San Andreas fault zone is described as an A-type earthquake source (Cao, 2003), and the slip rate of the fault zone is estimated to be 30 mm per year. The fault is considered capable of producing earthquakes in excess of M_{max} 7.4, and the average frequency of earthquakes along the Mojave segment of the San Andreas fault is approximately 140 years (SCEC, 2004).

7. POTENTIAL GEOLOGIC AND SEISMIC IMPACTS/HAZARDS

Based on our review of geologic and seismic background information, and geologic site reconnaissance, the proposed hotel expansion project is not anticipated to have a significant impact on the geologic environment. The proposed project may be subjected to potential impacts from geologic and seismic hazards, but appropriate design and construction measures can mitigate site hazards. Potential impacts on the proposed project based on our geologic and seismic review are provided in the following sections. Potential mitigation measures are presented in Section 8.

7.1. Surface Fault Rupture

Surface fault rupture is the offset or rupturing of the ground surface by relative displacement across a fault during an earthquake. The Newport-Inglewood fault zone is the closest active earthquake fault to the site and is located approximately 2 miles southwest of the site. Based on current published fault studies and geologic maps, as well as site reconnaissance, the project site is not crossed or underlain by a known active fault and, therefore, would not likely be subject to ground surface rupture.

7.2. Seismic Ground Shaking

The seismic hazard likely to impact the project is ground shaking during an earthquake on one of the nearby or distant active faults. The level of ground shaking at a given location depends on many factors, including the size and type of earthquake, distance from the earthquake, and subsurface geologic conditions. The size and type of construction also affects how a particular structure performs during ground shaking.

Our evaluation of the ground shaking hazard included review of a probabilistic seismic hazard assessment that consisted of statewide estimates of peak horizontal ground accelerations conducted for California (Peterson, 1996). In addition, for the purposes of evaluating seismically induced geotechnical hazards at the site, a site-specific probabilistic seismic hazard analysis was performed to evaluate anticipated peak ground accelerations (PGAs) using the computer program FRISKSP developed by Blake (2001). FRISKSP calculates the probability of occurrence of various ground accelerations at a site over a period of time and the probability of exceeding expected ground accelerations within the lifetime of the proposed structure from the significant earthquakes within a specific radius of search. For this project site, a search radius of 62 miles (100 kilometers) was selected.

The published guidelines of CGS (2004) define a PGA with a 10 percent probability of exceedance in 50 years as the Design Basis Earthquake (PGA_{DBE}) ground motion, and this value is typically used for residential and commercial structures. In evaluating the seismic hazards associated with the project site, we have considered a PGA that has a 10 percent probability of being exceeded in 50 years and used an attenuation relation for relatively shallow soil conditions present at the site. The PGA for the site was calculated as 0.4g (i.e., 40 percent of the acceleration due to gravity). This estimate of ground motion does not include near-source factors that may be applicable in the design of the proposed building structures. The requirements of the governing jurisdictions and the 2001 CBC should be considered in project design.

7.3. Liquefaction

Liquefaction is a phenomenon in which soil loses its shear strength for short periods of time during an earthquake. Ground shaking of sufficient duration results in the loss of grain-to-grain contact, due to a rapid increase in pore water pressure, causing the soil to behave as a fluid for short periods of time. The effects of liquefaction may include excessive total and/or differential settlement of structures founded on the liquefying soils. Soils that are susceptible to liquefaction generally include loose to medium dense, predominantly sand and silt below the groundwater table that are subjected to a sufficient magnitude and duration of ground shaking.

According to Seismic Hazards Zones Maps published by the State of California (CGS, 2005), the site is not mapped within an area considered susceptible to liquefaction. Based on the site groundwater and geologic conditions, the potential for liquefaction is considered low. The potential for liquefaction at the site should be evaluated by subsurface exploration and laboratory testing prior to design and construction of project improvements.

7.4. Landslides

Landslides, debris slides, and rock slides of earth materials predominately occur where slopes are steep and earth materials are relatively weak. Landslides can consist of rock falls, shallow slumps, flows and erosional failures, or deep-seated rotational and block failures. Shallow failures are typically caused by high incident rainfall or concentrated surface runoff conditions that weaken surficial materials. Rotational and block-type slides form deeper within the ground, typically within rock formations, and are generally related to adverse geologic structure or discontinuities in the rock that manifest into a sliding surface. Rainfall and other water infiltration into the ground can exacerbate and trigger these deeper sliding conditions. Landslides may also be caused by seismic ground shaking, particularly where high groundwater is present.

Our review of referenced geologic materials does not indicate the presence of previous land-slides at the hotel site. Landslides were not observed at the site during our recent

reconnaissance. We understand that a shallow slump occurred on the modified western bluff area below the terrace area in 1989. The slump was described as approximately 35 feet wide and 27 feet long and 4 to 5 feet deep. A remedial repair of the slump involved a geogrid-reinforced fill.

Due to the steep condition of the natural bluffs at the site, there is a potential for natural bluff area landslides. Previous studies and our geologic reconnaissance indicate that the orientation of bedding of the rock formations consists of an overall east-west trending strike and a northerly dip in the range of 30 to 70 degrees. This bedding orientation is considered neutral with respect to the orientation of the bluff faces and reduces the probability of a landslide occurring along bedding planes. The modified bluffs at the site have been graded to flatter inclinations and are landscaped and have a low potential for landsliding.

There is a potential for the project site to be affected by earthquake-induced landslides. The coastal bluffs are mapped by the State as an area susceptible to earthquake-induced landslides on the State Seismic Hazards Zones Maps (Figure 12). Potential earthquake-induced landslides that may be anticipated to affect the natural bluffs on the site would include shallow rockfalls and debris slides. Based on the geologic structure, the potential for deep-seated, rotational or block-glide landslides due to earthquake ground shaking is considered low.

7.5. Bluff Retreat and Bluff Stability

Our evaluation of the bluff retreat at the site was based on study of aerial photographs from 1929 to 2006, review of background geologic materials, review of site development reports, and previous site surveys and site reconnaissance. A comparison was made between the bluff edge (and other prominent topographic and geomorphic features) in the photographs and surveys to estimate the bluff retreat over that period and evaluate changes in surface conditions.

Overall, comparison of aerial photographs since 1929 indicates that the site has not had significant alterations of the bluff configuration since that time, other than the site development

grading activities that occurred. No indications of gross failure, accelerated erosion or significant bluff loss areas were observed in photographs reviewed. In the earliest aerial photographs reviewed from 1929, the configuration of the southwest bluff and lower west-facing bluff are similar to current configuration. The 1929 photographs show that the bluff toe area and the point at the toe formed by the relatively resistant Monterey formation breccia unit have remained in a relatively similar configuration since that time.

Our review indicates that the roadway at the toe of the bluffs was constructed prior to 1947 (an unpaved roadway and embankment are visible in the 1947 photograph). This roadway was used as a common reference for analysis of the aerial photographs of the site since 1947. The edge of the roadway is visible in the photographs, and we understand that modifications of that area from site development have not occurred. Relative to the roadway, the bluff has remained in relatively similar position.

Since development of the site and grading of the bluffs in the early 1970s, no significant changes in the bluff conditions were observed in the aerial photographs reviewed. Furthermore, significant erosion or retreat of natural bluff areas at the site has not been reported. The modified bluff areas at the site are not subject to retreat since they are graded, landscaped slope areas.

According to the City of Dana Point's 1990 Coastal Erosion Report, "the resistant small headland below the Ritz-Carlton hotel has not moved significantly within the time span or resolution of available coastal maps and aerial photos (used for that study). The existing rip-rap revetment (at the toe of the bluffs) was damaged negligibly during the January 1983 storms; therefore, existing mitigative measures along the shoreline at this headland are apparently adequate at the present time." The report also states that the exposure of breccia that forms the southern part of the Ritz headland has a low erodibility that has resulted in formation of the headland. A geotechnical map in the report indicates that the Ritz headland is an area of "slow retreat" and recommends a 25 foot setback from the bluff edge.

7.6. Groundwater and Surface Water

Based on our background review, some perched groundwater is present beneath the hotel site near the base of the terrace deposits, approximately 30 to 45 feet below the bluff top ground surface. Subsurface construction activities for the proposed hotel expansion project are anticipated to consist of excavations for building pads, foundations, and utilities. Based on the anticipated depth of these construction activities and reported depths to groundwater, shallow groundwater is considered to have less than a significant impact on the proposed project. Shallow groundwater may have an impact on construction of deeper foundations (if constructed). Mitigation measures to reduce these impacts to less than significant can be developed.

A groundwater seepage area was observed on the project site on the west-facing slope above the beach access trail. This area of seepage is coincident with a seepage area that was observed by Pacific Soils during their 1982 study. Currently, the surface water from the seepage areas is flowing via small earthen landscape channels that have been provided to drain the seepage to a storm drain inlet at the toe of the slope area. No indications of landslides or other slope instability were observed in the vicinity of the seepage area. This seepage area is not considered to have an impact on the proposed hotel expansion project.

Groundwater levels may be influenced by seasonal variations, precipitation, irrigation, soil/rock types, groundwater pumping, and other factors and are subject to fluctuations. Shallow perched conditions or seepage may be present in places. Further study, including subsurface exploration, should be performed during the design phase to evaluate the presence of groundwater, seepage, and/or perched groundwater at the site. In the event groundwater conditions are present that may impact the proposed construction, appropriate mitigation measures can be provided. Potential mitigation measures are presented in Section 8.4

7.7. Site Drainage and Erosion

Soil erosion refers to the process by which soil or earth material is loosened or dissolved and removed from its original location. Erosion can occur by many different processes and may occur at the project site where bare soil is exposed to moving water or wind. Construction of the proposed hotel expansion improvements would result in ground surface disruption during excavation, grading, and trenching that would create the potential for erosion to occur. However, the erosion potential when the site is developed will be relatively minor due to the anticipated covering of bare areas with structures, pavements, and associated hardscape and landscaped areas. Surface drainage provisions would also reduce the potential for soil erosion at the site. Potential soil erosion is considered to have a low impact during construction with mitigation incorporation.

7.8. Soil Settlement

Loose terrace deposit soils or undocumented/poorly compacted fill may be present in some areas at the site. Compressible natural soils and poorly compacted fills pose the risk of adverse settlement under static loads imposed by new fill or structures. Differential settlement of soils can cause damage to project improvements, including foundations, structures, pavements, and other hardscape features. The potential for soils prone to settlement at the site should be evaluated by subsurface exploration and laboratory testing prior to design and construction of project improvements in order to develop mitigation measures that would reduce the impacts.

7.9. Expansive Soils

Expansive soils generally result from specific clay minerals that have the capacity to shrink or swell in response to changes in moisture content. The ability of clayey soil to change volume can result in uplift or cracking to foundation elements or other rigid structures, such as slabs-on-grade, rigid pavements, sidewalks, or other slabs or hardscape founded on these soils. Background materials reviewed indicate that much of the near-surface, terrace deposit

soils at the project site consist of coarse, sandy materials. Therefore, the potential for expansive soils at the project site is considered to be low.

7.10. Corrosive Soils

The project site is located in a geologic environment that could potentially contain soil conditions that are corrosive to concrete and metals. Corrosive soil conditions may exacerbate the corrosion hazard to pipelines, foundations, and other buried improvements. Assessment of the potential for corrosive soils would be evaluated during the design phase of the project, and mitigation measures would be developed. Therefore, potential soil corrosivity is considered to have a low impact during construction of proposed improvements with mitigation incorporation.

7.11. Distinctive Geologic or Topographic Features

This potential geologic impact refers to the proposed project's potential to cover or modify one or more distinct prominent geologic or topographic features. Distinct topographic/geologic features at the site would include the undeveloped, natural coastal bluff areas of the property. Other prominent topographic/geologic features were not observed at the site. The developed portions of the proposed hotel expansion site have been previously graded and generally comprise a relatively level building pad terrace upon which the hotel is built and a modified portion of bluff area. The proposed hotel expansion project will result in grading and trenching activities within the developed areas of the property and along the top of the modified bluff area. Development is not proposed within 25 feet of the natural bluff areas. Therefore, the proposed project would not result in significant impacts related to the alteration or modification of prominent geologic or topographic features.

7.12. Tsunamis

Tsunamis are seismically-induced sea waves generated by offshore earthquakes. Large magnitude waves have not historically been recorded in Orange County because the coastline is somewhat protected from the north by the configuration of the coastline and offshore islands

in southern California (City of Dana Point, 1995). However, the coastal area of Dana Point is more exposed to damage from a rarer tsunami or other large storm waves which might come from the south (City of Dana Point, 1995). Tsunami damage is typically confined to low-lying coastal areas. The proposed hotel expansion site is elevated approximately 140 to 150 feet above mean sea level. Due to the elevation of the site above mean sea level, a potential tsunami is not anticipated to have a significant impact on the bluff top hotel improvements. A potential tsunami may have an impact on the bluffs of the property.

8. CONCLUSIONS AND DISCUSSION

Based on our evaluation, it is our general opinion that the proposed hotel expansion project is feasible from a geotechnical standpoint and can be constructed without adverse geologic impacts to the site. A potential geologic hazard for the proposed construction includes the relatively steep natural coastal bluffs. The present and historic conditions of the bluffs at the site have been evaluated as they relate to the proposed construction. Based on our evaluation described herein, we conclude that the bluffs at the site have exhibited an overall stable condition since 1929 and no significant changes in the configuration of the bluffs have occurred, other than site development activities. Accelerated retreat of the natural bluffs has not been observed, and, in our opinion, future retreat of the natural bluffs should not affect the proposed hotel expansion improvements in the next 50 years provided that appropriate site maintenance, geotechnical recommendations, and mitigation measures are incorporated into the design and construction of the project. Retreat of the modified bluff areas is not anticipated to occur. Therefore, in our opinion, the City-recommended 25-foot setback from the bluff edge is appropriate for the site.

The proposed wing infill and bungalows on the south side of the hotel are planned inland of the 25 foot setback line. The proposed wing infills on the west and northwest sides of the hotel are planned within the 25-foot setback zone (Figure 6). In our opinion, from a geotechnical-engineering standpoint, these proposed infills can be constructed within the setback zone without adverse impacts on the bluff stability, since the existing building has demonstrated stable per-

formance at those locations since construction. Geotechnical design recommendations should address appropriate foundation systems near the top of the bluff.

The potential geologic and seismic hazards previously discussed may be mitigated by employing sound engineering practice in the design and construction of the new facilities. This practice includes the performance of site-specific geotechnical and seismic hazards analyses prior to the construction of improvements at the site. Typical measures to mitigate potential hazards that may be encountered during the construction of the improvements are described in the following sections. These mitigation measures are provided for general environmental planning purposes, and specific design recommendations and measures to mitigate potential geotechnical hazards would be evaluated during the design and construction phase of the project.

8.1. Seismic Ground Shaking

Mitigation measures to reduce the potential impacts of seismic ground shaking will be achieved through project design and construction. During the design phase, site-specific geotechnical evaluations will be performed to obtain detailed subsurface soil and geologic data, including evaluation of the site-specific ground motion anticipated for the site. Structural elements will then be designed to resist or accommodate appropriate site-specific ground motions and conform to the current Uniform Building Code (UBC) seismic design standards.

8.2. Earthquake-Induced Landslides

Based on our evaluation, we conclude that there is a potential for seismically induced landslides to affect the steep, natural coastal bluffs on the property. The types of failure that may occur due to earthquake shaking may be rockfalls or shallow debris slides. Mitigation of the effects of these potential types of slides would involve the City-recommended, 25-foot setback from the bluff edges and measures to improve stability of the bluffs, such as drainage provisions to keep surface runoff from eroding the bluff face.