DRAFT ENVIRONMENTAL IMPACT REPORT

Marina del Rey

Oceana Retirement Facility & Holiday Harbor Courts

Marina del Rey Land Use Plan Parcels OT and 21

State Clearinghouse Number 2007021133

Volume I of II

Los Angeles County Project Numbers:

Parcel OT R2006-01510/RCDP200600002/RCUP200600115/RENV200600109/RPA200600109/RPKP200600009
Parcel 21 R2006-02726/RCDP200600003/RCUP200600223/RENV200600177/RPA200600010/RPKP200600015

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August 2009

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I. EXECUTIVE SUMMARY

A. INTRODUCTION

This Environmental Impact Report (EIR) has been prepared by the County of Los Angeles to evaluate potential environmental impacts resulting from the proposed Oceana Retirement Facility and Holiday Harbor Courts Project (the proposed project), located on separate parcels in Marina del Rey. One EIR has been prepared for both projects to take account of cumulative effects. Holiday-Panay Way Marina, L.P. and MDR Oceana, LLC (applicant) are proposing active seniors accommodations and commercial development of Parcels OT and 21 contained within the Marina del Rey (Marina) Land Use Plan (LUP), which is a component of the Los Angeles County Local Coastal Program (LCP). The fully certified LCP consists of the LUP and the Specific Plan acting as the Implementing Program of the LUP. Additionally, Los Angeles County (County) is the landowner of both Parcels, and the County Department of Beaches and Harbors serves as co-applicant on this and all projects on County-owned land within the Marina. Holiday-Panay Way Marina, L.P. and MDR Oceana, LLC are lessees of the sites. This project requires an amendment to the Local Coastal Program for 1) the creation of a new land use category in the LCP, 2) re-designation of the Parcel OT land use category, 3) the transfer of development potential between LCP Development Zones, 4) an adjustment to the lease parcel boundary between Parcels OT and P to add to Parcel OT, and 5) re-designation of the land use category on the portion of Parcel P added to Parcel OT. This project also requires modifications to LCP Amendment No. 1-01 for 1) the transfer of parking spaces from Parcel OT to Parcel 21, 2) the transfer of the yacht club and marine commercial uses from Parcel 20, Phase II, to Parcel 21, and 3) the enlargement of Parcel GR with a corresponding reduction in size of Parcel 21.

MDR Oceana, LLC proposes the Oceana Retirement Facility for a 2.08-acre site consisting of Parcel OT and a portion of Parcel P[1] (19,755 square feet (s.f.)), located on Admiralty Way in the Oxford Development Zone (DZ #6) of the Marina del Rey LUP. The proposed Oceana Retirement Facility would include a 114-unit active seniors accommodations facility, which would house an estimated population of 145 residents (assuming a 90 percent occupancy at any given time).[2] The facility takes advantage of frontage on both Washington Boulevard and Admiralty Way, and would include 5,000 s.f. of retail space along Washington Boulevard that would be open to the general public. The active seniors facility would include lounges, card rooms, a chapel, administration and reception offices, a dining room, library, arts and crafts room, laundry facilities, a trash and mail room, a kitchen, and a beauty salon that would serve residents and their guests. On-site parking would include private stalls to serve the retirement facility residents, their guests, and employees of the facility, as well as 92 stalls for the general public. A total of 94 of the LCP permitted 186 public parking spaces on OT would be transferred to Parcel 21.

Holiday-Panay Way Marina, L.P. proposes the Holiday Harbor Courts commercial development for Parcel 21, which is a 2.55-acre site on Panay Way in the Panay Development Zone (DZ #4) of the Marina del Rey LUP. The proposed Holiday Harbor Courts project would replace existing on-site uses with new marine commercial uses, a public park plaza and promenade, and on-site public parking. It would also provide a 5.5-foot wide sidewalk along the project's Panay Way frontage, as well as include a partial lease termination that would reduce the area of Parcel 21 by 31,050 s.f., with a corresponding increase in the area of Parcel GR, located adjacent to and west of Parcel 21.

[1] Hereafter, unless otherwise noted, the Oceana Retirement Facility project site is simply referred to as Parcel OT.

[2] Occupancy assumptions are based upon developer's experience at multiple other facilities of this type. If occupancy were at 100 percent, the resident population would be 161.

This EIR was prepared in accordance with the California Environmental Quality Act (CEQA) of 1970[3] and the CEQA Guidelines[4]. The County will use this EIR in its consideration of the requested approvals that would allow implementation of the proposed project. A Notice of Preparation (NOP) was circulated for review and comment by the public, agencies, and organizations as required under CEQA, from March 1, 2007 to March 30, 2007. The NOP is provided in Volume II of II of this EIR, in **Appendix A**. Comments relating to the EIR scope were taken into consideration in the preparation of this EIR.

This Executive Summary summarizes the project description and conclusions of the impact analyses provided in the EIR. Section III, Project Description, provides a detailed description of the proposed project evaluated in the EIR. Section IV, Environmental Analysis, addresses each of the issues that were identified in the Initial Study as requiring further analysis in the EIR. The impact analysis for each issue area examined in this EIR is presented in five subsections as described below:

- **Existing Conditions** – This subsection provides information describing the relevant environmental setting as well as the applicable regulatory setting.
- **Thresholds of Significance** – This subsection identifies the thresholds used to assess the significance of project impacts. These are based primarily on applicable CEQA criteria and the Los Angeles County Department of Regional Planning Initial Study prepared for the proposed project.
- **Project Impacts** – This subsection describes the nature and extent to which the proposed project would change the existing environment and makes a determination of whether or not these changes would exceed the thresholds of significance.
- **Cumulative Impacts** – This subsection identifies the potential for significant effects to occur as a result of the proposed project in combination with other development anticipated in the vicinity of the project site. Where this potential exists, a determination is made as to whether or not the proposed project's contribution to this impact is cumulatively considerable and therefore significant.
- **Mitigation Measures** – Mitigation measures are identified for each significant impact that would occur as a result of the proposed project. Although not required under CEQA, in some cases mitigation measures are also recommended for impacts that are considered less than significant, in order to further reduce such impacts, or to further assure the proper implementation of local, State, or Federal standards, codes, or regulations.

Section V, Alternatives, describes alternatives to the proposed project and the extent to which each alternative would reduce or avoid the significant environmental impacts associated with the proposed project. Section VI identifies significant irreversible environmental changes, and Section VII identifies growth-inducing impacts.

B. PROJECT DESCRIPTION

1. Introduction

As stated previously, MDR Oceana, LLC proposes the Oceana Retirement Facility for Parcel OT, which is a 2.08-acre site on Admiralty Way in the Oxford Development Zone of the Marina del Rey LUP. The proposed Oceana Retirement Facility would provide a 114-unit active seniors accommodations facility, which would consist of for-rent units and house an estimated population of 145 residents. Holiday-Panay

[3] State of California, Public Resources Code, Sections 21000 et seq.
[4] Title 14, California Code of Regulations, Sections 15000 et seq.

Way Marina, L.P. proposes the Holiday Harbor Courts commercial development for Parcel 21, which is a 2.55-acre site on Panay Way in the Panay Development Zone (DZ #4) of the Marina del Rey LUP.

2. Project Site

The proposed project is located within the unincorporated County community of Marina del Rey, with the surrounding region including the Pacific Ocean to the west, Venice to the north, Playa del Rey and the Los Angeles International Airport (LAX) to the south, and the terminus of State Highway 90 (Marina Expressway) at Lincoln Boulevard (State Highway 1) to the east. Parcel OT is also denoted as Assessor's Parcel Number (APN) 4224-006-900 at 4445 Admiralty Way, and Parcel 21 is APN 4224-003-901 at 14025 Panay Way.

The Oceana Retirement Facility project site (Parcel OT and 19,755 s.f. of Parcel P) is approximately 90,442 square feet (s.f.) in size, with dimensions of approximately 260 feet wide along Admiralty Way and 355 feet deep traversing from Washington Boulevard to Admiralty Way. The site is currently used as a County-operated paid public parking lot, with 183 parking spaces.[5] Most of the site is predominantly paved and relatively flat, and is bordered with some perimeter landscaping in generally poor condition - shrubs and trees (mostly non-native vegetation), including fig (*Ficus* sp.), Indian hawthorn (*Rhaphiolepis indica*), and Natal plum (*Carissa macrocarpa*). Along Washington Boulevard, the fig trees have grown to such an extent that the public sidewalk has become fractured and uneven. The site is bordered on the west by the Marina International Hotel, with a driveway separating the two uses; on the south by Admiralty Way and residential, hotel and restaurant uses; on the north by Washington Boulevard and single family homes north of Washington Boulevard; and on the east by a pathway and the Marina Lagoon (also known as the Oxford Retention Basin or Oxford Lagoon). Currently, the existing surface parking lot on Parcel OT and maintenance road to the Oxford Basin encroach approximately 21 feet into Parcel P (an area of 6,665 s.f.).

The Holiday Harbor Courts project site, Parcel 21, is located on the Panay Way mole road atop a quay. The Holiday Harbor Courts site measures approximately 741 feet in width along the frontage of Panay Way and approximately 150 feet in depth from Panay Way to the water. The Parcel is currently developed with two commercial structures and a paved parking area that serves the commercial structures and also provides parking for boaters using the adjacent docks. One structure consists of a health club and the other is comprised of retail and marine commercial uses. The site also contains some sparse landscaping and a pedestrian walkway along the water's edge. A six-story apartment building is adjacent to and east of Parcel 21, with an improved promenade along the water's edge adjacent to the apartment building. Other uses adjacent to Parcel 21 include apartments and a restaurant with parking to the south, as well as restaurants and retail to the west. Marina docks and slips (designated Marina Basin D in the LUP) are located immediately to the north of the site.

3. Project Characteristics

Parcel OT

The proposed Oceana Retirement Facility development would replace an existing 183-space parking lot with 114 for-rent congregate-care units and ancillary facilities, retail space, and on-site parking. The

[5] According to the Draft Right-Sizing Parking Study for the Public Parking Lots in Marina del Rey, California, prepared by Raju Associates, Inc. (March 2009), based on the field inventory surveys performed by the Los Angeles County Department of Beaches and Harbors, the public parking available on Parcel OT is 183. This is different from the number of spaces noted in the Marina del Rey Land Use Plan (LUP), which is 186 spaces, due to restriping of the lot after publication of the LUP to accommodate handicapped spaces. This EIR analysis conservatively uses the 186 space estimate in order to provide for a greater number of replacement parking spaces under the proposed project.

proposed structure would consist of five levels that extend from Washington Boulevard to Admiralty Way, as well as a partial level that fronts only Washington Boulevard, due to the slope of the property. Parking spaces would be available on the partial level (ground floor level) as well as the lower ground level above it. Parcel OT currently provides parking for visitors of the Marina, particularly those visiting Mother's Beach, even though it is located across the street (Admiralty Way) from these amenities. Of the 186 public parking spaces permitted on Parcel OT under the LCP, 94 spaces would be relocated to Parcel 21, which would provide parking that is adjacent to the Marina, closer in proximity to Mother's Beach, would not require street crossing to access Mother's Beach, and would provide covered parking, as envisioned by the proposed site plan. The remaining 92 LCP permitted public parking spaces would be provided at Parcel OT as part of the proposed project for use by the public and FantaSea Yachts and Yacht Club. The Oceana Retirement Facility would provide parking for its proposed uses, in accordance with the County Code, as well as incorporating 92 public parking spaces. In addition, the proposed project would replace an underutilized parking surface parking lot[6] with a mixed-use active seniors accommodations facility, helping to meet the growing demand for housing for the retired population, a growing demographic in Los Angeles County. The project would provide retired residents with increased access to the Marina coastal resources. Such development would require an LCP Amendment to both the LUP and the Implementing Program (the Specific Plan) to create an Active Seniors Accommodations Land Use Category in the LCP and re-designate Parcel OT as an Active Seniors Accommodations parcel. A transfer of approved development potential between Development Zones (hotel units from the Admiralty DZ #7 and retail space from the Palawan/Beach DZ #5 to the Oxford DZ #6, where Parcel OT is located). The project would be subject to a new set of development standards similar in character to the current Residential V designation of the LUP. The LCP Amendment also includes an adjustment to the lease parcel boundary between Parcel OT and Parcel P, which would also necessitate adjustments to the corresponding LCP maps.

The active seniors accommodations would consist of 67 one-bedroom units and 47 two-bedroom units totaling 96,250 square feet, as well as ancillary facilities comprising 25,389 square feet. As the proposed development on Parcel OT would include active seniors accommodations, the structures have been designed with consideration given to senior citizens with physical disabilities, providing easier access to indoor and outdoor uses.

The proposed project received conceptual approval from the Marina Design Control Board, on April 18, 2005, which found the project to meet the requirements of the LCP (refer to Appendix A). The building height would be approximately 67 feet and seven inches on Admiralty Way and approximately 75 feet on Washington Boulevard, measured from the streets to the highest point of the rooftop. The architects of the Oceana Retirement Facility describe the architectural design of the building as an updated classical style. The building design is reminiscent of older building styles (e.g., materials), but it is updated with contemporary forms. The building would include a stone-like base, ornamental railings and tile roofing, coupled with metal-framed glass walls and projecting metal canopies, which are designed to enhance the architectural character within contemporary forms. Some of the materials that are to be incorporated into the building design include red mission tiles on the roof, a neutral (light champagne) color on the free standing frames, railings, canopies and balconies, and a light silver color (anodic clear) on the window frames. Concrete pavers are to be used on the terraces and inner courtyard in colors described by the architects as olive green, oak creek blend and pewter. The building was also designed to open up to its surroundings. The structure is stepped back at the second and third floors along Admiralty Way and the

[6] The Marina del Rey LUP "contemplates the potential conversion of three parking lots to other uses" including Parcel OT. The LUP states that Parcel OT "is underutilized most of the year" and that "lot OT is fully used only during peak events" (LUP, Page 2-5).

lagoon, creating large private, stepped terraces, allowing for outdoor sitting, dining and recreation. Balconies are also provided for other exterior rooms.

Parcel 21

The proposed four-level Holiday Harbor Courts development would demolish the existing structures and replace existing uses with new marine uses, a public park plaza and promenade, and a six-level parking structure, which would be partially subterranean. Uses approved for Parcel 20 (Phase II)[7] (in the Panay DZ #4) but not built, including marine commercial space and a yacht club, would also be transferred to Parcel 21 (also in the Panay DZ #4), as would 94 parking spaces from Parcel OT. The proposed project would reduce the existing health club floor area by 6,000 s.f. (from 16,000 to 10,000 s.f.), with the remaining floor area planned for additional marine commercial uses. The proposed project would consist of a total of 29,348 square feet. With the transfer of land uses from Parcel 20, the development on Parcel 21 would result in zero s.f. of net new leasable area within the Panay DZ #4 of the Marina del Rey LUP. An estimated 447 parking spaces would be provided on Parcel 21 after the transfers are made from Parcels OT and 20. The proposed project would also include a 5.5-foot wide sidewalk along the Panay Way frontage, which does not currently exist. In addition, Parcel 21 would be reduced by 207 feet, or 31,050 s.f., through a partial lease termination, which would represent an increase in the area of Parcel GR, which lies adjacent and west of Parcel 21.

The first floor of the Holiday Harbor Courts building would contain the new health club and a portion of the replacement uses of LUP Parcel 21 (retail and marine commercial uses). The second floor would contain the remainder of the replacement uses of LUP Parcel 21 (retail and marine commercial uses), the transfer of marine commercial uses from LUP Parcel 20, and 6,000 s.f. of new marine commercial uses. The third floor is devoted to parking, and the fourth floor would contain the yacht club. The yacht club has a high, vaulted ceiling that is roughly equivalent to two levels of parking. The final level consists of the roof of the yacht club and adjacent parking. Parking on Parcel 21 would provide parking that is adjacent to the Marina, closer in proximity to Mother's Beach than the parking currently provided by the lot on Parcel OT, would not require street crossing to access Mother’s Beach, and would provide covered parking, as envisioned by the proposed site plan.

The proposed project received conceptual approval from the Marina Design Control Board on April 18, 2005, which found the project to meet the requirements of the LUP (refer to Appendix A). The building would be the same height as the adjacent apartments. Its design utilizes a nautical theme with curved and circular elements and hues of blue and green. Building materials include the use of aluminum (as does the apartment building next door) and blue-green glass. Portions of the facade would be designed with floor to ceiling glass, allowing for views from the building onto the adjacent plaza and waterfront. The structure is designed with a recessed ground floor and terraced upper floor. The attached parking structure consists of angular walls and curved openings punched on the facade, and it is designed in such a way as to allow for pedestrian views of the water through the parking structure at the ground level.

C. SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Table I-1, below, summarizes the proposed project’s environmental impacts and the measures identified to mitigate these impacts. The table also notes the significance of impacts before and after mitigation is

[7] Parcel 20 is located adjacent to and east of Parcel 21, and Phase I was developed with apartment uses in May 2005. Although Phase II uses were approved, they were not constructed. These original Phase II uses are proposed to be relocated to Parcel 21 as part of this project. Under a separate proposal and application, Parcel 20, Phase II (also referred to as Parcel 19), is proposed to be developed with a Department of Beaches and Harbors office. Although Parcel 20, Phase I, is not a related project to the proposed project, Parcel 20, Phase II, is a related project (refer to Table IV.H-10 in Section IV.H, Traffic/Access).

implemented. As stated above, in some cases mitigation measures are also recommended for impacts that are considered less than significant, in order to further reduce such impacts, or to further assure the proper implementation of local, State, or Federal standards, codes, or regulations. The proposed project would result in significant unavoidable adverse impacts (significant impacts that cannot be reduced to a less than significant level with implementation of mitigation measures) related to 1) noise at the balconies included on the Parcel OT active seniors accommodations that exceeds the standard for outdoor usable space, 2) a project- and cumulative-level visual quality impact associated with increased building height and massing at Parcel 21 along Panay Way and overall Marina del Rey development intensification, respectively, and 3) the proposed project's incremental contribution to cumulative traffic congestion at five of the 14 traffic study intersections.

D. AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

A number of issues regarding the proposed project were raised by public agencies in response to the NOP and through the Screencheck Draft EIR review process. These issues include environmental safety, geotechnical hazards, water quality, land use, traffic/access, utilities (water supply), water quality, cultural resources, air quality, and public services. These issues have therefore been addressed in this EIR in Sections IV.A through IV.M. The following issues have been identified as areas of controversy through the public review period on the Initial Study/Notice of Preparation disclosure by the Lead Agency:

- Creation of new land use category
- Re-designation of the land use category on Parcel OT to Active Senior Accommodations
- Amendment of the lease parcel boundary between Parcel OT and P
- Re-designation of the portion of Parcel P added to Parcel OT from Open Space to Active Senior Accommodations
- Transfer of development potential between development zones
- Height of the proposed building on Parcel OT
- Proximity of the Parcel OT project to the Oxford Basin
- Transfer of public parking from Parcel OT to Parcel 21
- Up-sizing and relocation of the Los Angeles County Department of Public Works water main on Parcel OT
- Cumulative Construction Traffic and Parking Impacts
- Partial lease termination from Parcel 21 to Parcel GR
- Transfer of yacht club and marine commercial uses from Parcel 20 Phase II to Parcel 21

Table I-1
Summary of Impacts and Mitigation Measures

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
Geotechnical Hazards			
Groundwater As groundwater may occur at depths as shallow as five feet below grade, and subterranean parking is proposed for both Parcels OT and 21 deeper than the groundwater table, the effects of groundwater during both the construction and operation phases of the proposed project, discussed below, are considered a significant impact.	Significant	**GEO-1** The applicant shall implement the geotechnical engineering recommendations related to groundwater of the geotechnical engineer and/or others, as well as conform to all subsequent conditions that are imposed on the project and are deemed appropriate and necessary during grading, construction, and/or operation of the proposed developments at Parcel OT and Parcel 21. A summary of these recommendations follows: ***Parcel OT and Parcel 21*** Excavation and Dewatering *Construction* • Open, unshored, excavations above the groundwater table may be cut vertically to a maximum depth of no more than four feet. Excavations extending between four and 15 feet deep (Parcel OT) or between four and ten feet (Parcel 21) shall be shored or sloped back from the base of the excavation to at least a one and one-half horizontal to 1 vertical (1.5H:1V) slope or flatter. If excavations dry out, sloughing will occur. No excavation shall be made within a 1:1 line projected outward from the toe of any existing footing or structure. • During the time open (unshored) excavations are open, no heavy grading equipment or other surcharge loads (i.e. excavation spoils) shall be allowed within a horizontal distance from the top of any slope equal to the depth of the excavation (both distances measured from the top of the excavation slope). • Adequate measures shall be taken to protect any structural foundations, pavements, or utilities adjacent to any excavations. • Design and operation of any	Less Than Significant

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		dewatering system shall be the responsibility of the contractor. However, ESSC suggests that a sheet-pile cutoff wall shall be used as a cutoff wall to minimize entry of groundwater into the temporary basement excavation. Alternatively, a soil-cement cutoff wall shall be used as the cutoff wall if it is also proposed as a mitigation measure for lateral spreading. Sumps, pumps, and or well points may also be necessary to remove groundwater from the basement excavation during construction. Sizing and operation of sumps and pumps or well points shall be the responsibility of the contractor. *Operation* • To minimize entry of moisture into the completed subterranean portions of the structures, a subdrain and backdrain system with sumps and sump pumps shall be utilized below the bottom floor slab and behind the retaining walls for the subterranean portions of the structure.	
<u>Soil Conditions</u> Since the fill material of Parcel OT is poorly compacted and contains significant amounts of debris and other foreign matter, it is not suitable in its current condition for supporting foundations. Therefore, it must be excavated, and although not expected, imported material may be necessary if fill is needed for support of sidewalks, ramps, parking areas or other exterior minor structures or pavements. Temporary excavations up to five feet in depth are anticipated to be necessary for construction of the proposed subterranean parking level slab and pile cap system of Parcel 21. The subterranean parking level is expected to be bottomed near the high groundwater level, and much of the soil within the building footprint is very loose and soft. Excavation bottoms at or below the groundwater level may not be firm and	Significant	**GEO-2** The applicant shall implement the geotechnical engineering recommendations related to soil condition improvement of the geotechnical engineer and/or others, as well as conform to all subsequent conditions that are imposed on the project and are deemed appropriate and necessary during grading, construction, and/or operation of the proposed developments at Parcel OT and Parcel 21. A summary of these recommendations follows: ***Parcel OT*** <u>General Site Preparation</u> • As the existing fill material is not suitable for use in engineered fill at the site, all strippings and debris shall be removed from the site in order to preclude their incorporation in site fill or remedial excavation backfill.	Less Than Significant

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
there may be a need to stabilize the excavation bottoms to provide a trafficable surface for pile driving and to construct the proposed pile caps and structural decks.		Depressions resulting from such removals shall have debris and loose soils removed and filled with suitable soils placed as recommended below. • Soils beneath any proposed traffic-bearing pavement and any exterior non-traffic bearing concrete flatwork (sidewalks, patios, walkways etc.), shall be excavated a minimum of 24 inches below the existing grade or finished subgrade, whichever is lower. The remedial excavation shall extend a minimum lateral distance of at least two feet beyond pavement edges. The bottom of the remedial excavation shall then be scarified (ripped) six inches. Suitable imported soils shall be used to replace the excavated fill, if necessary. The imported material shall be moisture conditioned to near optimum moisture content and be uniformly compacted to at least 90 percent of maximum dry density using mechanical compaction equipment. Compaction shall be verified by testing. ***It shall be understood that the new fill beneath such pavements and slabs will still be supported on at least 10 feet of non-engineered old debris fill, and as such may be subject to distress and shorter service life.*** • If necessary, import soils shall be equal to, or better than, the on-site soils in strength, expansion, compressibility, and soil chemistry characteristics. In general, import material shall be free of organic matter and harmful substances, have 100 percent passing a two inch sieve, 60 percent to 100 percent passing a #4 sieve, no more than 20 percent passing a #200 sieve, an Expansion Index less than 20, a Liquid Limit less than 35, and a Plasticity Index less than 12. If they are to be utilized, import soils shall be evaluated prior to their use. Approval of import soils shall be given only after the material is on the project,	

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		either in-place, or stockpiled in adequate quantity to complete the project. • Backfill around or adjacent to confined areas (i.e. interior utility trench excavations, etc.) shall be performed either with a lean sand/cement slurry (minimum two sacks of cement per cubic yard) or "flowable fill" material (a mixture of sand/cement/fly ash). The fluidity and lift placement thickness of any such material shall be controlled in order to prevent "floating" of any "submerged" structure. • Roof drainage systems for the proposed structure shall be designed so that runoff water is diverted away from any structure. • Final site grades shall be designed and constructed so that all water is diverted away from all structures and not allowed to pond on or near pavement. Drainage devices shall be constructed to divert drainage from the project site. <u>Slab-on-Grade Construction</u> • Any exterior building concrete slab-on-grade construction shall be supported by compacted soils. A minimum of four inches of compacted sand or gravel shall be placed over the finished compacted subgrade prior to placing concrete. This granular material shall be moisture conditioned to near optimum moisture content and uniformly compacted using mechanical compaction equipment. • Reinforcement of slab-on-grade construction is contingent upon the structural engineer's recommendations and the Expansion Index of the supporting soils. Since the mixing of fill soils with native soils could change the Expansion Index, additional tests shall be conducted during rough grading to determine the expansion characteristics of the new subgrade	

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		soils. Structural mat and post-tensioned slabs shall be designed as outlined below. All exterior concrete slab-on-grade construction shall be reinforced with at least #4 bars on 16-inch centers, each way. Reinforcement shall be placed at mid-depth of the slab. Additional reinforcement may be required once the final expansion potential of the subgrade soils is known. Actual reinforcement requirements will be dependent on the Expansion Index of the bearing soils, applicable sections of the governing building code, and requirements of the structural engineer. • Cracks that develop in concrete slab-on-grade shall be filled and sealed prior to placing floor coverings. Frequent control joints shall be incorporated into the slab construction, particularly in the areas of re-entrant corners, to help control cracking. • In areas of moisture sensitive floor coverings, an appropriate vapor retarder shall be installed in order to minimize vapor transmission from the subgrade soil to the slab. The vapor retarder shall be centered within the four-inch thick sand layer. The vapor retarder shall be evaluated for holes and/or punctures, and the edges overlapped and taped, prior to placement of sand. Any holes or punctures observed shall be properly repaired. The retarder shall be covered with two inches of sand to help protect it during construction. The sand shall be lightly moistened and densified just prior to placing the concrete. • Relatively impervious floor coverings (i.e. vinyl, linoleum, etc.) that cover concrete slab-on-grade may block the passage of moisture vapor through the concrete slab, which could result in damage to the floor covering. After the concrete slab has sufficiently cured, the concrete slab	

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		surface shall be sealed with a commercial sealant prior to placing the floor covering. The compatibility, and recommendations for placing of the concrete sealer, mastic, and floor covering shall be verified by the floor covering manufacturer prior to sealing the concrete or placing of the floor covering. • The proposed exterior perimeter slabs (sidewalks, patios, walkways, etc.) shall be designed to be relatively independent of foundation stems (free-floating) to help mitigate cracking due to foundation settlement and/or expansion. • Subgrade soils for all concrete flatwork shall be moisture conditioned to near optimum moisture content within 24 hours prior to placement of concrete. Measures shall be taken to maintain optimum moisture until concrete is placed. Actual depths of pre-moistening shall be dependent upon the actual Expansion Index of the subgrade soils. ***Parcel 21*** <u>General Site Preparation</u> • Much of the soil within the building footprints is very loose and soft, and the foundation excavations are expected to penetrate to a depth near or below the groundwater table elevation. Therefore, to provide a firm working surface for pile driving and construction of the pile caps and structural deck, a layer of gravel, at least one-foot thick, shall be placed at the base of the excavation for each building footprint. • Soils beneath any proposed traffic-bearing flexible pavement and non-traffic-bearing flatwork (sidewalks, walkways, patios, etc.) outside the building footprints, shall be excavated a minimum of 24 inches below the existing grade or finished	

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		subgrade, whichever is lower. These remedial excavations shall extend a minimum lateral distance of at least two feet beyond the pavement edges. The bottom of the remedial excavation shall then be scarified (ripped) six inches. The scarified and excavated soils shall be moisture conditioned to near optimum moisture content and be uniformly compacted to at least 90 percent of maximum dry density using mechanical compaction equipment. Compaction shall be verified by testing. The purpose of this recommendation is to provide minimum subgrade support to attain minimum life for the proposed pavements and flatwork. ***It shall be understood that, the entire site is underlain by at least 17 feet of poorly compacted uncertified fill and the proposed pavements and flatwork may experience settlement and other distress sooner and to a greater degree than pavements and flatwork supported by a full depth of structural fill.*** • If used, any import soils shall be equal to, or better than, the on-site soils in strength, expansion, compressibility, and soil chemistry characteristics. In general, import material shall be free of organic matter and harmful substances, have no more than 20 percent passing a #200 sieve, and an Expansion Index less than 20. Import soils shall be evaluated prior to their use, but will not be prequalified by the geotechnical consultant. Approval of import soils shall be given only after the material is on the project, either in-place, or stockpiled in adequate quantity to complete the project. • Backfill around or adjacent to confined areas (i.e. interior utility trench excavations, etc.) shall be performed with a lean sand/cement slurry (minimum two sacks of cement per cubic yard) or "flowable fill"	

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		material (a mixture of sand/cement/fly ash). The fluidity and lift placement thickness of any such material shall be controlled in order to prevent "floating" of any "submerged" structure. • Roof drainage systems for the proposed structures shall be designed so that runoff water is diverted away from any structure. • Final site grades shall be designed and constructed so that all water is diverted away from all structures and not allowed to pond on or near pavement. Drainage devices shall be constructed to divert drainage from the project site. <u>Temporary Shoring</u> • The proposed partial subterranean parking level excavation will be approximately five to seven feet deep and may be adjacent to at least one property line. Temporary shoring may be necessary to support the excavation during construction. The shoring shall consist of temporary sheet pile or steel panels, a soldier pile and lagging type system, or similar temporary shoring system. The shoring shall be cantilevered. • Cantilevered, shoring shall be designed to resist active lateral earth pressures of 40Z pounds per square foot (psf) per foot of depth, where Z = Depth (in feet) measured below the top of the retained ground surface behind the shoring. This value is based on level ground behind the shoring. • The lateral earth pressure to be resisted by retaining shall be increased to allow for surcharge loads. The surcharge considered shall include the loads from any other structures or vehicle traffic within a distance at least equal to the height of the shoring. This includes the surcharge from the weight of the existing south property-line wall if this wall is to be preserved in place.	

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		Surcharge effects for cantilevered shoring shall be computed assuming active earth pressure conditions using a pressure coefficient of 0.4. • Lateral resistance for temporary shoring sheet piles or soldier piles founded in native site soils shall be assumed to be provided by passive pressure below the bottom of the excavation. As discussed above, the excavation depth is expected to be approximately seven feet below the existing ground surface. The passive pressure for temporary sheet piles or soldier piles may be taken as 250D pounds per square foot (psf) per foot of depth for unsaturated soils, where D = Depth (in feet) measured below the bottom of the excavation. For saturated soils below the water table, passive pressure of 135 psf per foot of soil may be used. This resisting pressure is an ultimate value. An appropriate factor of safety shall be used for design calculations (minimum of 1.5 recommended). The effective width of soldier piles for passive pressure calculations shall be taken as up to three times the actual pile width. • If soldier piles are used, exposed soils between soldier piles shall be supported by lagging and backfilled or supported through the use of reinforced gunite designed to prevent soil movement. All timber lagging to be left in the ground shall be pressure treated in accordance with Standard Specifications for Public Works Construction, Section 204-2.	
<u>Fault Rupture and Seismic Shaking</u> Parcels OT and 21 are not located within a currently delineated California Geological Survey (CGS) Earthquake Fault Rupture Hazard ("Alquist-Priolo") Zone (Hart and Bryant, 1999). However, although no known active faults have been specifically identified beneath the sites and the potential for active fault rupture is considered to be very low, future fault rupture could	Less Than Significant	No mitigation required beyond conformance with the Uniform Building Code and County of Los Angeles Building Code requirements	Less Than Significant

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
occur at other locations. Additionally, the Parcels are not located within a known "earthquake fault zone," but they are located in a mapped seismic hazard zone (CDMG, 1999). Required conformance with the Uniform Building Code and County of Los Angeles Building Code requirements renders potential impacts related to fault rupture and seismic shaking less than significant.			
<u>Secondary Seismic Hazards</u> Both Parcels OT and 21 are located within a seismic hazard zone (CDMG, 1999) and are therefore subject to secondary seismic hazards, such as liquefaction, ground subsidence, and lateral spreading of the site soil, as well as seiche and tsunami. The effects of such secondary seismic induced hazards on the proposed development are considered potentially significant impacts and are further discussed in Geotechnical Hazards, Section IV.A of this EIR.	Significant	**GEO-3** The applicant shall implement the geotechnical engineering recommendations related to secondary seismic hazards (liquefaction, ground subsidence, and lateral spreading) of the geotechnical engineer and/or others, as well as conform to all subsequent conditions that are imposed on the project and are deemed appropriate and necessary during grading, construction, and/or operation of the proposed developments at Parcel OT and Parcel 21. A summary of these recommendations follows: ***Parcel OT*** <u>Soil Improvement</u> • There are a variety of methods that can be used for soil improvement to minimize liquefaction potential. For this site, the ESSC recommends: a) a combination of a soil-cement cutoff wall around most or all of the site perimeter and stone columns for soil densification and excess pore water pressure relief, or b) a cellular pattern of soil-cement cutoff walls to both mitigate the lateral spreading issue and to provide support for a mat-type foundation system. • It should be understood that if it is intended to leave some of the existing fill in place, soil improvement of that type of debris-filled irregular material may be difficult and may not result in adequate support for a mat foundation. Consideration shall be given to doing complete removal of the existing fill and replacement to the proposed mat	Less Than Significant

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		foundation elevation with imported granular engineered fill. • At a minimum, a soil-cement cutoff wall shall be installed along the easterly site boundary (adjacent to the lagoon) to mitigate the potential for lateral spreading. The cutoff wall shall be at least 30 feet deep to fully contain the soils with potential for lateral movement. Soil-cement cutoff walls shall also be installed around the remaining portions of the site perimeter for temporary excavation support and groundwater control. Additionally, if stone columns are not used, some soil-cement cutoff walls are recommended in the interior of the building footprint for form a "cellular" pattern for soil containment and support of a mat foundation. • Soil-cement cutoff walls shall consist of overlapping "cylinders" of soil mixed in place at depth with Portland cement or other suitable cemetitious materials. The specific soil cement mix design shall be provided by a qualified ground improvement contractor under the review of the project geotechnical engineer. • Stone columns shall be installed on a grid pattern to cover the building footprint plus at least 10 feet laterally beyond the building footprint. The exact spacing and depth of the stone columns is dependent on the amount of liquefying soil in a given part of the site. • As a preliminary estimate for the south part of the site, stone columns shall be spaced at no further than eight feet on center and should be at least 50 feet deep (below existing grade) to intersect all potentially liquefiable soil. In the northerly side of the site, stone columns shall be at least 30 feet deep to intersect the deepest liquefying layer in that area. • Stone columns shall be at least 18 inches in diameter and shall consist of relatively clean gravel placed in a	

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		"column" by means of a crane-mounted vibrator. • Wick drains (if used) shall be used to relieve excess pore pressure during stone-column installation and maximize ground densification. Wick drains shall consist of a geosynthetic drain material typically about four inches wide corrugated plastic with a filter fabric wrapping. Wick drains shall be installed to the same depth as the adjacent stone columns and are typically installed by hydraulic push methods. • Deep soil mixed soil-cement cutoff walls, stone columns, and wick drains (if used) shall be installed by a qualified ground improvement contractor with experience in Southern California. The ground improvement contractor shall be consulted for more specific estimates of the stone column specifications and for special limitations of the ground improvement methods. • Confirmation testing shall be required to verify that the ground improvement has achieved the minimum soil densities and strengths necessary to adequately reduce the liquefaction potential. At least 10 CPT soundings and five soil borings with SPT samples shall be performed after installation of the stone columns (and wick drains if used) to demonstrate the "post ground improvement" soil density. ESSC recommends the following tentative criteria to demonstrate adequate densification: corrected SPT blow counts (N_{160cs}) shall exceed 30 blows per foot, and CPT tip resistance (Q_{1CN}) shall exceed 160 tons per square foot (tsf) in all of the soils below the proposed building foundation that do not meet the "Chinese criteria' (clay content <15 percent or CPT Ic parameter <2.5). • An indicator program of soil-cement cutoff walls and stone columns is recommended at the beginning of the project (prior to full "production" of	

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		soil-cement and stone columns) to verify their effectiveness. For the indicator program, a soil-cement cutoff wall at least five feet wide by at least 20 feet long should be installed. Indicator stone columns should be installed in a 100 square foot area in the northerly part of the site and a 100 square foot area in the southerly part of the site. At least two borings with SPT samples and at least two CPT soundings should be completed in each of the two test areas to verify the effectiveness of the soil densification. Once the indicator program is complete, the ground improvement program can be finalized. <u>Mat Foundations</u> Due to the soft, variable nature of the site soils and the potential for seismic-induced ground movement, a structural mat foundation is recommended for the building foundation. The proposed soil improvement will reduce but not eliminate all potential variability in ground support for building foundations. ESSC recommends that any building or structure constructed on this site be designed to at least the minimum standards for Seismic Zone 4, as designated by the 2001 edition of the California Building Code (CBC). • The mat shall be either conventionally reinforced or consist of a post-tensioned slab system. Specific criteria for post-tensioned slab design shall be provided by the project geotechnical engineer if a post-tensioned system is selected. • The mat foundation for the proposed structure shall be supported by improved ground. • An allowable "net" bearing capacity of 1,500 pounds per square foot (psf) shall be utilized for dead and sustained live loads for design of the mat foundation. This value is a "net" value that includes the compensation for soil removal assuming a minimum five-foot deep parking basement. This value shall be increased by 1/3 when	

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		considering transient loads such as earthquake or wind forces. • The mat slab shall be at least six inches thick and shall include a perimeter beam extending a minimum of 24 inches below finished adjacent grade. The actual depth, width, and reinforcement requirements for the mat foundation depend on the Expansion Index of the bearing soils and shall be specified by the structural engineer. • The mat foundation shall be designed to accommodate differential movement of up to 1.5 inches in a 30-foot span (1:240 distortion ratio). • Resistance to lateral loading may be provided by friction acting along the mat foundation base. A coefficient of friction of 0.35 shall be used for concrete foundations on site soils that have been "improved." This value includes a safety factor of 1.5. • Additional resistance to lateral loading may be provided by passive earth pressure acting against the sides of foundations or grade beams. Based on the presence of "improved" soils around the perimeter of the proposed building, the passive pressure is estimated to be 350 Z PSF, where Z = Depth (in feet) below the finished ground elevation. In passive pressure calculations, the upper one-foot of soil shall be subtracted from the depth, Z, unless confined by pavement or slab. The resisting pressure provided is an ultimate value. An appropriate factor of safety shall be used for design calculations (minimum of 1.5 recommended). • The excavation for the mat foundation shall be cleaned of all loose or unsuitable soils and debris prior to placement of concrete. Soil generated from the foundation excavations shall not be placed below the mat slab unless properly moisture conditioned and compacted.	

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		Building Foundation Piles • Building foundation piles, if used, shall consist of precast, prestressed reinforced concrete driven piles. The piles may be round or square in cross-section. It is anticipated that piles would need to be at least 24-inches in diameter or square dimension. • Building piles shall be embedded a minimum of 15-feet into dense sand (minimum tip depth of at least 60 ft below exist grade in the southerly part of the site). The actual total pile length and embedment may vary depending upon the requirements of the structural engineer and the results of the pile driving analysis (ie. evaluation of pile driving blow counts). • In general, the pile driving criteria provided by the Engineering News Record (ENR) formula (Public Works, 2000) shall be satisfied for the last one foot of pile driving. If the required driving resistance is not achieved at the design depth, the pile may be allowed to "set" overnight and then driven an additional foot. If the required driving resistance is still not achieved, the pile may be lengthened or additional piles may be installed in accordance with the recommendations of the geotechnical and structural engineers. • The axial load carrying capacities of the foundation piles will depend on the final pile size and embedment depth selected. Deeper exploration of the site and further analysis of pile capacities would be necessary to provide allowable pile capacities. Preliminarily, skin friction for piles embedded below the lowest liquefying layer may be assumed to be approximately 0.9 tons per square foot (tsf). Down-drag forces of at least 0.5 tsf must be applied to all portions of the piles above the lowest liquefying soil layer. • The lateral load carrying capacity of	

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		foundation piles will be a function of the depth of liquefying soil at each pile location and the anticipated depth of lateral soil movement due to lateral spreading. Resistance to lateral movement can be provided by passive soil pressure below the lowest liquefying soil layer. Passive pressure may be taken as 500 pounds per square foot per foot of depth in firm soil below the liquefying layers. Driving lateral earth pressures must be applied to the portions of the piles within the depths where lateral spreading is anticipated. Specific lateral pile capacity calculations can be provided if pile foundations are selected for the project. • The design mix for the concrete to be used in the pile construction shall be established and approved by the structural engineer prior to the time of construction. Concrete compression tests shall be performed during pile casting in accordance with applicable codes or requirements of the structural engineer. Inspection by qualified personnel shall be provided during the pile casing and/or reinforcement placing and tensioning. • An indicator pile program shall be conducted for both proposed buildings prior to installation of the building foundation piles. The indicator pile program shall include a minimum of ten piles. The indicator piles shall have the same cross-section and consist of the same construction as the piles selected for the building foundation and may be used as final building foundation piles ("production piles"). The indicator piles shall be located at points distributed approximately uniformly across the two building footprints. The indicator piles shall be a minimum of 60 feet in length (as delivered to the site) and shall be driven to a minimum embedment of 15 feet into the dense sand below the lowest liquefying soil layer.	

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		• At least the first indicator pile shall be driven with no pre-boring. Pre-boring up to 3/4 of pile cross sectional area will be permitted for subsequent piles if necessary to achieve minimum embedment depth. The axial pile capacity for the last two feet of driving must be calculated based on blow counts to at least the required axial design load for the pile. • The geotechnical engineers, or their representatives, shall be present during the installation of all pile foundations. This is to observe pile driving conditions and help identify variations in soil conditions that may require additional evaluation of the foundation criteria in this report. • Piles in groups or rows shall be driven alternately before driving an adjacent pile. • Driven piles shall not be more than two percent from the plumb position. <u>Retaining Walls</u> The following lateral earth pressures shall be used in the design of the proposed basement (partial subterranean parking level) retaining walls, or similar structures at the site (Refer to Section IV.A of this EIR for equivalent fluid earth pressures table). • The basement (partial subterranean parking level) retaining walls shall be supported by the structural mat foundation as recommended herein. • The lateral earth pressure to be resisted by retaining shall be increased to allow for surcharge loads. The surcharge considered shall include the loads from any structures or vehicle traffic within a distance approximately equal to the height of the retaining wall. • Backfill immediately behind any retaining structure shall be a free-draining granular material. Comments on the characteristics of import soils shall be given by the geotechnical consultant after the material is on the	

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		project, either in place, or stockpiled in adequate quantities to complete the project. • Backfill behind retaining walls shall be with soils that have been properly moisture conditioned to approximately optimum moisture content and uniformly compacted to at least 90 percent of maximum dry density as determined by ASTM D 1557 test procedures using mechanical compaction equipment. To aid in the compaction operation, retaining wall backfill shall be placed in lifts not exceeding six inches compacted thickness. • Compaction within the area of a 1H:1V slope from the bottom of wall excavations shall be performed by hand operated compaction equipment, intended to reduce potential "locked-in" lateral pressures caused by compaction with heavy grading equipment. • Backdrains or an equivalent system of backfill drainage shall be incorporated into the retaining wall design unless the walls are designed to resist full hydrostatic pressure and properly waterproofed. Waterproofing of retaining walls shall be provided to help reduce the potential for efflorescent formation. • The final grade shall be such that all water is diverted away from the retaining wall's foundation or backfill. *Parcel 21* <u>Foundation Piles</u> • Building foundation piles shall consist of precast, prestressed reinforced concrete driven piles. The piles may be round or square in cross-section. Recommendations are provided herein primarily for 24-inch square piles. • Building piles shall be embedded a minimum of 13-ft. into dense sand (minimum tip depth of approximately	

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		45 ft. below existing grade). The actual total pile length and embedment may vary depending upon the requirements of the structural engineer and the results of the pile driving analysis (ie. evaluation of pile driving blow counts). • In general, the pile driving criteria provided by the Engineering News Record (ENR) formula (Public Works, 2006) shall be satisfied for the last one foot of pile driving. If the required driving resistance is not achieved at the design depth, the pile may be allowed to "set" overnight and then driven an additional foot. If the required driving resistance is still not achieved, additional piles shall be installed in accordance with the recommendations of the geotechnical and structural engineers. • The axial load carrying capacities of the foundation piles shall be determined based on the final pile size and embedment depth selected. • The lateral load carrying capacities of the foundation piles shall be determined based on the final pile size and embedment depth selected. • The design mix for the concrete to be used in the pile construction shall be established and approved by the structural engineer prior to the time of construction. Concrete compression tests shall be performed during pile casting in accordance with applicable codes or requirements of the structural engineer. Inspection by qualified personnel shall be provided during the pile casing and/or reinforcement placing and tensioning. • An indicator pile program shall be conducted for the proposed building prior to the remainder of the building foundation piles. The indicator pile program shall include a minimum of six piles within each of the two building footprints. The indicator piles shall have the same cross-	

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		section and consist of the same construction as the piles selected for the building foundation and may be used as final building foundation piles ("production piles"). The indicator piles shall be located at points distributed approximately uniformly across the building footprints, except that at least one set of indicator piles shall be driven as a group of three to evaluate pile group installation. The indicator piles shall be 45 to 50 feet in length (as delivered to the site) and shall be driven to a minimum embedment of 15 feet into the dense sand (at least 15 feet below the 32-foot depth from existing grade). The indicator piles shall be driven using the same hammer that will be used for production pile installation. • At least the first indicator pile shall be driven with no pre-boring. Pre-boring up to 3/4 of pile cross sectional area shall be permitted for subsequent piles if necessary to achieve minimum embedment depth. The axial pile capacity for the last foot of driving shall be calculated based on blow counts to at least the required axial design load for the pile. • The geotechnical engineers, or their representatives, shall be present during the installation of all pile foundations. This is to observe pile driving conditions and help identify variations in soil conditions that may require additional evaluation of the foundation criteria in this report. • Piles in groups or rows shall be driven alternately before driving an adjacent pile. • Driven piles shall not be more than two percent from the plumb position. <u>Retaining Walls</u> • The walls of the subterranean portion of the proposed building shall be supported by the structural deck and building piles. Any retaining walls	

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		proposed for the project that are not structurally supported by the piles shall be supported by existing uncertified fill soils at the site and thus may experience some degree of settlement and other distress. • Lateral earth pressures for subterranean walls at the subject site include normal "static" pressures and earth pressures resulting from earthquakes and laterally spreading soils. The following "static" lateral earth pressures shall be used in the design of the proposed subterranean building walls and any other retaining walls that may be proposed at the site (Refer to Section IV.A of this EIR for equivalent fluid earth pressures with well drained backfill table). • For walls founded in soil rather than supported by the pile foundation system, resistance to lateral loading shall be provided by passive pressure of soil in front of the wall and by friction acting along the foundation base. • For retaining walls founded in soil, passive pressures of 270 psf per foot of soil in front of the wall shall be used for unsaturated soils. For saturated soils below the water table, passive pressure of 135 psf per foot of soil may be used. The upper one-foot of soil shall be neglected for passive pressure calculations unless confined by pavement or slab. • A coefficient of friction of 0.3 shall be used in designing concrete retaining wall foundations in site soils recompacted to approximately 90 percent of maximum dry density as determined by ASTM D 1557 test procedures, and shall be used with dead loads. This value includes a safety factor of 1.5. This value used for design may be increased by 1/3 when transient loads (such as wind and seismic forces) are considered. • The lateral earth pressure to be resisted by retaining shall be increased to	

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		allow for surcharge loads. The surcharge considered shall include the loads from any structures or vehicle traffic within a distance approximately equal to the height of the retaining wall. • Backfill immediately behind any retaining structure shall be a free-draining granular material. Comments on the characteristics of import soils shall be given by the geotechnical consultant after the material is on the project, either in place, or stockpiled in adequate quantities to complete the project. • Backfill behind retaining walls shall be with soils that have been properly moisture conditioned to approximately optimum moisture content and uniformly compacted to at least 90 percent of maximum dry density as determined by ASTM D 1557 test procedures using mechanical compaction equipment. To aid in the compaction operation, retaining wall backfill shall be placed in lifts not exceeding six inches compacted thickness. • Compaction within the area of a 1H:1V slope from the bottom of wall excavations shall be performed by hand operated compaction equipment. This is intended to reduce potential "locked-in" lateral pressures caused by compaction with heavy grading equipment. • Back-drains, or an equivalent system of backfill drainage shall be incorporated into the retaining wall design. Proper back-drainage will minimize the potential for hydrostatic pressures behind retaining walls. In addition to back-drains, waterproofing of retaining walls is recommended to minimize moisture migration through the walls and to help reduce the potential for efflorescent formation. • The final grade shall be such that all water is diverted away from the retaining wall's foundation or backfill.	

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		Seiches and Tsunamis ***Parcels OT and 21*** **GEO-4** The applicant shall prepare emergency evacuation plans for both Parcel OT and Parcel 21, subject to the review and approval of the Fire Department.	
Cumulative Geotechnical Impacts Several related projects are proposed for development within the general study area encompassing the project site. Related projects, however, would require municipal government approvals of grading plans, design, and mitigation. Significant cumulative grading and geotechnical impacts resulting from the potentially concurrent construction of the related projects are not anticipated. The proposed and related projects would be subject to potentially severe ground shaking during an earthquake. Assuming adherence to the building codes and other locally imposed plans, cumulative impacts would be reduced, but not eliminated. Related projects would not be exposed to a greater than normal seismic risk than other areas in Southern California. In addition, related projects would not compound the specific effects that could occur on the project site. Therefore, cumulative impacts are considered less than significant.	Less Than Significant	No mitigation required	Less Than Significant
Noise			
Construction Noise Impacts *General* There are residential uses within the potential noise impact zone that could experience pile driving and construction noise in excess of noise ordinance standards at both the Parcel OT and 21 sites, which would be considered a significant impact of the proposed project prior to implementation of mitigation.	Significant	**N-1** Noise monitoring shall be performed by a qualified acoustician, who shall be responsible for posting notices at the construction sites describing the nature of the project and the duration and hours of construction, providing a phone number at which noise complaints may be registered, and responding to such complaints. If any violations occur, the equipment in question or barriers/shields shall be modified before pile driving or construction activities continue.	Less Than Significant

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
Construction Noise Impacts *Pile Driving* There are residential uses within the potential noise impact zone that could experience pile driving noise in excess of noise ordinance standards at both the Parcel OT and 21 sites, which would be considered a significant impact of the proposed project prior to implementation of mitigation.	Significant	**N-2** The pile driver shall be shielded through noise blankets or a temporary barrier sufficiently to meet the Los Angeles County noise ordinance levels. **N-3** Because the repetitive noise of pile driving may be intrusive even if ordinance standards are not exceeded, the allowable hours of pile driving shall be restricted from 8 a.m. to 4:30 p.m. from Monday through Friday.	Less Than Significant
Non-pile Driving If heavy equipment operations were to occur during designated quiet periods, standards would be substantially exceeded, which would result in a significant impact prior to mitigation.	Significant	The County of Los Angeles Ordinances requires that construction noise measured at nearby single-family residential property lines not exceed 75 dB from mobile noise sources. The construction noise standard for multi-family uses is 80 dB, and 85 dB for the adjacent hotel. This standard would be met if the following measures are implemented: **N-4** All construction and general maintenance activities, except in an emergency, shall be limited to the hours of 8 a.m. to 5 p.m. Monday through Saturday and shall utilize the quietest equipment available. **N-5** All on-site construction equipment shall have properly operating mufflers. Other measures shall be implemented wherever necessary to further reduce construction equipment noise. These may include, but are not limited to, utilizing ¾-inch plywood screening on semi-stationary equipment operating under full power for more than 60 minutes within a direct line of sight to any residential bedroom window. **N-6** All construction staging and delivery areas shall be located as far away as possible from the nearest homes (for development on Parcel OT, staging shall occur away from the northwestern portions of the site; and for development on Parcel 21, staging shall occur away from the easternmost and southernmost	Less Than Significant

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		portions of the site), and shall be scheduled to occur from the mid-morning to mid-afternoon hours.	
Haul Truck Noise on Local Roadways Demolition and grading activities would result in 21 truck trips over 7 days and 86 truck trips over 15 days, respectively. Assuming a 35 mile per hour (mph) travel speed, this number of trucks would provide the following noise signature at 50 feet from the roadway centerline: 49.7 dB CNEL for the demolition phase and 54.7 dB CNEL for the grading phase. The maximum potential project impact attributed to truck hauling activity noise during demolition and construction is +0.3 dB CNEL. This is less than the significance threshold of +3 dB CNEL.	Less Than Significant	No mitigation required	Less Than Significant
Operational Noise Impacts *Traffic Noise* As seen in Table IV.B.4-1, in the existing time frame, traffic noise is high with many segments already exceeding 65-70 dB CNEL at 50 feet from the centerline. Since traffic volumes are already elevated, and because the traffic generated by the project is low, implementation does not significantly alter the noise environment on any of the segments. As project-related traffic would not increase noise by even as much as +0.2 dB compared to the no-project scenario, the proposed project would have a less than significant impact related to traffic noise.	Less Than Significant	No mitigation required	Less Than Significant
Interior Noise Impacts As shown in Table IV.B-9, the proposed project would result in a significant impact associated with interior noise at Parcel OT resulting from adjacent roadway noise. Noise reduction of 30 dB is normally attainable with closed, upgraded dual-paned windows in mid-rise construction. That would reduce any traffic-related CNEL from 73 to 43 dB for interior use. The structural noise attenuation in wood or steel-framed mid-rise construction is generally close to the sound transmission class (STC) ratings	Significant	**N-7** In order for the County interior standard of 45 dB CNEL to be met with a reasonable margin of safety, the applicant shall incorporate the use of dual-paned windows (STC=30 rated windows and/or sliding glass doors) and supplemental ventilation that includes a fresh air supply of 30 cubic feet per minute in the active seniors accommodations on Parcel OT.	Less Than Significant

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
of the windows. Use of STC=30 rated windows and/or sliding glass doors would allow the County interior standard of 45 dB CNEL to be met with a reasonable margin of safety. As window closure is a requirement to meet the interior noise standard of 45 dB CNEL in habitable rooms (especially those with a direct view of Washington Blvd. or Admiralty Way),, supplemental ventilation must be provided to allow for such closure. With Implementation of Mitigation Measure N-7, this impact would be reduced to less than significant. Area-wide noise levels in the Parcel 21 vicinity are much less than the 77 dB CNEL commercial noise standard permitted by California. Traffic noise, as determined by the traffic analysis, and ambient noise, as measured through on-site noise readings, would result in a less than significant impact on the interior noise at Parcel 21.			
Structural Noise The noise control requirements for multiple occupancy residences are required and would be incorporated into project designs; therefore, the proposed project's impacts associated with interior (structural) noise on Parcel OT would be less than significant. However, for additional enforcement and to assure proper implementation of structural noise attenuation measures, Mitigation Measure N-8 is provided. Area-wide noise levels in the Parcel 21 vicinity are much less than the 77 dB CNEL commercial noise standard permitted by California. Traffic noise, as determined by the traffic analysis, and ambient noise, as measured through on-site noise readings, would result in a less than significant impact on the interior noise at Parcel 21.	Less Than Significant	Construction of multiple family dwelling units requires compliance with all noise insulation requirements of the California Building Code, as applied to the project by the County Department of Building and Safety. **N-8** The applicant shall implement structural noise attenuation measures as required by the California Building Code. The Code requires the following noise insulation features for such units, as stated in CBC Appendix 1208A: • Wall and floor-ceiling assemblies separating dwelling units from each other and from public spaces such as interior corridors and service areas shall provide airborne sound insulation for walls, and both airborne and impact sound insulation for floor-ceiling assemblies. Wall assemblies shall have a minimum STC rating of 50. Floor-ceiling assemblies shall	Less Than Significant

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		have a minimum STC and IIC ratings of 50. • Construction details for all sound- and impact-rated assemblies shall be provided on architectural plans. Laboratory test reports governing the STC and IIC ratings of these assemblies shall be specified. • Entrance doors from interior corridors to dwelling units together with their perimeter seals shall have a minimum STC rating of 26. The 1-3/8-inch (35mm) solid core wood or 18-gauge insulated steel slab doors with resilient stop and compression seals all around, including threshold, are acceptable without other substantiating data. • All penetrations or openings in construction assemblies for piping, electrical devices, recessed cabinets, bathtubs, soffits, or heating, ventilating or exhaust ducts shall be sealed, lined, insulated or otherwise treated to maintain the required ratings. • All rigid conduit, ducts, plumbing pipes, and appliance vents located in sound assemblies shall be sealed, lined, insulated or otherwise treated to maintain the required ratings. • Mineral fiber insulation shall be installed in joint spaces whenever a plumbing pipe or duct penetrates a floor-ceiling assembly or where such pipe or duct passes through the plane of the floor-ceiling assembly from within a wall. The insulation shall be installed to a point 12 inches (305mm) beyond the pipe or duct.	

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		• Combustion air and kitchen and bathroom exhaust ducts within sound separation assemblies shall be wrapped with Type "C" insulation as shown in Table No. 6-D, Uniform Mechanical Code. • Electrical penetrations in sound-rated wall and floor-ceiling assemblies shall conform to the following (outlet box used herein is defined as a box used for receptacles, switches, surface-mounted lighting fixtures, junction points, telephones, thermostats, television uses, etc.): - Outlet box dimensions shall not exceed 6 inches (152mm) in length or width. - Only outlet boxes and ceiling exhaust fans in the bathrooms shall be permitted in walls and ceilings. All other equipment and devices including recessed fixtures, panel boards, heaters, kitchen exhaust fans, sound-producing equipment (bells, intercoms, etc.) shall not be installed in these sound-rated assemblies. - Light switches, outlet boxes and surface-mounted fixtures shall not be installed back-to-back. Plugs and switches shall be separated by 36 inches (914mm) minimum. - Surface-mounted fixtures shall be separated by 24 inches (610mm) minimum. All openings shall be caulked to ensure integrity. - Outlet boxes shall not	

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		exceed 1-1/2" (38mm) in depth so as to allow the required 2-inch (51mm) uncompressed insulation to be installed in a standard 2-inch X 4-inch (51mm by 104mm) wall. On walls of deeper dimensions, boxes of greater depths may be permitted. - Conduits or raceways (stubouts) may penetrate the sound-rated assemblies provided the conduit is covered at the penetration point with permanently resilient sealant. - Floor-ceiling assemblies between residential areas and equipment penthouses (a/c units, etc.) shall be installed in accordance with the sound separation requirements. • Floor coverings such as carpet and pad which are required as part of a sound- and impact-rated assembly shall be installed prior to final inspection and that such coverings must be retained as a permanent part of the assembly and may be replaced only by other floor coverings which provide the required ratings. • Wall-mounted lavatories and toilets are not permitted on sound-rated walls.	
Exterior Recreational Use Noise Impacts Outdoor recreational uses at the Parcel OT active seniors accommodations would be sited in the interior of the complex, allowing the buildings to shelter recreational users from street traffic noise. The noise level within the interior courtyard would be 15-20 dB less than at any exterior balconies or	Significant	No feasible mitigation	Significant

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
similar exposures. Exterior façade levels of 70-75 dB CNEL would be reduced to 50-60 dB within interior courtyards. Interior courtyards would meet County standards for usable outdoor space. Individual balconies facing Washington Blvd. or Admiralty Way would have outside noise levels exceeding the 65 dB CNEL goal for usable outdoor space. Although the interior terrace, rear spa and terraces would provide substantial outdoor recreational space with noise levels well within the 65 dB CNEL goal, noise in excess of this standard on individual balconies on the proposed Parcel OT project would be conservatively considered a significant and unavoidable impact. No feasible mitigation exists to reduce this impact to less than significant, as a six-foot wall composed of a combination of a solid base and 3/8-inch glass would be required to reduce the noise exposure to below 65 dB CNEL. This would essentially enclose the balconies. Parcel 21 is comprised of commercial uses only; therefore, noise requirements for recreational use are not applicable to this site.			
Off-Site Noise Exposure The active seniors accommodations proposed for Parcel OT is not anticipated to generate noise that would affect off-site uses and therefore constitutes a less than significant impact associated with off-site noise exposure. However, it is anticipated that HVAC equipment, for Parcel 21 would be sited on the roof of the office/yacht club portion of the building. The apartments to the south of the project site, which are across Panay Way and are approximately 70 feet from the property line of Parcel 21, could experience a noise nuisance from this equipment. Therefore, the proposed project on Parcel 21 would result in a significant impact to noise-sensitive receivers related to HVAC equipment. Mitigation Measure N-9	Significant	**N-9** Heating, ventilation, or air conditioning (HVAC) equipment on Parcel 21 shall not operate between the hours of 10 p.m. and 7 a.m., unless it is demonstrated by noise measurement that the noise level from such operation does not exceed a Leq_{50} of 45 dB at the closest residential property line. **N-10** Although noise from the Parcel 21 parking structure is not expected to be any greater than what sensitive receivers currently experience in the project area, the applicant shall incorporate into the parking structure a design that coats the floor with a treatment or provides a swirled concrete texture that reduces tire squeal.	Less Than Significant

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
would reduce this impact to less than significant. These design strategies and conformity with County ordinances can help prevent conflicts due to commercial site operations in an area with little, but growing residential development. Furthermore, cars driving and turning in parking structures often produce tire squeal. This noise has a different character than that already occurring near the site from paved parking lots. Although this type of noise would have a less than significant impact to surrounding noise-sensitive receptors, Mitigation Measure N-10 is recommended to assure that the effects of tire squeal are minimized. Additionally, accidental car alarm initiation can also be an issue in a parking structure located close to off-site residences. Although this type of noise would also have a less than significant impact to surrounding noise-sensitive receptors, Mitigation Measure N-11 is recommended to assure that the effects of accidental car alarm initiation are minimized.		**N-11** Signage shall be posted that notifies parking structure users on Parcel 21 of possible penalties (such as reporting to the Sheriff's Department that may result in towing) for false alarms if their alarm does not comply with limits on frequency or duration of triggering an alarm.	
<u>Cumulative Noise Impacts</u> Area build-out traffic growth would create moderate increases in traffic volumes. However, because of the logarithmic nature of traffic noise, it requires a very large increase in traffic volume to increase associated noise levels, especially for areas that are already built out with a relatively large traffic base. Cumulative traffic noise analysis shows the largest cumulative traffic noise increase on any segment to be +2.9 dB CNEL. This segment is Panay Way west of Via Marina. Not only is this increase less than the adopted +3 dB CNEL threshold, but the project itself does not contribute substantially to the noise increase. Noise levels are nearly identical for the 2014 "no project" and 2014 'with project" scenarios. The next largest increase is +1.4 dB CNEL on Via Marina between Admiralty and Panay Way. Again, the project	Less Than Significant	No mitigation required	Less Than Significant

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
contributes negligibly to this growth in cumulative traffic noise. Therefore, the proposed project's traffic noise impacts associated with forecast area growth are not cumulatively significant along any analyzed roadway segment.			
Water Quality			
Surface Water Quality Stormwater runoff from driveways and parking areas carries oil, grease and other materials deposited on the pavement surfaces. Runoff from landscaped areas may contain pesticides, herbicides and other chemical compounds. If urban pollutants were to leave the project site untreated, resulting in a change in water quality that violates Federal or State regulations, the proposed project would result in a significant impact on surface water quality.	Significant	**WQ-1** Grading activities shall be planned during the Southern California dry season (April through October) to the extent feasible and practicable. **WQ-2** The applicant shall prepare a Stormwater Pollution Prevention Plan (SWPPP) and submit it with the grading plan to the County of Los Angeles Department of Public Works' Land Development Division for review and approval and apply the appropriate BMPs identified. These may contain at a minimum the following items: • During construction, contractors shall be required to utilize sandbags and berms to control runoff during on-site watering and periods of rain in order to minimize erosion, sedimentation, and surface water contamination. • In order to intercept sediment-laden runoff generated during construction activities and trap and retain sediment, sediment basins shall be employed within the project site. • Filter fences designed to intercept and detain sediment and trash while decreasing the velocity of runoff shall be employed within project sites. **WQ-3** The applicant shall prepare a Drainage Concept and Standard Urban Stormwater Mitigation Plan (SUSMP) for both Parcels OT and 21, subject to review and approval by the County of Los Angeles Department of Public Works' Land	Less Than Significant

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		Development Division. The SUSMP shall include best management practices for controlling and treating polluted runoff and removing floating solids from runoff. Any such best management practices or devices shall be incorporated as shown on the Drainage Concept as approved by the County of Los Angeles Department of Public Works, if necessary, for compliance with applicable Total Maximum Daily Loads under the Los Angeles Regional Water Quality Control Board.	
Groundwater Quality Groundwater is present under both Parcels OT and 21. The potential for effects on groundwater depend on the extent to which contaminants infiltrate into groundwater sources. The proposed project's potential effects on surface water quality in the area may in turn result in potential impacts on groundwater quality due to infiltration. Although there are no known uses of this groundwater, the proposed project's potential indirect impacts on groundwater quality in this area are considered significant.	Significant	Refer to Mitigation Measures WQ-1, WQ-2, and WQ-3, above.	Less Than Significant
Cumulative Water Quality Impacts Several related projects are proposed for development within the general study area (Marina del Rey, Los Angeles County, and the City of Los Angeles). These projects are generally similar or larger in scope compared to the proposed project. They represent a mix of residential, commercial, office, and hotel/motel projects, with some open space and associated recreational land uses. Urbanization (i.e., the development of related projects) of the Ballona Creek Watershed, as well as the Santa Monica Mountains Watershed, is expected to have significant cumulative water quality impacts to Santa Monica Bay, of which the proposed project is a part. However, the proposed project's contribution to the cumulative condition following proper	Less Than Significant	No additional mitigation required	Less Than Significant

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
implementation of project design measures and compliance with all applicable regulations and permit conditions would be less than significant.			
Air Quality			
Construction Period Impacts *Airborne Dust* Dust generation associated with project construction would be temporary, and the size of the sites proposed for development are relatively small. Therefore, dust impacts during project demolition, grading, and construction activities are considered adverse, but less than significant. Use of standard dust control measures, applied to all discretionary projects, would minimize the fugitive dust impacts during demolition and construction.	Less Than Significant	No mitigation required	Less Than Significant
Construction-Related Exhaust Emissions Construction equipment exhaust contains carcinogenic compounds within the diesel exhaust particulates. The toxicity of diesel exhaust is evaluated relative to a 24-hour per day, 365 days per year, 70-year lifetime exposure. Public exposure to heavy equipment operating in the distance would be an extremely small fraction of the above dosage assumption. Diesel equipment is also becoming progressively "cleaner" in response to air quality rules on new off-road equipment. Diesel exhaust emissions from up to four pieces of heavy equipment operating on-site would be dwarfed by diesel exhaust from hundreds of diesel trucks passing the site each day on Washington Blvd. Any public health risk associated with project-related heavy equipment operations exhaust is therefore not quantifiable, but less than significant.	Less Than Significant	No mitigation required	Less Than Significant
Local Significance Thresholds Impact Use of an LST analysis for a project is optional, because they were derived for economically or socially disadvantaged communities. For commercial and residential uses, LSTs are only applicable to construction activities. CO and NOx emissions would be below LST	Significant	**AQ-1** The applicant shall prepare a Construction Management Plan to control fugitive dust. At a minimum, the Plan shall include the following dust control measures: • The simultaneous disturbance	Less Than Significant

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
thresholds. PM-10 and PM-2.5 emissions may exceed the LST thresholds.		site should be minimized as much as possible. • The proposed project shall comply with SCAQMD established minimum requirements for construction activities to reduce fugitive dust and PM-10 emissions. A plan to control fugitive dust through the implementation of best available control measures shall be prepared and submitted to the County for approval prior to the issuance of grading permits. The plan shall specify the dust control measures to be implemented. Such measures may include but are not limited to: a) Application of soil stabilizers to inactive areas; b) Preparation of a high wind dust control plan and implement plan elements and terminate soil disturbance when winds exceed 25 mph; c) Stabilization of previously disturbed areas if subsequent construction is delayed; and d) Covering all stock piles with tarps. • The project proponent shall comply with all applicable SCAQMD Rules and Regulations including Rule 403 insuring the clean up of construction-related dirt on approach routes to the site. Rule 403 prohibits the release of fugitive dust emissions from any active operation, open storage pile or disturbed surface area visible beyond the property line of the emission source. Particulate	

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		matter on public roadways is also prohibited. • Adequate watering techniques shall be employed to mitigate the impact of construction-related dust particulates. Portions of the site that are undergoing surface earth moving operations shall be watered such that a crust will be formed on the ground surface, and then watered again at the end of each day. Watering of exposed surfaces and haul roads three times/day is recommended. • Any vegetative cover to be utilized onsite shall be planted as soon as possible to reduce the disturbed area subject to wind erosion. Irrigation systems required for these plants shall be installed as soon as possible to maintain good ground cover and to minimize wind erosion of the soil. • Any construction access roads (other than temporary access roads) shall be paved as soon as possible and cleaned after each work day. The maximum vehicle speed on unpaved roads shall be 15 mph. • Grading operations shall be suspended during any first stage ozone episodes.	
<u>Operational Impacts</u> *Project-Related Traffic Emissions* The proposed project would not cause the thresholds of significance to be exceeded. Project-related emission levels for the two ozone precursor pollutants (ROG and NOx) would represent 17 and seven percent of the significance threshold, respectively. Carbon monoxide (CO) would similarly not exceed the suggested significance	Less Than Significant	No mitigation required	Less Than Significant

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
threshold by a large margin of safety. The proposed project's operational emissions would therefore be less than significant.			
Micro-Scale Emissions Impacts Micro-scale air quality is traditionally analyzed within environmental studies in terms of any potential carbon monoxide (CO) "hot spots." Hot spots are possible violations of standards at sensitive receptor locations within very short distances of major intersections or other points of traffic stagnation. Such an analysis is not necessary for the proposed project because: • Background CO levels are low in Marina del Rey; • The average CO emissions per vehicle will decrease by more than 50 percent in this next decade such that it becomes physically impossible to create enough of a vehicle concentration to generate enough CO emissions to exceed standards; and • The maximum background CO levels were 3.0 ppm in 2005. It would take an increase of more than 17 ppm to exceed the current one-hour standard of 20 ppm. CO modeling by the SCAQMD has shown that the worst-case CO impact at the largest intersection in the air basin operating at a level of service of "F" (Wilshire at Veteran) is currently much less than 10 ppm. Any local Marina del Rey impacts would be much less than the worst-case basin-wide location. Therefore, micro-scale impacts associated with CO "hot spot" potential and the proposed project are considered less than significant.	Less Than Significant	No mitigation required	Less Than Significant
<u>Cumulative Air Quality Impacts</u> On a cumulative basis, related projects as described in Section IV.H,	Significant	**AQ-1** The applicant shall prepare a Construction Management Plan to control fugitive dust. At a minimum, the Plan shall include	

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
Traffic/Access would add to the generation of air pollutants from construction activities and long-term traffic generation. Mitigation measures must therefore be considered and employed where applicable on a project-by-project basis. Regionally, air pollutant emission impacts would fall below the significance level with attainment of air quality planning goals. In the interim, the cumulative condition is significant. Operationally, the proposed project's emissions would not impact adopted significance thresholds. The proposed project's air quality impacts during construction would similarly not exceed significance thresholds. However, as the SCAB is in non-attainment for smog and PM-10, impacts from all Basin-wide construction activities (including diesel exhaust from construction vehicles) are cumulatively considerable, including the proposed project. However, implementation of Mitigation Measures AQ-1 and AQ-2 (Best Available Control Measures) would reduce the proposed project's contribution to this cumulative condition to less than significant.		the following dust control measures: • The simultaneous disturbance site should be minimized as much as possible. • The proposed project shall comply with SCAQMD established minimum requirements for construction activities to reduce fugitive dust and PM-10 emissions. A plan to control fugitive dust through the implementation of best available control measures shall be prepared and submitted to the County for approval prior to the issuance of grading permits. The plan shall specify the dust control measures to be implemented. Such measures may include but are not limited to: e) Application of soil stabilizers to inactive areas; f) Preparation of a high wind dust control plan and implement plan elements and terminate soil disturbance when winds exceed 25 mph; g) Stabilization of previously disturbed areas if subsequent construction is delayed; and h) Covering all stock piles with tarps. • The project proponent shall comply with all applicable SCAQMD Rules and Regulations including Rule 403 insuring the clean up of construction-related dirt on approach routes to the site. Rule 403 prohibits the release of fugitive dust emissions from any active operation, open storage pile or disturbed	

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		surface area visible beyond the property line of the emission source. Particulate matter on public roadways is also prohibited. • Adequate watering techniques shall be employed to mitigate the impact of construction-related dust particulates. Portions of the site that are undergoing surface earth moving operations shall be watered such that a crust will be formed on the ground surface, and then watered again at the end of each day. Watering of exposed surfaces and haul roads three times/day is recommended. • Any vegetative cover to be utilized onsite shall be planted as soon as possible to reduce the disturbed area subject to wind erosion. Irrigation systems required for these plants shall be installed as soon as possible to maintain good ground cover and to minimize wind erosion of the soil. • Any construction access roads (other than temporary access roads) shall be paved as soon as possible and cleaned after each work day. The maximum vehicle speed on unpaved roads shall be 15 mph. • Grading operations shall be suspended during any first stage ozone episodes. **AQ-2** The applicant shall prepare a Construction Management Plan to control vehicle and equipment emissions during construction. At a minimum, the Plan shall incorporate the following mitigation measures:	

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		• Construction parking shall be configured to minimize the potential for traffic interference and vehicle idling. • Any construction equipment using direct internal combustion engines shall use a diesel fuel with a maximum of 0.05 percent sulfur and a four-degree retard. • Equipment and vehicle engines shall be maintained in good condition and in proper tune, according to manufacturer's specifications and per SCAQMD rules, to minimize exhaust emissions. 90 day Low Nox tune-ups shall be required for off-road equipment. • Tier 3 rated engines shall be used for all equipment during site grading, if available. • Equipment whose engines are equipped with diesel oxidation catalysts shall be utilized, if available. • Construction operations affecting off-site roadways shall be scheduled by implementing traffic hours and shall minimize obstruction of through-traffic lanes. Construction operations that may affect traffic flow on the arterial system shall be limited to off-peak hours, as permitted. • Truck deliveries occurring during construction shall be consolidated to the extent feasible. • Idling trucks or heavy equipment shall turn off their engines if the expected duration of idling exceeds five (5) minutes as required by law. • On-site heavy equipment	

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		used during grading and construction shall be equipped with diesel particulate filters unless it is demonstrated that such equipment is not available or its use is not cost-competitive. • All building construction shall comply with energy use guidelines in Title 24 of the California Code of Regulations. • To the extent that such measures are economically feasible/cost competitive, the applicant shall incorporate the following practices: – Utilizing electricity from power poles in place of temporary diesel or gasoline-powered generators; – Utilizing methanol or natural gas-powered mobile equipment and pile drivers in place of diesel; and – Utilizing propane or butane-powered on-site mobile equipment in place of gasoline. • Construction equipment operations shall be suspended during any second stage smog alert.	
Biota			
Non-sensitive Plant Life The Parcel OT site does not contain natural or undisturbed land. The trees planted along the margins of the streets bordering the project site and a few in islands within the parking lot, and the earthen portion of Parcel P between the existing parking lot and fence line are exotic species. No native perennial herbs, grasses, or weeds we observed. The proposed project would result in the removal of the trees within the development footprint, and	Less Than Significant	No mitigation required	Less Than Significant

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
construction of the County's 24-inch replacement water main would require removal of the trees currently located to the north of the proposed building location. Since all of the trees and landscaping on-site are exotic species and not considered sensitive or protected, their proposed removal would be considered less than significant. Parcel 21 similarly does not support natural or undisturbed land. The plant species located on the site consist of exotic trees planted in the margins of the bordering streets, in islands within the parking lot itself or within large pots, and in beds surrounding the buildings. Exotic shrubs and perennial herbs are also present onsite, as are non-native grasses. Given the urbanized condition of the site and lack of native species, development of Parcel 21 would result in a less than significant impact.			
<u>Non-sensitive Wildlife</u> Several bird species are likely to occur on Parcel OT, and due to the trees onsite, the potential for nesting of resident and summer resident bird species in the trees onsite cannot be discounted. Removal of trees for construction of the proposed project and/or construction of the County's 24-inch water main along the northern portion of the property would result in a potentially significant impact to nesting birds, if active nests are present and harmed. Potential impacts to nesting birds on Parcel 21 may also occur due to construction of the project on-site and/or construction of improvements to the Panay Way water main infrastructure. This would constitute a potentially significant impact.	Significant	**BIO-1** Tree removal shall be performed between the dates of August 1 through January 31 to avoid the nesting bird season. Should this not be feasible, a qualified biologist shall conduct a thorough examination of the tree to determine whether nesting birds are present, and if found, the status of the nest shall be noted. The nest survey shall take place not more than three days (72 hours) prior to the planned removal. If nesting birds are present, the biologist shall prepare a recommendation, which may include a delay of the removal until such time that nesting has been completed. The recommendation of the biologist shall be communicated to the local CDFG Agent for approval and consent prior to removal of the tree(s).	Less Than Significant
<u>Sensitive Plants, Wildlife, and Their Habitat</u> With the exception of Cooper's hawk and sharp-shinned hawk, which are both California Species of Special Concern,	Significant	Refer to Mitigation Measure BIO-1, above.	Less Than Significant

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
other sensitive plant and wildlife species were not observed and are not expected to occur on either Parcel OT, the subject portion of Parcel P or Parcel 21. Additional, sensitive habitat types were not observed within the project sites. Neither Cooper's hawk nor sharp-shinned hawk were observed on the Parcels, but both species can be expected to occur on both Parcels. Specifically, Cooper's hawk is a year round resident that nests in the region and may forage on the Parcels, but the presence of sharp-shinned hawk would be limited to the winter. Due to the low density of tree canopy on the Parcels, nesting by the Cooper's hawk is likely precluded. As documented in a focused heron survey prepared for Parcels OT and P by Dr. Jeffrey Froke, PhD, herons do not occupy and are not expected to nest or forage within Parcel OT and the portion of Parcel P to be added to Parcel OT. However, nesting and foraging of herons is expected to occur within the aquatic habitat and heavier cover that exists in the central portions of the Oxford Basin. Based on studies conducted since 2005, herons within the Oxford basin proven to be tolerant of the urban development which surrounds the Oxford Basin, including elevated levels of ambient and irregular event noise such as loud motorcycles and automobiles. Based on the tolerance of the herons to urban uses, and the setback of the proposed project from heron nesting and foraging habitat, operation of the Ocean Retirement Facility would not result in a loss of heron habitat, and would not significantly affect heron nesting or foraging activities within the Oxford Basin. Elevated levels of ambient and irregular event noise would be generated during construction of the proposed Oceana Retirement Facility. However, based on the proven tolerance of the herons to urban and construction noise in the area around the Oxford Basin, and			

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
compliance with mitigation measures N-1 through N-6, impacts to herons during construction of the proposed Oceana Retirement Facility would be less than significant. As defined in the thresholds of significance listed above, impacts to these nesting birds would result in a violation of both the CDFG Code Section 3500 et seq. and the Migratory Bird Treaty Act. Therefore, even the remote possibility of impacts to any nesting raptor resulting from tree removal would be considered a significant impact.			
Cumulative Biota Impacts Several related projects are proposed for development within the general study area (Marina del Rey, Los Angeles County, and the City of Los Angeles). These projects are generally similar or larger in scope compared to the proposed project. They represent a mix of residential, commercial, office, and hotel/motel projects, with some open space and associated recreational land uses. As Marina del Rey and the immediate areas are largely urbanized, the proposed project's contribution to the cumulative condition after proper implementation of the mitigation measure specified above is not cumulatively considerable. Therefore, the proposed project would result in a less than significant cumulative impact on biota.	Less Than Significant	No mitigation required	Less Than Significant
Cultural Resources			
Prehistoric and Historic Archaeological Resources While no prehistoric or historic resources have been recorded within one-half mile of the property, the identification of the historic Venice Landfill as being located near both Parcel OT and Parcel 21 and recent investigations in nearby Ballona Creek resulting in the discovery of hundreds of native American burials and numerous prehistoric features indicates a sensitivity of the project area for prehistoric and	Significant	**CUL-1** During the removal of asphalt paving and subsequent grading of the sites, the sites shall be monitored by a qualified archaeological monitor. Should evidence of any prehistoric or historic resources be uncovered, the archeologist must be notified and work in the find area shall cease until the monitor arrives. The State Historic Preservation Office and Los Angeles County Department of Regional Planning	Less Than Significant

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
historic archaeological resources. As the potential exists for such resources to be uncovered during grading and excavation activities for the proposed developments, prior to mitigation, the proposed project may result in a significant impact to prehistoric and historic archaeological resources.		shall also be notified if such resources are uncovered. The archeological monitor shall have the authority to halt any activities adversely impacting potentially significant archeological resources, while the find is evaluated in accordance with CEQA criteria for significance. **CUL-2** Should evidence of any prehistoric or historic archaeological resources be uncovered, a Phase II evaluation must be conducted in accordance with Section 15064.5(f) of the CEQA Guidelines. **CUL-3** Following §30116(d) of the Coastal Act, any cultural resource found in the portion of the LCP study area planned for development shall be collected and maintained at the Los Angeles County Museum of Natural History or other appropriate location as otherwise provided by State law. **CUL-4** Should human remains be discovered during the removal of asphalt paving and subsequent grading of the sites, the County Coroner shall be contacted and permitted access to the site for preliminary identification of the remains. If the remains are found to be of Native American origin, the Native American Heritage Commission must be notified and permitted to identify the Most Likely Descendant (MLD), and, in consultation with the proponent and archaeological monitor, determine the appropriate disposition of the remains, as stated in Section 15064.5(d) of the CEQA Guidelines. **CUL-5** As part of the Coastal Development Permit application involving disturbance of native soils or vegetation, including but not limited to excavation, pile	

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		driving or grading, the applicant shall provide evidence that they have notified the Office of State Historic Preservation and the Native American Heritage Commission of the location of the proposed grading, the proposed extent of the grading, and the dates on which the work is expected to occur. **CUL-6** Should an Archaeological Recovery Program be warranted, it shall require a Coastal Development Permit consistent with the provisions of the certified Marina del Rey LCP.	
<u>Cumulative Cultural Resources Impacts</u> As discussed above, the proposed project is not expected to result in adverse significant impacts to paleontological or historic resources. Therefore, the proposed project is not cumulatively considerable with regard to paleontological or historic resources. With regard to prehistoric and historic archaeological resources and the potential of the proposed project to uncover these, the proposed project constitutes Phase II development of Marina del Rey, and any resources on Marina land already altered or designated for development have been or probably have been already impacted, according to the Marina del Rey LCP. If for some reason this is not the case, and grading and/or excavation of Phase II development uncovers such resources, the project would be considered cumulatively considerable to this effect. However, as buildout of the County of Los Angeles General Plan and Marina del Rey LCP occurs, each future project would be subject to CEQA review and appropriate cultural resources reporting. As with the proposed project, implementation of mitigation measures would reduce cumulative project impacts to a less than significant level.	Significant (for prehistoric and historic archaeologic al resources)	**CUL-1 though 6, above**	Less Than Significant (for prehistoric and historic archaeologic al resources)
Visual Qualities			

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
Potential Impacts to Visual Resources and Scenic Vistas The development proposed for Parcel OT and Parcel 21 would not result in the creation of a significant impact upon visually sensitive views of the ocean or other shoreline features.	Less Than Significant	No mitigation required	Less Than Significant
Potential Light and Glare Impacts *Daytime Glare* Parcel OT is removed from the Marina and is not subject to potential reflected sunlight glare effects that can occur on either the easterly or westerly sides of the Marina, which result from additional sunlight being reflected off water surfaces. As proposed, the lower levels of the building's exterior surfaces would be surfaced in a variegated textured and earth-toned material resembling natural stone. When coupled with its setback buffer of groundcover, shrub, and low ornamental tree landscaping, the structure's walls would not become a likely source of glare along any of the building's sides. Although reflected sunlight from the surface water of the Marina contributes to glare effects, particularly in westerly and easterly directions during the morning and evening times of day, the water-facing sides of the proposed structures on Parcel 21 would be north-facing and would not figure effectively in sunlight being reflected by them into the waters of the Marina, where it could contribute significantly to increased daytime glare effects.	Less Than Significant	No mitigation required	Less Than Significant
Nighttime Glare and Lighting Numerous multistory buildings exist on adjacent properties and/or in relatively close proximity to Parcel OT, and a number of high-rise residential towers and hotels can be found along the southerly side of Admiralty Way, typical of an urban environment. The sources of light that would be introduced by the proposed development on Parcel OT are expected to be consistent with the existing urban environment. Therefore,	Less Than Significant	**VIS-1** The applicant shall develop and submit a Lighting Plan for the proposed project for County of Los Angeles review and approval. The Lighting Plan shall include the following features, at a minimum: • Exterior lighting shall consist of low intensity, shielded, hooded fixtures and shall be directed downward or toward the area to be illuminated, so	Less Than Significant

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
as the project has been designed to utilize hooded and carefully directed lighting fixtures, and it is located in an already urbanized community subject to the effects of night lighting, the potential for adverse night lighting or glare stemming from the proposed development on Parcel OT would be less than significant. Several multistory residential buildings exist on adjacent properties and/or in relatively close proximity to Parcel 21 along Panay Way. The sources of light that would be introduced by the proposed development on Parcel 21 are expected to be consistent with the existing urban environment.		that backscatter to the nighttime sky is minimized and light trespass outside the project boundary is prevented. • Outdoor flood lamps shall not be used to provide architectural highlight or accent lighting. • Lighting used to provide for public safety along exterior pedestrian walkways shall consist of low level positioned lights that are specifically aimed at key walkway points and screened by lens-covering light grills to eliminate potential glare effects.	
<u>Potential Impacts to Compatibility with Surrounding Land Uses and Local Plans</u> The development proposed for Parcel OT has received conceptual approval from the Marina del Rey Design Control Board, which found the proposal to be consistent with the Marina del Rey LCP policies. The Parcel 21 project site plans have been developed in accordance with applicable guidelines and standards established by the Marina del Rey LCP and are intended to preserve and enhance the visual character of Marina del Rey. As with the Parcel OT proposal, the proposed development on Parcel 21 has received conceptual approval from the Marina del Rey Design Control Board, finding it to be consistent with the Marina del Rey LCP policies. However, despite the above provisions and design features of the proposed project, the building to be developed on Parcel 21 would represent an increase in height and massing from the current condition on this segment of the Panay Way mole road. Although views to the north of Parcel 21 are limited to motorists along Panay Way (there are no sidewalks south of Parcel 21) and mainly include brief views of the masts of boats and not the	Significant	No feasible mitigation	Significant

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
water or shoreline, the proposed development would occupy a greater portion of Parcel 21 at a greater height, as compared to scattered, smaller structures that currently exist on the site. As stated above, Panay Way is not a designated scenic highway or vista and the design of the proposed project would allow for corridors that create views to the north of Parcel 21; therefore, the proposed project is considered to have a less than significant impact associated with impacts to visual resources and scenic vistas. However, the proposed increase in building mass and height on Parcel 21, located on a relatively narrow mole road with limited area, is conservatively considered to be a potentially significant and unavoidable visual quality impact of the proposed project related to incompatibility with the scale of structures in Marina del Rey that are shorter in height and represent less massing.			
Potential Impacts to Shade/Shadow-sensitive Uses The Parcel OT project would minimally impact existing structures northwesterly of the site during the winter solstice. The longest afternoon shadows would be cast northeasterly of the proposed structure, where they would shade the landscaped side of the proposed structure's grounds and the adjacent Marina Lagoon/Oxford Retention Basin, which is not a shade-sensitive use. No buildings would be shaded to the northeast of the project site. As no routinely useable outdoor spaces associated with residential, recreational, or institutional (e.g., schools, convalescent homes) land uses, commercial uses such as pedestrian-oriented outdoor spaces or restaurants with outdoor eating areas, nurseries, and existing solar collectors would be shaded for more than three hours during the winter solstice. Furthermore, no shade/shadow-sensitive uses as defined above would be shaded by equinox and summer solstice shadows cast by the proposed project.	Less Than Significant	No mitigation required	Less Than Significant

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
Parcel 21 would not impact shade/shadow-sensitive uses.			
Cumulative Visual Quality Impacts Implementation of Phase II Marina del Rey development would gradually result in the alteration of the existing visual character of the Marina del Rey, as larger and taller structures (greater massing) are becoming more common in the community. As such, when Phase II development is complete and viewed cumulatively, impacts to visual quality within the Marina del Rey community could be considered significant, given the intensification of development that is occurring. However, regulations are in place to assure that proposed projects in Marina del Rey do not adversely affect visual resources in the area. The proposed project has received conceptual approval from the Marina del Rey Design Control Board, and it would be constructed so as to comply with the Marina del Rey LCP height, density, and view corridor requirements. Similarly, related projects must also comply with the Marina del Rey LCP policies and be approved by the Marina del Rey Design Control Board. However, despite these provisions of the proposed project, the buildings to be developed on Parcel OT and Parcel 21 would incrementally contribute to the intensification of development occurring in Marina del Rey. Therefore, the proposed project is conservatively considered to have a significant and unavoidable cumulative impact on visual quality	Significant	No feasible mitigation	Significant
Traffic/Access			
Construction Period Impacts Construction of the proposed project on Parcels OT and 21, as well as the upsized sewer and water main projects, would require the designation of construction vehicle and haul routes and construction period management of roadways, sidewalks, and public transportation routes. During the construction period, parking on the subject parcels would become	Significant	**TA-1** Traffic Control Plans for both Parcel OT and Parcel 21 shall be submitted to the County of Los Angeles Department of Beaches and Harbors and the County of Los Angeles Department of Public Works Traffic and Lighting Division for review and approval. The Traffic Control Plans shall designate haul routes for construction-related vehicles, the location of access to the	Less Than Significant

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
temporarily unavailable. Public parking on these parcels would be diverted to underutilized public parking lots within the Marina as identified by the Draft Right-Sizing Parking Study. Construction and tenant parking during construction would be provided by the Applicant via a valet system, with the spaces being provided on Parcel 76 for the Parcel OT project and Parcel 18 for the Parcel 21 project, which are both under lease to the Applicant. Although the proposed project would result in the temporary loss of both public and private parking on the sites during the construction period, the proposed provision for private parking and the availability of underutilized public parking throughout the Marina is anticipated to accommodate the parking demand. Therefore construction period impacts to parking supply would be less than significant.		construction site, and staging and parking areas for workers and equipment. The Plans shall also specify the permitted hours of construction, methods of safeguarding traffic flow, methods of re-routing or detouring traffic if necessary, and the placement/utilization of traffic control devices (including signs, flashing arrows, traffic cones and delineators, barricades, flaggers, temporary modifications to existing signals and signal timing, etc.), as necessary. Further, the Plans shall address the provision of signage for alternative pedestrian and bicycle access routes where affected, coordination with emergency service providers, and coordination with pubic transit providers (such as the MTA, LADOT Commuter Express, and Culver City Bus).	
<u>Operational Period Impacts</u> *Site Access Impacts* Vehicular access for the Parcel OT site would be available directly from Washington Boulevard and Admiralty Way, as well as from an existing two-way driveway that extends between these two roadways. Parcel OT would provide parking via upper ground and lower ground parking levels. Access to the upper ground parking level would be located off of the existing driveway, approximately 170 feet north of Admiralty Way. Vehicular access to the parking facility to be located on Parcel 21 would be available on Panay Way via two driveways. Both Parcel 21 driveways would provide one ingress lane and one egress lane. Full left- and right-turn access would be allowed at the two driveways. Additionally, the promenade to be located along the north side of Parcel 21 is designed to serve as a fire lane, to satisfy Los Angeles County Fire Department requirements.	Less Than Significant	No mitigation required	Less Than Significant

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
The proposed project is therefore expected to result in a less than significant impact related to site access for both Parcel OT and Parcel 21. Further, adequate access during an emergency is provided and the proposed project is not expected to result in problems for emergency vehicles or residents/employees in the area.			
Site Parking As discussed in the parking analysis and shown in Tables IV.H-4 and IV.H-5 of the Traffic section (IV.H) of this EIR, the proposed project would result in a less than significant impact related to site parking on both Parcel OT and Parcel 21. For all proposed land uses, the required amount of parking spaces is either met or exceeded by the project site plans.	Less Than Significant	No mitigation required	Less Than Significant
Traffic Congestion Impacts *Project Trip Generation* When the trip generation rates and the trip discounts are applied, the traffic expected to be generated by the proposed project is expected to be as summarized in Table IV.H-7 of the Traffic Section (IV.H) of this EIR. As shown in this table, the Parcel OT component of the proposed project is expected to generate approximately 387 net new trips per day, including about ten trips occurring during the morning peak hour and 41 trips occurring during the evening peak hour. The proposed redevelopment on Parcel 21 would result in a net decrease of approximately 109 trips per day, including a net increase of about two trips occurring during the morning peak hour and a net decrease of about 11 trips occurring during the evening peak hour. The two proposed sites combined are expected to generate a total of approximately 278 net new daily trips, including about 12 trips occurring during the morning peak hour and 30 trips occurring during the evening peak hour. This net project trip generation will be added to the project area roadway network once the proposed project is	Less Than Significant	No mitigation required	Less Than Significant

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
completed and fully occupied.			
Regional Transportation Impacts A review of the project's net trip generation indicates that the proposed project is not expected to generate 150 trips during either peak hour. The maximum amount of project traffic added to any particular freeway segment would occur along the westbound and eastbound Marina Expressway/Freeway east of Mindanao Way during the PM peak hour. During this time, the proposed project would add approximately six trips, which is significantly less than the Los Angeles County CMP threshold of 150 peak hour trips added to any segment of any freeway in a single direction. Based on this information, the impact criteria would not be exceeded; therefore, the proposed project would result in a less than significant impact on the regional transportation system.	Less Than Significant	No mitigation required.	Less Than Significant
Cumulative Traffic/Access Impacts Traffic from 43 projects near the Parcels OT and 21 could potentially add traffic resulting in significant cumulative impacts at 11 of the 14 study intersections, resulting in some locations near or above capacity. The proposed project would contribute incrementally to these cumulative impacts, although its contributions are three percent or less of the cumulative impact at all locations. Nevertheless, the proposed project would contribute to a significant cumulative impact related to traffic congestion. At five of the 11 impacted intersections, this cumulative impact is currently unmitigable.	Significant	For the intersections of Admiralty Way at Via Marina, Admiralty Way at Palawan Way, and Admiralty Way at Bali Way: **TA-2** Pursuant to the Marina del Rey Specific Plan Transportation Improvement Program (TIP), the applicant shall provide a "fair share" contribution toward the funding of Category 1 (local Marina) and Category 3 (regional) roadway improvements, based on the amount of project PM peak hour trips. [As the County's traffic mitigation fee structure is currently $5,690 per PM peak hour trip, the proposed project shall be required to pay $170,700 in trip mitigation fees, based on the expected project trip generation of 30 net new PM peak hour trips, with a portion of these fees being designated toward the Category 3 (regional) transportation improvements]. For the intersections of Washington Boulevard at Palawan Way, Washington Boulevard at Ocean Avenue/Via Marina, and Admiralty Way at Mindanao Way:	Significant

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		TA-3 The applicant shall contribute "fair share" funding to provide 1) a new traffic signal at the intersection of Washington Boulevard and Palawan Way, 2) realignment at the south leg of the intersection to reduce the angle of the northbound right-turn only lane for a more perpendicular approach in addition to northbound dual left-turn lanes, and 3) two northbound left-turn lanes onto westbound Washington Boulevard and an exclusive right-turn lane (add a second left-turn). The proposed project shall contribute 3.8 percent of the impact at this location. While cost estimates for this improvement are currently being finalized, they are estimated to be $332,500, with a project responsibility of $12,635. **TA-4** The proposed project shall contribute "fair share" funding to either 1) a second southbound left-turn lane at the Admiralty Way at Mindanao Way intersection or 2) the conversion of the shared left-turn/through lane to a shared through/left-/right-turn lane on the westbound approach to the Admiralty Way at Mindanao Way intersection with optimization of signal operation at adjacent intersections at this intersection when plans are finalized by the applicable discretionary agencies. **TA-5** The proposed project shall dedicate the necessary right of way for the future widening of Admiralty Way as well as an eight-foot sidewalk along the project frontage on Admiralty Way.	
<u>Cumulative Traffic/Access Impacts</u> The timing of construction of the proposed project may occur with various other planned City and County of Los Angeles projects that would likely necessitate work to be performed in roadways. This cumulative impact is	Significant	Implementation of Mitigation Measure T-1 would reduce the cumulative traffic impact associated with the construction of cumulative projects to less than significant.	Less Than Significant

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
considered significant prior to mitigation. Traffic control plans, as required by Mitigation Measure T-1 for the proposed project, would be required for such planned projects. Implementation of these plans, as approved by the applicable City and County traffic agencies, would reduce potential cumulative traffic impacts associated with the construction of cumulative projects to less than significant.			
Cumulative Construction Parking Impacts In the event that all of the related projects are under construction and non-operational at the same time, a total of 581 public parking spaces on Parcels OT, NR, IR and FF would temporarily be unavailable. Based on the findings of the Draft Right-Sizing Parking Study prepared for the Los Angeles County Department of Beaches and Harbors, not counting underutilized spaces provided in Lot 11 on parcel GR, a total of 850 underutilized public parking spaces would remain available throughout the Marina. Therefore an excess of 269 underutilized public parking space would be available to meet the demand for public parking assuming this worse case scenario. Therefore, cumulative construction parking impacts are anticipated to be less than significant.	Less than Significant	No mitigation required.	Less than Significant
Utilities (Water Supply)			
Water Demand Collectively, the proposed project would represent a water demand of 29,108 gallons of water per day. This figure is approximately 22,253 gpd more than the existing/approved condition, not taking into account any water demand from the existing parking lot on Parcel OT. Based on the most recent water use information made available by the UWMP, the Marina del Rey Water System used (demanded) 1,509,380 gallons per day in Fiscal Year 2004-2005. Therefore, although the proposed project would represent an increase of	Less Than Significant	**WS-1** The applicant shall prepare a landscape plan that meets all provisions of Title 26 of the Los Angeles County Code, Chapter 71, Water Efficient Landscaping. **WS-2** The applicant shall incorporate into the building plans water conservation measures as outlined in the following: • State of California Health and Safety Code Section 17921.3, requiring low-flow toilets and urinals; • Title 24, California Administrative Code, which	Less Than Significant

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
approximately 22,253 gpd over the existing uses, this translates to 1.5 percent of the Marina del Rey Water System water use (demand). In addition, the proposed project represents a replacement of existing land uses on Parcel 21, as well as a transfer of development potential (as provided for in Marina del Rey Land Use Plan) and/or otherwise approved uses not yet built on Parcels OT and 21. Therefore, the proposed project is considered to be accounted for in 2005 Urban Water Management Plan and other Countywide growth projections and is expected to have a less than significant impact on water supply. However, Mitigation Measures are provided below for added enforcement and to assure proper implementation of regulatory requirements.		establishes efficiency standards for shower heads, lavatory faucets, and sink faucets, as well as requirements for pipe insulation that can reduce water used before hot water reaches equipment or fixtures; and • Government Code Section 7800, which requires that lavatories in public facilities be equipped with self-closing faucets that limit the flow of hot water.	
<u>Local Water Infrastructure</u> The applicant has obtained "will serve" letters from the District for both Parcel OT and Parcel 21, indicating that water lines exist in the project area; however, the "will serve" letters are subject to conditions. Impacts associated with the payment of fees and adherence to Health Department requirements are considered less than significant. However, implementation of Mitigation Measures WS-3 and WS-4 would assure that the requirements of the District and Health Department are met by the proposed project. The District currently has plans to upsize the 14-inch water main that currently traverses Parcel OT to a 24-inch water main within the same alignment. The existing and approved water mains are located within the footprint of the proposed Parcel OT building, and thus construction of the proposed building would require relocation of the water main. The applicant has identified a proposed alignment approximately 36 feet to the northeast of the existing alignment that would accommodate both the upsized water main and the proposed	Less Than Significant	**WS-3** The applicant shall adhere to the conditions of the Los Angeles County Waterworks District "will serve" letters issued for Parcel OT and Parcel 21, including, but not limited to, the payment of connection fees and implementation of water system improvements, if necessary. **WS-4** The construction of on-site facilities shall meet all health and safety codes, and all domestic water service meter and fire protection connections shall have a backflow device to prevent contamination of the public water system. **WS-5** The District has prepared a water main relocation and expansion plan for the 14-inch water main that currently traverses Parcel OT. Prior to issuance of the grading permit for the proposed project, the upsized water main shall be installed and operational on Parcel OT, unless the water main upsizing is to be constructed and made operational as a part of the proposed project. The applicant	Less Than Significant

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
project within the subject property. The conflict between the location of the proposed building and the water main on Parcel OT would result in a potentially significant impact to local water infrastructure, but are mitigable via WS-5. With regard to fire flow demand for this site, adequate water and pressure are available from the City and County of Los Angeles on Parcel OT to meet the demand of the proposed project; however, implementation of Mitigation Measure WS-6 would further assure that County of Los Angeles Fire Department requirements are met. An existing 10-inch water main delivers water to properties along Panay Way. Based on available fire flow data, this line would not be able to provide the required water and pressure to accommodate the proposed project on Parcel 21. The project includes replacing this water main infrastructure with a water line that is up to 18 inches in diameter within the Panay Way right-of-way to provide the required fire flow. The inadequate water infrastructure for firefighting demand at Parcel 21 would result in a potentially significant impact related to local water infrastructure, mitigable via **WS-7**. Implementation of Mitigation Measure WS-6 would further assure that County of Los Angeles Fire Department requirements are met.		shall be responsible for costs associated with relocating the water main on Parcel OT or compensating the District for such incurred costs. **WS-6** The applicant shall complete the following tasks, for review and approval by the County of Los Angeles Fire Department: *Parcel OT* • Prepare a Fire Safety Plan; • Verify and perform Fire Flow Availability tests on 1) the nearest existing public fire hydrant on Admiralty Way (Los Angeles County Waterworks), and 2) the nearest existing public fire hydrant on Washington Boulevard (District); • Submit architectural plans to the Fire Prevention Engineering Division in Hawthorne; and • Submit an original Fire Flow Availability Form (196). *Parcel 21* • Prepare a Fire Safety Plan; • Verify the nearest existing public fire hydrant to the property; • Submit architectural plans to the Fire Prevention Engineering Division in Hawthorne; and • Submit an original Fire Flow Availability Form (196). **W-7** Prior to issuance of the grading permit for the proposed project, the water main infrastructure in Panay Way shall be replaced with a water main that is up to 18 inches in diameter and operational in order to meet the fire flow demand of the project on Parcel 21.	

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
Cumulative Utilities (Water Supply) Impacts Buildout of the Marina del Rey Specific Plan is planned through the establishment of Development Zones and development potential. Generally, developments outside of planned conditions need to be assessed for adequate local and regional water supplies. To meet future domestic water demands and fire protection water demands in the community, the District prepared a master plan to upgrade the domestic water distribution network in Marina del Rey, which is based on the existing demand and growth projections, as well as redevelopment land uses proposed in the Marina del Rey Land Use Plan. Phase I of the improvement plan was completed in 2002, and Phase II of the project is scheduled to begin construction in early 2010. Although the proposed project requires amendment to the Marina del Rey LCP, it is not expected to demand a significant water supply in relation to the overall capacity of the Marina del Rey Water System. However, until completion of Phases II and III of the system upgrade described above, fire flow water capacity may be insufficient for new development within the community, as indicated by the District. Where flow capacity would be inadequate, developers may choose to finance required improvements, as with the proposed project on Parcel 21. As both short and long-term strategies have been developed to manage potential water supply/fire protection water demand deficiencies, the proposed project would not result in a significant adverse cumulative impact on water supply.	Less Than Significant	No mitigation required	Less Than Significant

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures		Significance After Mitigation
Environmental Safety				
Soil Toxicity The analytical results show that several samples had detectable levels of certain metals, volatile organic compounds, pesticides, and petroleum-based compounds considered as regulated contaminants, and the primary contaminants of concern included elevated levels of lead and copper. Levels of lead were above the residential preliminary remediation goal (PRG). Additionally, several sample test results exceeded a figure of ten times their respective soluble threshold limit concentration (STLC). This result indicates that some of the soils would be classified as hazardous, if excavated. As such, development of Parcel OT would result in a significant impact associated with soil toxicity prior to implementation of Mitigation Measures ES-1 and ES-2.	Significant	**ES-1**	The applicant shall adhere to all applicable County, State, and Federal guidelines regarding the handling, excavation, disposal, and/or remediation of soils classified as hazardous waste, which may include, but not be limited to, the development and implementation of a Soil Management Work Plan (SMWP) for the project, as well as correspondence with the Regional Water Quality Control Board (RWQCB) and Department of Toxic Substances Control (DTSC) to determine the level of any necessary remediation efforts.	Less Than Significant
		ES-2	In the event that previously unidentified waste or debris is discovered during construction/grading activities, and the waste or debris is believed to involve hazardous waste or materials, the contractor shall: immediately stop work in the vicinity of the suspected contaminant; remove workers and the public from the area; notify the resident inspector; secure the area as directed by the resident inspector; and notify the County of Los Angeles Hazardous Waste/Materials Coordinator and the Fire Department. Work in the affected area shall cease until the proper approval is granted by the appropriate governmental oversight agency and a work plan is implemented, if necessary.	
Parcel OT Methane Concentrations Where subsurface methane concentrations exceed 5,000 ppm, mitigation improvements are typically required by the oversight agency (such as the Department of Public Works Building and Safety Division). As methane concentrations as high as 28,000 ppm were measured during the investigation of Parcel OT, and	Significant	**ES-3**	The applicant shall install a passive ventilation system beneath the building foundation system on Parcel OT. The sub-slab vent system typically consists of four-inch diameter perforated polyethylene piping installed within 12-inch deep gravel-filled trenches beneath the building. These vent lines are normally spaced no more than 20 to 30 feet	Less Than Significant

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
development of the site would require grading and result in the construction of a facility, this is identified as a significant impact prior to implementation of Mitigation Measures ES-3 through ES-6.		apart in order to effectively ventilate the subgrade beneath the building. The sub-slab vent lines are connected to vent risers installed within the building walls. As with typical sanitary sewer vent lines, the methane vent risers terminate above the roofline of the building. A dewatering system shall be required if the methane vent lines are less than one foot above the historic high groundwater level at the site. **ES-4** The applicant shall install a gas membrane beneath the building foundation system of Parcel OT. The sub-slab gas barrier typically consists of a continuous Liquid Boot™ membrane installed beneath the floor slab of the building. This membrane has a minimum required thickness of 100-mills (0.10 inch). Gas tight seals are required at all locations where utilities or conduits penetrate the membrane. At the completion of the installation, the membrane is smoke tested using a procedure developed by GeoKinetics in order to confirm its integrity. **ES-5** The applicant shall install conduit seals on dry utilities servicing the building the Parcel OT. Conduit seals shall be installed on dry utility conduits (e.g. electrical, telephone, cable T.V.) that terminate on the interior of the building. These seals are intended to prevent the migration of methane through the conduits to interior areas. Also, in order to reduce the potential for methane to migrate through the sand backfill of any utility trenches, which extend up to and/or beneath the building, “dams” consisting of a lean sand/ cement/ bentonite slurry shall be installed within the trench	

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
		lines at the perimeter of the building. **ES-6** Upon finalization of the foundation and/or architectural plans for the structure on Parcel OT, and prior to issuance of the Grading Permit, the project subsurface methane gas consultant shall review such plans and provide further recommendations for methane gas mitigation measures, if necessary. Any additional recommendations by the subsurface methane gas consultant shall be adhered to by the applicant.	
<u>Cumulative Environmental Safety Impacts</u> Several related projects are proposed for development within the general study area (Marina del Rey, Los Angeles County, and the City of Los Angeles). Buildout of Marina del Rey is planned for through the County of Los Angeles General Plan, Marina del Rey Specific Plan, and Marina del Rey Land Use Plan/Local Coastal Program, as well as annual budgeting processes. Cumulative, or related, projects, as they are developed, would be subject to the same law/code requirements as the proposed project. Thus, when related projects undergo the CEQA process, they would be individually evaluated on the same criteria as the proposed project relative to environmental safety, as well as the other issues included in the EIR scope. The proposed project's contribution to the cumulative condition after proper implementation of mitigation measures and compliance with all applicable regulations and permit conditions therefore results in a less than significant cumulative impact.	Less Than Significant	No mitigation required	Less Than Significant
Land Use			
The addition of the Active Seniors Accommodations Land Use Category to the Marina del Rey LCP is not expected to result in significant impacts to the environment. As provided in the policy consistency analysis, certain aspects of	Less Than Significant	No mitigation required	Less Than Significant

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
the project would require implementation of mitigation measures to ensure consistency (refer to Sections IV.A through IV.J). Since the proposed land uses on Parcels OT and 21 are consistent with the proposed land use designations, proposed Mixed Use Overlay Zone (Parcel OT only), and LCP and Specific Plan policies, the proposed project would result in less than significant impacts relative to land use policies and zoning consistency, with mitigation measures incorporated in some cases. As such, mitigation measures have been provided in Sections IV.A through IV.J and IV.L for potential impacts related to geotechnical hazards, noise, water quality, air quality, biota, cultural resources, visual qualities, traffic/access, utilities (water supply), environmental safety, and global climate change, no further mitigation measures are warranted to render potential land use impacts less than significant.			
Cumulative Land Use Impacts The proposed project would not contribute a significant impact that is cumulatively significant with regard to any land use impacts. As future projects are proposed, they must be reviewed for compliance with County land use plans and ordinances. County infrastructure requirements (such as circulation plan improvements) and other development requirements are based upon development anticipated by the County General Plan and the various County Specific Plans. Should development occur that is largely inconsistent with those plans and require substantial amendments, such developments would need to undergo CEQA review for potential land use/planning impacts. The proposed project's cumulative impact is less than significant.	Less Than Significant	No mitigation required	Less Than Significant
Global Climate Change			
At this time, State and local agencies (namely the California Air Resources Board and South Coast Air Quality Management District) have not yet established significance thresholds under	Thresholds of significance have not yet been formally adopted;	It should be noted that the project, in mitigating for traffic and air quality impacts, has been designed to incorporate many of the mitigation measures to reduce greenhouse gas emissions recommended by the scientific	Thresholds of significance have not yet been

Description of Impact	Significance Before Mitigation	Proposed Mitigation Measures	Significance After Mitigation
CEQA that address greenhouse gas emissions or global climate change. Therefore, a significance determination cannot be made at this time.	therefore, a significance determination cannot be made at this time.	community. Additionally, the applicant has incorporated several measures into the project design that exceed minimum Title 24 energy conservation requirements. Among these measures are: • Installation of low NOx (nitrogen oxide) residential water heaters and space heaters; • Installation of Energy Star labeled furnaces, equipment, and appliances; • Use of water-based paint on exterior surfaces; • Use solar-assisted water heating and/or tankless hot water on demand systems if their energy efficiency is demonstrated to exceed that of a central storage tank water heating system; • Use of improved insulation and ducting; • Use of natural lighting; • Installation of energy efficient lighting and/or maximize use of low pressure sodium and/or fluorescent lighting; • Use of drought-tolerant landscaping subject to County review; • Encouragement of the use of transit, bicycling and walking by providing infrastructure to promote their use (bike paths and sidewalks); • Prohibition against the installation and use of wood burning fireplaces; and • Use of low volatile organic compound (VOC) coatings for painted surfaces.	formally adopted; therefore, a significance determinatio n cannot be made at this time.

E. SUMMARY OF ALTERNATIVES

The potential impacts of two alternatives were evaluated and compared to the proposed project impacts, and the environmentally superior alternative was identified as well. A brief summary is provided as follows:

1. Alternative 1: No Project Alternative – Buildout Under Existing Marina del Rey LCP

Within the existing Marina, development of some kind has occurred on all leasehold parcels. This development cycle is generally referred to as Phase I development. Recycling, intensification, or conversion of these initial uses on leased parcels is referred to as Phase II development. Phase II development is encouraged and permitted, subject to the individual leaseholders demonstrating consistency with the policies of the Marina del Rey LCP, which includes priority consideration for development of boating and visitor-serving facilities. Neither Parcel OT nor Parcel 21 has undergone development under Phase II of the Marina del Rey LCP. As described further below for each parcel, the No Project Alternative assumes the continuation of existing conditions at these sites, although renovation/redevelopment of existing facilities may occur.

Parcel OT

This alternative assumes that the Active Seniors Accommodations Land Use Category would not be added to the LCP; Parcel OT would not be re-designated as an Active Seniors Accommodations Facility parcel; and the requested transfer of development potential to Parcel OT, including 114 hotel rooms and 5,000 square feet (s.f.) of retail space, from the Admiralty Development Zone (DZ) #7 and the Palawan/Beach DZ #5, respectively, to the Oxford DZ #6, does not occur. As Parcel OT currently exists as a surface parking lot (186 spaces) and is designated for parking in the Marina del Rey LCP, it would likely remain as such a use, albeit redeveloped pursuant to the conditions of Phase II development of the Marina del Rey LCP. As specified in the Marina del Rey LCP, parcels in the LCP area designated for parking carry a height limitation of 90 feet. Therefore, should development of the proposed project not occur, Parcel OT may potentially remain designated for parking but could be redeveloped into a parking structure that is 90 feet in height (taller than the proposed retirement facility).

Parcel 21

Without the transfer of development potential from Parcel 20, Phase II (also referred to as Parcel 19), or the transfer of parking from Parcel OT, it is also reasonable to assume that the existing uses on Parcel 21 would remain although they may be renovated or redeveloped. It is also assumed that expansion of existing development levels at the site would not occur under this alternative. The site would contain the same amount of square footage of marine commercial (3,132 s.f.), retail (2,916 s.f.), and health club (16,000 s.f.) uses, as well as the same amount of parking (226 spaces) as it does currently. However, if the development potential from Parcel 20, Phase II, is not transferred to Parcel 21, this leaves 2,300 s.f. of marine commercial and 5,000 s.f. of yacht club uses originally approved for Parcel 20 Phase II/Parcel 19 in the Panay DZ #4 to be developed. As one of the current Marina del Rey redevelopment projects includes the development of an administrative building on Parcel 20 Phase II/Parcel 19 for the L.A. County Department of Beaches and Harbors (DCB Project Table, March 8, 2007), this remaining development potential would be transferred elsewhere (to another parcel in the Panay DZ #4 or to another DZ), if an alternate site is not selected for the County's administrative building.

Environmental Evaluation

In the case that the proposed project is disapproved and both Parcels OT and 21 remain in their existing condition and are not proposed for redevelopment under Phase II of the Marina del Rey LCP, then the No Project Alternative would avoid all potential impacts of the proposed project related to geotechnical hazards, noise, water quality, air quality, biota, cultural resources, visual qualities, traffic/access, utilities, environmental safety, land use, and global climate change. If the parcels are redeveloped, construction-related impacts in each of these issue areas may occur. With denial of the proposed project, development permitted under the LCP may occur elsewhere in the LCP area, resulting in similar impacts elsewhere. However, the specific location and type of development that would occur cannot be known at this time and therefore the impacts of this development cannot be assessed.

2. Alternative 2: No Change in Type of Land Use Development Potential in the Marina del Rey LCP

This alternative would re-designate Parcel OT as a Hotel parcel in the LCP and allows for the requested transfer of permitted land uses (development potential) within the Marina del Rey LCP area. It does not allow for changes in the types of the land uses to be developed. Specifically, the development potential of 114 hotel rooms would still be transferred to Parcel OT in the Oxford DZ #6 from the Admiralty DZ #7, as proposed with the project. However, the developed land use after the transfer would remain a hotel use. No retail development potential would be transferred from the Palawan/Beach DZ #5 to the Admiralty DZ #7; therefore, a Mixed Use Overlay Zone (MUZ) would not be necessary, as the land use would not be comprised of mixed uses.

Parcel OT

With this alternative, Parcel OT would be re-designated as a Hotel parcel in the LCP and 114 hotel rooms would be transferred to Parcel OT in the Oxford DZ #6 from the Admiralty DZ #7. A 114-room hotel (57 guest rooms and 57 guestroom suites) would be constructed on Parcel OT, as well as parking for the hotel (86 spaces).[8] The design of this structure is anticipated to be similar to that of the active seniors accommodations facility; however, the hotel units would not be equipped with balconies. The proposed structure would consist of five levels that extend from Washington Boulevard to Admiralty Way, as well as a partial level that fronts only Washington Boulevard, due to the slope of the property. Parking spaces would be available on the partial level (ground floor level) as well as the lower ground level above it. As with the proposed project, 92 of the existing 186 on-site parking spaces would be replaced on site and 94 would be transferred to Parcel 21.

Parcel 21

The proposed development on Parcel 21 under this alternative would remain the same as that proposed with the project. The proposed four-level Holiday Harbor Courts development would replace existing uses with new marine uses, a public park plaza and promenade, and a six-level parking structure, which would be partially subterranean. The development on Parcel 21 would replace the existing 16,000 s.f. of health club, 2,916 s.f. of retail, and 3,132 s.f. of marine commercial on Parcel 21. An additional 2,300 s.f. of marine commercial and 5,000 s.f. of yacht club uses would be transferred to Parcel 21 from Parcel 20 Phase II/Parcel 19. Replacement parking for the existing 226 parking spaces on Parcel 21 and parking for the additional marine commercial and yacht club uses (112 spaces), as well as 94 spaces from Parcel OT, would be located on-site (432 total spaces).

[8] Hotel uses require one parking space for each two guestrooms, and one parking space for each suite of guestrooms, based on the Los Angeles County Code.

Environmental Evaluation

As the hotel proposed for Parcel OT under this alternative is expected to be structurally and aesthetically similar to the active seniors accommodations facility proposed with the project, and no changes would occur to the development on Parcel 21 with this alternative, it can be assumed that Alternative 2 would result in similar impacts associated with geotechnical hazards, water quality, air quality, biota, cultural resources, visual qualities, utilities, and environmental safety as the proposed project. The demolition, grading, and construction and operational activities necessary for development of the proposed project would also be required with Alternative 2. However, the environmental effects of Alternative 2 that would vary from the proposed project involve land use, noise, and traffic impacts associated with development of Parcel OT as a hotel rather than an active seniors accommodations facility.

3. Alternative 3: Alternative Land Use – Public Park on Parcel OT and Boat Storage on Parcel 21

This alternative would result in development of a public park on Parcel OT and a boat storage facility on Parcel 21.

Parcel OT

With this alternative, the transfer of development potential from the Admiralty DZ #7 and the Palawan/Beach DZ #5 to the Palawan/Beach DZ #5 would not be necessary. Under the Marina del Rey Specific Plan (Part 3 of Chapter 22.46.1550 of Title 22 of the Los Angeles County Code), public parks are permitted where a site is zoned for parking, as is the case with Parcel OT. As such, the existing surface parking lot would be demolished and replaced with an approximately two-acre park, including landscaping, and parking spaces to accommodate park users.

Parcel 21

With this alternative, the existing 16,000 s.f. of health club, 2,916 s.f. of retail, and 3,132 s.f. of marine commercial uses on Parcel 21 would be demolished. The additional 2,300 s.f. of marine commercial and 5,000 s.f. of yacht club uses proposed to be transferred to Parcel 21 from Parcel 20 Phase II/Parcel 19 under the proposed project would remain at their existing location under this alternative. Existing Parcel 21 land uses would be replaced with dry boat storage spaces. It is anticipated that Parcel 21 could accommodate 200 vessels. This alternative would also provide parking for individuals utilizing the facility. Under the Marina del Rey Specific Plan (Part 3 of Chapter 22.46.1430 of Title 22 of the Los Angeles County Code), boat storage is permitted where a site is zoned for marine commercial uses, such as Parcel 21.

Environmental Evaluation

Given the nature of the land uses proposed with this alternative, the operational phase of this alternative would be expected to result in fewer impacts as compared to the proposed project associated with air quality, traffic/access, and global climate change (fewer average daily trips than the proposed project), biota (by providing a park with landscaping adjacent to the Marina Lagoon rather than the active seniors accommodations), utilities (it is expected that the relocation of the County water line on Parcel OT would not be necessary), noise (this alternative would expose park visitors to outdoor noise, but not permanent residents), and environmental safety (not developing active seniors accommodations facility within a methane buffer zone). Visually, the park on Parcel OT would allow the site to retain its current "openness." Dry boat storage on Parcel 21 may include construction of a building to house dry boat storage of unknown height. Therefore, the visual impacts associated with the proposed project for Parcel 21 may also apply to this alternative. However, the demolition, grading, and construction activities

necessary for development of Alternative 3 would result in similar impacts as the proposed project to biota (disturbance of birds nesting in trees on-site) and cultural resources (disturbance of resources during grading or excavation). Further, this alternative would place development in a seismically active region of Southern California and expose people to the associated geotechnical hazard; albeit fewer people due to the types of land uses proposed with this alternative as compared to the project, and it would still necessitate grading for subterranean parking. Additional environmental effects of Alternative 3 that would vary from the proposed project namely involve land use and the transfer of development potential in Marina del Rey. While the proposed land uses of this alternative are consistent with the Parcel zoning, the proposed park would replace a parking lot on Parcel OT that is utilized for visitors of Mother's Beach as well as return several land uses from Parcel 21 to the Marina del Rey "bank" of development potential. It is expected that all such uses would be replaced elsewhere in Marina del Rey.

Alternative 4: Reduced Height Alternative

This alternative would include development of a 50-unit retirement facility, retail uses, and parking on Parcel OT and marine commercial uses and parking on Parcel 21.

Parcel OT

With this alternative, the transfer of development potential from the Admiralty DZ #7 and Palawan/Beach DZ #5 to the Oxford DZ #6 would still be necessary, and the site would be developed with a retirement facility of 50 units, 5,000 s.f. of retail space, and parking. The height of the retirement facility would reach a maximum height of 47 feet and seven inches on Admiralty Way and 55 feet on Washington Boulevard (as measured from the streets to the highest point of the rooftop).

Parcel 21

The proposed development on Parcel 21 under this alternative would remain the same as that proposed with the project. The proposed four-level Holiday Harbor Courts development would replace existing uses with new marine uses, a public park plaza and promenade, and a six-level parking structure, which would be partially subterranean. The development on Parcel 21 would replace the existing 16,000 s.f. of health club, 2,916 s.f. of retail, and 3,132 s.f. of marine commercial on Parcel 21. An additional 2,300 s.f. of marine commercial and 5,000 s.f. of yacht club uses would be transferred to Parcel 21 from Parcel 20 Phase II/Parcel 19. Replacement parking for the existing 226 parking spaces on Parcel 21 and parking for the additional marine commercial and yacht club uses (112 spaces), as well as 94 spaces from Parcel OT, would be located on-site (432 total spaces).

Environmental Evaluation

The retirement facility proposed for Parcel OT under this alternative is expected to be approximately 20 feet shorter in height than the structure of the proposed project, but structurally and aesthetically similar, and no changes would occur to the development on Parcel 21 with this alternative. Therefore, it can be assumed that Alternative 4 would result in similar impacts associated with geotechnical hazards, water quality, air quality, biota, cultural resources, utilities, and environmental safety as the proposed project. The demolition, grading, and operational activities necessary for development of the proposed project would also be required with Alternative 4, but the construction period may occur over a shorter duration due to the reduced height of the Parcel OT project. However, the environmental effects of Alternative 4 that would vary from the proposed project involve visual, traffic, and global climate change impacts associated with development of Parcel OT as a smaller retirement facility than that of the proposed project.

Alternative 5: No Lease Parcel Boundary Adjustment Alternative

This alternative would include development of a 114-unit retirement facility, retail uses, and parking within the existing limits of Parcel OT and marine commercial uses and parking on Parcel 21.

Parcel OT

With this alternative, the transfer of development potential from the Admiralty DZ #7 and Palawan/Beach DZ #5 to the Oxford DZ #6 would still be necessary, and the site would be developed with a retirement facility of 114 units, 5,000 s.f. of retail space, and parking. However, as compared to the proposed project, the footprint of the project would be located within the existing limits of Parcel OT, and the height of the retirement facility would reach a maximum of approximately 88 feet on Admiralty Way and 95 feet on Washington Boulevard (as measured from the streets to the highest point of the rooftop).

Parcel 21

The proposed development on Parcel 21 under this alternative would remain the same as that proposed with the project. The proposed four-level Holiday Harbor Courts development would replace existing uses with new marine uses, a public park plaza and promenade, and a six-level parking structure, which would be partially subterranean. The development on Parcel 21 would replace the existing 16,000 s.f. of health club, 2,916 s.f. of retail, and 3,132 s.f. of marine commercial on Parcel 21. An additional 2,300 s.f. of marine commercial and 5,000 s.f. of yacht club uses would be transferred to Parcel 21 from Parcel 20 Phase II/Parcel 19. Replacement parking for the existing 226 parking spaces on Parcel 21 and parking for the additional marine commercial and yacht club uses (112 spaces), as well as 94 spaces from Parcel OT, would be located on-site (432 total spaces).

Environmental Evaluation

The retirement facility proposed for Parcel OT under this alternative is expected to be approximately 20 feet taller in height than the structure of the proposed project, but structurally and aesthetically similar, and no changes would occur to the development on Parcel 21 with this alternative. Therefore, it can be assumed that Alternative 5 would result in similar impacts associated with geotechnical hazards, water quality, air quality, biota, cultural resources, utilities, and environmental safety as the proposed project. The demolition, grading, and operational activities necessary for development of the proposed project would also be required with Alternative 5; however, construction may occur over a longer duration due to the increased height of the structure. However, the environmental effects of Alternative 5 that would vary from the proposed project involve utilities, as well as visual and land use impacts associated with development of Parcel OT as a taller retirement facility than that of the proposed project.

Alternative 6: No Retail Use on Parcel OT Alternative

This alternative would include development of a 114-unit retirement facility and parking on Parcel OT and marine commercial uses and parking on Parcel 21. No retail spaces would be provided on Parcel OT.

Parcel OT

With this alternative, the transfer of development potential from the Admiralty DZ #7 and Palawan/Beach DZ #5 to the Oxford DZ #6 would still be necessary, and the site would be developed with a retirement facility and parking. No retail space would be provided on this Parcel, and the 5,000 s.f. of space would be allocated to additional amenities for residents of the project.

Parcel 21

The proposed development on Parcel 21 under this alternative would remain the same as that proposed with the project. The proposed four-level Holiday Harbor Courts development would replace existing uses with new marine uses, a public park plaza and promenade, and a six-level parking structure, which would be partially subterranean. The development on Parcel 21 would replace the existing 16,000 s.f. of health club, 2,916 s.f. of retail, and 3,132 s.f. of marine commercial on Parcel 21. An additional 2,300 s.f. of marine commercial and 5,000 s.f. of yacht club uses would be transferred to Parcel 21 from Parcel 20 Phase II/Parcel 19. Replacement parking for the existing 226 parking spaces on Parcel 21 and parking for the additional marine commercial and yacht club uses (112 spaces), as well as 94 spaces from Parcel OT, would be located on-site (432 total spaces).

Environmental Evaluation

The developments included in this alternative on Parcel OT and Parcel 21 would be similar to the proposed project; however, the Parcel OT project would not include 5,000 s.f. of retail space. The 5,000 s.f. of space would instead be dedicated to providing additional space for amenities for the project's residents. Therefore, it can be assumed that Alternative 6 would result in similar impacts associated with geotechnical hazards, water quality, air quality, biota, cultural resources, utilities, and environmental safety as the proposed project. The demolition, grading, and construction and operational activities necessary for development of the proposed project would also be required with Alternative 6. However, the environmental effects of Alternative 6 that would vary from the proposed project involve land use, traffic, and global climate change impacts associated with development of Parcel OT with no retail component.

4. Environmentally Superior Alternative

Based on the alternatives analysis, an environmentally superior alternative must be designated among the alternatives. According to CEQA Guidelines Section 15126.6(e)(2), if the environmentally superior alternative is the No Project Alternative, then the EIR shall identify an environmentally superior alternative among the other alternatives.

The No Project Alternative is the Environmentally Superior Alternative since it would avoid the project's significant impacts. Other than the No Project Alternative, the Environmentally Superior Alternative is Alternative 3 (Alternative Land Use – Public Park on Parcel OT and Boat Storage on Parcel 21). As shown in the above analysis of this alternative, implementation of this alternative would 1) result in similar significant impacts as the proposed project associated with construction period biota and cultural resources impacts, 2) result in fewer air quality, traffic/access, global climate change, and utilities impacts, 3) avoid the significant and unavoidable noise impact of the proposed project, and 4) be more consistent with the planned uses set forth in the Marina del Rey LCP than the proposed project in the short-term. However, this alternative may also result in a similar visual qualities impact as the proposed project on Parcel 21, and it would also potentially defer a range of environmental effects to other future developments by returning development potential to the available "bank" of development potential in the Marina del Rey LCP area.

II. INTRODUCTION

A. PROJECT SUMMARY

Holiday-Panay Way Marina, L.P. and MDR Oceana, LLC (applicant) are proposing active seniors accommodations and commercial development of Parcels OT (and a portion of Parcel P) and 21 of the Marina del Rey (Marina) Local Coastal Program (LCP). MDR Oceana, LLC proposes the Oceana Retirement Facility for a 2.08-acre site consisting of Parcel OT and a portion of Parcel P and located on Admiralty Way in Marina del Rey. The Oceana Retirement Facility would include a 114-unit active seniors accommodations facility, retail space, a lobby, two lounges, two card rooms, a chapel, administration and reception offices, a dining room, library, arts and crafts room, laundry facilities, a trash and mail room, kitchen, beauty salon, and on-site parking. These units would be rented on a daily, monthly, or annual basis. Holiday-Panay Way Marina, L.P. proposes the Holiday Harbor Courts commercial development for Parcel 21, which is a 2.55-acre site located on Panay Way in Marina del Rey, approximately 0.66 mile (driving distance) from Parcel OT. The proposed Holiday Harbor Courts project would replace existing on-site marine commercial uses with new marine office and commercial uses, a public park plaza and promenade, and on-site parking. It would also provide a 5.5-foot wide sidewalk along the project's Panay Way frontage, as well as include a partial lease termination that would reduce the area of Parcel 21 by 31,050 square feet (s.f.) with a corresponding increase in the area of Parcel GR, located adjacent to and west of Parcel 21.

B. CEQA NOTICING AND PROCESS

The California Environmental Quality Act (CEQA) requires the preparation of an Environmental Impact Report (EIR), pursuant CEQA Guidelines Section 15064, when there is substantial evidence that a project may have a significant effect on the environment. The purpose of an EIR is to provide decision makers, State and local agencies, and the general public with detailed information on the potentially significant environmental effects that a proposed project is likely to have, to list ways that the significant environmental effects may be minimized, and to indicate alternatives to the project. Additionally, CEQA requires that an EIR identify those adverse impacts determined to be significant after mitigation.

The EIR for the Oceana Retirement Facility and Holiday Harbor Courts is a Project EIR. As stated in the CEQA Guidelines Section 15161, a Project EIR should "focus primarily on the changes in the environment that would result from the development project." The Project EIR examines all phases of a project, including planning, construction, and operation.

The project proposal was reviewed by the Los Angeles County Department of Regional Planning (serving as Lead Agency). An Initial Study was prepared, and it was determined that the project required the preparation of an EIR. A Notice of Preparation (NOP) was therefore issued for the project on March 1, 2007 and publicly circulated until March 30, 2007 to solicit comments on the proposed content of the EIR. Additionally, a public scoping meeting was held on August 9, 2007, and the opportunity for the public to comment further was extended from August 9, 2007 through August 23, 2007. Please refer to **Appendix A** for the transcript of the scoping meeting. All comments received on the NOP relating to the EIR were reviewed and incorporated to the extent relevant and feasible in this EIR.

This Draft EIR (DEIR) is now being circulated for public review and comment for a period of 45 days, as required under CEQA. During this period, comments from the general public, organizations, and agencies on environmental issues raised in the DEIR and the DEIR's accuracy and completeness may be submitted to the Lead Agency at the following address:

Los Angeles County Department of Regional Planning – Special Projects
320 West Temple Street
Los Angeles, California 90012
Attn. Mr. Michael Tripp, Room 1362

Comments on the DEIR should be submitted in writing and delivered to the above address by 5 p.m. on the last day of the public review period. Upon completion of the public review period, a Final EIR (FEIR) will be prepared that will include the comments on the DEIR as well as responses to those comments.

C. ORGANIZATION OF THE EIR

Volume I

Section I provides an executive summary of detailed information contained in subsequent sections. It includes a description of the project; alternatives considered; and identifies by environmental issue the significance determination, mitigation measures, cumulative impacts, and significance after mitigation for those impacts.

Section II identifies the lead agency and provides an introduction to the project. It provides a brief overview of the history of the project, the CEQA environmental review process, and a description of the organization of the EIR.

Section III provides a description of the project. It identifies the location, size, and components of the project, including the proposed residential, commercial, and office uses, as well as proposed amenities. Additionally, this section identifies project objectives, project approvals, and intended uses of the EIR.

Section IV describes the potential environmental impacts of the proposed project. The discussion in this section is organized by environmental issue area including geotechnical hazards, noise, water quality, air quality, biota, cultural resources, visual qualities, traffic/access, utilities (water supply), environmental safety, land use, and global climate change. Each issue discussion is organized into six subsections as described below, where applicable:

Existing Conditions: This section describes the existing conditions and environmental setting in the project vicinity as it pertains to the specific environmental issue.

Threshold of Significance: This section defines the criteria for determining whether an impact of the project is considered significant.

Project Impacts: This section provides an analysis of the proposed project, including the identification and evaluation of direct and indirect impacts, as appropriate, which may occur during construction or operation. This section also discusses whether or not these environmental effects meet or exceed the established threshold of significance.

Cumulative Impacts: This section addresses the potentially significant cumulative impacts that may result from the proposed project when taking into account the environmental impacts of other related, and reasonably foreseeable past, present, and future projects.

Mitigation Measures: This section identifies potentially feasible mitigations that would avoid or substantially reduce significant adverse project-related impacts.

Significant Impacts After Mitigation: This section discusses the environmental effects of the proposed project after the implementation of the identified mitigation measures and indicates whether or not the resulting impact has been reduced to a less than significant level.

Section V provides a discussion of the No Project Alternative as well as other alternatives to the proposed project. Based on the alternatives analysis, an environmentally superior alternative is designated among the alternatives. CEQA Guidelines Section 15126.6(e)(2) requires that if the environmentally superior alternative is the No Project Alternative, then the EIR shall identify an environmentally superior alternative among the other alternatives.

Section VI discusses the significant environmental effects that cannot be avoided if the proposed project is implemented. Additionally, this section discusses the irreversible environmental changes that could occur as a result of construction or operation of the proposed project.

Section VII describes the potential for the proposed project to foster economic or population growth or the construction of additional housing either directly or indirectly in the surrounding environment.

Section VIII provides a list of contacts and references consulted during the preparation of the EIR and also identifies the preparers.

Volume II

Technical Reports are provided under separate cover in Volume II.

III. PROJECT DESCRIPTION

A. PROJECT OVERVIEW

Holiday-Panay Way Marina, L.P. and MDR Oceana, LLC (applicants) are proposing active seniors accommodations facility and commercial development of Parcels OT including a portion of Parcel P[1] and 21 contained within the Marina del Rey (Marina) Land Use Plan (LUP), which is a component of the Los Angeles County Local Coastal Program (LCP). The fully certified LCP consists of the LUP and the Specific Plan acting as the Implementing Program of the LUP. Additionally, Los Angeles County (County) is the landowner of the affected Parcels, and the County Department of Beaches and Harbors serves as co-applicant on this and all projects on County-owned land within the Marina. Holiday-Panay Way Marina, L.P. and MDR Oceana, LLC are lessees of the sites.

MDR Oceana, LLC proposes the Oceana Retirement Facility for a 2.08-acre site consisting of Parcel OT and a portion of Parcel P (19,755 square feet (s.f.)), located on Admiralty Way in the Oxford Development Zone (DZ #6) of the Marina del Rey LUP. The Oceana Retirement Facility would include a 114-unit active seniors accommodations facility, which would house an estimated population of 145 residents (assuming a 90 percent occupancy at any given time).[2] The units would be rented on a monthly or annual basis. The facility would also include 5,000 s.f. of retail spaces along Washington Boulevard that would be open to the general public, as well as private lounges, card rooms, a chapel, administration and reception offices, a dining room, library, arts and crafts room, laundry facilities, a trash and mail room, kitchen, and a beauty salon that would serve patrons and their guests. On-site parking would include private stalls to serve the retirement facility residents, guests, and employees, as well as 92 public stalls to serve the general public. A total of 94 of the LCP permitted 186 public parking spaces on OT will be transferred to Parcel 21. Refer to the parking discussion, below, for additional details.

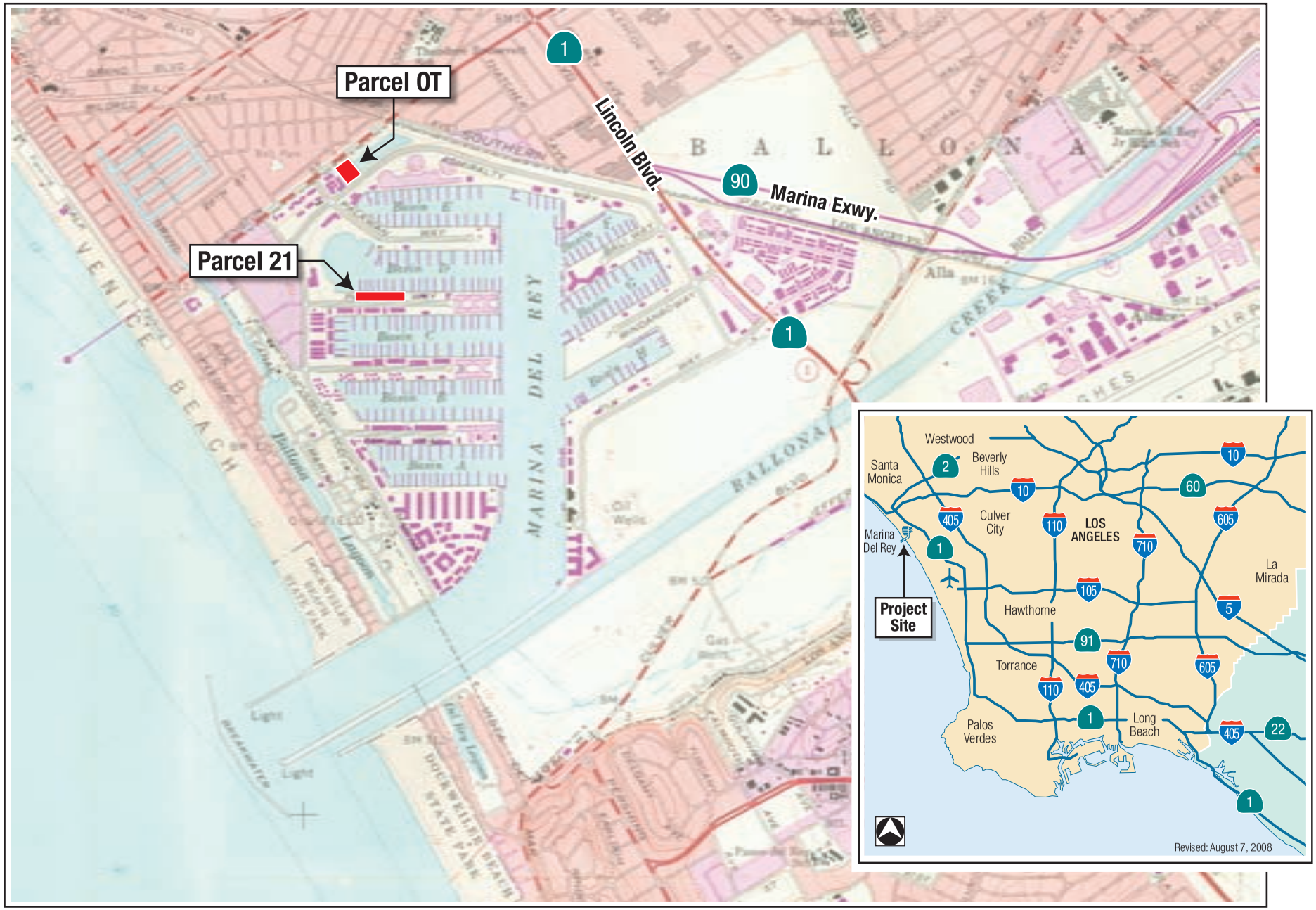
Holiday-Panay Way Marina, L.P. proposes the Holiday Harbor Courts commercial development for Parcel 21, which is a 2.55-acre site on Panay Way, approximately 2.5 miles (driving distance) from Parcel OT. Parcel 21 is included within the Panay Development Zone (DZ #4) of the Marina del Rey LUP. The proposed Holiday Harbor Courts project would replace existing on-site uses with new marine commercial uses, a public park plaza and promenade, and on-site parking. It would also provide a 5.5-foot wide sidewalk along the project's Panay Way frontage, as well as include a partial lease termination that would reduce the area of Parcel 21 by 31,050 s.f., with a corresponding increase in the area of Parcel GR, located adjacent to and west of Parcel 21.

1. Project Location

The proposed project is located within the unincorporated County community of Marina del Rey, with the surrounding region including the Pacific Ocean and portions of the City of Los Angeles to the west, the community of Venice to the north, Playa del Rey and the Los Angeles International Airport (LAX) to the south, and the terminus of State Highway 90 (Marina Expressway) at Lincoln Boulevard (State Highway 1) to the east (refer to **Figure III-1** and **Figure III-2**). Both developments are located on the United States Geological Survey (USGS) 7.5 minute Venice Topographic Quadrangle; however, the specific areas on which Parcels OT, P and 21 are sited were not covered by the Public Land Survey System (PLSS). Rather, they are identified as being part of the Spanish/Mexican Land Grant System, specifically Rancho Ballona. As depicted on the Venice Topographic Quadrangle, the location of Parcel OT is 33° 59' 5" north latitude and 118° 27' 20" west longitude, and the location of Parcel 21 is 33° 58' 45" north

[1] Hereafter, unless otherwise noted, the Oceana Retirement Facility project site is simply referred to as Parcel OT.

[2] Occupancy assumptions are based upon developer's experience at multiple other facilities of this type. If occupancy were at 100 percent, the resident population would be 161.



Source: Venice, California, U.S.G.S. 7.5 Minute Topographic Quadrangle

OCEANA RETIREMENT FACILITY AND HOLIDAY HARBOR COURTS EIR

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Project Location

FEET 0 1,000 2,000

FIGURE III-1

Aerial Source: I.K. Curtis Services, Inc., September 2005.

Revised: August 5, 2008

OCEANA RETIREMENT FACILITY AND HOLIDAY HARBOR COURTS EIR

ENVICOM CORPORATION

Surrounding Land Use

FEET 0 250 500

FIGURE III-2

latitude and 118° 27' 15" west longitude. Parcels OT and P are also denoted as Assessor's Parcel Number (APN) 4224-006-900 at 4445 Admiralty Way, and Parcel 21 is APN 4224-003-901 at 14025 Panay Way.

2. Environmental Setting

The Oceana Retirement Facility project site (Parcel OT and 19,755 s.f. of Parcel P) is approximately 90,442 s.f. (2.08 acres) in size, with dimensions of approximately 260 feet wide along Admiralty Way and 355 feet deep traversing from Washington Boulevard to Admiralty Way. Parcel OT is currently used as a County-operated paid public parking lot, with 183 parking spaces.[3] Some of these spaces and a maintenance driveway currently encroach 6,665 s.f. into Parcel P. The FantaSea Yachts and Yacht Club retains a Coastal Development Permit (A-5-MDR-95-189) and non-exclusive right to use up to 92 of the parking spaces after 6:00 pm, and on weekends and holidays. Most of the site is predominantly paved and relatively flat, and is bordered with perimeter landscaping containing shrubs and trees (mostly non-native vegetation), including Fig (*Ficus* sp.), Indian hawthorn (*Rhaphiolepis indica*), and Natal plum (*Carissa macrocarpa*). Along Washington Boulevard, the fig trees have grown to such an extent that the public sidewalk has become fractured and uneven. The site is bordered on the west by the Marina International Hotel, with a driveway separating the two uses; on the south by Admiralty Way and residential, hotel and restaurant uses; on the north by Washington Boulevard and single family homes north of Washington Boulevard; and on the east by the Oxford Lagoon (also known as the Oxford Retention Basin or Oxford Lagoon, on the remainder of Parcel P), as depicted in Figure III-2. Hereafter, unless otherwise noted, the Oceana Retirement Facility project site is simply referred to as Parcel OT.

The Holiday Harbor Courts project site, Parcel 21, is located on the Panay Way mole road atop a quay. The Holiday Harbor Courts site measures approximately 741 feet in width along the frontage of Panay Way and approximately 150 feet in depth from Panay Way to the water. The Parcel is currently developed with two commercial structures and a paved parking area that serves the commercial structures and also provides parking for boaters using the adjacent docks. One structure consists of a health club and the other is comprised of retail and marine commercial uses. The site also contains some sparse landscaping and a pedestrian walkway along the water's edge. A six-story apartment building is adjacent to and east of Parcel 21, with an improved promenade along the water's edge adjacent to the apartment building.[4] Other uses adjacent to Parcel 21 include apartments and a restaurant with parking to the south, as well as restaurants and retail to the west (refer to Figure III-2). Marina docks and slips (designated Marina Basin D in the LUP) are located immediately to the north of the site.

3. Project Characteristics

Proposed Land Uses and Design Characteristics

Parcel OT

The proposed Oceana Retirement Facility development would replace an existing 183-space parking lot with a 114-unit active seniors accommodations facility and ancillary facilities, retail space, and on-site parking. Parcel OT currently provides parking for visitors of the Marina, particularly those visiting Mother's Beach, even though it is located across the street (Admiralty Way) from these amenities. The

[3] According to the Draft Right-Sizing Parking Study for the Public Parking Lots in Marina del Rey, California, prepared by Raju Associates, Inc. (March 2009), based on the field inventory surveys performed by the Los Angeles County Department of Beaches and Harbors, the number of public parking spaces available on Parcel OT is 183. This is different from the number of spaces noted in the Marina del Rey Land Use Plan (LUP), which is 186 spaces, due to restriping of the lot after publication of the LUP to accommodate handicapped spaces. This EIR analysis conservatively uses the 186 space estimate in order to provide for a greater number of replacement parking spaces under the proposed project.

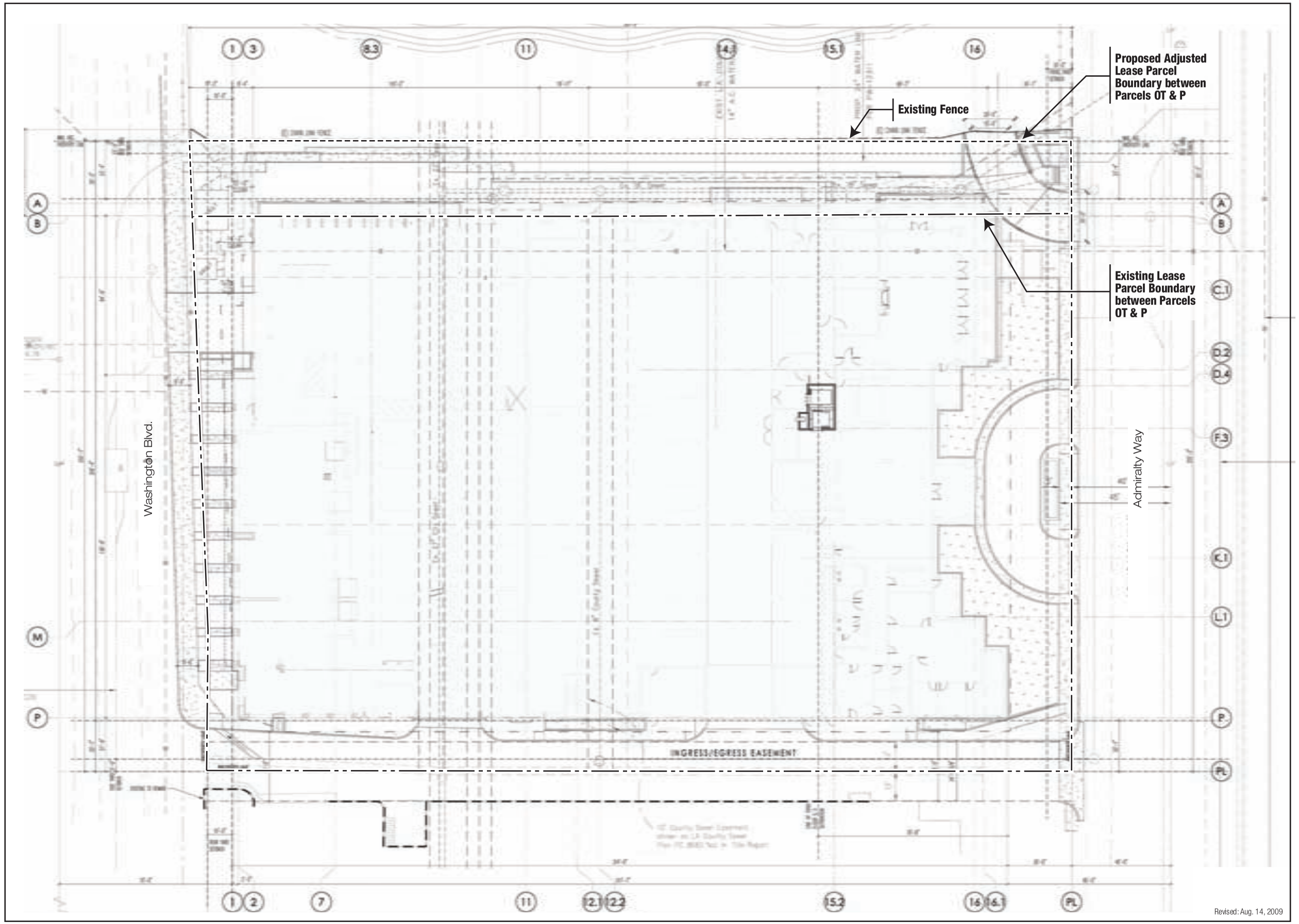
[4] Approved with Local Coastal Program Amendment No. 1-01, January 7, 2002.

project proposed would transfer 94 of the LCP permitted 186 public parking spaces on Parcel OT to Parcel 21, which would provide parking that is adjacent to the Marina, closer in proximity to Mother's Beach, would not require street crossing to access Mother's Beach, and would provide covered parking, as envisioned by the proposed site plan. The remaining 92 LCP permitted public parking spaces would be provided at Parcel OT as part of the proposed project for use by the public and FantaSea Yachts and Yacht Club. (Additional parking for the project uses would also be provided as described further below in the parking discussion, below.) In addition, the proposed project would replace an underutilized parking surface parking lot[5] with a mixed-use active seniors accommodations facility, helping to meet the growing demand for housing for the retired population, a growing demographic in Los Angeles County. The project would provide retired residents with increased access to the Marina coastal resources. Such development would require an LCP Amendment to both the LUP and the Implementing Program (the Specific Plan) to create an Active Seniors Accommodations Land Use Category in the LCP and re-designate Parcel OT as an Active Seniors Accommodations parcel. A transfer of approved development potential between Development Zones (hotel units from the Admiralty DZ #7 and retail space from the Palawan/Beach DZ #5 to the Oxford DZ #6, where Parcel OT is located). The project would be subject to a new set of development standards similar in character to the current Residential V designation of the LUP. The LCP Amendment also includes an adjustment to the lease parcel boundary between Parcel OT and Parcel P, which would also necessitate adjustments to the corresponding LCP maps.

The proposed site plan for Parcel OT is displayed in **Figure III-3a. Figures III-3b, 3c, 3d, and 3e** depict the various floors of the active seniors accommodations, including the parking structure. As the proposed development on Parcel OT is an active seniors accommodations facility, the structures have been designed with consideration given to senior citizens, providing easier access to indoor and outdoor uses. A cross-section and elevations are also provided in **Figures III-3f** and **III-4**, respectively, to depict the development. Figure III-3f demonstrates the relationship between the different levels of the facility, and Figure III-4 shows the facility viewed from Admiralty Way looking north and from Washington Boulevard looking south. The floor area assigned to each use is provided below in **Table III-1**.

The proposed project has already received conceptual approval from the Marina Design Control Board, which found the project to meet the design requirements of the LUP. **Figure III-5** provides a view of the project, as it would appear from Admiralty Way. The building height would be approximately 67 feet and seven inches on Admiralty Way and approximately 75 feet on Washington Boulevard, measured from the streets to the rooftop (which is nine feet and ten inches). The architects of the Oceana Retirement Facility describe the architectural design of the building as an updated classical style. The building design is reminiscent of older building styles (e.g., materials), but it is updated with contemporary forms. The building would include a stone-like base, ornamental railings and tile roofing, coupled with metal-framed glass walls and projecting metal canopies, which are designed to enhance the architectural character within contemporary forms. Some of the materials that are to be incorporated into the building design include red mission tiles on the roof, a neutral (light champagne) color on the free standing frames, railings, canopies and balconies, and a light silver color (anodic clear) on the window frames. Concrete pavers are to be used on the terraces and inner courtyard in colors described by the architects as olive green, oak creek blend and pewter. The building was also designed to open up to its surroundings. The structure is stepped back at the second and third floors along Admiralty Way and the lagoon, creating large private, stepped terraces, allowing for outdoor sitting, dining and recreation. Balconies are also provided for other exterior rooms.

[5] The Marina del Rey LUP "contemplates the potential conversion of three parking lots to other uses," including Parcel OT. The LUP states that Parcel OT "is underutilized most of the year" and that "lot OT is fully used only during peak events" (LUP, Page 2-5).



Source: GMPA Architects, August 2009.

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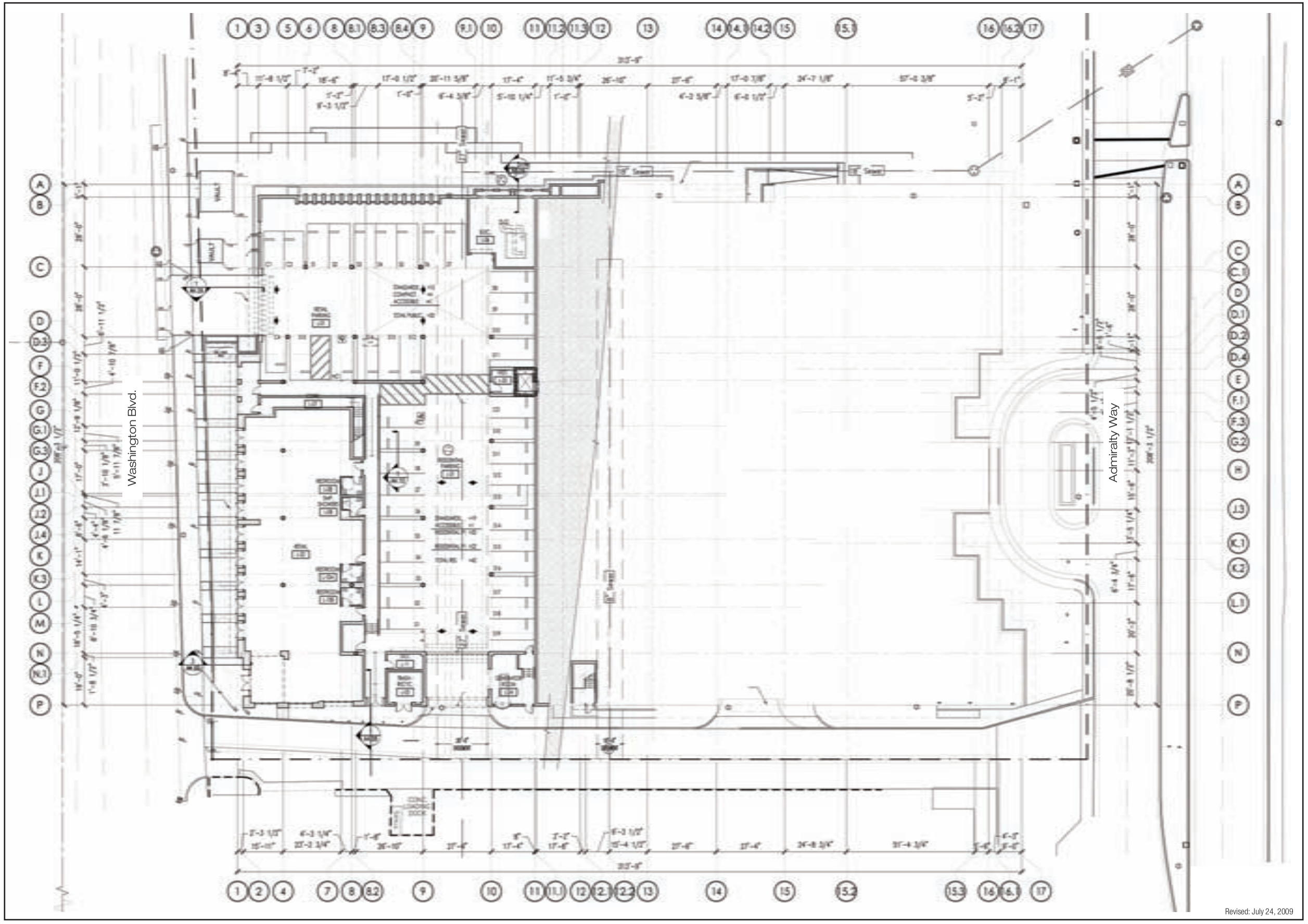
Oceana Retirement Facility Site Plan

FEET 0 20 40

FIGURE III-3a



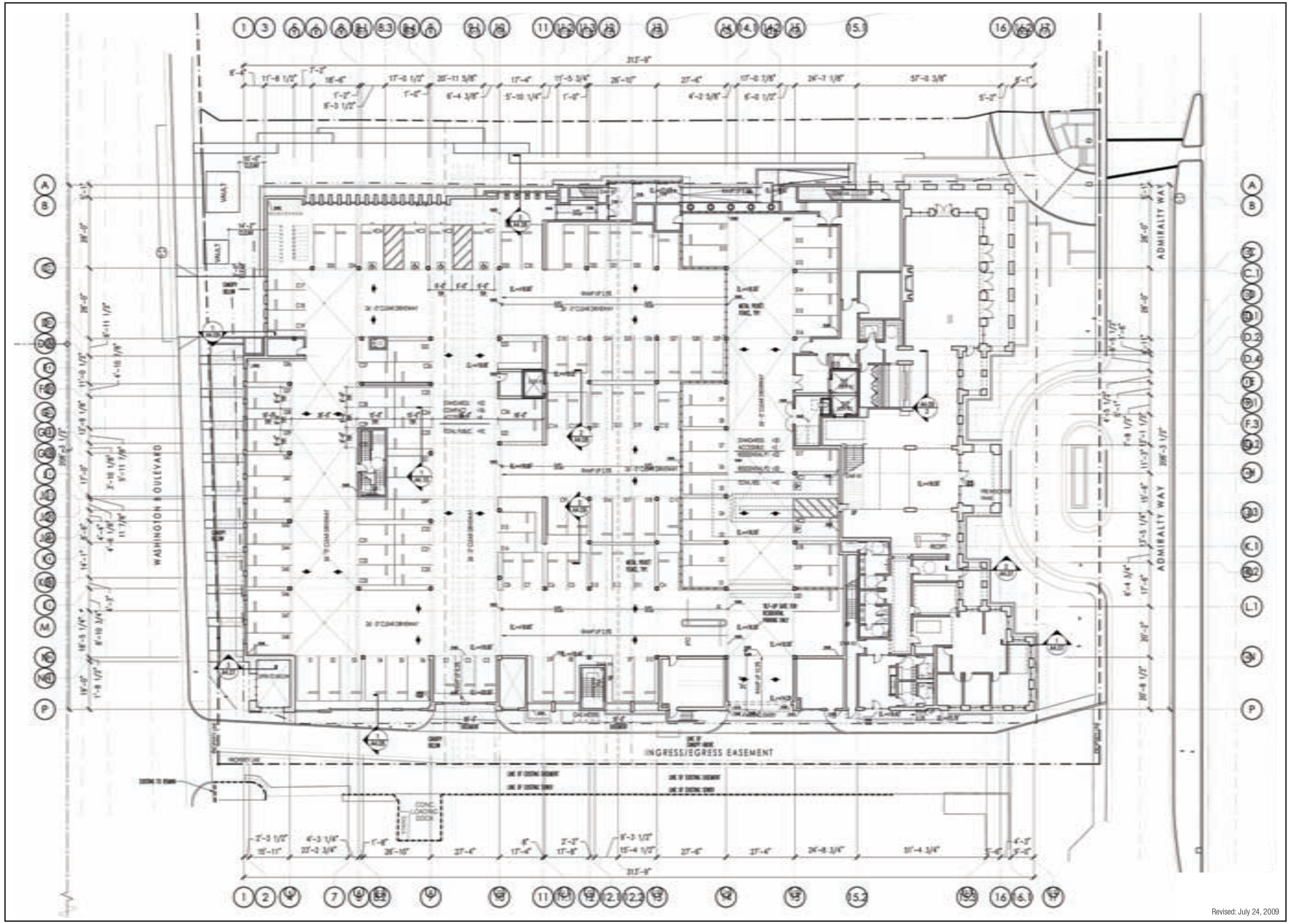
Source: GMPA Architects, July 2009.

ENVICOM CORPORATION

Oceana Retirement Facility Lower Garage Floor Plan

FEET 0 20 40

FIGURE III-3b



Source: GMPA Architects, July 2009.

OCEANA RETIREMENT FACILITY AND HOLIDAY HARBOR COURTS EIR

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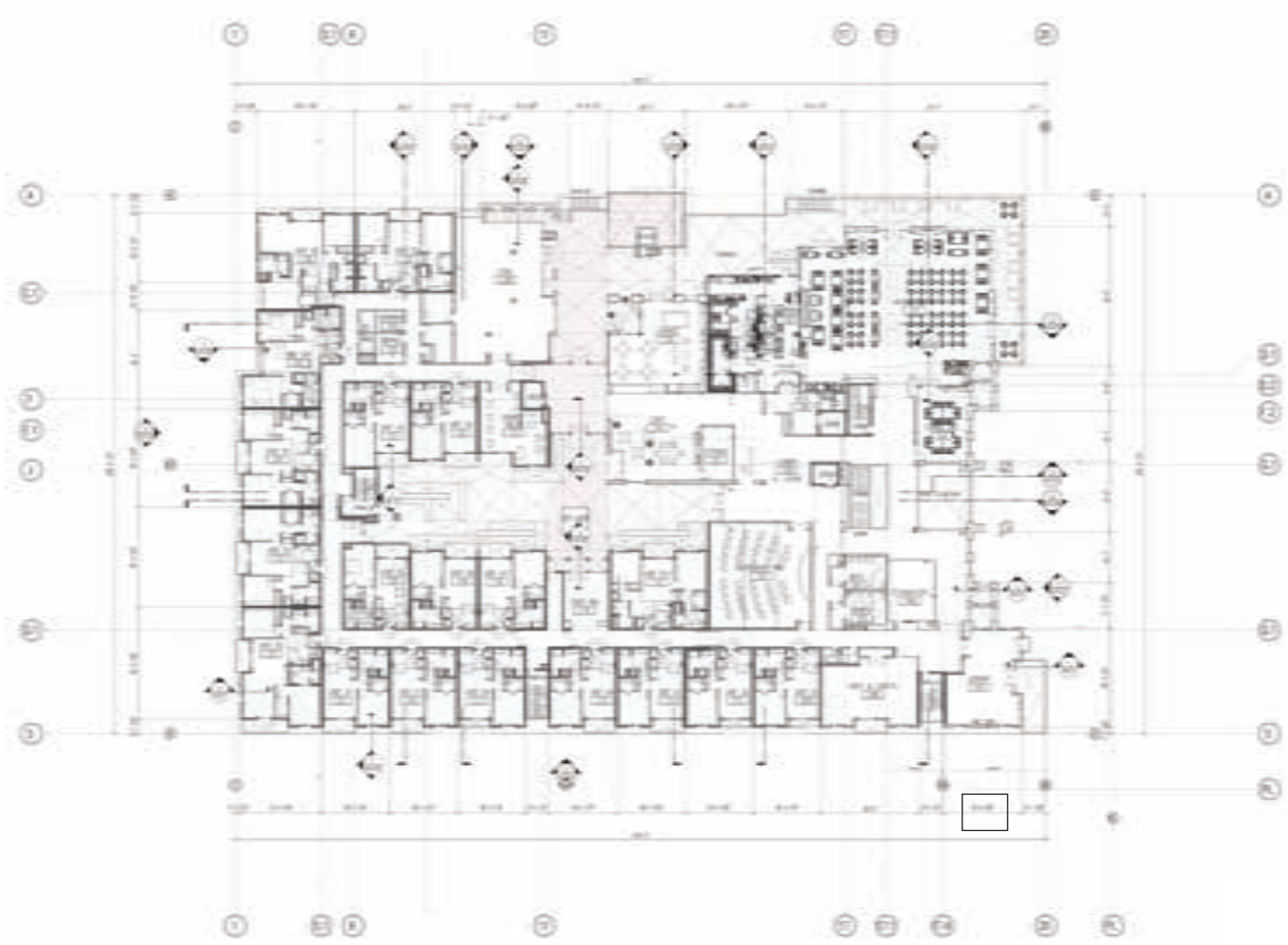
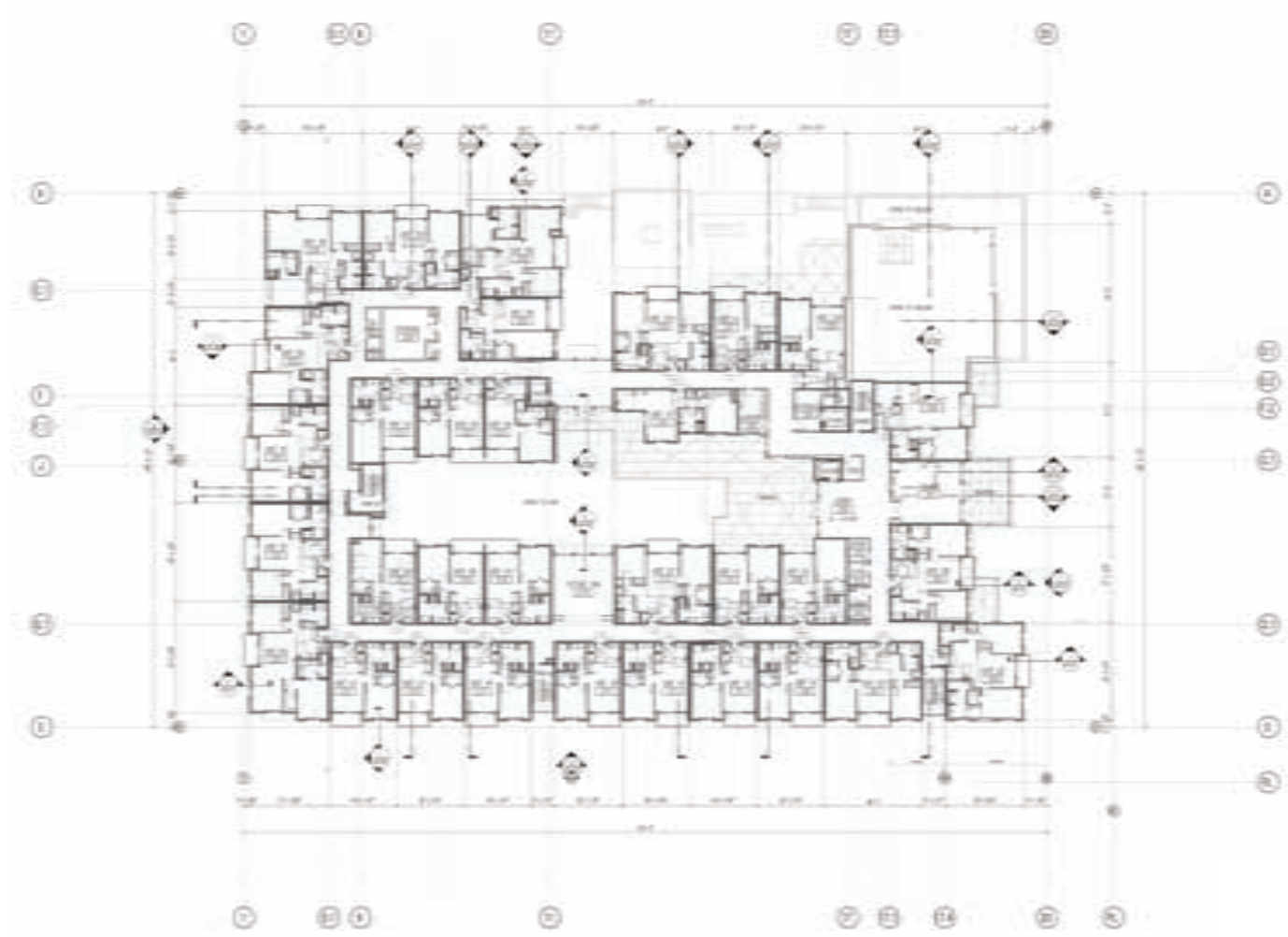
Oceana Retirement Facility Upper Garage Floor Plan

FEET 0 20 40

FIGURE III-3c



First Floor



Second Floor

Revised: July 24, 2009

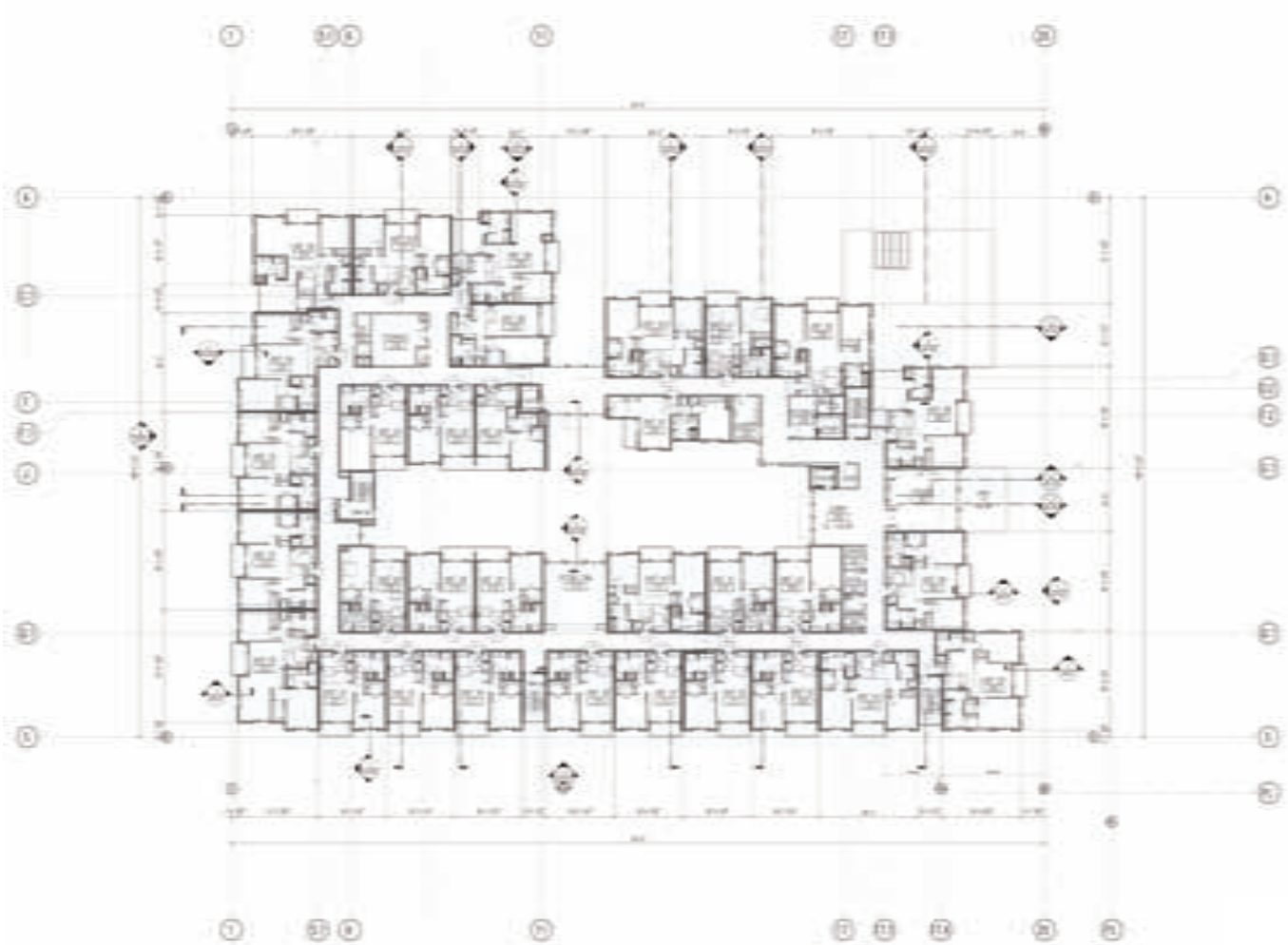
Source: GMPA Architects, July 2009.

ENVICOM CORPORATION

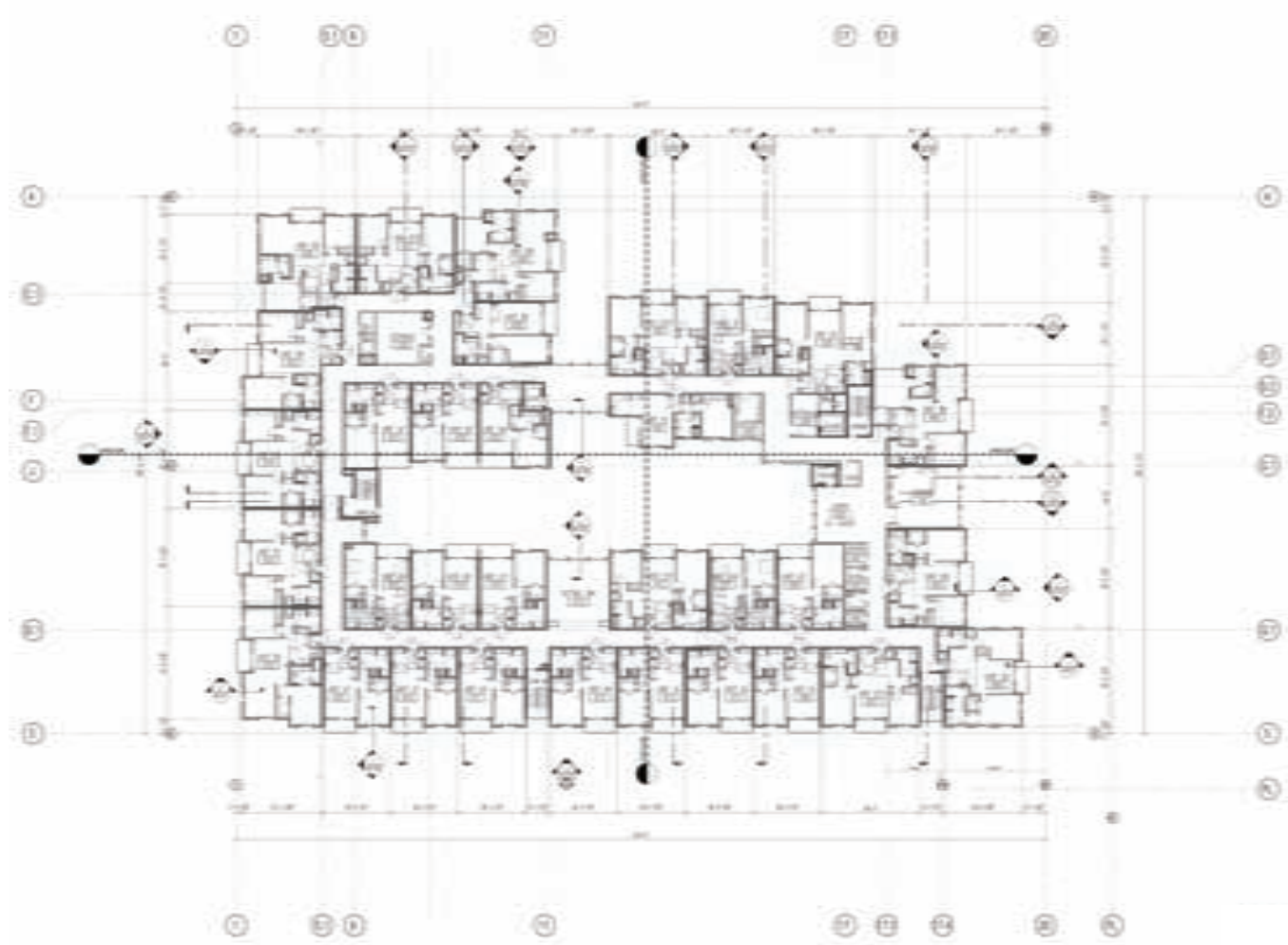
Oceana Retirement Facility First and Second Floor Plans

FEET 0 40 80

FIGURE III-3d



Third Floor



Fourth Floor

Revised: July 24, 2009

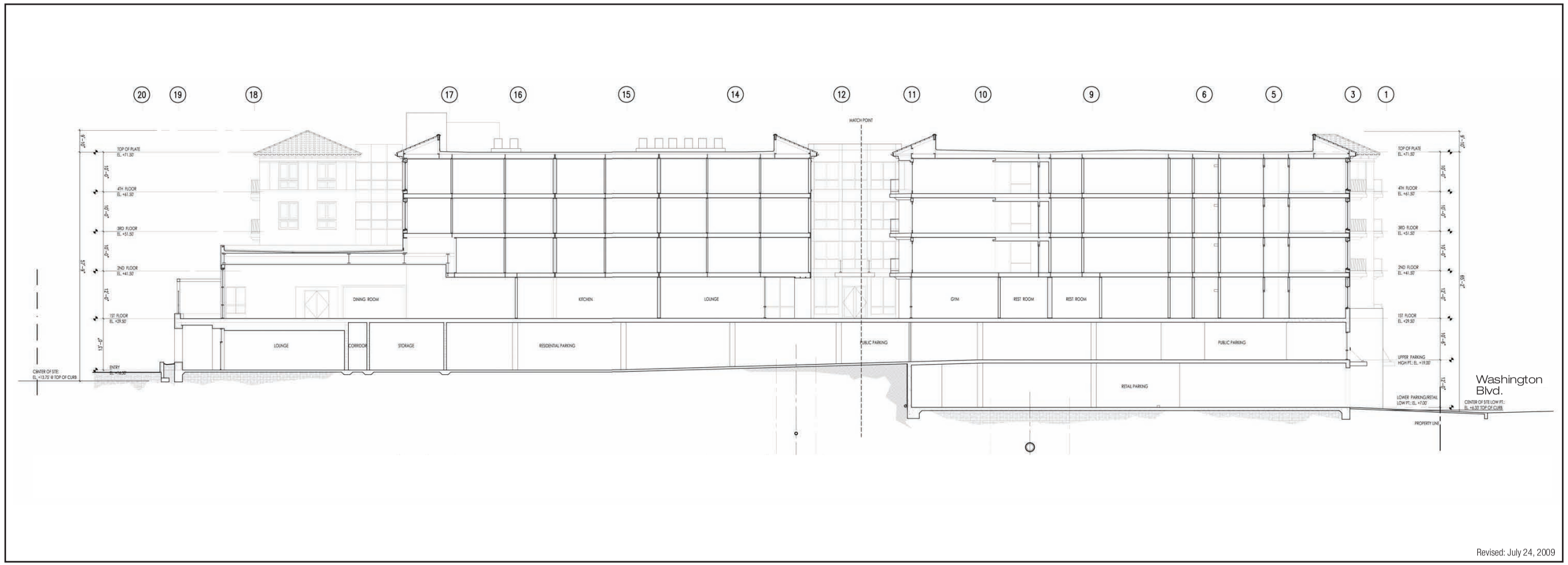
Source: GMPA Architects, July 2009.

ENVICOM CORPORATION

Oceana Retirement Facility Third and Fourth Floor Plans

FEET 0 40 80

FIGURE III-3e



Source: GMPA Architects, July 2009.

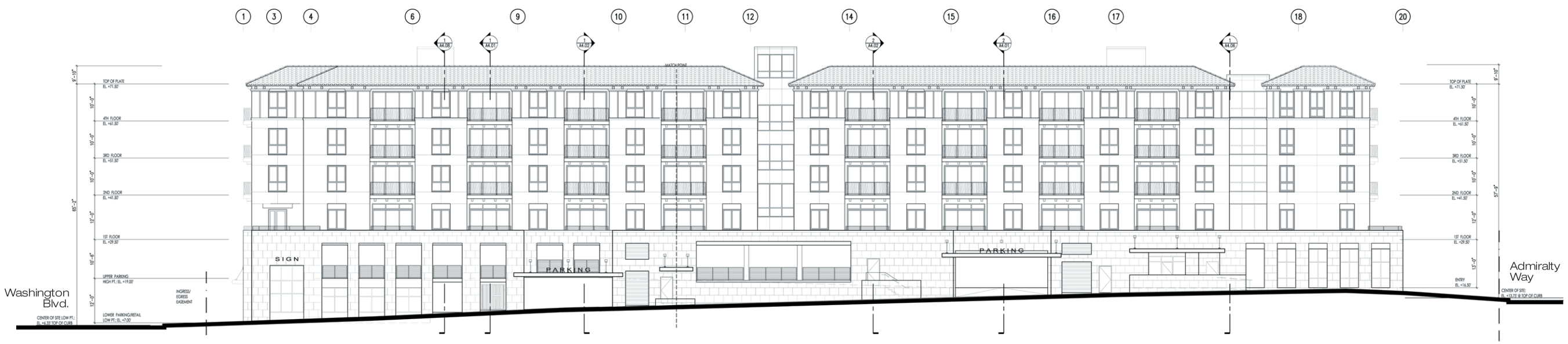
ENVICOM CORPORATION

Oceana Retirement Facility Building Cross-Section

FEET 0 15 30

FIGURE III-3f

East Elevation



West Elevation

Revised: July 24, 2009

Source: GMPA Architects, July 2009.

ENVICOM CORPORATION

Oceana Retirement Facility Elevations

FEET 0 15 30

FIGURE III-4

Source: GMP Architects, March 2006

Revised: August 5, 2008

Oceana Retirement Facility Rendering

Operating Characteristics of the Proposed Parcel OT Development

The Oceana Retirement Facility would aim to serve active seniors who do not require medical assistance, are capable of taking care of their own daily physical needs, and desire the benefits of a service oriented retirement environment. This proposed development would be age restricted for active seniors of age 60 and up. The proposed development on Parcel OT would not be an assisted living facility nor would it be a senior apartment building. It would not be licensed and no medication would be disbursed to the residents.

As stated above, the units would be approximately 750 square feet in size for the one bedroom units and approximately 1,050 square feet in size for the two bedroom units. The rooms would be equipped with a microwave oven and a small refrigerator and also furnished; however residents may bring their own furniture if they desire.

Table III-1
Proposed Oceana Retirement Facility Uses

Use (Category)	Net Area (s.f.)	Floor Level
Resident Suites		
11 One Bedroom Suites (at approx. 700 s.f. each)	15,739	First Floor
7 Two Bedroom Suites (at approx. 1,050 s.f. each)		First Floor
20 One Bedroom Suites (at approx. 700 s.f. each)	28,131	Second Floor
12 Two Bedroom Suites (at approx. 1,050 s.f. each)		Second Floor
18 One Bedroom Suites (at approx. 700 s.f. each)	28,746	Third Floor
14 Two Bedroom Suites (at approx. 1,050 s.f. each)		Third Floor
18 One Bedroom Suites (at approx. 700 s.f. each)	28,746	Fourth Floor
14 Two Bedroom Suites (at approx. 1,050 s.f. each)		Fourth Floor
Private Amenities for Residents		
Lobby Lounge & Bar	2,713	Upper Garage Floor
Lobby, Administration Offices, Mailroom, Bathrooms & Staff Lounge w/ Services	6,033	Upper Garage Floor
Building Services, Laundry, Trash & Utilities	1,712	Upper Garage Floor
Lobby & Residential Services	1,418	First Floor
Dining Room	4,114	First Floor
Private Dining	563	First Floor
Kitchen	1,586	First Floor
Residential Store	119	First Floor
Lounge One	918	First Floor
Café	665	First Floor
Gym	1,634	First Floor
Beauty Salon	623	First Floor
Screening Room	1,418	First Floor
Library	862	First Floor
Residential Business Center	568	First Floor
Arts & Crafts Room	884	First Floor
Offices	950	First Floor
Card Room	239	First Floor

Use (Category)	Net Area (s.f.)	Floor Level
Lobby Lounge	562	Second to Fourth Floors
Lounge	601	Second to Fourth Floors
Seating Area	506	Second to Fourth Floors
Common Floor Area Storage & Utilities	5,518	Upper Garage to Fourth Floor
Private and Public Parking		
Parking – P1 Level	16,073	Upper Garage Floor
Parking – P2 Level	43,468	Lower Garage Floor
Public Uses		
Retail Space	5,000	Lower Garage Floor
Net Floor Area	***200,109***	
Gross Floor Area (includes 57,261 s.f. of circulation etc.)	***257,370***	
Source: GMPA Architects. July 2009.		

The services provided to the Oceana Retirement Facility senior citizens would include food service in the main dining room and other areas located through out the building; shuttle and limousine service to restaurants, doctors appointments and other area attractions. Entertainment and on-going activities and outings would be planned by and administered by the facility staff. There would also be a full service commercial kitchen. The dining operation would be the same as any private restaurant serving breakfast, lunch, dinner, and snacks throughout the day and evening. There would also be a smaller private dining room for private parties and family meals. As shown in Table III-1, the facility would also contain a library, theatre room, game room, spa, snack areas on each floor, computer room, and other amenities (including laundry, room service, and linen). There would be an outdoor plaza with seating and water features that may be used by the guests for private family functions as well as an entertainment area for facility functions administered by the operating staff.

The services provided for the guests account for approximately 70 to 75 percent of the monthly fee charged to the residents, with the remaining percentage covering the cost of the real estate. Month-to-month leases would be required by the residents and there would be no purchase equity required.

Parcel 21

The proposed four-level Holiday Harbor Courts development would replace existing uses with new marine commercial uses, a public park plaza and promenade, and a six-level parking structure, which would be partially subterranean. Uses approved for Parcel 20 (Phase II) but not built, including marine commercial space and a yacht club, would also be transferred to Parcel 21, as would 94 parking spaces from Parcel OT. The proposed project would reduce the existing health club floor area by 6,000 s.f. (from 16,000 to 10,000 s.f.), with the remaining floor area planned for additional marine commercial uses. With the transfer of land uses from Parcel 20, the development on Parcel 21 would result in zero s.f. of net new leasable area within the Panay DZ #4 of the Marina del Rey LUP. Additionally, Parcel 21 would be reduced by 207 feet of frontage, or 31,050 square feet, through a partial lease termination. The partial lease parcel termination would increase the area of Parcel GR that could be used in the future to add additional parking under a separate project. The following tables describe the land use allocations on Parcels 20 and 21 as they exist today and as proposed by the project. **Table III-2** illustrates the existing square footage on-site. Although approved development on Parcel 20 is not a part of this project, it is included on the table to demonstrate the transfer (donor) uses and locations. All existing development on Parcel 21 would be demolished and replaced with the development identified in **Table III-3**.

Table III-2
Existing Development

Existing Project Land Use	Net Leasable Commercial Area by Site (s.f.)		
	LUP Parcel 20	LUP Parcel 21	Total Existing
Health Club	0	16,000	16,000
Retail (Ship Store)	0	2,916	2,916
Marine Commercial	0	0	0
Marine Commercial[1]	0	3,132	3,132
Marine Commercial[2]	2,300	0	2,300
Yacht Club[3]	5,000	0	5,000
Total Net Leasable Area (s.f.)	***7,300***	***22,048***	***29,348***

[1]Existing Tenants: California Sailing Academy, Golden West Yachts, Club Natique, and South Sea Publishing.
[2] Uses to be transferred from Parcel 20 to Parcel 21.
[3]Uses to be transferred from Parcel 20 to Parcel 21.

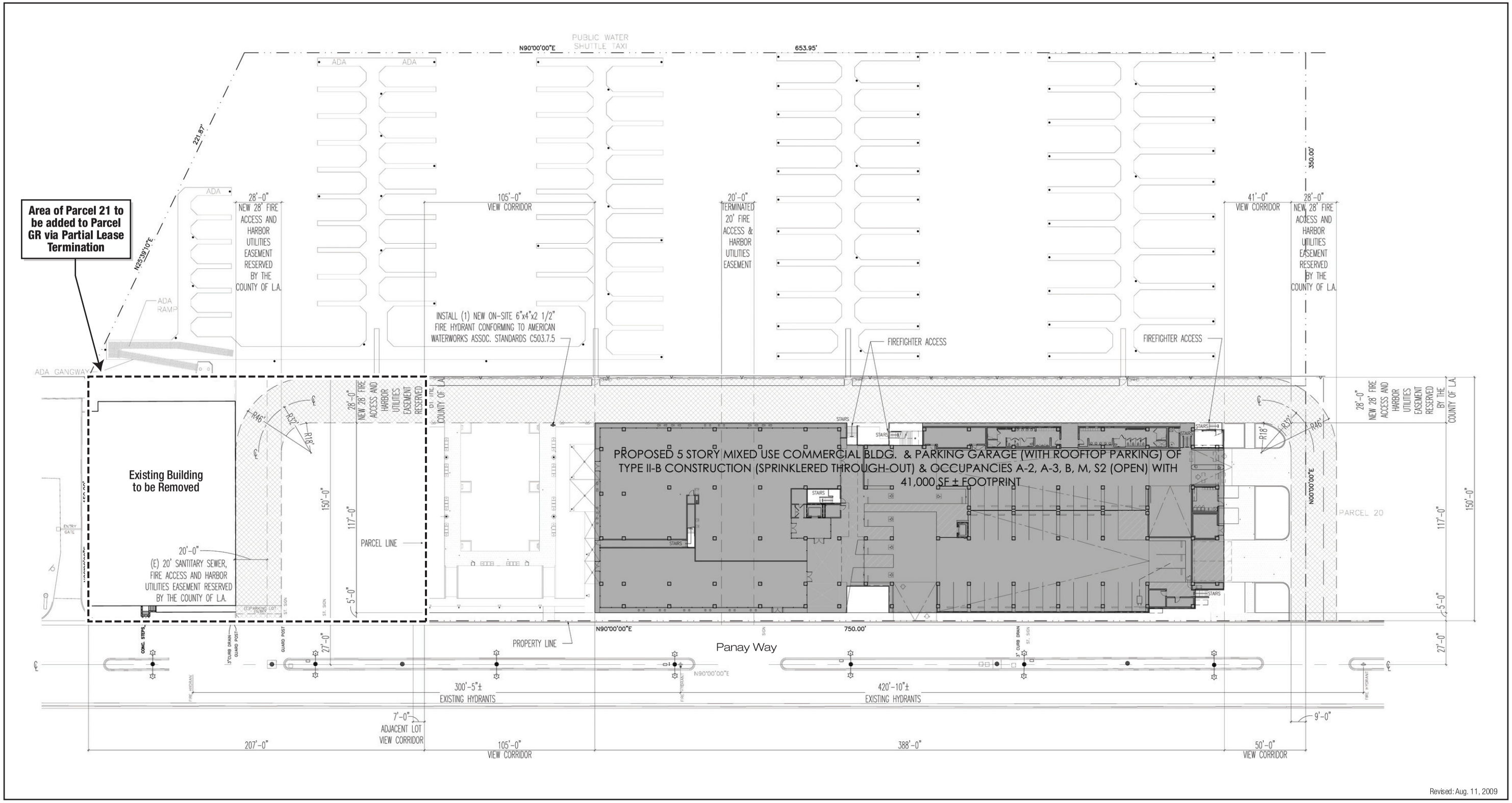
Table III-3
Net New Proposed Development for Parcel 21

Proposed Project Land Use	Total Net Leasable Area (s.f.)		Net New Leasable Area (s.f.)
	Existing	*Proposed*	
Health Club	16,000	10,000	(-) 6,000
Retail (Ship Store)	2,916	2,916	0
Marine Commercial	0	6,000	6,000
Marine Commercial[1]	3,132	3,132	0
Marine Commercial[2]	2,300	2,300	0
Yacht Club[3]	5,000	5,000	0
Subtotal	***29,348***	***29,348***	***0***
Total	**29,348**	**29,348**	***0***

[1]Existing Tenants: California Sailing Academy, Golden West Yachts, Club Natique, and South Sea Publishing.
[2]Includes transferred uses from Parcel 20 to Parcel 21.

The proposed site plan for Parcel 21 is displayed in **Figure III-6a.** The Promenade, 0.5, 1, and 1.2 levels are depicted in **Figure III-6b**. The first level of the Holiday Harbor Courts building would contain the health club and a portion of the replacement uses of LUP Parcel 21 (retail and marine commercial uses). The remaining levels (partially subterranean level; and levels 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, and 5.5) and a building cross-section are depicted in **Figures III-6c** through **III-6h**. The second level would contain the remainder of the replacement uses of LUP Parcel 21 (retail and marine commercial uses), the transfer of marine commercial uses from LUP Parcel 20, and 6,000 s.f. of new marine commercial uses. The third level is devoted to parking, and the fourth level would contain the yacht club. The yacht club has a high, vaulted ceiling that is roughly equivalent to two levels of parking. The final level consists of the roof of the yacht club and adjacent parking. **Figure III-7** depicts the project exterior as viewed from the west, east, south and north.

The proposed project has received conceptual approval from the Marina Design Control Board, which found the project to meet the design requirements of the LUP. **Figure III-8** depicts the project in context with its surroundings, as viewed from the northwest. The building would be the same height as the



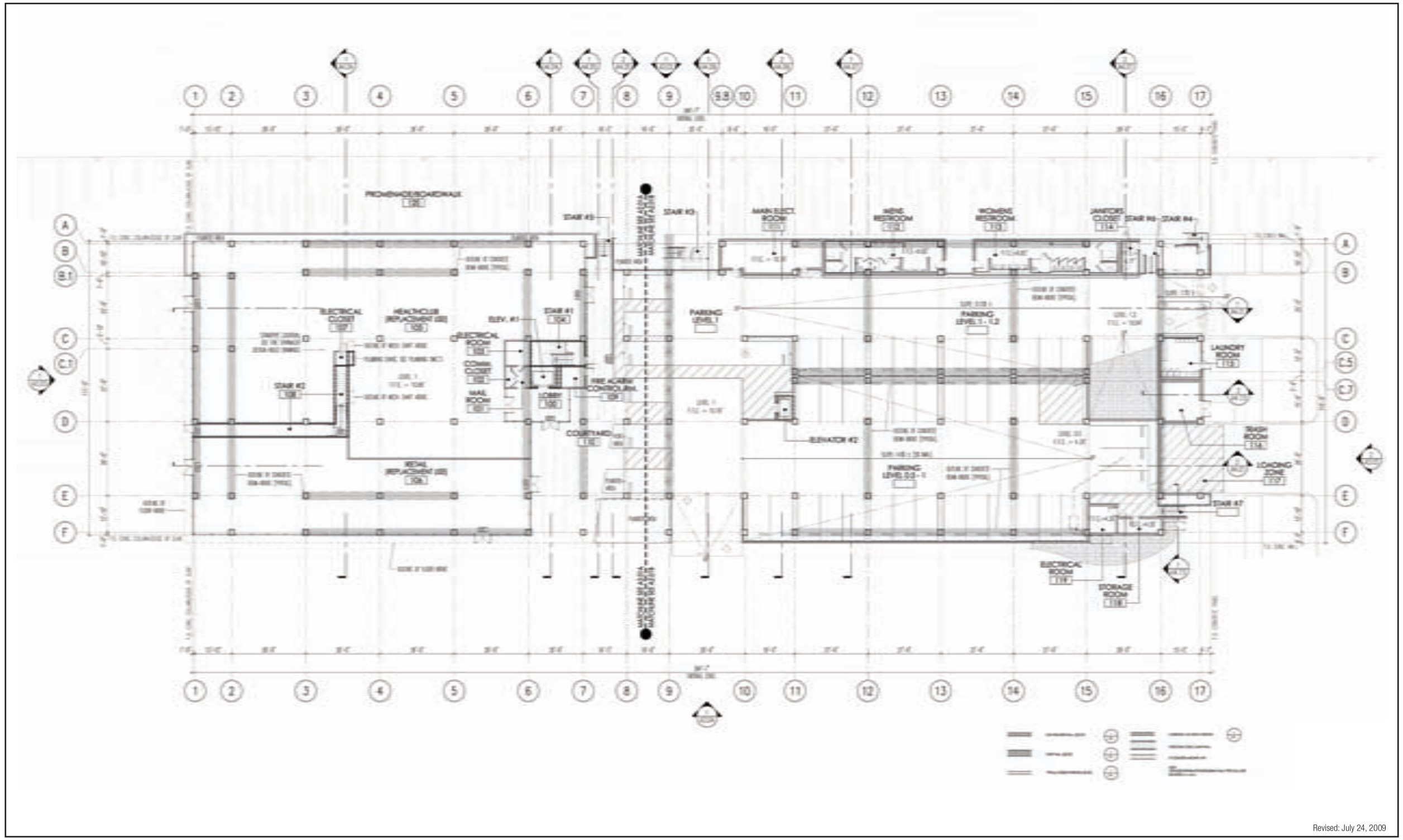
Source: GMPA Architects, August 2009.

ENVICOM CORPORATION

Holiday Harbor Courts Site Plan

FEET 0 30 60

FIGURE III-6a



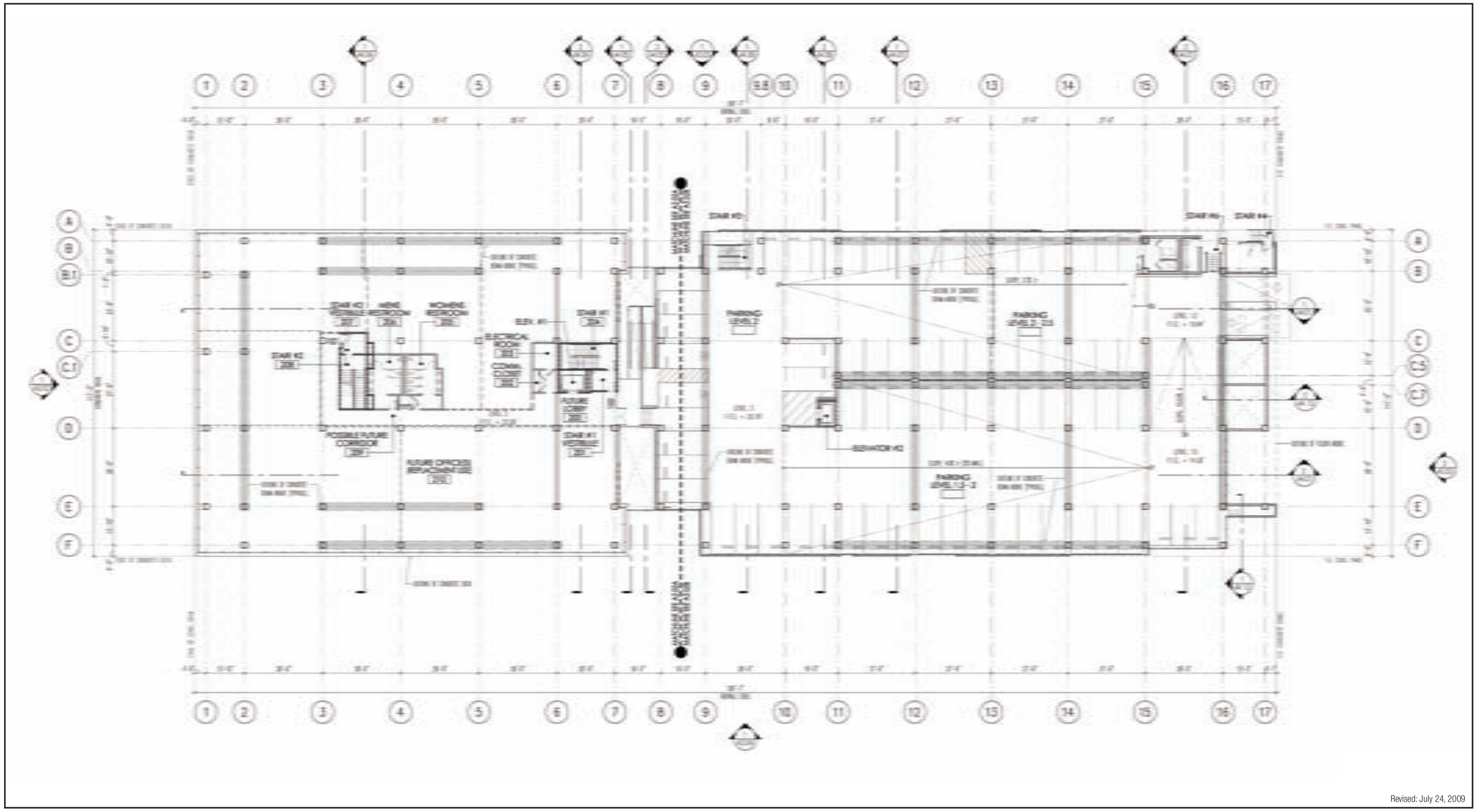
Source: GMPA Architects, July 2009.

ENVICOM CORPORATION

Holiday Harbor Courts Level Promenade 0.5, 1, and 1.2 Floor Plan

FEET 0 20 40

FIGURE III-6b



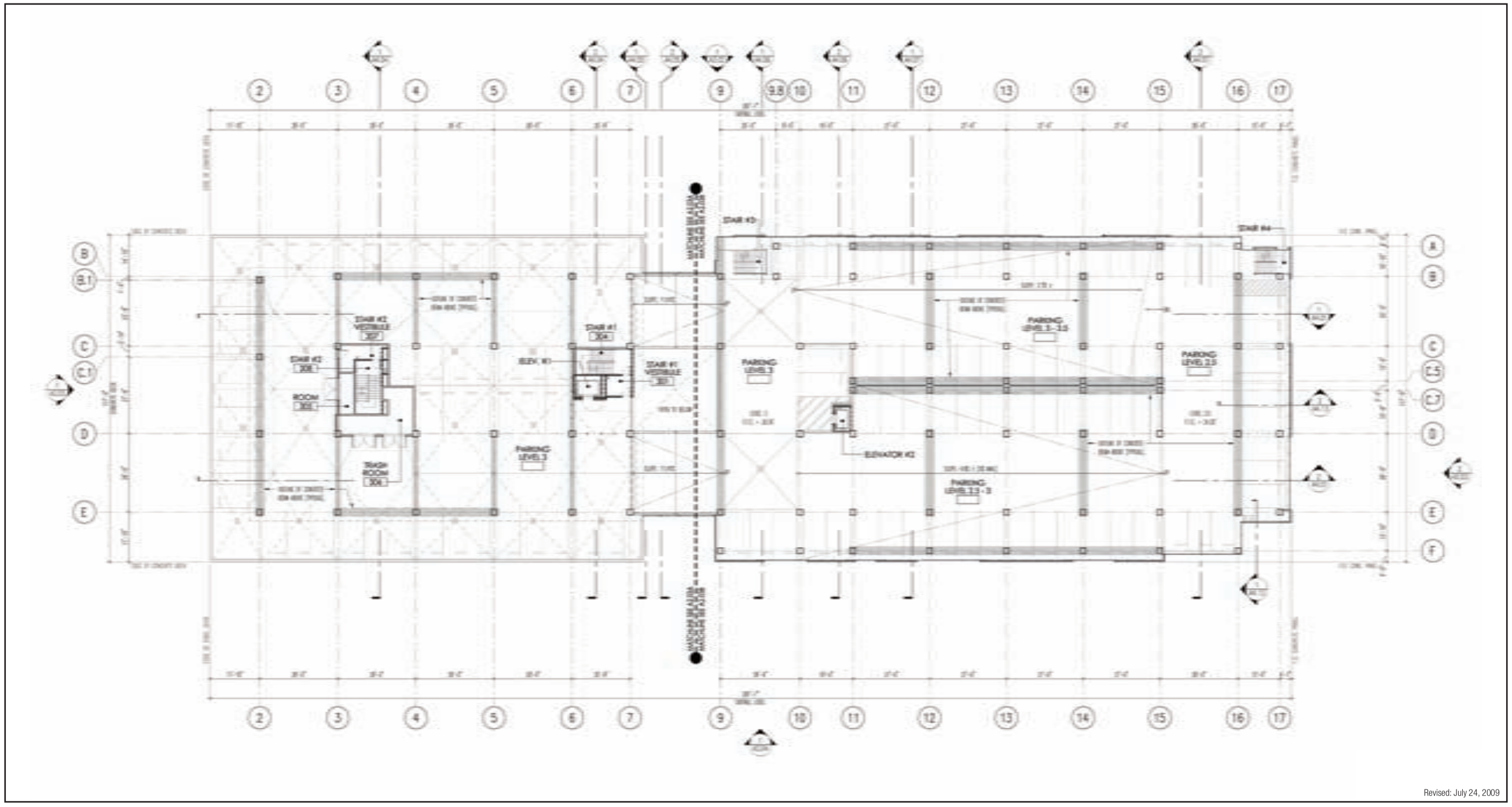
Source: GMPA Architects, July 2009.

ENVICOM CORPORATION

Holiday Harbor Courts Level 1.5 and 2 Floor Plan

FEET 0 20 40

FIGURE III-6C



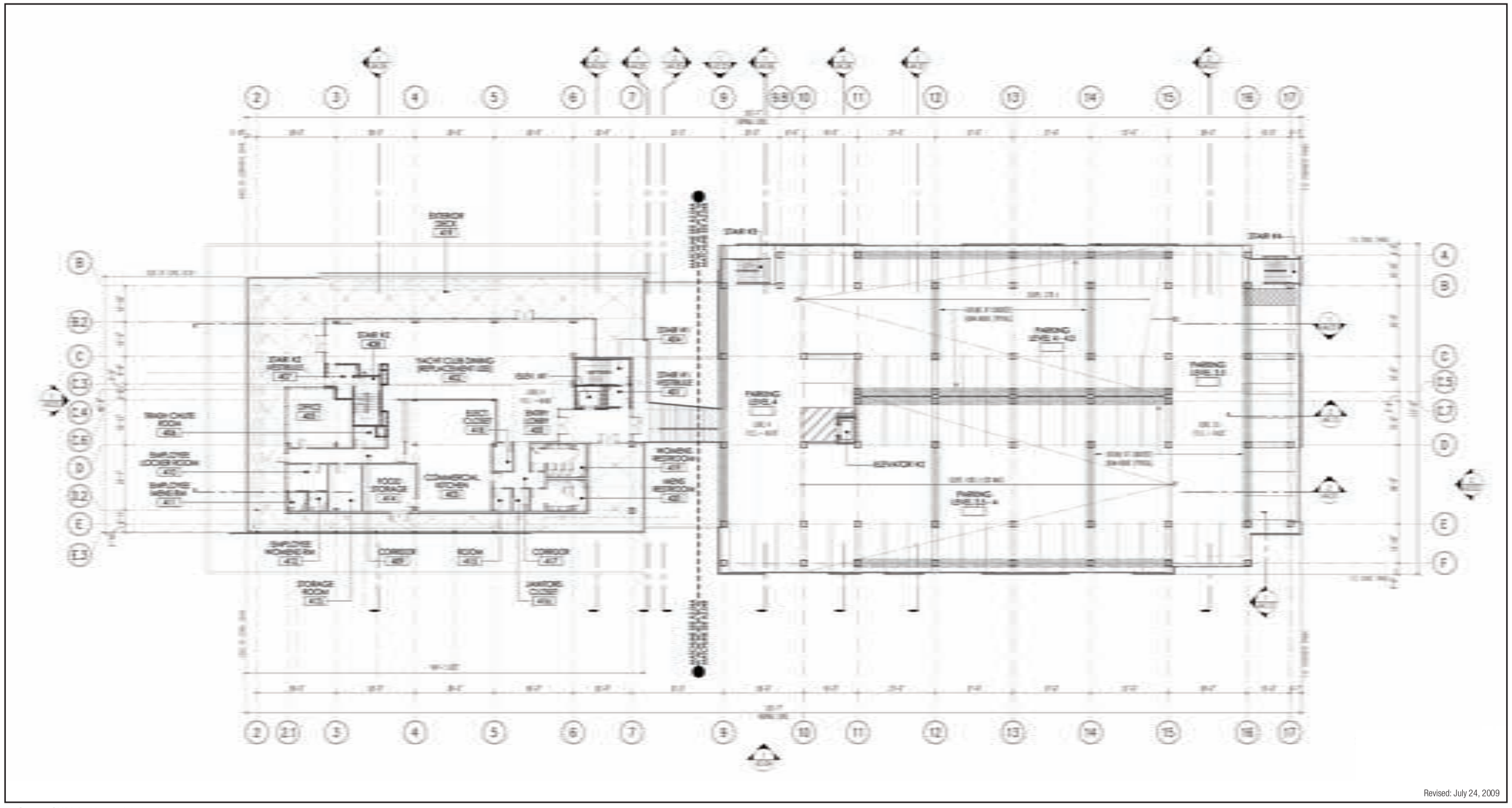
Source: GMPA Architects, July 2009.

ENVICOM CORPORATION

Holiday Harbor Courts Level 2.5 and 3 Floor Plan

FEET 0 20 40

FIGURE III-6d



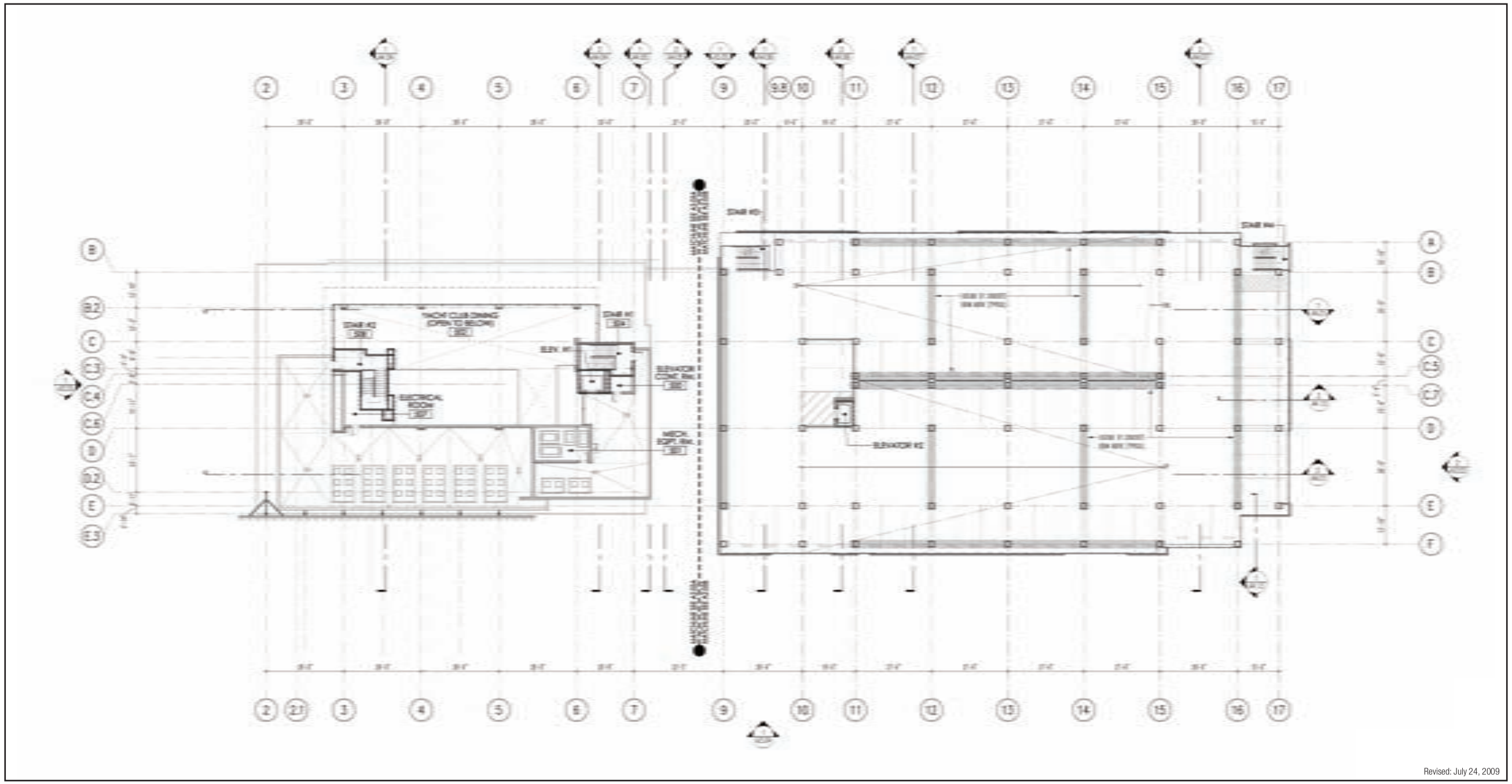
Source: GMPA Architects, July 2009.

ENVICOM CORPORATION

Holiday Harbor Courts Level 3.5 and 4 Floor Plan

FEET 0 20 40

FIGURE III-6e



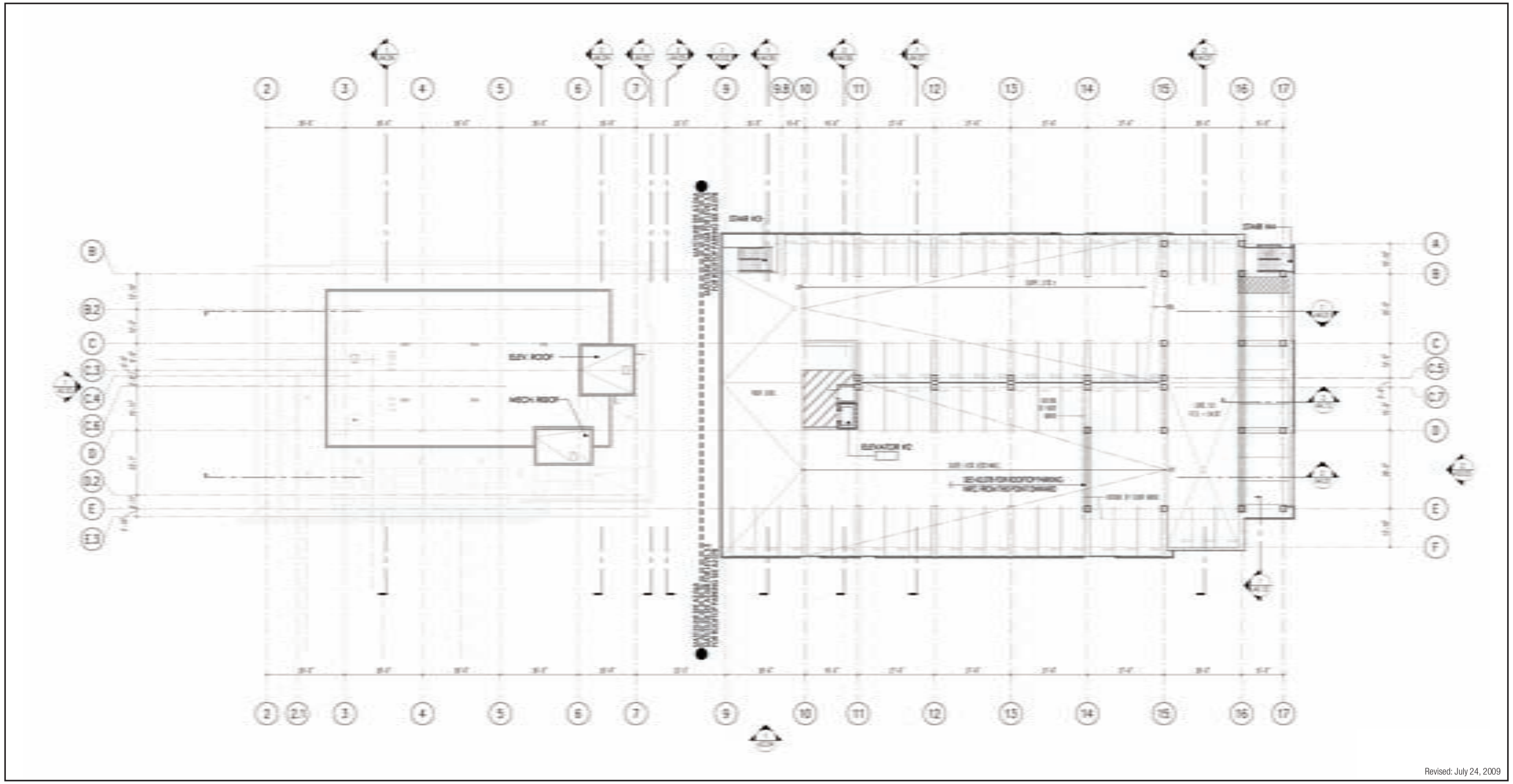
Source: GMPA Architects, July 2009.

ENVICOM CORPORATION

Holiday Harbor Courts Level 4.5 and 5 Parking and Level 5 Floor Plan

FEET 0 20 40

FIGURE III-6f



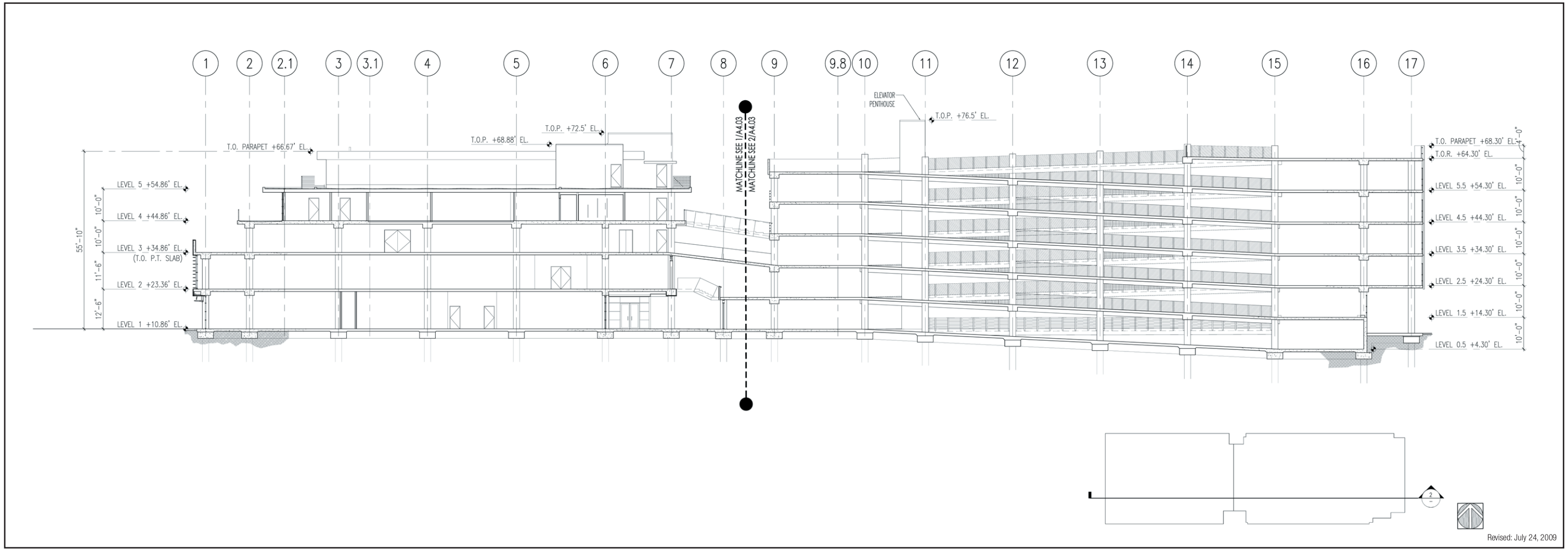
Source: GMPA Architects, July 2009.

ENVICOM CORPORATION

Holiday Harbor Courts Level 5.5 Parking and Upper Roof Plan

FEET 0 20 40

FIGURE III-6g



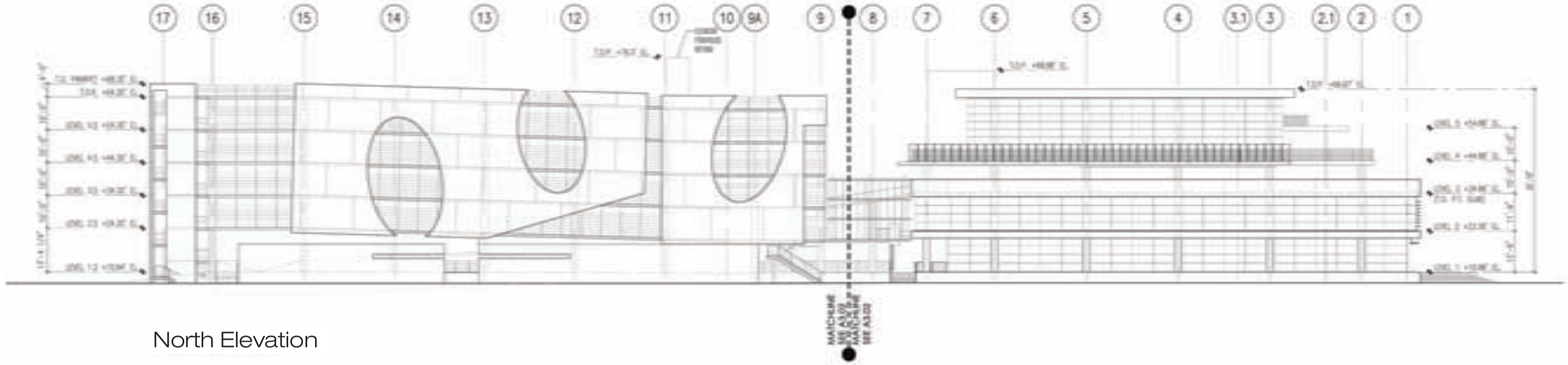
Source: GMPA Architects, July 2009.

ENVICOM CORPORATION

Holiday Harbor Courts Building Cross-Section

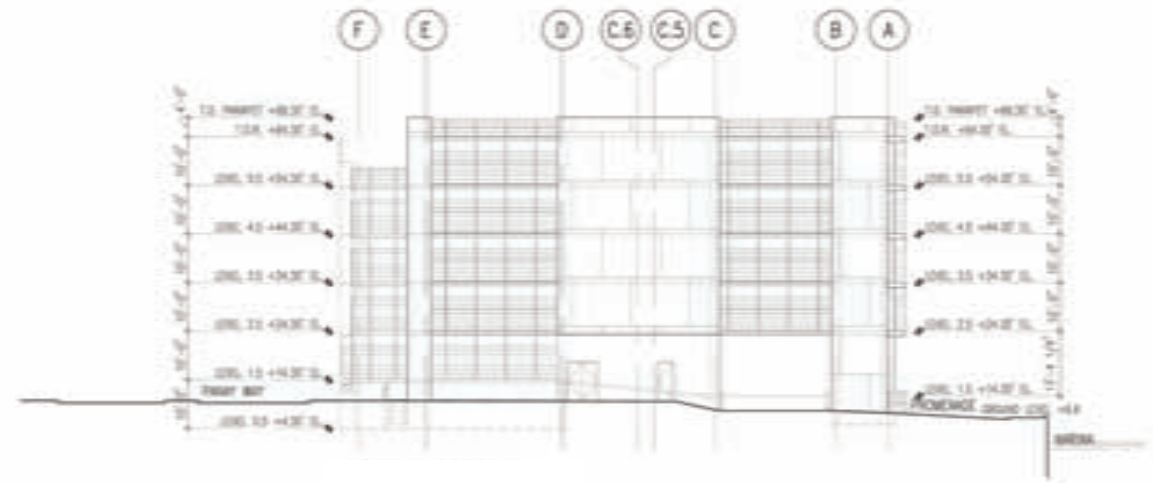
FEET 0 20 40

FIGURE III-6h

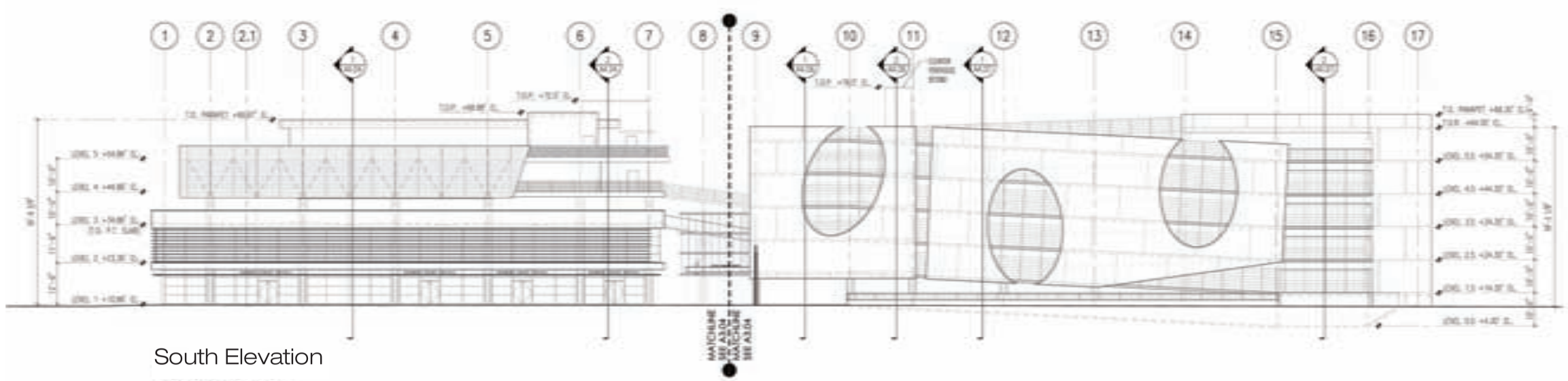


North Elevation

West Elevation



East Elevation



South Elevation

Source: GMPA Architects, July 2009.

Revised: July 24, 2009

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Holiday Harbor Courts Elevations

FEET 0 20 40

FIGURE III-7

Source: GMP Architects, March 2006

Revised: August 5, 2008

ENVICOM CORPORATION

Holiday Harbor Courts Rendering

FIGURE III-8

adjacent apartments. Its design utilizes a nautical theme with curved and circular elements and hues of blue and green. Building materials include the use of aluminum (as does the apartment building next door) and blue-green glass. Portions of the facade would be designed with floor to ceiling glass, allowing for views from the building onto the adjacent plaza and waterfront. The structure is designed with a recessed ground floor and terraced upper floor. The attached parking structure consists of angular walls and curved openings punched on the facade, and it is designed in such a way as to allow for pedestrian views of the water through the parking structure at the ground level.

Project Amenities, Open Space, and Landscaping

Parcel OT

The commercial retail space in the building, as well as individual auxiliary rooms (arts and crafts, lounges, card rooms, chapel, etc.), would provide amenities for the retirement facility residents. Also, the surrounding Marina area provides additional amenities, including the Marina itself (boating, walking along promenades and other walkways, etc.), shopping, a health club, beach, and restaurants. Many of these amenities are within walking distance of the project.

The project would include an improved, landscaped pedestrian access way between Admiralty Way and Washington Boulevard, along the adjusted eastern boundary of the Parcel OT, just west of the existing Oxford Basin. This linear passageway would be accomplished by moving the parcel boundary between Parcel P and Parcel OT through an adjustment to the lease parcel boundary to include a 55-foot strip of Parcel P (the Parcel of the LCP containing the Oxford Retention Basin), as shown in Figure III-3a. The adjustment would be effectuated by the Department of Beaches and Harbors through revised legal descriptions for each of the two Parcels. The proposed project would adjust the Parcel OT boundary to include 19,755 s.f. of Parcel P, which is designated open space in the LCP. The proposed building would encroach approximately 30 to 35 feet (or 9,397 s.f.) into what is currently Parcel P, leaving approximately 20 to 25 feet for a pathway and transitional landscaping compatible with the future enhancement of Oxford Basin. Currently, the surface parking lot on Parcel OT encroaches approximately 21 feet into Parcel P (an area of 6,665 s.f.); therefore, the proposed building on Parcel OT would encroach into Parcel P by an additional nine to 14 feet and 2,732 s.f. The Department of Beaches and Harbors intends to propose offsetting the reduction of open space on Parcel P via the planned expansion of Burton W. Chace Park. According to the Burton W. Chace Park Master Plan (Los Angeles County Department of Beaches and Harbors, June 11, 2009), the existing Burton W. Chace Park on Mindanao Way is 7.8 acres in size, but the Master Plan project would increase its size to 15 acres. Therefore, notwithstanding the project's encroachment into Parcel P, open space in the Marina del Rey community would cumulatively increase under Phase II development. The proposed passageway would provide improved access for those currently traversing the limited access-way now, as well as the residents at the proposed facility. These features would provide an improved open space and recreational buffer, which would also allow for improved public viewing access to the lagoon. County access via a new driveway entrance would be provided on the southeast corner of the project site, for maintenance use to service on-site and adjacent utilities, including the retention basin/lagoon.

The active seniors accommodations would include one internal courtyard in the middle of the floor plan on Level 1 for use by the retirees and their guests. The dining room would have two terraces; one would be a small private terrace and the second would be a large terrace that wraps around the dining room and connects to another large terrace off the lounge. There would also be an additional private terrace that wraps around the arts and crafts room, library, and computer room. The final terrace on Level 1 would be located next to the library, across from the women's restrooms and the stairwell. Other recreation on this level would include an outdoor spa and an indoor gym, a screening room, and a cafe. All suites would

have their own private balcony. An additional community terrace would be located off the second floor lounge.

The entrance of the facility would be framed by date palms (*Phoenix dactylifera*), and a small fountain would be located at the vehicular drop off area. The landscape plan (shown in **Figure III-9**) extends into the linear passageway between the active seniors accommodations and the existing retention basin/lagoon connecting Admiralty Way to Washington Boulevard, and would include trees and shrubs, a path approximately 20 feet wide by 350 feet long, and benches. The planting palette is divided into three zones; lower slope, middle slope and upper slope. Each zone would include both native and drought tolerant trees, shrubs and ground cover. The landscape area along the pathway is a combination of fan palms and flowering plum trees. The Washington Boulevard frontage is intended to be open for retail uses with fan palms as the street trees. The additional landscaping would center primarily on the perimeter of the building and would include the planting of 1,900 blue finger *(Senecio mandraliscae)*, 5,600 sedge (*Carex* Spp.), 21 pink flowering plum trees (*Prunus blireiana*), and 17 New Zealand Christmas trees (*Metero sideros excelsus*), among many others species (number counts provided here are approximations).

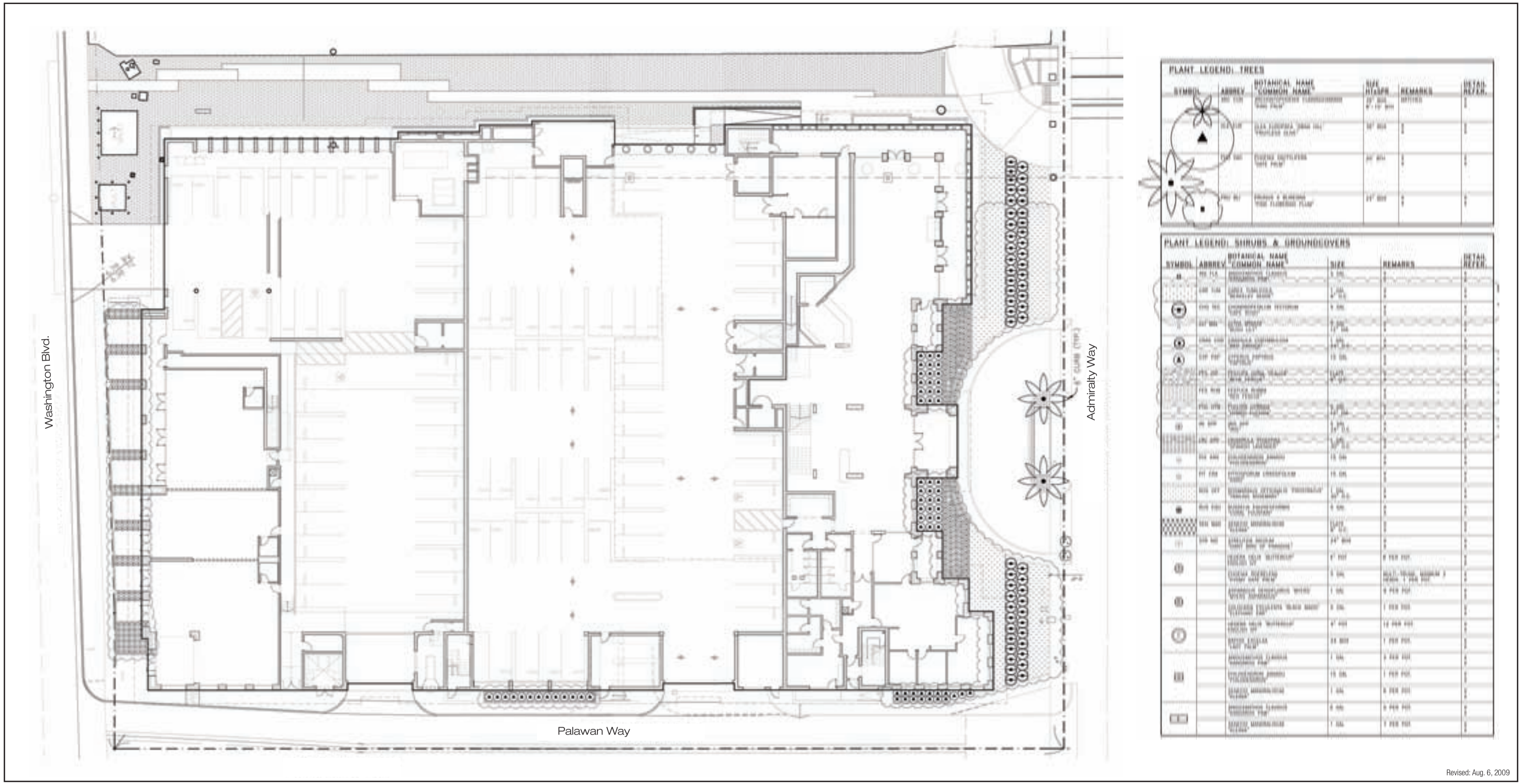
Parcel 21

A park plaza and improved promenade would also be developed as a part of the proposed project. The park plaza would be located west of the health club and would extend the existing promenade located on Parcel 20 (Phase I), which was included in LCP Amendment No. 1-01 (January 7, 2002), east of Parcel 21.[6] The visitors of the neighborhood park plaza and promenade would have a direct view of the Marina. The park plaza would include an open lawn area, terraced seating, trees, and a pedestrian path between the street and the promenade. A gravel-filled dry well is proposed below the lawn area to retain and recharge storm water run-off from the site. The plaza and 28-foot wide promenade would offer views of the Marina and would serve a recreational function by allowing the public direct access to the waterfront; specifically Marina small craft harbor uses and Mother's Beach. The promenade would incorporate a variety of different shaped and colored pavers with colors such as charcoal, antique brown, terra cotta and buff. The promenade would also include benches for pedestrians as well as lighting and shrubs. The promenade is also designed to serve as a fire lane, to satisfy Los Angeles County Fire Department requirements. In addition, the project's frontage along Panay Way would include a 5.5-foot wide sidewalk, which is not currently present.

The landscape plan (shown in **Figure III-10**) for Parcel 21 would conform with and compliment the existing landscaping on Parcel 20 (Phase I). The landscaping would consist of palm trees, perennial plants, and accent paving around the building entry. Other species to be used in the plant palette include big blue lily turf (*Liriope muscari*), bird of paradise (*Strelitzia reginae*), and New Zealand flax (*Phormium tenax*, or "Maori Maiden").

The project has been designed within the combined height and view corridor provisions of the LUP. The plan includes an allowable height limit of 45 feet with a view corridor requirement of 20 percent of a project's total water frontage (LUP, page I-9). However, LUP policy allows for an increase in building height of 1.5 feet for every corresponding one percent view corridor increase. The project building height is approximately 56 feet (measured from grade to the rooftop), with a maximum height of approximately 59 feet to the top of the parapet. This height is in like kind to other adjacent properties on Panay Way. The marine commercial building's height of 56 feet requires a view corridor equal to 27.33 percent of the frontage, which amounts to a required 146 feet of view corridor. A total of 146 feet (or greater) for the

[6] Parcel 20 (Phase I) consisted of a 99 unit apartment building with 50 -two bedroom units and 49 one bedroom units and structured parking for 200 cars.



Source: GMPA Architects, August 2009.

Landscape Plan

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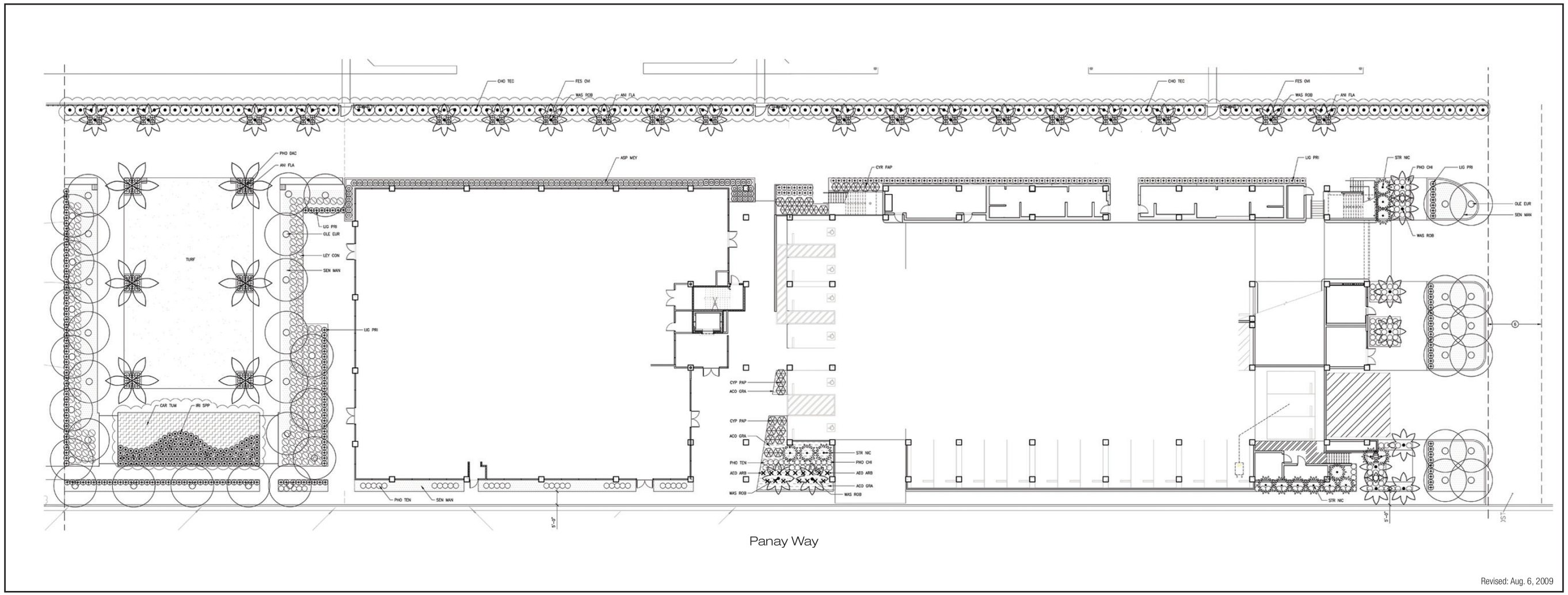
Oceana Retirement Facility Landscape Plan

FEET 0 30 60

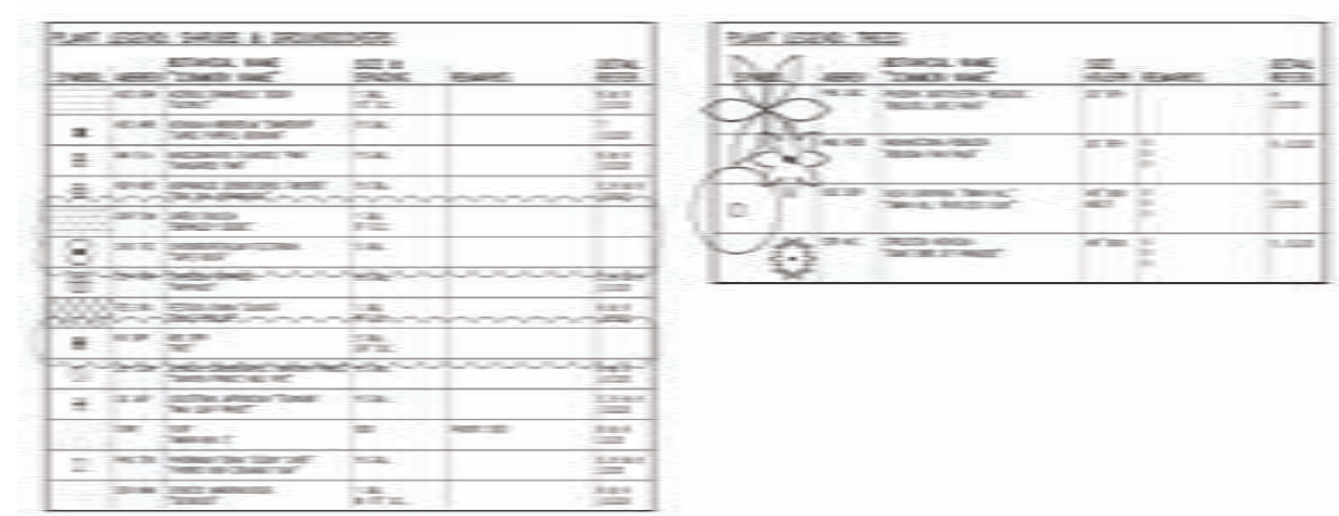
FIGURE III-9



Revised: Aug. 6, 2009

Source: GMPA Architects, August 2009.

Landscape Plan



OCEANA RETIREMENT FACILITY AND HOLIDAY HARBOR COURTS EIR

ENVICOM CORPORATION

Holiday Harbor Courts Landscape Plan

FEET 0 20 40

FIGURE III-10

view corridor would be accommodated in the design. The view corridors on the project site would facilitate public views of the shoreline, providing views of the water, the harbor's docks and slips, and Mother's Beach. The plaza would form the primary view corridor for the Holiday Harbor Courts site, at 105 feet in width. Two additional view corridors are provided. One is on the ground floor level between the parking structure and the commercial building, at 27.2 feet in width, and the other is east of the parking structure and is 50 feet in width.

Parking

Parcel OT

Of the 186 public parking spaces permitted in the LCP for Parcel OT, 94 spaces would be relocated to Parcel 21 as part of the Holiday Harbor Courts development, to be located to the south of Parcel OT on Panay Way. The Oceana Retirement Facility would provide parking for its proposed uses, in accordance with the County Code, as well as retain 92 of the existing on-site public parking spaces. As shown in **Table III-4**, with implementation of the proposed project, 92 spaces would be allocated to public parking, 43 spaces would be designated spaces for the active seniors accommodations, 22 spaces would be allocated for retail uses, and 94 spaces would be transferred to Parcel 21. This transfer of public parking spaces to Parcel 21 responds to the Los Angeles County Department of Beaches and Harbors' Draft Right-Sizing Parking for the Public Parking Lots in Marina del Rey, California (prepared by Raju Associates, Inc., March 2009), which found that for most of the year (more than 300 days any year), the public parking lots located in the Mother's Beach Activity Area (including Parcel OT) are underutilized. Parking lot 8 on Parcel OT, lot 9 on Parcel NR, lot 10 on Parcel IR and lot 11 on Parcel GR serve this activity area with a total of 843 spaces. However, the study determined that the recommended minimum public parking supply for this activity area is only 400 spaces. The Los Angeles County Department of Beaches and Harbors' currently proposed Parking Plan would meet this minimum amount, as well as provide for an additional 117 spaces in this activity area. The transfer proposed with development of the Oceana Retirement Facility and Holiday Harbor Courts project is in accordance with these findings, by moving underutilized public parking spaces from Parcel OT to Parcel 21, where covered parking would be adjacent to the Marina and closer in proximity to Mother's Beach.

Table III-4
Proposed Parking for Parcel OT and Parking Transfer to Parcel 21

Use	Existing LCP Permitted Parking on Parcel OT	Proposed Parking	
		Parcel OT	Parcel 21
Public Parking	186	92	94
Active Seniors Accommodations		43	
Retail		22	
Relocated/Transferred Public Parking			94
Total	186	**157**	**94**

The general public would access on-site upper level parking from the driveway located on the westerly side of the structure (the side adjacent to the Marina International Hotel), closest to Admiralty Way on the southerly side of Parcel OT (see Figure III-3b). This driveway would have two separate designated gated areas; one for public parking and one for residents of the retirement facility. The second driveway located on the westerly side of the structure, closest to Washington Boulevard, would be reserved for residents of the retirement facility and patrons of the on-site retail spaces, as would the access from Washington

Boulevard along the site's northerly side (see Figure III-3a). These entries would lead to both the upper and lower parking levels. General public and building use parking spaces will be designated with signage.

Parcel 21

Parking for the proposed Holiday Harbor Courts development would be provided in a six-level, partially subterranean, parking structure that is attached to the structure housing the yacht club and marine commercial uses. The parking structure would serve visitors to the Holiday Harbor Courts as well as provide for general public parking (for example, to serve visitors to Mother's Beach). This design allows for direct access to the commercial structure, in addition to close access to the Marina slips and Mother's Beach. As discussed above, Parcel 21 would include transferred parking from the proposed development on Parcel OT, as well as from Parcel 20. As shown in **Table III-5** below, an estimated 447 parking spaces would be provided by the proposed project after the transfers are made from Parcels OT and 20.

Table III-5
Parcel 21 Proposed Parking and Parking Replacement

Type of Parking	Amount
Replacement for on-site Parcel 21 uses	43
Yacht Club/ Marine Commercial (replacement from Parcel 20, Phase II)	112
New Uses	15
Replacement for Boater Parking	183
Replacement from Parcel OT	94
Total	**447**

Tenant parking for Parcel 21 would be accessed from a driveway located on the easterly side of the proposed structure (see Figure III-6c), while general public parking would be accessed from a driveway on the southerly portion of the structure (Figure III-6b). General public parking would be located on-site on Levels 0.5, 1, 1.2, 1.5, and 2, while tenant parking would be provided on Levels 1.5, 2, 2.5, 3. 3.5, 4, 4.5, 5, 5.5 and the roof level. Tenant parking would serve both employees and patrons of on-site uses. General public and tenant parking spaces would be designated with signage, and a security gate would also separate tenant and public parking on Levels 1.5 and 2, as shown on Figure III-6c (gridline 13).

Demolition of Existing Development, On-site Grading, and Construction

Demolition activities associated with redevelopment of Parcels OT and 21 would result in the hauling of 4,446 cubic (c.y.) yards of waste (246 c.y. for Parcel OT and 4,200 c.y. for Parcel 21), which is expected to be transported from the sites and hauled to the Community Recycling and Resource Recovery Center (operated by the Crown Disposal Company and located at 9147 De Garmo Avenue in Sun Valley) or to a landfill. The hauling of demolition waste is expected to occur over seven days. Grading activities for Parcels OT and 21 would result in exporting 7,768 c.y. of soil (6,500 c.y. for Parcel OT and 1,268 c.y. for Parcel 21). The hauling of soils is expected to occur over 15 days. For both phases, it is assumed that trucks would move between the sites and the Marina Expressway, using the major roadways of Admiralty Way, Washington Boulevard, and Lincoln Boulevard (refer to Table IV.B-8 in Section IV.B for further detail). Development of the proposed project is expected to begin in 2012, with construction of the Oceana Retirement Facility on Parcel OT estimated to occur over two years, while construction of the Holiday Harbor Courts project is estimated to occur over 18 months.

4. Scope of the EIR Analysis

As determined in the Initial Study prepared for the proposed project by the Los Angeles County Department of Regional Planning in accordance with CEQA, this EIR includes the analysis of the following potential environmental effects in Section IV, Environmental Setting, Impacts, and Mitigation Measures:

- Geotechnical Hazards;
- Noise;
- Water Quality;
- Air Quality;
- Biota;
- Cultural Resources;
- Visual Qualities;
- Traffic/Access;
- Utilities (Water Supply);
- Environmental Safety;
- Land Use; and
- Global Climate Change.

Additionally, Section IV.H includes a discussion of those environmental issues that were found to not warrant EIR analysis and were scoped out of the EIR by the Los Angeles County Department of Regional Planning Initial Study for the project.

5. Project Objectives

Parcel OT

- Construct active seniors accommodations to address the increasing needs, locally and Statewide, for retirement and senior facilities.
- Provide mixed-uses (related commercial and other active seniors accommodations -supporting uses) on-site to serve the residents and reduce the need for travel.
- Locate the project in the general vicinity of additionally supporting commercial uses (including restaurants, shopping and service needs) and proximate to major transportation corridors that provide easy access.
- Locate the facility in the Marina where passive and active marina-related opportunities are available to the retirees for recreational pursuit.
- Provide an improved, landscaped pathway with benches for passive recreation between Admiralty Way and Washington Boulevard, on the eastern boundary of the project site.
- Develop a facility that meets the criteria set forth in the Marina Del Rey Land Use Plan regarding height limits, parking and other design features, as well as to meet the criteria of the Los Angeles County Green Building Ordinance.
- Provide for right size public parking and co-locate said parking in an effective manner.

Parcel 21

- Construct a harbor-related and Marina adjacent multi-use building with an attached parking structure in order to update and add facilities to accommodate a yacht club, health center, transferred uses from LUP Parcel 20, Phase II, and a promenade.
- Construct a project that meets the requirements of the Los Angeles County Green Building Ordinance, as well as the Marina del Rey Land Use Plan requirements for height, view corridors, parking, and design features.
- Provide public and private recreational opportunities, including improved boater restrooms and showers and other boater facilities.
- Locate a project in the general vicinity of residents and marine users, who would utilize the new or updated facilities, and proximate to major transportation corridors that provide access to coastal uses.
- Provide improved marine/coastal access by constructing a promenade and view corridors on-site, including the plaza.
- Preserve public parking in Marina del Rey in a more appropriate location for the demand (including transferring parking spaces from LUP Parcel OT to LUP Parcel 21) and improve parking access to the Mother's Beach Activity Area, per the findings of the Los Angeles County Department of Beaches and Harbors Right-Sizing Parking Study.[7]

6. Project Approvals and Intended Uses of the EIR

The California Environmental Quality Act (CEQA) requires the preparation of an EIR when there is substantial evidence that a project may have a significant effect on the environment. The purpose of the EIR is to provide decision makers, public agencies, and the general public with an objective and informational document that fully discloses the potential environmental impacts of the proposed project. The EIR for the Oceana Retirement Facility and Holiday Harbor Courts Project is a Project EIR, which examines the environmental impacts of a specific development project. According to the CEQA Guidelines, Section 15162, a Project EIR focuses on the changes that would occur in the environment as a result of the proposed development project. Each phase of the proposed project, including planning, construction, and operation, is examined in the Project EIR.

This EIR will be used by the County of Los Angeles, as the lead agency under CEQA, in making decisions with regard to approval of the project. The information in this EIR may also be used by other agencies, including, but not limited to, those identified below, in deciding whether to grant permits or approvals necessary to construct or operate the proposed project.

- State
  - California Coastal Commission
  - Regional Water Quality Control Board, Los Angeles Region
- County
  - Los Angeles County Department of Beaches & Harbors
  - LA County Department of Regional Planning
  - Marina del Rey Design Control Board
  - LA County Department of Public Works

[7] Raju Associates, Inc. for the Los Angeles County Department of Beaches and Harbors. Draft Right-Sizing Parking Study for the Public Parking Lots in Marina del Rey, California. March 2009.

- LA County Waterworks District No. 29
- Sanitation Districts of LA County
- LA County Fire Department
- Local Water/ Utilities Companies

The proposed project has already received conceptual approval from the Marina Design Control Board, and the individual parcels are currently anticipated to require discretionary permits and approvals, including, but not limited to, those identified below.

Parcel OT

- LCP Amendment to:
  1. Create a new land use category in the LCP of Active Seniors Accommodations to be described as: a specialized facility for the housing of active persons over age 60 who may or may not be retired. Units shall contain no more than two bedrooms and shall not provide a kitchen. However, communal dining facilities shall be available on-site. Mixed use services provided on-site for residents may include, but are not limited to, one or more of the following: concierge, dry cleaners, laundry, hair and beauty salon, spa (excluding massage), recreation room, lounge, shuttle/limousine, travel, maid, linen, and other similar personal services. The accommodations may be rented or leased on a monthly or yearly basis. Accommodations may be rented, for no more than seven (7) days, to relatives or friends who are visiting residents of the facility. Units within an Active Seniors Accommodations facility are not considered residential uses for purposes of allocating dwelling units, assessing affordable housing requirements, or assessing transient occupancy taxes or fees.
  2. Re-designate Parcel OT from Parking to Active Seniors Accommodations parcel with a Mixed Use Overlay Zone (MUZ)[8] allowing for the mixed-use senior citizen retirement facility with a retail component.
  3. Transfer development potential (114 hotel units from the Admiralty DZ #7 and 5,000 s.f. of retail space from the Palawan/Beach DZ #5) to Parcel OT in the Oxford DZ #6.
  4. Adjust the lease parcel boundary between Parcel OT and Parcel P to accommodate 55 feet (19,755 s.f.) of building and landscaped pathway to extend the buffer between the Oxford Retention Basin and the Parcel OT project to the existing fence line. (This would necessitate adjustments to the corresponding LCP maps.)
  5. Re-designate the portion of Parcel P added to Parcel OT from Open Space to Active Seniors Accommodations.
- Conditional Use Permit (CUP), Coastal Development Permit (CDP), and Parking Permit for the transfer of development potential, parking, and trip generations between Parcels OT, 21, and 20.

Parcel 21

- Modifications to LCP Amendment No. 1-01 for the following:
  1. Transfer 94 required parking spaces from Parcel OT to Parcel 21.

[8] The Marina LUP MUZ (LUP pages 8-12 and 8-13) is intended to provide additional flexibility for development of creatively designed mixed-use projects on selected non-waterfront parcels. Parcels with this overlay zone are permitted to combine land use categories on an individual parcel, and are allowed to mix primary uses within a structure. Development potential available to each applicant is subject to the limitations of the zone in which the parcel resides.

2. Transfer of the yacht club and marine commercial uses from Parcel 20, Phase II, to Parcel 21.
3. Enlarge Parcel GR by 207 feet of frontage or 31,050 square feet with a corresponding reduction in Parcel 21 through a parcel lease termination.

- Conditional Use Permit (CUP), Coastal Development Permit (CDP), and Parking Permit for the transfer of development potential, parking, and trip generations between Parcels OT, 21, and 20.

IV. ENVIRONMENTAL ANALYSIS

A. GEOTECHNICAL HAZARDS

The following analysis is based on the Preliminary Geotechnical Reports prepared for the proposed project by Earth Systems Southern California (ESSC) Inc., dated June 15, 2004 (Parcel OT) and August 21, 2006 (Parcel 21). The Preliminary Geotechnical Reports are included in **Volume II**, **Appendix B**, of this EIR. ESSC conducted the field exploration of Parcel OT on March 10 and 11, 2004 and of Parcel 21 on May 15 and May 31 through June 2, 2006.

1. Existing Conditions

Geologic Setting

The Marina was created in approximately 1963. Based on Los Angeles County maps of the Venice Landfill (operated in the site vicinity in the early to mid 1900's and currently closed) extents and the current Marina configuration, portions of the dump fill were removed during the Marina construction. Some of the land in Marina del Rey, particularly the peninsulas of Palawan Way, Panay Way (location of Parcel 21) and Marquesas Way consist of dredge material placed hydraulically or as dump fill between the north and south quay walls at that time (USACOE, 1963).

Parcels OT and 21 lie within the northwestern limits of the Peninsular Ranges geomorphic province that is characterized by northwest-southeast trending mountain ranges and intervening valleys. Included in this province is the Los Angeles Basin. The sites are located at the northwesterly edge of the southwestern block of the Los Angeles Basin, which is characterized by the deep alluvial deposits of the coastal plain. The sites also lie at the southern margin of the Transverse Ranges geomorphic province that is composed of parallel, east-west trending mountain ranges and intervening sediment-filled valleys. The Santa Monica Mountains extend from the Los Angeles River approximately 45 miles westward to the Oxnard Plain. The mountains comprise a complex, westward-plunging anticline that exposes older rocks in the eastern core of the range.

An older (late Pleistocene age) dissected alluvial surface (the Santa Monica plain) lies along the southern flank of the Santa Monica Mountains. This plain extends as far south as the Santa Monica Airport [approximately 1.24 miles (mi) north of the subject site]. The Westchester plain above the bluff at Playa del Rey forms a similar-age geomorphic surface approximately 1.24 mi south of the subject site. These plains remain as an elevated, isolated, geomorphically inactive surface that is neither generating nor receiving sediments. The Ballona Creek floodplain occupied the intervening lowland area between Westchester and Santa Monica plains. The area of Parcel 21 has been incised below the older, elevated alluvial plains that surround it. The Quaternary sedimentary units are "stratigraphically reversed" with the older units at a higher elevation. The sediments underlying Parcel 21 are recent (Holocene) deposits.

Parcel OT consists of ground that slopes approximately north to south at elevations from nearly ten to 15 feet above mean sea level (msl). The ground drops off more steeply at a gradient of approximately 10 to one vertical (10H:1V) on the easterly side of the Parcel, where the Marina Lagoon (with an estimated elevation of -5 msl) is located. Parcel 21 is situated at ground elevations of nearly seven to 10 feet above msl. The Parcel slopes downward towards the north at a grade of approximately two percent to a relatively flat area adjacent to the quay wall.

Groundwater

Parcel OT

Free groundwater was encountered at Parcel OT in the test borings at depths of approximately 10 to 17 feet below existing site grade. Groundwater within the Marina has been demonstrated to fluctuate significantly, primarily in response to tides. Based on the highest tide recorded in this part of the Southern California Coast (approximately 4.7 feet above msl), the shallowest anticipated groundwater would be approximately five to 10feet below existing ground surface, depending on which part of the site is considered (ground surface elevation ranges from approximately 10to 15 feet above msl).

Parcel 21

Free groundwater was encountered at Parcel 21 in the test borings at depths of approximately 12 to 16 feet below existing site grade. The two groundwater monitoring wells (MW1 and MW2) installed at the site indicated groundwater depths of 15 to 16 feet, when drilled in April 2005, and approximately seven to nine feet after well development and sampling. According to the Seismic Hazards Report for the Venice Quadrangle (CDMG, 1998), the historic shallowest groundwater in the site vicinity is approximately five feet below grade. Based on the highest tide recorded in this part of the Southern California Coast, the shallowest anticipated groundwater would be approximately five feet below existing ground surface.

Soil Conditions

Parcel OT

Artificial fill soils were encountered in each of the six exploratory borings drilled by ESSC. The depth of fill observed ranged from approximately 12 to 14 feet below existing ground. The fill consisted of a silty soil matrix containing significant amounts of debris including asphalt, glass, metal, brick, wood and other materials. One boring (B3) and one cone penetration test (CPT) sounding (CPT-1x) encountered refusal at depths of 13 feet and eight feet, respectively. The fill was observed to be poorly compacted and the soil matrix was found to consist predominantly of silty sand, sandy silt, clayey silty, and sandy clay (SM, ML and CL soil types, respectively, based upon the Unified Soil Classification System). Based upon results of the Expansion Index (EI) Tests (ASTM D 4829), conducted for this investigation, the upper on-site soils are considered to have a very low (EI = 0 to 20) expansion potential.

A layer of very soft to medium stiff clay and silt (CL and ML soil types) of varying thickness was found between approximately 13 and 23 feet below existing grade in each of the borings and CPT soundings. Below approximately 23 feet, the natural soils were found to consist predominantly of medium dense to very dense silty sands, and slightly silty sands (SM, SW-SM and SP-SM soil types, respectively) with density generally increasing with depth. Following the 2001 edition of the California Building Code (CBC), Table 16-J, the site soil profile should be classified as an S_D soil profile (stiff soil profile) or potentially an S_F soil profile (soils requiring site-specific evaluation), when soil liquefaction is considered (discussed further below).

Parcel 21

Artificial fill soils were encountered in each of the borings and CPT soundings drilled by ESSC. The depth of fill was observed to be approximately 12 to 14 feet. These fill soils were found to consist predominantly of moderately compact to poorly compact silty sand, clayey sand, and clay (SM, SC, and CL, respectively) soil types based upon the Unified Soil Classification System. It is ESSC's understanding that these artificial fill soils were placed as hydraulic fill or "dump fill" during construction of the marina circa 1963. Based upon results of the Expansion Index (EI) Tests (ASTM D 4829)

conducted for previous investigations at Parcel 20, the majority of the upper on-site fill soils are considered to have a low (EI = 21 - 50) expansion potential.

Native alluvial soils below the fill soils were found to consist predominantly of loose to medium dense silty sand and soft to very stiff silts (SM and ML soil types, respectively) down to a depth of approximately 32 feet below existing grade. Below 32 feet, the alluvial soils consist predominantly of medium dense to very dense silty sands, poorly-graded and well-graded sands, and poorly-graded and well-graded gravels (SM, SP, SW, SP-SM, GP, GW, and GC soil types, respectively).

Geologic Hazards

Geologic hazards that may affect the proposed development on Parcels OT and 21 include seismic shaking and other earthquake-related hazards. The following is a detailed discussion regarding fault rupture and seismic shaking, as well as secondary seismic hazards, including liquefaction, seismic induced ground subsidence and ground damage and lateral spreading.

Fault Rupture and Seismic Shaking

Parcels OT and 21 are not located within a currently delineated California Geological Survey (CGS) Earthquake Fault Rupture Hazard ("Alquist-Priolo") Zone (Hart and Bryant, 1999). No known active faults have been specifically identified beneath the sites. Therefore, the potential for active fault rupture is considered to be very low. While fault rupture would most likely occur along previously established fault traces, future fault rupture could occur at other locations.

Although the Parcels are not located within a known "earthquake fault zone," they are located in an active seismic region where large numbers of earthquakes are recorded each year. Historically, major earthquakes (such as those with a magnitude greater than 7.5) felt in the vicinity of the subject site have originated from faults outside the area. These include the December 21, 1812 "Santa Barbara Region" earthquake that was presumably centered in the Santa Barbara Channel, the 1857 Fort Tejon earthquake, the 1872 Owens Valley earthquake, and the 1952 Kern County earthquake.

The nearest known "active" or "potentially active" faults in the vicinity of the subject sites include the Santa Monica fault (approximately 4.5 mi northwest of the site), the Palos Verdes fault (approximately 4.6 mi southwest), the Malibu Coast fault (approximately 5.3 mi northwest), the Newport-Inglewood fault (approximately 5.9 mi northeast of the site), and the Hollywood fault (approximately 7.5 mi northeast of the site). The Santa Monica, Hollywood, and Malibu Coast faults together make up the southern frontal fault system of the Santa Monica mountains. This fault system is the southern boundary of the Transverse Ranges Geomorphic Province. The active Newport- Inglewood fault zone is one of the most significant geologic features of the area. The northwest-trending Compton-Los Alamitos Trend of folds is now thought to overlie a northeast dipping series of blind thrust faults several miles to the south of the site. This series of faults and folds is likely associated with the more widely recognized Newport-Inglewood zone of deformation that extends from Newport Beach through the Baldwin Hills. The Cheviot Hills are the northernmost recognizable feature in the Newport-Inglewood zone of deformation. The active Newport-Inglewood fault zone is one of the most significant geologic features of the area and is located under the southern margin of the western Santa Monica Mountains.

The subject sites, like all other sites in the general area, can be affected by moderate to major earthquakes centered on faults in southern California. Based on the various analyses complied by ESSC, and as a conservative approach, the design earthquake for the subject sites is considered to be a 7.1 magnitude event, with a peak ground acceleration of 0.5g.

Secondary Seismic Hazards

Secondary seismic hazards related to ground shaking include liquefaction, seismic induced ground subsidence and ground damage, lateral spreading, seiches, and tsunamis.

Liquefaction

Liquefaction is defined as a loss of strength of saturated cohesionless soil, generally due to seismic shaking. Soil types most susceptible to liquefaction are loose, saturated silty to clean fine sands. Parcels OT and 21 are located within a "liquefaction hazard zone" as defined by the CDMG on the Venice Quadrangle Seismic Hazard Zones map, dated March 1999.

Parcel OT

The results of ESSC's liquefaction analyses indicate significant amounts of soil liquefaction can be anticipated at the site. The results suggest that the potential for liquefaction is significantly greater in the southerly part of the site (liquefying layers ranging from seven to 48 feet below existing grade) than in the northerly part of the site (liquefying layers expected to range from 20 to 28 feet below existing grade). That 20 to 28-foot liquefying layer appears to be continuous across both the southerly and northerly parts of the site.

Parcel 21

The results of ESSC's liquefaction analyses indicate significant potential for liquefaction within the upper site soils between approximately five feet and 32 feet below existing grade. The CPT data suggest the potential for liquefaction of a few thin (one to three feet thick) layers of soil in various locations and depths between 32 and 52 feet below existing ground surface. However, some research suggests that the potential for liquefaction is reduced at the greater overburden stresses experienced at such depths.

Seismic Induced Ground Subsidence and Ground Damage

Ground subsidence is the vertical depression of the ground surface, which may occur because of the collapse of natural cavities, such as caves, fissures, and associated openings; compression of the ground, and letting down of the surface as a result of compaction; or the collapse of man made cavities, such as mines, tunnels and cellars and of entrances like shafts, adits and wells. Given that site soils below the groundwater table may liquefy during a significant seismic event, some resulting vertical settlement and ground disturbance can be expected. Vertical ground settlements may result as loose liquefied soils and loose unsaturated soils densifying during seismic motions. When soil layers at depth experience liquefaction, the resulting loss of support to overlying soil layers can cause surface disruptions such as fissures, vertical off-sets and sand boils.

Parcel OT

The data collected regarding the potential for liquefaction-induced ground subsidence suggests that in the event of a nearby earthquake as discussed above, liquefaction-induced ground subsidence in the south side of the site could range from approximately 1.2 to 1.4 inches. In the northerly part of the site, liquefaction-induced ground subsidence is estimated to range from 3.3 to 5.3 inches.

Parcel 21

The data collected regarding the potential for liquefaction-induced ground subsidence suggests that in the event of a nearby earthquake producing ground accelerations of 0.5g or greater at the subject site, the estimates of the total seismically induced settlements range from 1.2 inches to 7.7 inches. Thus, without

any ground improvement, earthquake-induced differential ground settlement across the site could be as great as the difference between these values, 6.5 inches.

Lateral Spreading

Lateral spreading involves the lateral movement of soils on or near a slope that has been temporarily weakened due to liquefaction. The issue of lateral spreading is a complex problem involving soil properties and the type of expected earthquake motion. Studies have shown that the degree of lateral spreading is not uniform but rather is greatest at the free face and decreases to zero away from the free face (in this case, along the easterly south part of the site near the lagoon for Parcel OT and along the south part of the site near Panay Way for Parcel 21). Lateral spreading may be calculated by various methods, which are summarized below but are explained further by ESSC in the Preliminary Geotechnical Engineering Reports in Volume II, Appendix B. Below is a summary of the lateral spreading conditions that may be expected to occur at Parcels OT and 21.

Parcel OT

According to the Youd Method (2002), soils with corrected blow counts less than 15 blows per foot can be susceptible to lateral spreading, particularly with the presence of a nearby “free face” such as the adjacent lagoon. However, only the upper liquefying layer found in the southerly part of the site has both an adjacent "free face" (i.e. is above the bottom of the lagoon elevation) and corrected blow counts less than 15 blows per foot. As such, lateral ground movement of up to approximately seven feet (estimated by the Youd Method) could be experienced at Parcel OT, which would likely induce some earth pressures against the proposed subsurface structures.

As a more specific method for evaluating lateral spread potential at the site, a "sliding block" type evaluation using a computer slope stability analysis program (STABL6H) was used along with estimated post-liquefaction shear strengths to evaluate the stability of the site in the event of a liquefaction-producing earthquake. Post-liquefaction shear strengths (“residual strengths”) for the liquefied layers were estimated using the chart provided by Seed and Harder (1990). Residual strengths of 200 psf and 400 psf were estimated. The slope stability program was used to evaluate both a potential static “flow failure” condition (i.e., residual strengths but no ground acceleration), and a dynamic condition (i.e. weakened liquefied soil subject to ground acceleration). Safety factors of approximately 2.0 to 3.6 were computed for circular failure surfaces (and 7.8 for planar failure), suggesting that “flow failure” would not be expected at this site since these safety factors exceed 1.0. However, safety factors of approximately 0.5 to 0.6 were computed for circular failure surfaces (and 0.9 for planar surfaces) subject to expected ground acceleration, suggesting that some lateral soil spreading would be anticipated since these safety factors are less than 1.0.

The computer “psuedostatic” analysis is an approximation that applies a continuous force horizontally out of the slope. During a seismic event, the slope will actually experience various directional components of acceleration and velocity, both in and out of the slope. The following parameters were used for the pseudostatic evaluation of the dynamic condition. The yield acceleration for the most critical failure (circular failure on section B-B’) was then estimated at 0.11g by “back-calculating” to a safety factor of 1.0. Using the anticipated maximum acceleration and yield acceleration, the lateral ground displacement was estimated using procedures presented in MCEER (2001) and SCEC (2002). The lateral displacement calculated according to these methods was approximately 15 inches, which is significantly lower than the displacements predicted by Youd’s method, but may still be enough to cause distress to shallow or deep foundations.

Parcel 21

The temporary loss of soil shear strength caused by liquefaction can cause the liquefied soil and blocks of mostly intact, surficial soil to displace down-slope or toward a free face during an earthquake. As discussed above, the site is potentially subject to soil liquefaction and is adjacent to the existing Marina sea wall (quay wall, which constitutes a "free face" approximately 15 feet high). Site soils (artificial fill) to a depth of approximately 17 feet are quite loose, with corrected blow counts ranging from five to more than 30 blows per foot. Below approximately 17 feet, average blow counts exceed 15 blows per foot. Soils with an excess of 15 blows per foot are not generally subject to lateral spreading. Therefore, lateral spreading is considered applicable to the upper 17 feet of soil at this site. Using the Youd Method for "free field" analysis, ESSC estimates that the lateral soil displacement at Parcel 21 is between two to 11 feet when subject to an earthquake magnitude of 7.1, distance to the fault of 4.3 mi, and four-meter thickness of soil with blow counts less than 15 and average fines content of 25 percent. Since the "free face" is on the north side of the site and the site slopes generally from south to north, the soil spreading movement is expected to occur in a south-to-north direction.

As an alternate method for evaluating the potential for and magnitude of lateral spreading at the site, ESSC conducted a preliminary "sliding block" analysis. A computer slope stability analysis program (STABL6H) was used along with estimated post-liquefaction shear strengths to evaluate the stability of the site in the event of a liquefaction-producing earthquake. Post-liquefaction shear strengths ("residual strengths") for the liquefied layers were estimated using the chart provided by Seed and Harder (1990). The average less one-standard-deviation value for $(N_1)_{60}$ averaged across the depth of lateral spreading (five to 17 feet) is approximately 11 blows per foot. Based on the chart from Seed and Harder, a residual strength of 400 psf was estimated for the upper liquefied (laterally spreading) layer. The average $(N_1)_{60}$ blow count (20 to 30 blows per foot) for the lower liquefied layer (17 to 32 feet) falls outside the source data range on the chart, however, for blow counts in excess of 16, values for residual strength may be extrapolated linearly from the lower bound curve (Seed et al, 2003). Based on a corrected blow count $(N_1)_{60}$ of 20, the residual strength of the lower liquefied layer may be taken as 900 psf.

The slope stability program was used to evaluate a potential "flow failure" condition (i,e, residual strengths but no ground acceleration). Safety factors of 2.37 and higher were computed, suggesting that "flow failure" would not be expected at this site. A safety factor of 0.97 was computed for the site subject to the expected ground acceleration (0.5g). A seismic coefficient of 0.27 was estimated for that evaluation using procedures presented by Bray et al (1998) and SCEC (2002). Since this safety factor is less than 1.0, ground displacement or lateral spreading would be expected under that ground acceleration. The yield acceleration was then estimated at 0.25g by "back-calculating" to a safety factor of 1.0. Using the anticipated maximum rock acceleration and soil yield acceleration, the lateral ground displacement was estimated using procedures presented by Bray and Rathje (1998). The displacement calculated according to that method was approximately 3.3 inches. A horizontal ground displacement of 3.3 inches is significantly lower than the displacements predicted by the Youd Method, but may still be enough to induce lateral spreading earth pressures against deep foundations and/or sheet pile walls.

Tsunamis and Seiches

Due to the Parcels' location in a Marina, flooding hazards at the site would be directly related to tides. Ground surface at the site is located above the highest recorded tide for the vicinity (approximately five feet above msl) and thus is not considered at significant risk of flooding from normal rainfall or tidal activity. Hazards from seiches and tsunamis could conceivably pose hazards at the site.

According to the Marina del Rey LUP (Page 10-4), seismic sea waves, or tsunamis, are a series of traveling ocean waves of extremely long length and period, which are believed to originate as vertically

displaced columns of ocean water that result from either vertical displacement of the ocean floor, submarine avalanche, or periodic earthquake waves. Tsunamis can pose a hazard to low-lying areas of Marina del Rey, due to minimal elevations proximate to the ocean, and earthquakes with epicenters anywhere in the Pacific Ocean could generate these waves.

Tsunami data included in the Marina del Rey LUP (Page 10-4) offers a range of possibilities for probable tsunami occurrence in the Marina. One source states that the maximum expected run-up of a tsunami wave in the Venice Beach area is 9.6 feet in a 100-year interval and 15.3 feet in a 500-year interval, while other data suggests that the maximum expected run-up of a tsunami wave in the Venice Beach area is 7.9 feet in a 100-year interval and 12.5 feet in a 500-year interval. These run-up values are computed for tsunamis that are generated by distant earthquakes. Tsunamis generated by local seismic faults (such as from activity in Santa Monica Bay) may be larger, albeit less likely to occur. Marina del Rey is not identified as a tsunami hazard area based primarily on historical tsunami data (CDMG, 1972); however, Parcels OT and 21 are located in a tsunami inundation area (Los Angeles County Safety Element, Flood Inundation Hazards Map).

Seiches, or "sloshing" of captive bodies of water (such as the Marina del Rey Small Craft Harbor) due to seismic activity usually occur in moderate to great earthquakes (magnitude of 5.0 and greater), as discussed in the Marina del Rey LUP (Page 10-4). Seiches may raise and lower a water surface from a few inches to several feet and may also occur several thousand miles from an earthquake epicenter. The possibility of seiche occurrence in Ballona Creek is considered remote, as the height of a seiche is a function of the size of the water body, and the channel is relatively narrow.

Regulatory Framework

This regulatory framework identifies the State and local statutes and guidelines that relate to geology and soils, and which must be considered by the County of Los Angeles during the decision-making process for projects that involve grading (excavation or fill), modification of existing structures, or construction of new structures.

State of California

The State of California Geological Survey (CGS; formerly the CDMG, the California Division of Mines and Geology) identifies several earth resource issues that should be taken into consideration in evaluating whether a proposed project would likely be subject to geologic hazards, particularly related to earthquake damage. These considerations include the potential for existing conditions to pose a risk to the project and the potential for the project to result in an impact on the existing conditions for geology and soils.

The CGS establishes regulations related to geologic hazards (e.g., faulting, liquefaction, earthquake-induced landslides, ground shaking) as they affect people and structures. Projects located within special studies (active or potentially active faults) or designated hazards (liquefaction or seismically induced landslide) zones as delineated by the Alquist-Priolo Earthquake Fault Zone (APEFZ) and Seismic Hazards Mapping Program (SHMP) may be subject to regulatory control. The State delegates this control to local governments to regulate development within special studies and hazards zones. The CGS also issues guidelines for the evaluation of geologic and seismic factors that may impact a project, or that a project may affect. The guidelines that are most applicable are as follows:

- CDMG Note 42, Guidelines to Geologic/Seismic Reports;[1]

[1] California Department of Conservation, Division of Mines and Geology, 1997 (Revised). Fault-Rupture Hazard Zones in California. Special Publication 42. Supplements 1 and 2 added 1999.

- CDMG Note 46, Guidelines for Geologic/Seismic Considerations in Environmental Impact Reports;[2] and
- CDMG Note 49, Guidelines for Evaluating the Hazard of Surface Fault Rupture.[3]

Each guideline provides checklists and outlines to help ensure a comprehensive report of geologic/seismic conditions. Although not mandatory in all their detail, these guidelines provide assistance in assuring completeness of geologic/seismic studies conducted for a project.

Alquist-Priolo Earthquake Fault Zoning Act (Special Studies Zone Act of 1972)

The CGS has delineated special study zones along known active or potentially active faults in California pursuant to the (APEFZ) Act of 1972.[4] The State designates the authority to local government to regulate development within an APEFZ. Construction of habitable structures is not permitted over potential rupture zones.

Seismic Hazards Mapping Act of 1990

The CGS has also identified Seismic Hazard Zones that are delineated in accordance with the Seismic Hazards Mapping Program (SHMP) of the Seismic Hazards Act of 1990.[5] The Act is "to provide for a statewide seismic hazard mapping and technical advisory program to assist cities and counties in fulfilling their responsibilities for protecting the public health and safety from the effects of string ground shaking, liquefaction, landslides, or other ground failure and other seismic hazards caused by earthquakes." The project site is located in the Venice Quadrangle Official Seismic Hazard Zones Map.[6]

State of California (Uniform) Building Code

The State of California (Uniform) Building Code (California Building Code) sets standards for investigation and mitigation of site conditions related to fault movement, liquefaction, landslides, differential compactions/seismic settlement, ground rupture, and ground shaking, tsunami, seiche, and seismically induced flooding. Mitigation of geological (including earthquake) and soils (geotechnical) issues must be undertaken in compliance with the California Building Code.

Local

County of Los Angeles Building Code

The County of Los Angeles Building Code (2002) typically follows the California Building Code for geology and geotechnical standards. In addition, the County Grading Ordinance mandates specific compliance requirements for all projects within the County.

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[2] California Department of Conservation, Division of Mines and Geology, 1986. Guidelines for Geologic/Seismic Considerations in Environmental Impact Reports. Special Publication No. 46.

[3] California Department of Conservation, Division of Mines and Geology, 1998. Guidelines for Evaluating the Hazard of Surface Fault Rupture. Special Publication No. 49.

[4] California Public Resources Code, § 2621 et. seq.: Alquist-Priolo Earthquake Fault Zoning Act.

[5] California Public Resources Code, § 2690 et. seq.: Seismic Hazards Mapping Act.

[6] California Department of Conservation, Division of Mines and Geology. State of California Seismic Hazard Zones: Venice Quadrangle Official Map.

2. Thresholds of Significance

According to the Initial Study prepared for the proposed project by the Los Angeles County Department of Regional Planning and subsequent consultation with the County, the proposed project would potentially result in significant impacts associated with geotechnical hazards if Parcels OT and 21 were:

- Located in an active or potentially active fault zone, Seismic Hazard Zone, or Alquist-Priolo Earthquake Zone;
- Located in an area containing a major landslide;
- Located in an area having high slope instability;
- Subject to high subsidence, high groundwater level, liquefaction, or hydrocompaction;
- Proposing development of a sensitive use (school, hospital, public assembly site) located in close proximity to a significant geotechnical hazard;
- Requiring substantial grading and/or alteration of topography including slopes over 25 percent;
- Located on expansive soil, as defined in Table 18-1 B of the Uniform Building Code (1994), creating substantial risk to life or property; and/or
- Located in a tsunami inundation area based on the Los Angeles County Safety Element, Flood Inundation Hazards Map.

The proposed project site (Parcels OT including a portion of Parcel P[7] and 21, collectively) is not located in area containing a major landslide or having high slope instability, nor does the project require substantial grading including slopes over 25 percent, as defined by the above thresholds. Therefore, the following analysis evaluates the site on the remaining thresholds.

3. Project Impacts

Groundwater

As groundwater may occur at depths as shallow as five feet below grade, and subterranean parking is proposed for both Parcels OT and 21 deeper than the groundwater table, the effects of groundwater during both the construction and operation phases of the proposed project, discussed below, are considered a significant impact.

Construction

The subterranean facilities are expected to be bottomed near or below the groundwater level. Dewatering may be required to perform site construction operations. Excavation bottoms at or below the groundwater level may not be firm and there may be a need to stabilize the excavation bottoms to provide a trafficable surface for construction. Temporary excavations of up to 14 feet in depth (Parcel OT) and five feet in depth (Parcel 21) are anticipated to be required for construction of the proposed subterranean parking facilities. Excavations will have to be shored or "laid back" to appropriate temporary slope angles. A soil-cement cutoff wall created using deep soil mixing may be constructed around the perimeter of the site. The soil-cement cutoff wall could act as temporary shoring, as well as a cutoff wall for dewatering. Prior to implementation of **Mitigation Measure GEO-1**, potential impacts involving groundwater during construction of the proposed project would be significant.

[7] Hereafter, unless otherwise noted, the Oceana Retirement Facility project site is simply referred to as Parcel OT.

Operation

The proposed parking level floors would be located below the current groundwater table elevation and a few feet below the highest anticipated groundwater elevation. Thus, the subterranean portion of the structures will need to be designed and constructed as "water-tight" structures, able to resist anticipated hydrostatic uplift pressures. Alternatively, a continuously active dewatering system could be used to minimize water pressure around and beneath the structure. For the purposes of this analysis, it is assumed that the foundation and parking level retaining walls will be designed to resist hydrostatic pressures and subdrains (dewatering) will not be used during project operation. The structure foundation and the parking level retaining walls would therefore include water-stops in the joints, water-proof membranes and/or other measures to minimize moisture migration into the parking area. Prior to implementation of Mitigation Measure GEO-1, potential impacts involving groundwater during operation of the proposed project would be significant.

Soil Conditions

Parcel OT

A partial-subterranean parking level is proposed for the structure on Parcel OT; therefore, it would be necessary to remove as much as 14 feet of the upper material in parts of the site, to reach the proposed floor and foundation elevations. Deeper excavations may be proposed to remove the existing fill to its full depth either for environmental reasons or to provide more suitable foundation support. As mentioned in the Soil Conditions Section under Existing Conditions, above, artificial fill from the old landfill is present across the project site to depths of approximately 12 to 14 feet below existing grade.

Since the fill material is poorly compacted and contains significant amounts of debris and other foreign matter, it is not suitable in its current condition for supporting foundations or for use as compacted fill. All excavated fill material should be removed from the site. Additional excess "spoil" material may be generated during ground improvement procedures such as stone-column installation. It would likely be necessary to remove that excess material from the site as well. Since the upper materials (existing waste fill) are not suitable for use as engineered fill, imported material may be necessary if fill is needed for support of sidewalks, ramps, parking areas or other exterior minor structures or pavements. Although import of fill is not expected, prior to implementation of **Mitigation Measure GEO-2**, potential impacts involving development of the proposed project on unsuitable soils would be significant.

Parcel 21

The proposed structure on Parcel 21 would have a partial subterranean level parking facility. Significant amounts of debris, including large chunks of concrete, were encountered during drilling and during construction of the structure on Parcel 20, which is adjacent to the east. Extensive debris removal should therefore be anticipated during grading for Parcel 21. Temporary excavations up to five feet in depth are anticipated to be necessary for construction of the proposed subterranean parking level slab and pile cap system. The subterranean parking level is expected to be bottomed near the high groundwater level, and much of the soil within the building footprint is very loose and soft. Excavation bottoms at or below the groundwater level may not be firm and there may be a need to stabilize the excavation bottoms to provide a trafficable surface for pile driving and to construct the proposed pile caps and structural decks. Gravel was used to stabilize the excavation bottom during construction at Parcel 20. Prior to implementation of Mitigation Measure GEO-2, potential impacts involving development of the proposed project on unsuitable soils would be significant.

Fault Rupture and Seismic Shaking

Parcels OT and 21 are not located within a currently delineated California Geological Survey (CGS) Earthquake Fault Rupture Hazard ("Alquist-Priolo") Zone (Hart and Bryant, 1999). However, although no known active faults have been specifically identified beneath the sites and the potential for active fault rupture is considered to be very low, future fault rupture could occur at other locations. Additionally, the Parcels are not located within a known "earthquake fault zone," but they are located in a mapped seismic hazard zone (CDMG, 1999). Required conformance to the Uniform Building Code and County of Los Angeles Building Code requirements renders potential impacts related to fault rupture and seismic shaking less than significant.

Secondary Seismic Hazards

Both Parcels OT and 21 are located within a seismic hazard zone (CDMG, 1999) and are therefore subject to secondary seismic hazards, such as liquefaction, ground subsidence, and lateral spreading of the site soil, as well as seiche and tsunami. The effects of such secondary seismic induced hazards on the proposed development are considered potentially significant impacts, which are mitigable to less than significant with implementation of **Mitigation Measures GEO-3 and GEO-4**.

Liquefaction

As stated above, Parcels OT and 21 are located within a liquefaction hazard zone, as defined by the CDMG on the Venice Quadrangle Seismic Hazard Zones map dated March 1999. Development of the proposed project in a liquefaction hazard zone is considered a significant impact.

Parcel OT

The results of the investigation conducted by ESSC indicate significant amounts of soil liquefaction can be anticipated at the site. The results suggest that the potential for liquefaction is significantly greater in the southerly part of the site (liquefying layers ranging from seven to 48 feet below existing grade) than in the northerly part of the site. In the southerly part of the site, the results suggest that only soils between approximately 20 feet and 28 feet are likely to liquefy. That 20 to 28-foot liquefying layer appears to be continuous across both the southerly and northerly parts of the site. Prior to implementation of Mitigation Measure GEO-3, potential impacts involving development of the proposed project in a liquefaction hazard zone would be significant.

Parcel 21

The results of the investigation conducted by ESSC indicate significant potential for liquefaction within the upper site soils (from a depth of five feet to approximately 32 feet). The CPT data also suggest the potential for liquefaction of a few thin (one to three feet thick) layers of soil in various locations and depths between 32 and 52 feet below existing ground surface. Prior to implementation of Mitigation Measure GEO-3, potential impacts involving development of the proposed project in a liquefaction hazard zone would be significant.

Ground Subsidence and Ground Damage

As a result of their location on sites with liquefiable soils, Parcels OT and 21 are also subject to the effects of ground subsidence, which may result in ground damage in the event of a substantial seismic event. The development of the proposed project in an area subject to ground subsidence is a significant impact.

Parcel OT

Based on the anticipated liquefaction-induced ground subsidence to occur at the site (1.2 to 1.4 inches in the south side of the site to 3.3 to 5.3 inches in the northerly part of the site) in the event of nearby earthquake, the earthquake-related differential settlement in the south part of the site would range from approximately 3/4 of an inch to as much as 2.7 inches in the northerly part of the site. Alternatively, the differential settlement between the northerly and southerly ends of the proposed structure could be taken as the difference in the maximum anticipated settlement in each of those areas (5.3 inches minus 1.4 inches = 3.9 inches). Assuming a three-foot thick liquefied layer overlain by approximately eight feet of unliquefied soils, ground damage, such as sand boils and ruptures, could be anticipated if liquefaction occurs. Prior to implementation of Mitigation Measure GEO-3, potential impacts involving development of the proposed project in an area subject to ground subsidence would be significant.

Parcel 21

The liquefying soils beneath the site can be expected to experience volumetric strains of up to four percent. Estimates of the total seismically induced settlements range from 1.2 inches to 7.7 inches. Thus, without any ground improvement, earthquake-induced differential ground settlement across the site could be as great as the difference between these values, 6.5 inches. This site would be likely to experience some ground damage during a significant seismic event, such as fissures, vertical off-sets and sand boils. Prior to implementation of Mitigation Measure GEO-3, potential impacts involving development of the proposed project in an area subject to ground subsidence would be significant.

Lateral Spreading

Parcel OT

Several methods of analysis described above reveal that development on Parcel OT would be subject to the effects of lateral spreading, resulting in ground movement of up to seven feet during a significant seismic event. Such ground movement would likely induce some earth pressures against the proposed subsurface structures and cause distress to shallow or deep foundations. Prior to implementation of Mitigation Measure GEO-3, potential impacts involving development of the proposed project in an area subject to lateral spreading would be significant.

Parcel 21

According to ESSC's investigation, the Los Angeles County Department of Public (LACDPW) works completed a major upgrade of the existing quay wall in the late 1990's including 24-inch diameter piers installed at 10-foot spacing and anchored to the quay wall panels. According to design reports for the upgrade project, soil liquefaction and certain dynamic soil pressures were accounted for (GEI, 1996 and Kesner, 1999). However, according to subsequent communication with the LACDPW, the LACDPW determined that the quay wall, including upgrades, was not capable of withstanding anticipated loads due to laterally spreading soils. Therefore, all analyses of building foundations within the Panay Way peninsula cannot rely on containment of the existing soils within the existing quay wall system.

If the existing quay wall were to fail, the upper liquefied soils (to a depth of approximately 17 feet) and the overlying soil "crust" (unsaturated soil overlying liquefied soil) under Parcel 21 would be laterally unconfined and subject to lateral spreading. If such a scenario occurred, the soil would be expected to move or "spread" in a south-to-north direction, in the path of least resistance. The various methods for estimating the magnitude of the anticipated lateral ground displacement range from approximately two inches to as much as 11 feet. Nevertheless, the analyses indicate that some lateral spreading would be expected to occur to a degree likely to induce some earth pressures against the proposed subsurface

structures and distress to shallow or deep foundations. Prior to implementation of Mitigation Measure GEO-3, potential impacts involving development of the proposed project in an area subject to lateral spreading would be significant.

Seiches and Tsunamis

The Marina LUP specifies that finished pad and street elevations will be 20 and 10 feet above msl, respectively, in Marina del Rey, while the largest tsunami event is estimated to be 15.3 feet with a 500-year interval. In addition, the Marina del Rey Small Craft Harbor has sustained some minor damage in the past due to seiche and tsunami, because of special design standards embodied in the moles, docks, and breakwater. According to the Preliminary Geotechnical Reports prepared for Parcels OT and 21, seiches (surging water within the marina) and tsunamis (seismically induced ocean waves) could conceivably pose hazards at the sites.
However, as discussed in the Marina LUP, there are no known existing proposals that provide protection to physical structures from such events, although warning systems are in effect that allow persons the time to vacate the area. The Marina del Rey LUP also specifies as a future action the investigation of the feasibility of establishing a tsunami alert procedure. As such, **Mitigation Measure GEO-4** is recommended as the only feasible mitigation currently available to reduce the potentially significant hazards posed by seiche and tsunamis on the proposed project to less than significant. Additionally, the proposed project would adhere to Police and Fire Department-related requirements for emergency access and exit, which would aid evacuation under emergency situations.

4. Cumulative Impacts

Several related projects are proposed for development within the general study area encompassing the project site. Related projects, however, would require municipal government approvals of grading plans, design, and mitigation. Significant cumulative grading and geotechnical impacts resulting from the potentially concurrent construction of the related projects are not anticipated.

The proposed and related projects would be subject to potentially severe ground shaking during an earthquake. Assuming adherence to the building codes and other locally imposed plans, cumulative impacts would be reduced, but not eliminated. Related projects would not be exposed to a greater than normal seismic risk than other areas in Southern California. In addition, related projects would not compound the specific effects that could occur on the project site. Therefore, cumulative impacts are considered less than significant.

5. Mitigation Measures

There is a range of geologic conditions within the overall setting described above that could potentially lead to significant impacts should the proposed project be approved and implemented. These considerations are rendered less than significant by compliance with the final geotechnical design measures incorporated into project plans and adherence to existing regulations. Geotechnical reports prepared for the proposed project must be prepared in accordance with the requirements and recommendations of the LACDPW, the California Division of Mines and Geology, and the California Seismic Safety Board. They are also subject to the review and approval of the LACDPW. Compliance with existing local, County, State, and Federal laws, regulations, codes, and statutes applicable to the geology, soils, and seismicity conditions outlined in this document or found subsequent to this document's approval, will reduce the geotechnical hazards issues to a less than significant level.

However, for purposes of this analysis, mitigation measures based on the recommendations of the geotechnical reports prepared for the proposed project are provided below to specifically address

potential impacts associated with groundwater, soil conditions, secondary seismic hazards (ground subsidence, liquefaction, and lateral spreading), and seiche and tsunami hazards, which render the proposed project's potentially significant impacts related to geotechnical hazards to less than significant.

Groundwater

GEO-1 The applicant shall implement the geotechnical engineering recommendations related to groundwater of the geotechnical engineer and/or others, as well as conform to all subsequent conditions that are imposed on the project and are deemed appropriate and necessary during grading, construction, and/or operation of the proposed developments at Parcel OT and Parcel 21. A summary of these recommendations follows:

Parcel OT and Parcel 21

Excavation and Dewatering

Construction

- Open, unshored, excavations above the groundwater table may be cut vertically to a maximum depth of no more than four feet. Excavations extending between four and 15 feet deep (Parcel OT) or between four and 10feet (Parcel 21) shall be shored or sloped back from the base of the excavation to at least a one and one-half horizontal to 1 vertical (1.5H:1V) slope or flatter. If excavations dry out, sloughing will occur. No excavation shall be made within a 1:1 line projected outward from the toe of any existing footing or structure.
- During the time open (unshored) excavations are open, no heavy grading equipment or other surcharge loads (i.e. excavation spoils) shall be allowed within a horizontal distance from the top of any slope equal to the depth of the excavation (both distances measured from the top of the excavation slope).
- Adequate measures shall be taken to protect any structural foundations, pavements, or utilities adjacent to any excavations.
- Design and operation of any dewatering system shall be the responsibility of the contractor. However, ESSC suggests that a sheet-pile cutoff wall shall be used as a cutoff wall to minimize entry of groundwater into the temporary basement excavation. Alternatively, a soil-cement cutoff wall shall be used as the cutoff wall if it is also proposed as a mitigation measure for lateral spreading. Sumps, pumps, and or well points may also be necessary to remove groundwater from the basement excavation during construction. Sizing and operation of sumps and pumps or well points shall be the responsibility of the contractor.

Operation

- To minimize entry of moisture into the completed subterranean portions of the structures, a subdrain and backdrain system with sumps and sump pumps shall be utilized below the bottom floor slab and behind the retaining walls for the subterranean portions of the structure.

Soil Conditions

GEO-2 The applicant shall implement the geotechnical engineering recommendations related to soil condition improvement of the geotechnical engineer and/or others, as well as conform to all subsequent conditions that are imposed on the project and are deemed appropriate and necessary during grading, construction, and/or operation of the proposed developments at Parcel OT and Parcel 21. A summary of these recommendations follows:

Parcel OT

General Site Preparation

- As the existing fill material is not suitable for use in engineered fill at the site, all strippings and debris shall be removed from the site in order to preclude their incorporation in site fill or remedial excavation backfill. Depressions resulting from such removals shall have debris and loose soils removed and filled with suitable soils placed as recommended below.
- Soils beneath any proposed traffic-bearing pavement and any exterior non-traffic bearing concrete flatwork (sidewalks, patios, walkways etc.) shall be excavated a minimum of 24 inches below the existing grade or finished subgrade, whichever is lower. The remedial excavation shall extend a minimum lateral distance of at least two feet beyond pavement edges. The bottom of the remedial excavation shall then be scarified (ripped) six inches. Suitable imported soils shall be used to replace the excavated fill, if necessary. The imported material shall be moisture conditioned to near optimum moisture content and be uniformly compacted to at least 90 percent of maximum dry density using mechanical compaction equipment. Compaction shall be verified by testing. ***It shall be understood that the new fill beneath such pavements and slabs will still be supported on at least 10 feet of non-engineered old debris fill, and as such may be subject to distress and shorter service life.***
- If necessary, import soils shall be equal to, or better than, the on-site soils in strength, expansion, compressibility, and soil chemistry characteristics. In general, import material shall be free of organic matter and harmful substances, have 100 percent passing a two inch sieve, 60 percent to 100 percent passing a #4 sieve, no more than 20 percent passing a #200 sieve, an Expansion Index less than 20, a Liquid Limit less than 35, and a Plasticity Index less than 12. If they are to be utilized, import soils shall be evaluated prior to their use. Approval of import soils shall be given only after the material is on the project, either in-place, or stockpiled in adequate quantity to complete the project.
- Backfill around or adjacent to confined areas (i.e. interior utility trench excavations, etc.) shall be performed either with a lean sand/cement slurry (minimum two sacks of cement per cubic yard) or "flowable fill" material (a mixture of sand/cement/fly ash). The fluidity and lift placement thickness of any such material shall be controlled in order to prevent "floating" of any "submerged" structure.
- Roof drainage systems for the proposed structure shall be designed so that runoff water is diverted away from any structure.
- Final site grades shall be designed and constructed so that all water is diverted away from all structures and not allowed to pond on or near pavement. Drainage devices shall be constructed to divert drainage from the project site.

Slab-on-Grade Construction

- Any exterior building concrete slab-on-grade construction shall be supported by compacted soils. A minimum of four inches of compacted sand or gravel shall be placed over the finished compacted subgrade prior to placing concrete. This granular material shall be moisture conditioned to near optimum moisture content and uniformly compacted using mechanical compaction equipment.
- Reinforcement of slab-on-grade construction is contingent upon the structural engineer's recommendations and the Expansion Index of the supporting soils. Since the mixing of fill soils with native soils could change the Expansion Index, additional tests shall be conducted during rough grading to determine the expansion characteristics of the new subgrade soils. Structural mat and post-tensioned slabs shall be designed as outlined below. All exterior concrete slab-on-

grade construction shall be reinforced with at least #4 bars on 16-inch centers, each way. Reinforcement shall be placed at mid-depth of the slab. Additional reinforcement may be required once the final expansion potential of the subgrade soils is known. Actual reinforcement requirements will be dependent on the Expansion Index of the bearing soils, applicable sections of the governing building code, and requirements of the structural engineer.

- Cracks that develop in concrete slab-on-grade shall be filled and sealed prior to placing floor coverings. Frequent control joints shall be incorporated into the slab construction, particularly in the areas of re-entrant corners, to help control cracking.
- In areas of moisture sensitive floor coverings, an appropriate vapor retarder shall be installed in order to minimize vapor transmission from the subgrade soil to the slab. The vapor retarder shall be centered within the four-inch thick sand layer. The vapor retarder shall be evaluated for holes and/or punctures, and the edges overlapped and taped, prior to placement of sand. Any holes or punctures observed shall be properly repaired. The retarder shall be covered with two inches of sand to help protect it during construction. The sand shall be lightly moistened and densified just prior to placing the concrete.
- Relatively impervious floor coverings (i.e. vinyl, linoleum, etc.) that cover concrete slab-on-grade may block the passage of moisture vapor through the concrete slab, which could result in damage to the floor covering. After the concrete slab has sufficiently cured, the concrete slab surface shall be sealed with a commercial sealant prior to placing the floor covering. The compatibility, and recommendations for placing of the concrete sealer, mastic, and floor covering shall be verified by the floor covering manufacturer prior to sealing the concrete or placing of the floor covering.
- The proposed exterior perimeter slabs (sidewalks, patios, walkways, etc.) shall be designed to be relatively independent of foundation stems (free-floating) to help mitigate cracking due to foundation settlement and/or expansion.
- Subgrade soils for all concrete flatwork shall be moisture conditioned to near optimum moisture content within 24 hours prior to placement of concrete. Measures shall be taken to maintain optimum moisture until concrete is placed. Actual depths of pre-moistening shall be dependent upon the actual Expansion Index of the subgrade soils.

Parcel 21

General Site Preparation

- Much of the soil within the building footprints is very loose and soft, and the foundation excavations are expected to penetrate to a depth near or below the groundwater table elevation. Therefore, to provide a firm working surface for pile driving and construction of the pile caps and structural deck, a layer of gravel, at least one-foot thick, shall be placed at the base of the excavation for each building footprint.
- Soils beneath any proposed traffic-bearing flexible pavement and non-traffic-bearing flatwork (sidewalks, walkways, patios, etc.) outside the building footprints, shall be excavated a minimum of 24 inches below the existing grade or finished subgrade, whichever is lower. These remedial excavations shall extend a minimum lateral distance of at least two feet beyond the pavement edges. The bottom of the remedial excavation shall then be scarified (ripped) six inches. The scarified and excavated soils shall be moisture conditioned to near optimum moisture content and be uniformly compacted to at least 90 percent of maximum dry density using mechanical compaction equipment. Compaction shall be verified by testing. The purpose of this recommendation is to provide minimum subgrade support to attain minimum life for the proposed pavements and flatwork. ***It shall be understood that, the entire site is underlain by at least 17 feet of poorly compacted uncertified fill and the proposed pavements and flatwork may***

experience settlement and other distress sooner and to a greater degree than pavements and flatwork supported by a full depth of structural fill.

- If used, any import soils shall be equal to, or better than, the on-site soils in strength, expansion, compressibility, and soil chemistry characteristics. In general, import material shall be free of organic matter and harmful substances, have no more than 20 percent passing a #200 sieve, and an Expansion Index less than 20. Import soils shall be evaluated prior to their use, but will not be prequalified by the geotechnical consultant. Approval of import soils shall be given only after the material is on the project, either in-place, or stockpiled in adequate quantity to complete the project.
- Backfill around or adjacent to confined areas (i.e. interior utility trench excavations, etc.) shall be performed with a lean sand/cement slurry (minimum two sacks of cement per cubic yard) or "flowable fill" material (a mixture of sand/cement/fly ash). The fluidity and lift placement thickness of any such material shall be controlled in order to prevent "floating" of any "submerged" structure.
- Roof drainage systems for the proposed structures shall be designed so that runoff water is diverted away from any structure.
- Final site grades shall be designed and constructed so that all water is diverted away from all structures and not allowed to pond on or near pavement. Drainage devices shall be constructed to divert drainage from the project site.

Temporary Shoring

- The proposed partial subterranean parking level excavation will be approximately five to seven feet deep and may be adjacent to at least one property line. Temporary shoring may be necessary to support the excavation during construction. The shoring shall consist of temporary sheet pile or steel panels, a soldier pile and lagging type system, or similar temporary shoring system. The shoring shall be cantilevered.
- Cantilevered, shoring shall be designed to resist active lateral earth pressures of 40Z pounds per square foot (psf) per foot of depth, where Z = Depth (in feet) measured below the top of the retained ground surface behind the shoring. This value is based on level ground behind the shoring.
- The lateral earth pressure to be resisted by retaining shall be increased to allow for surcharge loads. The surcharge considered shall include the loads from any other structures or vehicle traffic within a distance at least equal to the height of the shoring. This includes the surcharge from the weight of the existing south property-line wall if this wall is to be preserved in place. Surcharge effects for cantilevered shoring shall be computed assuming active earth pressure conditions using a pressure coefficient of 0.4.
- Lateral resistance for temporary shoring sheet piles or soldier piles founded in native site soils shall be assumed to be provided by passive pressure below the bottom of the excavation. As discussed above, the excavation depth is expected to be approximately seven feet below the existing ground surface. The passive pressure for temporary sheet piles or soldier piles may be taken as 250D pounds per square foot (psf) per foot of depth for unsaturated soils, where D = Depth (in feet) measured below the bottom of the excavation. For saturated soils below the water table, passive pressure of 135 psf per foot of soil may be used. This resisting pressure is an ultimate value. An appropriate factor of safety shall be used for design calculations (minimum of 1.5 recommended). The effective width of soldier piles for passive pressure calculations shall be taken as up to three times the actual pile width.
- If soldier piles are used, exposed soils between soldier piles shall be supported by lagging and backfilled or supported through the use of reinforced gunite designed to prevent soil movement.

All timber lagging to be left in the ground shall be pressure treated in accordance with Standard Specifications for Public Works Construction, Section 204-2.

Secondary Seismic Hazards: Liquefaction, Ground Subsidence, Lateral Spreading, and Seiche and Tsunamis Hazards

GEO-3 The applicant shall implement the geotechnical engineering recommendations related to secondary seismic hazards (liquefaction, ground subsidence, and lateral spreading) of the geotechnical engineer and/or others, as well as conform to all subsequent conditions that are imposed on the project and are deemed appropriate and necessary during grading, construction, and/or operation of the proposed developments at Parcel OT and Parcel 21. A summary of these recommendations follows:

Parcel OT

Soil Improvement

- There are a variety of methods that can be used for soil improvement to minimize liquefaction potential. For this site, the ESSC recommends: a) a combination of a soil-cement cutoff wall around most or all of the site perimeter and stone columns for soil densification and excess pore water pressure relief, or b) a cellular pattern of soil-cement cutoff walls to both mitigate the lateral spreading issue and to provide support for a mat-type foundation system.
- It should be understood that if it is intended to leave some of the existing fill in place, soil improvement of that type of debris-filled irregular material may be difficult and may not result in adequate support for a mat foundation. Consideration shall be given to doing complete removal of the existing fill and replacement to the proposed mat foundation elevation with imported granular engineered fill.
- At a minimum, a soil-cement cutoff wall shall be installed along the easterly site boundary (adjacent to the lagoon) to mitigate the potential for lateral spreading. The cutoff wall shall be at least 30 feet deep to fully contain the soils with potential for lateral movement. Soil-cement cutoff walls shall also be installed around the remaining portions of the site perimeter for temporary excavation support and groundwater control. Additionally, if stone columns are not used, some soil-cement cutoff walls are recommended in the interior of the building footprint for form a “cellular” pattern for soil containment and support of a mat foundation.
- Soil-cement cutoff walls shall consist of overlapping “cylinders” of soil mixed in place at depth with Portland cement or other suitable cemetitious materials. The specific soil cement mix design shall be provided by a qualified ground improvement contractor under the review of the project geotechnical engineer.
- Stone columns shall be installed on a grid pattern to cover the building footprint plus at least 10 feet laterally beyond the building footprint. The exact spacing and depth of the stone columns is dependent on the amount of liquefying soil in a given part of the site.
- As a preliminary estimate for the south part of the site, stone columns shall be spaced at no further than eight feet on center and should be at least 50 feet deep (below existing grade) to intersect all potentially liquefiable soil. In the northerly side of the site, stone columns shall be at least 30 feet deep to intersect the deepest liquefying layer in that area.
- Stone columns shall be at least 18 inches in diameter and shall consist of relatively clean gravel placed in a “column” by means of a crane-mounted vibrator.
- Wick drains (if used) shall be used to relieve excess pore pressure during stone-column installation and maximize ground densification. Wick drains shall consist of a geosynthetic drain

material typically about four inches wide corrugated plastic with a filter fabric wrapping. Wick drains shall be installed to the same depth as the adjacent stone columns and are typically installed by hydraulic push methods.

- Deep soil mixed soil-cement cutoff walls, stone columns, and wick drains (if used) shall be installed by a qualified ground improvement contractor with experience in Southern California. The ground improvement contractor shall be consulted for more specific estimates of the stone column specifications and for special limitations of the ground improvement methods.
- Confirmation testing shall be required to verify that the ground improvement has achieved the minimum soil densities and strengths necessary to adequately reduce the liquefaction potential. At least 10 CPT soundings and five soil borings with SPT samples shall be performed after installation of the stone columns (and wick drains if used) to demonstrate the "post ground improvement" soil density. ESSC recommends the following tentative criteria to demonstrate adequate densification: corrected SPT blow counts (N_{160cs}) shall exceed 30 blows per foot, and CPT tip resistance (Q_{1CN}) shall exceed 160 tons per square foot (tsf) in all of the soils below the proposed building foundation that do not meet the "Chinese criteria' (clay content <15 percent or CPT Ic parameter <2.5).
- An indicator program of soil-cement cutoff walls and stone columns is recommended at the beginning of the project (prior to full "production" of soil-cement and stone columns) to verify their effectiveness. For the indicator program, a soil-cement cutoff wall at least five feet wide by at least 20 feet long should be installed. Indicator stone columns should be installed in a 100 square foot area in the northerly part of the site and a 100 square foot area in the southerly part of the site. At least two borings with SPT samples and at least two CPT soundings should be completed in each of the two test areas to verify the effectiveness of the soil densification. Once the indicator program is complete, the ground improvement program can be finalized.

Mat Foundations

Due to the soft, variable nature of the site soils and the potential for seismic-induced ground movement, a structural mat foundation is recommended for the building foundation. The proposed soil improvement will reduce but not eliminate all potential variability in ground support for building foundations. ESSC recommends that any building or structure constructed on this site be designed to at least the minimum standards for Seismic Zone 4, as designated by the 2001 edition of the California Building Code (CBC).

- The mat shall be either conventionally reinforced or consist of a post-tensioned slab system. Specific criteria for post-tensioned slab design shall be provided by the project geotechnical engineer if a post-tensioned system is selected.
- The mat foundation for the proposed structure shall be supported by improved ground.
- An allowable "net" bearing capacity of 1,500 pounds per square foot (psf) shall be utilized for dead and sustained live loads for design of the mat foundation. This value is a "net" value that includes the compensation for soil removal assuming a minimum five-foot deep parking basement. This value shall be increased by 1/3 when considering transient loads such as earthquake or wind forces.
- The mat slab shall be at least six inches thick and shall include a perimeter beam extending a minimum of 24 inches below finished adjacent grade. The actual depth, width, and reinforcement requirements for the mat foundation depend on the Expansion Index of the bearing soils and shall be specified by the structural engineer.
- The mat foundation shall be designed to accommodate differential movement of up to 1.5 inches in a 30-foot span (1:240 distortion ratio).

- Resistance to lateral loading may be provided by friction acting along the mat foundation base. A coefficient of friction of 0.35 shall be used for concrete foundations on site soils that have been "improved." This value includes a safety factor of 1.5.
- Additional resistance to lateral loading may be provided by passive earth pressure acting against the sides of foundations or grade beams. Based on the presence of "improved" soils around the perimeter of the proposed building, the passive pressure is estimated to be 350 Z PSF, where Z = Depth (in feet) below the finished ground elevation. In passive pressure calculations, the upper one-foot of soil shall be subtracted from the depth, Z, unless confined by pavement or slab. The resisting pressure provided is an ultimate value. An appropriate factor of safety shall be used for design calculations (minimum of 1.5 recommended).
- The excavation for the mat foundation shall be cleaned of all loose or unsuitable soils and debris prior to placement of concrete. Soil generated from the foundation excavations shall not be placed below the mat slab unless properly moisture conditioned and compacted.

Building Foundation Piles

- Building foundation piles, if used, shall consist of precast, prestressed reinforced concrete driven piles. The piles may be round or square in cross-section. It is anticipated that piles would need to be at least 24-inches in diameter or square dimension.
- Building piles shall be embedded a minimum of 15-feet into dense sand (minimum tip depth of at least 60 ft below exist grade in the southerly part of the site). The actual total pile length and embedment may vary depending upon the requirements of the structural engineer and the results of the pile driving analysis (ie. evaluation of pile driving blow counts).
- In general, the pile driving criteria provided by the Engineering News Record (ENR) formula (Public Works, 2000) shall be satisfied for the last one foot of pile driving. If the required driving resistance is not achieved at the design depth, the pile may be allowed to "set" overnight and then driven an additional foot. If the required driving resistance is still not achieved, the pile may be lengthened or additional piles may be installed in accordance with the recommendations of the geotechnical and structural engineers.
- The axial load carrying capacities of the foundation piles will depend on the final pile size and embedment depth selected. Deeper exploration of the site and further analysis of pile capacities would be necessary to provide allowable pile capacities. Preliminarily, skin friction for piles embedded below the lowest liquefying layer may be assumed to be approximately 0.9 tons per square foot (tsf). Down-drag forces of at least 0.5 tsf must be applied to all portions of the piles above the lowest liquefying soil layer.
- The lateral load carrying capacity of foundation piles will be a function of the depth of liquefying soil at each pile location and the anticipated depth of lateral soil movement due to lateral spreading. Resistance to lateral movement can be provided by passive soil pressure below the lowest liquefying soil layer. Passive pressure may be taken as 500 pounds per square foot per foot of depth in firm soil below the liquefying layers. Driving lateral earth pressures must be applied to the portions of the piles within the depths where lateral spreading is anticipated. Specific lateral pile capacity calculations can be provided if pile foundations are selected for the project.
- The design mix for the concrete to be used in the pile construction shall be established and approved by the structural engineer prior to the time of construction. Concrete compression tests shall be performed during pile casting in accordance with applicable codes or requirements of the structural engineer. Inspection by qualified personnel shall be provided during the pile casing and/or reinforcement placing and tensioning.

- An indicator pile program shall be conducted for both proposed buildings prior to installation of the building foundation piles. The indicator pile program shall include a minimum of 10piles. The indicator piles shall have the same cross-section and consist of the same construction as the piles selected for the building foundation and may be used as final building foundation piles ("production piles"). The indicator piles shall be located at points distributed approximately uniformly across the two building footprints. The indicator piles shall be a minimum of 60 feet in length (as delivered to the site) and shall be driven to a minimum embedment of 15 feet into the dense sand below the lowest liquefying soil layer.
- At least the first indicator pile shall be driven with no pre-boring. Pre-boring up to 3/4 of pile cross sectional area will be permitted for subsequent piles if necessary to achieve minimum embedment depth. The axial pile capacity for the last two feet of driving must be calculated based on blow counts to at least the required axial design load for the pile.
- The geotechnical engineers, or their representatives, shall be present during the installation of all pile foundations. This is to observe pile driving conditions and help identify variations in soil conditions that may require additional evaluation of the foundation criteria in this report.
- Piles in groups or rows shall be driven alternately before driving an adjacent pile.
- Driven piles shall not be more than two percent from the plumb position.

Retaining Walls

- The following lateral earth pressures shall be used in the design of the proposed basement (partial subterranean parking level) retaining walls, or similar structures at the site:

	Equivalent Fluid Earth Pressures (pcf)[5]	
	Driving (Active) Earth Pressure[1]	**Resisting (Passive) Earth Pressure[3]**
Well drained, level backfill soil	35	400[4]
Well drained soil, 2H:1V slope backfill	48	-
At-rest (restrained) wall, level backfill soil	53[2]	-

[1] Equivalent fluid pressure (psf) per foot of soil height.
[2] For purposes of design, a wall is considered restrained if it is prevented from movement greater than 0.002H (H = height of wall in feet) at the top of the wall. Basement walls such as the walls of the proposed partial subterranean parking level are typically considered restrained walls.
[3] Hydrostatic pressures should be added to the buoyant earth pressures for soils below the highest anticipated water table.
[4] The upper one foot of soil should be neglected for passive pressure calculations unless confined by pavement or slab.
[5] The pressures recommended above were based on the assumption that select granular material will be used as wall backfill and will be compacted to approximately 90 percent of maximum dry density. The resisting pressure provided is an ultimate value. An appropriate factor of safety shall be used for design calculations (minimum of 1.5 recommended).

- The basement (partial subterranean parking level) retaining walls shall be supported by the structural mat foundation as recommended herein.
- The lateral earth pressure to be resisted by retaining shall be increased to allow for surcharge loads. The surcharge considered shall include the loads from any structures or vehicle traffic within a distance approximately equal to the height of the retaining wall.
- Backfill immediately behind any retaining structure shall be a free-draining granular material. Comments on the characteristics of import soils shall be given by the geotechnical consultant

after the material is on the project, either in place, or stockpiled in adequate quantities to complete the project.

- Backfill behind retaining walls shall be with soils that have been properly moisture conditioned to approximately optimum moisture content and uniformly compacted to at least 90 percent of maximum dry density as determined by ASTM D 1557 test procedures using mechanical compaction equipment. To aid in the compaction operation, retaining wall backfill shall be placed in lifts not exceeding six inches compacted thickness.
- Compaction within the area of a 1H:1V slope from the bottom of wall excavations shall be performed by hand operated compaction equipment, intended to reduce potential "locked-in" lateral pressures caused by compaction with heavy grading equipment.
- Backdrains or an equivalent system of backfill drainage shall be incorporated into the retaining wall design unless the walls are designed to resist full hydrostatic pressure and properly waterproofed. Waterproofing of retaining walls shall be provided to help reduce the potential for efflorescent formation.
- The final grade shall be such that all water is diverted away from the retaining wall's foundation or backfill.

Parcel 21

Foundation Piles

- Building foundation piles shall consist of precast, prestressed reinforced concrete driven piles. The piles may be round or square in cross-section. Recommendations are provided herein primarily for 24-inch square piles.
- Building piles shall be embedded a minimum of 13-ft. into dense sand (minimum tip depth of approximately 45 ft. below existing grade). The actual total pile length and embedment may vary depending upon the requirements of the structural engineer and the results of the pile driving analysis (ie. evaluation of pile driving blow counts).
- In general, the pile driving criteria provided by the Engineering News Record (ENR) formula (Public Works, 2006) shall be satisfied for the last one foot of pile driving. If the required driving resistance is not achieved at the design depth, the pile may be allowed to “set” overnight and then driven an additional foot. If the required driving resistance is still not achieved, additional piles shall be installed in accordance with the recommendations of the geotechnical and structural engineers.
- The axial load carrying capacities of the foundation piles shall be determined based on the final pile size and embedment depth selected.
- The lateral load carrying capacities of the foundation piles shall be determined based on the final pile size and embedment depth selected.
- The design mix for the concrete to be used in the pile construction shall be established and approved by the structural engineer prior to the time of construction. Concrete compression tests shall be performed during pile casting in accordance with applicable codes or requirements of the structural engineer. Inspection by qualified personnel shall be provided during the pile casing and/or reinforcement placing and tensioning.
- An indicator pile program shall be conducted for the proposed building prior to the remainder of the building foundation piles. The indicator pile program shall include a minimum of six piles within each of the two building footprints. The indicator piles shall have the same cross-section and consist of the same construction as the piles selected for the building foundation and may be used as final building foundation piles (“production piles”). The indicator piles shall be located at

points distributed approximately uniformly across the building footprints, except that at least one set of indicator piles shall be driven as a group of three to evaluate pile group installation. The indicator piles shall be 45 to 50 feet in length (as delivered to the site) and shall be driven to a minimum embedment of 15 feet into the dense sand (at least 15 feet below the 32-foot depth from existing grade). The indicator piles shall be driven using the same hammer that will be used for production pile installation.

- At least the first indicator pile shall be driven with no pre-boring. Pre-boring up to 3/4 of pile cross sectional area shall be permitted for subsequent piles if necessary to achieve minimum embedment depth. The axial pile capacity for the last foot of driving shall be calculated based on blow counts to at least the required axial design load for the pile.
- The geotechnical engineers, or their representatives, shall be present during the installation of all pile foundations. This is to observe pile driving conditions and help identify variations in soil conditions that may require additional evaluation of the foundation criteria in this report.
- Piles in groups or rows shall be driven alternately before driving an adjacent pile.
- Driven piles shall not be more than two percent from the plumb position.

Retaining Walls

- The walls of the subterranean portion of the proposed building shall be supported by the structural deck and building piles. Any retaining walls proposed for the project that are not structurally supported by the piles shall be supported by existing uncertified fill soils at the site and thus may experience some degree of settlement and other distress.
- Lateral earth pressures for subterranean walls at the subject site include normal "static" pressures and earth pressures resulting from earthquakes and laterally spreading soils. The following "static" lateral earth pressures shall be used in the design of the proposed subterranean building walls and any other retaining walls that may be proposed at the site (earth pressures resulting from laterally spreading soils are discussed elsewhere in this report):

	Equivalent Fluid Earth Pressures (pcf)[1] Well Drained Backfill (above water table)[2]
Level backfill soil	40[4]
2H:1V slope backfill	55
At-rest[3] (restrained) wall, level backfill soil	64

[1] Equivalent fluid pressure (psf) per foot of soil height.
[2] Hydrostatic pressures should be added to the buoyant earth pressures for soils below the water table.
[3] For purposes of design, a wall is considered restrained if it is prevented from movement greater than 0.002H (H = height of wall in feet) at the top of the wall. The walls of the subterranean portions of the proposed structure may be considered restrained walls.
[4] The pressures recommended were based on the assumption that the on-site soils will be used for wall backfill and will be compacted to approximately 90% of maximum dry density. The use of select granular fill may reduce the recommended driving earth pressure. The resisting pressure provided is an ultimate value. An appropriate factor of safety should be used for design calculations (minimum of 1.5 recommended).

- For walls founded in soil rather than supported by the pile foundation system, resistance to lateral loading shall be provided by passive pressure of soil in front of the wall and by friction acting along the foundation base.

- For retaining walls founded in soil, passive pressures of 270 psf per foot of soil in front of the wall shall be used for unsaturated soils. For saturated soils below the water table, passive pressure of 135 psf per foot of soil may be used. The upper one-foot of soil shall be neglected for passive pressure calculations unless confined by pavement or slab.
- A coefficient of friction of 0.3 shall be used in designing concrete retaining wall foundations in site soils recompacted to approximately 90 percent of maximum dry density as determined by ASTM D 1557 test procedures, and shall be used with dead loads. This value includes a safety factor of 1.5. This value used for design may be increased by 1/3 when transient loads (such as wind and seismic forces) are considered.
- The lateral earth pressure to be resisted by retaining shall be increased to allow for surcharge loads. The surcharge considered shall include the loads from any structures or vehicle traffic within a distance approximately equal to the height of the retaining wall.
- Backfill immediately behind any retaining structure shall be a free-draining granular material. Comments on the characteristics of import soils shall be given by the geotechnical consultant after the material is on the project, either in place, or stockpiled in adequate quantities to complete the project.
- Backfill behind retaining walls shall be with soils that have been properly moisture conditioned to approximately optimum moisture content and uniformly compacted to at least 90 percent of maximum dry density as determined by ASTM D 1557 test procedures using mechanical compaction equipment. To aid in the compaction operation, retaining wall backfill shall be placed in lifts not exceeding six inches compacted thickness.
- Compaction within the area of a 1H:1V slope from the bottom of wall excavations shall be performed by hand operated compaction equipment. This is intended to reduce potential "locked-in" lateral pressures caused by compaction with heavy grading equipment.
- Back-drains, or an equivalent system of backfill drainage shall be incorporated into the retaining wall design. Proper back-drainage will minimize the potential for hydrostatic pressures behind retaining walls. In addition to back-drains, waterproofing of retaining walls is recommended to minimize moisture migration through the walls and to help reduce the potential for efflorescent formation.
- The final grade shall be such that all water is diverted away from the retaining wall's foundation or backfill.

Seiches and Tsunamis

Parcels OT and 21

GEO-4 The applicant shall prepare emergency evacuation plans for both Parcel OT and Parcel 21, subject to the review and approval of the Los Angeles County Fire Department.

6. Significant Project Impacts After Mitigation

With implementation of the mitigation measures identified above, as well as required compliance with existing County, State, and Federal laws, regulations, codes, and statutes applicable to the geology, soils, and seismicity conditions outlined in this document or found subsequent to this document's approval, the proposed project's potentially significant geotechnical hazard issues would be reduced to a less than significant level.

B. NOISE

1. Existing Conditions

Background

Sound is mechanical energy transmitted by pressure waves in a compressible medium such as air. Noise is generally defined as unwanted sound. Sound is characterized by various parameters, which describe the rate of oscillation of sound waves, the distance between successive troughs or crests, the speed of propagation, and the pressure level or energy content of a given sound wave. In particular, the sound pressure level has become the most common descriptor used to characterize the loudness of an ambient sound level. The unit of sound pressure expressed as a ratio to the faintest sound detectable by a keen human ear is called a decibel (dB).

Since sound or noise can vary in intensity by over one million times within the range of human hearing, a logarithmic loudness scale similar to the Richter scale used for earthquake magnitude is used to keep sound intensity numbers at a convenient and manageable level. Since the human ear is not equally sensitive to all sound frequencies within the entire spectrum, noise levels at maximum human sensitivity are factored more heavily into sound descriptions in a process called "A-weighting," written as dB(A). Any further reference to decibels in this report written as "dB" should be understood to be A-weighted values.

Decibel levels associated with sound decrease as the distance from the source increases. Sound dissipates exponentially with distance from the noise source. For a point source such as mechanical equipment, sound levels decrease approximately six dB per doubling of distance from the source. For a line source noise such as traffic, the sound typically decreases three decibels for each doubling of distance. If the site is primarily vegetative which absorbs sound, the rate of dissipation for a line source is four and one-half decibels for each doubling of distance.

Time variations in noise exposure are typically expressed in terms of a steady-state energy level equal to the energy content of the time varying period (called Leq), or, alternately, as a statistical description of the sound pressure level that is exceeded over some fraction of a given observation period. Finally, because community receptors are more sensitive to unwanted noise intrusion during the evening and at night, State law requires that, for planning purposes, an artificial dB increment be added to quiet time noise levels in a 24-hour noise descriptor called the Community Noise Equivalent Level (CNEL) or Day-Night Noise Level (Ldn). CNEL and Ldn apply a penalty to noise that occurs at night. CNEL is calculated by adding a five-decibel penalty to sound levels in the evening (7:00 p.m. to 10:00 p.m.), and a ten-decibel penalty to sound levels in the night (10:00 p.m. to 7:00 a.m.) to compensate for the increased sensitivity to noise during the quieter evening and nighttime hours.

California state law requires that development planning use CNEL as the appropriate noise/land use compatibility criterion. CNEL's are used mainly to make land use decisions regarding noise exposure for those noise sources pre-empted from local control such as motor vehicles, airplanes, trains, etc. In contrast to noise performance standards governing sources amenable to local control, CNEL levels are therefore more reactive to the noise environment rather than being proactive noise control standards.

Planning Standards

The State of California has established guidelines for acceptable community noise levels, which are based upon the CNEL rating scale to insure that noise exposure is considered in any development, as shown in

Table IV.B-1. CNEL-based standards apply to noise sources whose noise generations are preempted from local control (such as from on-road vehicles, trains, airplanes, etc.) and are used to make land use decisions as to the suitability of a given site for its intended use. These CNEL-based standards are typically articulated in the Noise Element of the General Plan. Local jurisdictions generally regulate the level of non-transportation noise that one use may impose upon another through a Noise Ordinance, which is typically found in the jurisdiction's Code of Regulations.

Table IV.B-1
California Land Use Compatibility Guidelines for Exterior Community Noise

Land Use	Community Noise Exposure CNEL, dB			
	Normally Acceptable[1]	Conditionally Acceptable[2]	Normally Unacceptable[3]	Clearly Unacceptable[4]
Single Family, Duplex, Mobile Homes	50-60	55-70	70-75	Above 75
Multi-Family Homes	50-65	60-70	70-75	Above 75
Schools, Libraries, Churches, Hospitals, Nursing Homes	50-70	60-70	70-80	Above 80
Transient Lodging: Motels, Hotels	50-65	60-70	70-80	Above 80
Auditoriums, Concert Halls, Amphitheaters	-	50-70	-	Above 65
Sports Arena, Outdoor Spectator Sports	-	50-75	-	Above 70
Playgrounds, Neighborhood Parks	50-70	-	67-75	Above 75
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50-75	-	70-80	Above 80
Office Buildings, Business and Professional Commercial	50-70	67-77	Above 75	-
Industrial, Manufacturing, Utilities, Agriculture	50-75	70-80	Above 75	-

Source: State of California Governor's Office of Planning and Research, General Plan Guidelines, 1990.
[1] Normally Acceptable: Specified land use is satisfactory based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
[2] Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
[3] Normally Unacceptable: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
[4] Clearly Unacceptable: New construction or development should generally not be undertaken.

Since the Los Angeles County Noise Element does not specifically call out CNEL-based standards, the State standards, which are typical of most jurisdictions, were used as a guideline. State standards allow 77 dBA CNEL for commercial use, such as the proposed uses for Parcel 21. Standards also allow 70 dBA CNEL for residential multi-family homes use, which can be applied to the proposed Parcel OT active seniors accommodations, provided exterior noise levels have been substantially mitigated through reasonable application of the best available noise reduction technology. Los Angeles County, as a matter of policy, requires exterior noise to be mitigated to 65 dB CNEL in usable outdoor space, such as yards, patios, balconies, decks, etc. Interior noise exposure may not exceed 45 dBA CNEL with windows and doors closed. Requiring that windows and doors remain closed to achieve an acceptable interior noise level will typically necessitate the use of air conditioning and/or mechanical ventilation.

Noise Ordinance Standards

For stationary noise sources located proximate to residential uses, Los Angeles County has adopted a detailed Noise Ordinance. Noise from one land use crossing the property line of an adjacent property is regulated by Section 12.08.390 of the Los Angeles County Code. These standards are expressed in terms of a mean (50th percentile) noise level, which is the noise level allowed for up to 30 minutes. Some short-term noise levels may exceed the 50th percentile standard, up to a maximum of 20 dB above the allowable mean.

The Los Angeles County Noise Ordinance allowable exterior noise levels for various land uses are shown in **Table IV.B-2**. An average noise level of 50 dBA (50th percentile, or "L_{50}") by day and 45 dBA L_{50} for residential areas at night is the standard applicable at the nearest existing homes or planned on-site residences. However, when these noise levels are already exceeded by ambient noise levels, then the ambient level becomes the standard. The ordinance also establishes the maximum allowable noise exposure for all land uses. In residential areas, daytime noise exposure is not to exceed 70 dBA for any period of time, and nighttime noise exposure is not to exceed 65 dBA for any period of time.

Table IV.B-2
Los Angeles County Noise Standards

Noise Zone	Land Use (Receptor Property)	Time Intervals	Exterior Noise Level (dB) for Standard Number				
			1 (L_{50})[1]	2 (L_{25})[2]	3 ($L_{8.3}$)[3]	4 ($L_{1.7}$)[4]	5 (L_0)[5]
I	Noise-Sensitive Area	Anytime	45	50	55	60	65
II	Residential Properties	10:00 p.m. to 7:00 a.m. (nighttime)	45	50	55	60	65
		7:00 a.m. to 10:00 p.m. (daytime)	50	55	60	65	70
III	Commercial Properties	10:00 p.m. to 7:00 a.m. (nighttime)	55	60	65	70	75
		7:00 a.m. to 10:00 p.m. (daytime)	60	65	70	75	80
IV	Industrial Properties	Anytime	70	75	80	85	90

Source: Los Angeles County Noise Ordinance, Exterior Noise Standards, Chapter 28.08, Part 3, Section 12.08.390.
[1]Los Angeles County Noise Standard No. 1, L_{50}: Noise levels that may not be exceeded for a cumulative period of more than 30 minutes in any hour. If the ambient L_{50} exceeds the levels listed above, then the ambient L_{50} becomes the exterior noise level for Standard No. 1.
[2]Los Angeles County Noise Standard No. 2, L_{25}: Noise levels that may not be exceeded for a cumulative period of more than 15 minutes in any hour. If the ambient L_{25} exceeds the levels listed above, then the ambient L_{25} becomes the exterior noise level for Standard No. 2.
[3]Los Angeles County Noise Standard No. 3, $L_{8.3}$: Noise levels that may not be exceeded for a cumulative period of more than 5 minutes in any hour. If the ambient $L_{8.3}$ exceeds the levels listed above, then the ambient $L_{8.3}$ becomes the exterior noise level for Standard No. 3.
[4]Los Angeles County Noise Standard No. 4, $L_{1.7}$: Noise levels that may not be exceeded for a cumulative period of more than 1 minute in any hour. If the ambient $L_{1.7}$ exceeds the levels listed above, then the ambient $L_{1.7}$ becomes the exterior noise level for Standard No. 4.
[5]Los Angeles County Noise Standard No. 5, L_0: Noise levels that may not be exceeded for any period of time. If the ambient L_0 exceeds the levels listed above, then the ambient L_0 becomes the exterior noise level for Standard No. 5.

Construction Noise

The Los Angeles County Noise Ordinance restricts and regulates hours of construction operation and levels of construction noise. In Exterior Noise Standards, Chapter 28.08, Part 4, Specific Noise Restrictions, Section 12.08.440, construction noise is restricted from 7:00 p.m. to 7:00 a.m. weekdays and at any time on Sundays or holidays when it creates a noise disturbance across a residential or commercial property line. Section 12.08.440 B regulates construction activity noise levels.

As stated in Section 12.08.440 B, for noise restrictions at affected residential structures, the contractor is to conduct construction activities in such a manner that the maximum noise levels at the affected buildings will not exceed those listed in **Table IV.B-3** and **Table IV.B-4**.

Table IV.B-3
Maximum Noise Levels from Non-scheduled, Intermittent, and Short-term Operation (less than 10 days) of Mobile Equipment Near Affected Residential Structures

	Single-family Residential (dBA)	Multi-family Residential (dBA)	Semi-residential/ Commercial (dBA)
Daily, except Sundays and legal holidays, 7:00 a.m. to 8:00 p.m.	75	80	85
Daily, 8:00 p.m. to 7:00 a.m. and all day Sunday and legal holidays	60	65	70

Table IV.B-4
Maximum Noise Levels for Repetitively Scheduled and Relatively Long-term Operation (period of 10 days or more) of Stationary Equipment

	Single-family Residential (dBA)	Multi-family Residential (dBA)	Semi-residential/ Commercial (dBA)
Daily, except Sundays and legal holidays, 7:00 a.m. to 8:00 p.m.	60	65	70
Daily, 8:00 p.m. to 7:00 a.m. and all day Sunday and legal holidays.	50	55	60

For business structures, Section 12.08.440 B states that for noise restrictions at affected buildings, the contractor is to conduct construction activities in such a manner that the maximum noise levels at the affected buildings due to non-scheduled, intermittent, short-term operation of mobile equipment shall not exceed a maximum of 85 dBA on a daily basis, including Sunday and legal holidays, at all hours.

Baseline Noise Levels

Noise measurements were made in order to document existing baseline levels in the area. These help to serve as a basis for projecting future noise exposure, both from projects upon the surrounding community and from ambient noise activity upon the proposed project.

Parcel 21

Short-term on-site noise measurements were conducted on Parcel 21 on Thursday, July 6, 2006, at five locations surrounding the project site, as shown in **Table IV.B-5, Parcel 21 Short-Term Noise Measurements [dB(A)]**. The results of the measurements and location description are shown below as well.

Table IV.B-5
Parcel 21 Short-Term Noise Measurements (dB[A])

Site	Time	Leq	Lmax	Lmin	L_{10}	L_{33}	L_{50}	L_{90}
1	1:15-1:30 p.m.	53.4	64.0	49.0	55.0	53.5	52.5	51.0
2	1:33-1:48 p.m.	50.3	61.5	44.0	53.0	49.5	48.0	46.0
3	1:50-2:05 p.m.	54.4	67.0	44.0	57.0	53.0	51.0	47.5
4	2:07-2:22 p.m.	60.3	73.5	46.5	65.0	55.5	51.5	48.0
5	2:25-2:40 p.m.	61.6	79.0	45.5	65.0	55.5	52.0	47.0

Site 1: Onsite, north side, near Health Club NE corner at property line, near westernmost docks.
Site 2: Onsite, north side, near restroom facilities, at property line near easternmost docks.
Site 3: Onsite, east side, at base of new 6-story apartment building.
Site 4: Offsite, apartments on south side of Panay Way, across from current retail building, meter placed at western entrance to 14014 Panay Way building #8, 12 yards to Panay Way Centerline.
Site 5: Offsite, apartments on south side of Panay Way, across from health club, at western entrance to 14044 Panay Way, building #7, 12 yards to Panay Way Centerline.

Monitoring experience has shown that 24-hour weighted Community Noise Equivalent Levels (CNELs) are typically 2-3 dB higher than the mid-afternoon Leq readings shown below. The existing site perimeter noise levels are in the low 50 to low 60 dB Leq (equivalent sound level) range. This would translate into CNELs of 52 to 65 dBA, which is consistent with the findings of the traffic analysis in Section IV.H, Traffic/Access.

The short term noise monitoring at the apartments to the south of Parcel 21 shows the L_{50} to be 52 dB and Lmax is 79 dB. Since the Los Angeles Noise Ordinance Standards are lower than the ambient daytime noise levels, the standards are adjusted upwards. Therefore, the daytime L_{50} standard is 52 and the Lmax standard is 79 dB for the project area.

Parcel OT

Short-term on-site noise measurements were also conducted on Thursday, June 29, 2006, at four locations surrounding Parcel OT (and a portion of Parcel P)[1]. The results of the measurements and location description are shown below in **Table IV.B-6 Marina Retirement Facility (Parcel OT) Short-Term Noise Measurements [dB(A)]**.

With 24-hour weighted CNELs typically being 2-3 dB higher than the mid-afternoon Leq readings, existing site perimeter noise levels are estimated to be in 60 to 70 dBA CNEL. The roadway segment along Admiralty Way (Site 3, below) may already experience CNELs above the allowed 70 dBA CNEL multi-family exterior threshold, which is consistent with the findings of the traffic analysis in Section IV.H, Traffic/Access.

Table IV.B-6

[1] Hereafter, unless otherwise noted, the Oceana Retirement Facility project site is simply referred to as Parcel OT.

Parcel OT Short-Term Noise Measurements [dB(A)]

Site	Time	Leq	Lmax	Lmin	L_{10}	L_{33}	L_{50}	L_{90}
1	2:40-2:55	63.8	73.5	52.5	66.0	64.0	63.0	57.5
2	2:57-3:12	57.8	67.5	53.5	59.5	58.0	57.0	55.5
3	3:14-3:29	67.5	86.5	54.0	70.0	67.0	64.0	58.0
4	3:32-3:47	58.3	73.5	51.5	60.0	57.0	56.0	53.5

Site 1: Onsite, northwest, facing Washington Blvd, 15 yards to edge of curb.
Site 2: Onsite, northeast, facing the Lagoon. Meter placed at property line.
Site 3: Onsite, southeast, facing Admiralty Way, 15 yards to centerline.
Site 4: Onsite, southwest, facing Marina International Hotel. Meter placed near Parking Lot entrance gate, 14 yards from Hotel Building.

2. Thresholds of Significance

The Initial Study prepared for the proposed project by the Los Angeles County Department of Regional Planning, Appendix G of the CEQA Guidelines, and the Los Angeles County Code noise requirements were consulted to develop thresholds of significance to use in the evaluation of the proposed project's potential impacts associated with noise. As such, it was determined that the proposed project may result in a significant impact associated with noise if it would:

- Be considered a noise-sensitive use (school, hospital, or senior citizen facility) or be located in close proximity to other noise-sensitive uses;
- Cause noise standards to be exceeded where they are currently met;
- Substantially[2] worsen an existing unacceptable noise environment;
- Create an exposure of persons to noise levels exceeding standards established in the local General Plan or other applicable regulations; and/or
- Violate the Los Angeles County Code regarding allowable noise exposure, or result in a three or more dB CNEL traffic noise increase, which creates or worsens an unacceptable noise exposure.

3. Project Impacts

Three noise concerns are typically identified with land use intensification such as that proposed for the project area. First, construction activities, especially heavy equipment, will create short-term noise increases near the project site. Second, upon completion, project-related traffic will cause an incremental increase in area-wide noise levels throughout the project area. Since, however, the number of trips generated by the proposed project is limited, the impact of ambient noise on the project site, rather than project traffic noise impacts to the community, is the third concern.

[2] "Substantially" is not defined in any guidelines. The accuracy of sound level meters and of sound propagation computer models is no better than ± 1.0 dB. This is also the human loudness difference discrimination level under ideal laboratory conditions. Most people cannot distinguish a change in the noise environment that differs by less than three dB between the pre- and post-project exposure if the change occurs under ambient conditions. It requires a doubling of traffic volumes to create a significant individual noise impact. Few projects individually create a doubling of traffic volumes on already noisy roadways. Significant traffic noise impacts are therefore, almost always cumulative.

Multi-family residential activity (comparable to the proposed active seniors accommodations) generally creates negligible noise that is considered unacceptable. Mechanical equipment for heating, ventilation, and air conditioning (HVAC systems) is typically roof-mounted, but modern systems are designed to be very quiet because they would disturb the building tenants before causing any off-site audibility. Elevated noise from heavily traveled arterials would mask any possible site-generated noise. This project would replace a parking lot that also is a noise-generating source. Any possible project noise impacts, aside from construction activities and from increased project-related traffic, would be considered insignificant.

Commercial use project activities, such as those proposed on Parcel 21 as well as the retail uses proposed for Parcel OT, would also entail noise generation from HVAC equipment. Although many of the tenants are already known, precise site uses would not be known until all available space is occupied. The type of HVAC equipment is also not known with certainty, but their general noise characteristics can be better estimated with typical "default" noise generation assumptions.

Construction Noise Impacts

Temporary construction noise impacts would vary markedly, because the noise strength of construction equipment ranges widely as a function of the equipment used and its activity level, as shown on **Figure IV.B-1**. Short-term construction noise impacts tend to occur in discrete phases dominated initially by site clearing and grading, then by foundation construction, and finally for finish construction.

Pile drivers would be the noisiest equipment to be used for project construction. The noise level for one hour of continuous pile-driving is seen in Figure IV.B-1 to be approximately 100 dB at 50 feet from the activity. As the driver moves around the site, it is considered a "mobile" construction activity source. Pile driving would occur intermittently over a six-week period. For purposes of analysis, Section 12.08.440.B.1 was assumed to apply to pile driving (intermittent, mobile source). If pile driving is restricted to hours of lesser sensitivity, i.e. 7 a.m. to 8 p.m. on Monday through Saturday, the following noise standards apply:

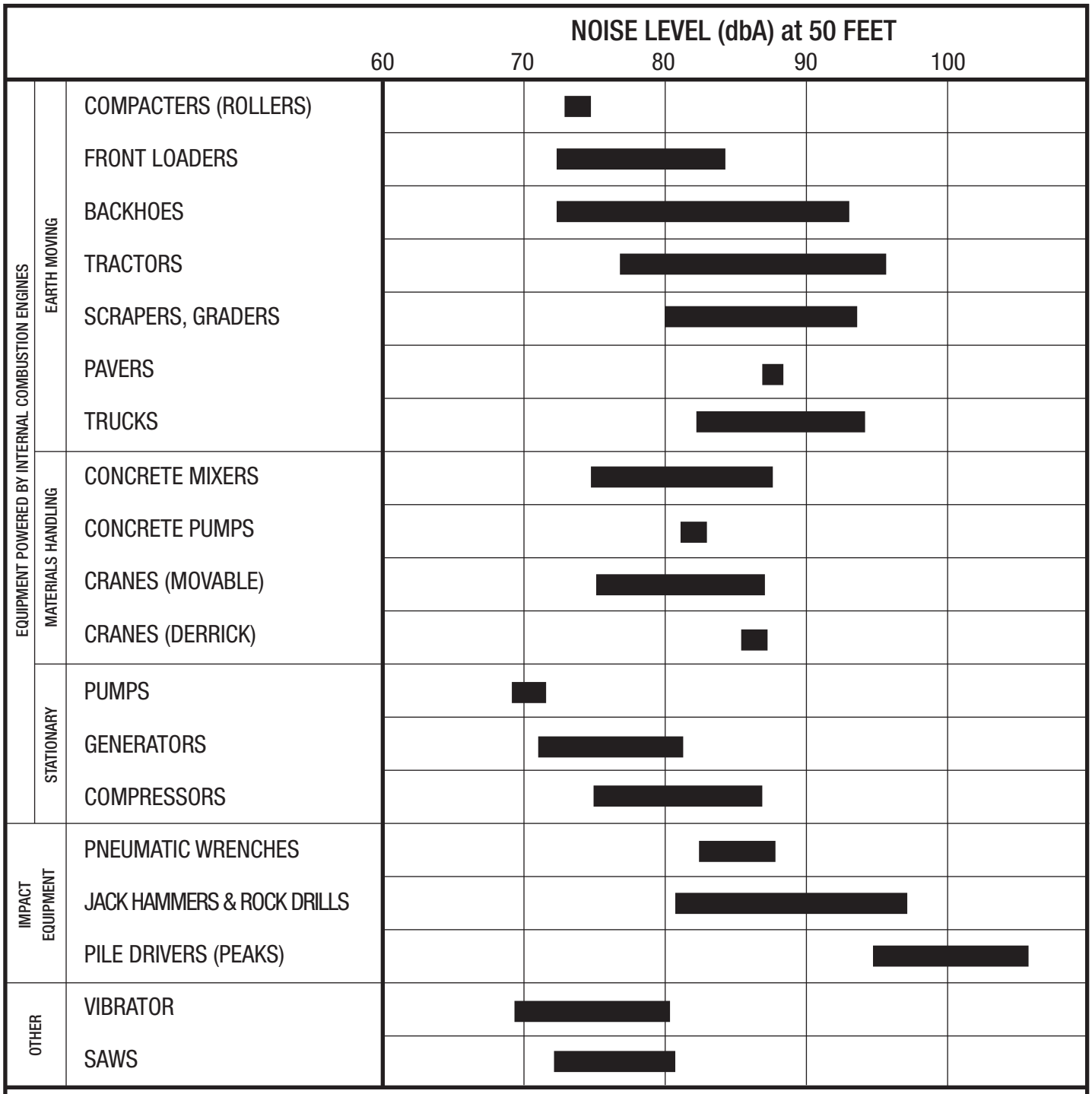
- Closest Single-Family Homes – 75 dB Leq
- Closest Multi-Family Homes – 80 dB Leq
- Closest Hotel Use – 85 dB Leq

For a normal geometric spreading of sound waves, the noise impact envelope for pile driving relative to these standards extends as follows:

- Multi-Family – 500 feet

Pile Driving Construction Impacts

There are residential uses within the potential noise impact zone that could experience pile driving noise in excess of noise ordinance standards at both the Parcel OT and 21 sites, which would be considered a significant impact of the proposed project prior to implementation of mitigation. Pile driver noise can be mitigated by modifying the placement technique to use drilled holes with cast-in-place pilings. Alternately, the driver can be wrapped in acoustical blankets, or a temporary barrier can be erected around the activity. Each technique can achieve the required ordinance level. The acoustical blanket/temporary barrier mitigation is typically the preferred technique. Implementation of **Mitigation Measures N-1 through N-3** would reduce this impact to less than significant.



Source: EPA PB 206717, Environmental Protection Agency, Dec. 31. 1971, "Noise from Construction Equipment & Operations."

Revised: August 5, 2008

Typical Construction Equipment Noise Generation Levels

FIGURE IV.B-1

Non-pile Driving Construction Impacts

For non-pile driving construction activities, the measured hourly reference noise level from mobile construction equipment is approximately 85 dB Leq at 50 feet from the source, due to variable duty cycles and equipment mobility. The noise impact envelope for an 85 dB reference source is shown in **Table IV.B-7**.

Table IV.B-7
Noise Impact Envelope for an 85 dB Reference Source – Non-pile Driving Construction Activities

	Single Family	Multi-Family	Semi-Residential and Commercial
7 a.m. – 8 p.m. Mon. – Sat.	160 feet	90 feet	50 feet
8 p.m. – 7 a.m., and Sun. and Holidays	890 feet	500 feet	280 feet

The closest residential land uses to the Parcel OT site are an adjacent hotel and multi-family uses across Washington Blvd. Single-family uses north of Washington Blvd. are shielded by a solid row of multi-family residences. The applicable construction noise standards therefore apply to multi-family and semi-residential (hotel) uses.

The closest residential land uses to the Parcel 21 site are an apartment building to the east of the site. There are also apartments and a restaurant to the south and commercial/retail uses are to the west. They are typically farther than 90 feet from construction equipment, within which the multi-family standards might be exceeded. Marina docks and slips are located immediately to the north. The applicable construction noise standards therefore apply to multi-family.

If heavy equipment operations were to occur during designated quiet periods, standards would be substantially exceeded, which would result in a significant impact prior to mitigation. As seen above, if construction activities occur between the allowed hours from 7 a.m. to 8 p.m. on Monday through Saturday, non-pile driving equipment noise levels at these receivers will be within allowable levels (refer to **Mitigation Measures N-1 and N-4 through N-6**.

Haul Truck Noise on Local Roadways

Heavy duty diesel trucks will be utilized in demolition and grading to haul debris and soil. The following haul truck trips are anticipated:

Demolition Phase
4,446 cubic yards of waste, 74 loads = approximately 148 truck trips over 7 days = 21 trucks trips per day

Grading Phase
7,768 cubic yards of soil, 647 loads = approximately 1,294 truck trips over 15 days = 86 truck trips per day

Assuming a 35 mile per hour (mph) travel speed, the above number of trucks would provide the following noise signature at 50 feet from the roadway centerline:

Demolition Phase 49.7 dB CNEL
Grading Phase 54.7 dB CNEL

It is expected that haul trucks would travel toward the Marina Expressway along the following roadways; therefore, the truck noise signature would impact the existing noise levels at 50 feet from the centerline as shown in **Table IV.B-8**.

Table IV.B-8
Haul Truck Noise at 50 Feet from the Centerline in Comparison to Existing Noise levels

Roadway	Existing Noise Level	Maximum Truck Noise	Total Noise Level
Admiralty Way/			
Via Marina-Palawan Way	71.4 dB CNEL	54.7 dB CNEL	71.5 dB CNEL
Palawan Way to Bali Way	72.5 dB CNEL	54.7 dB CNEL	72.6 dB CNEL
Washington Blvd./			
East of Ocean	69.9 dB CNEL	54.7 dB CNEL	70.0 dB CNEL
West of Palawan Way	71.1 dB CNEL	54.7 dB CNEL	71.2 dB CNEL
East of Palawan Way	71.8 dB CNEL	54.7 dB CNEL	71.9 dB CNEL
Lincoln Blvd./			
South of Washington Blvd.	75.7 dB CNEL	54.7 dB CNEL	75.7 dB CNEL
North of Marina Expressway	74.8 dB CNEL	54.7 dB CNEL	74.8 dB CNEL
Marina Expressway-Bali Way	73.6 dB CNEL	54.7 dB CNEL	73.7 dB CNEL
Bali Way/			
Admiralty-Lincoln Blvd.	66.8 dB CNEL	54.7 dB CNEL	67.1 dB CNEL

The maximum potential project impact attributed to truck hauling activity noise during demolition and construction is +0.3 dB CNEL. This is less than the significance threshold of +3 dB CNEL. Truck haul noise during both the 15 days of grading activities and seven days of demolition activity would therefore be less than significant.

Operational Noise Impacts

Traffic Noise Impacts

Long-term noise concerns from the development of active seniors accommodations and commercial uses at the two parcels derive primarily from vehicles operating on project area roadways. These concerns were addressed using the California specific vehicle noise curves (CALVENO) in the Federal roadway noise model (the FHWA Highway Traffic Noise Prediction Model, FHWA-RD-77-108). The model calculates the Leq noise level for a particular reference set of input conditions, and then makes a series of adjustments for site-specific traffic volumes, distances, roadway speeds, or noise barriers.

Table IV.B-9 summarizes the 24-hour CNEL level at 50 feet from the roadway centerline along 28 roadway segments. Four traffic scenarios were evaluated; existing conditions, 2014 “no project”, 2014 “with project”, and 2014 “with project and cumulative area development.”

Table IV.B-9
Traffic Noise Impact Analysis (dBA CNEL at 50 feet from Centerline)

Roadway Segment	Existing	2014 No Project	2014 with Project	2014 with Project and Area Buildout
Ocean Ave/				
North of Washington	67.7	67.9	67.9	68.2
Via Marina/				
Washington-Admiralty	70.5	70.6	70.8	71.2
Admiralty-Panay	70.1	70.3	70.3	71.5
Panay-Marquesas Wy.	68.9	69.1	69.1	70.2
Washington Blvd./				
West of Ocean	70.6	70.8	70.8	71.2
East of Ocean	69.9	70.1	70.2	70.9
West of Palawan Wy.	71.1	71.3	71.3	71.9
East of Palawan Wy.	71.8	72.1	72.1	72.8
West of Lincoln Blvd.	73.9	73.9	73.9	74.2
East of Lincoln Blvd.	73.5	73.7	73.7	74.0
Admiralty Wy. /				
Via Marina-Palawan Wy.	71.4	71.6	71.6	72.4
Palawan to Bali	72.5	72.6	72.6	73.4
South of Bali Wy.	72.3	72.5	72.5	73.2
North of Mindanao Wy.	72.5	72.7	72.7	73.4
South of Mindanao Wy.	72.1	72.2	72.2	72.7
Palawan Wy. /				
Washington-Admiralty	66.4	66.6	66.6	67.6
South of Admiralty Wy.	62.5	62.7	62.8	63.0
Bali Wy. /				
West of Admiralty Wy.	59.7	59.9	59.9	60.1
Admiralty-Lincoln	66.8	67.0	67.0	67.5
East of Lincoln Blvd.	56.4	56.6	56.6	57.4
Lincoln Blvd/				
North of Washington	74.9	75.1	75.1	75.5
South of Washington	75.7	75.7	75.7	76.3
North of Marina Expressway	74.8	75.0	75.0	75.7
Marina Expressway-Bali Wy.	73.6	73.7	73.7	74.4
Bali Wy. -Mindanao Wy.	72.8	73.1	73.1	74.9
Mindanao Wy. -Fiji Wy.	74.0	74.2	74.2	74.9
Panay Wy. /				
West of Via Marina	56.8	56.9	56.9	59.7
East of Via Marina	63.7	63.9	64.1	64.8

As seen in Table IV.B-8, in the existing time frame, traffic noise is high with many segments already exceeding 65-70 dB CNEL at 50 feet from the centerline. Since traffic volumes are already elevated, and because the traffic generated by the project is low, implementation does not significantly alter the noise environment on any of the segments. As project-related traffic would not increase noise by even as much

as +0.2 dB compared to the no-project scenario, the proposed project would have a less than significant impact related to traffic noise.

Interior Noise Impacts

Parcel OT

Adjacent Roadway Noise

The roadways that would mostly affect project on-site noise exposure for Parcel OT are Washington Blvd. and Admiralty Way. For the purpose of this analysis it is assumed that the building façade is 50 feet from the roadway centerline. As a worst case, future noise levels with cumulative development were used for noise loadings. The noise loadings for building façades and needed attenuation to provide a 45 dB CNEL interior noise level along the adjacent roadways would be as shown in **Table IV.B-10**.

Table IV.B-10
Parcel OT Adjacent Roadway Noise Levels

Roadway	Future Traffic Noise[1]	Needed Attenuation
Washington Blvd	72.8 dB CNEL	27.8 dB CNEL
Admiralty Way	73.1 dB CNEL	28.1 dB CNEL

[1] At 50 feet from roadway centerline.

As shown, prior to mitigation, the proposed project would result in a significant impact associated with interior noise at Parcel OT resulting from adjacent roadway noise. Noise reduction of 30 dB is normally attainable with closed, dual-paned windows in mid-rise construction. That would reduce any traffic-related CNEL from 73 to 43 dB for interior use. The structural noise attenuation in wood or steel-framed mid-rise construction is generally close to the sound transmission class (STC) ratings of the windows. Use of STC=30 rated windows and/or sliding glass doors would allow the County interior standard of 45 dB CNEL to be met with a reasonable margin of safety. As window closure is a requirement to meet the interior noise standard of 45 dB CNEL in habitable rooms (especially those with a direct view of Washington Blvd. or Admiralty Way), supplemental ventilation must be provided to allow for such closure. With Implementation of **Mitigation Measure N-7**, this impact would be reduced to less than significant.

Structural Noise

In addition to exterior to interior noise attenuation, the Uniform Building Code (UBC) imposes certain structural standards that govern noise transmission from one unit to another within the same building of a multi-tenant structure. Horizontal noise transmission resistance through shared ("party") walls must be rated at STC=50 or higher. Vertical sound transmission through the floor/ceiling assembly of stacked units must similarly have an STC=50 or higher rating. Vertical transmission through floor/ceiling assemblies must also be able to reduce impact noise such as footfalls, dropped objects, etc. by 50 dB. The impact noise reduction is expressed in a parameter called the "impact isolation class," or IIC. If structural assemblies are sound rated, the UBC also has standards regarding penetration of such assemblies by piping, ducts, electrical outlets, etc. The noise control requirements for multiple occupancy residences are required and would be incorporated into project designs; therefore, the proposed project's impacts associated with interior (structural) noise on Parcel OT would be less than significant. However, for additional enforcement and to assure proper implementation of structural noise attenuation measures, **Mitigation Measure N-8** is provided below.

Parcel 21

Area-wide noise levels in the Parcel 21 vicinity are much less than the 77 dB CNEL commercial noise standard permitted by California. Traffic noise, as determined by the traffic analysis, and ambient noise, as measured through on-site noise readings, would result in a less than significant impact on the interior noise at Parcel 21.

Exterior Recreational Use Noise Impacts

Parcel OT

Outdoor recreational uses at the Parcel OT active seniors accommodations would be sited in the interior of the complex, allowing the buildings to shelter recreational users from street traffic noise. The noise level within the interior courtyard would be 15-20 dB less than at any exterior balconies or similar exposures. Exterior façade levels of 70-75 dB CNEL would be reduced to 50-60 dB within interior courtyards. Interior courtyards would meet County standards for usable outdoor space. Individual balconies facing Washington Blvd. or Admiralty Way would have outside noise levels exceeding the 65 dB CNEL goal for usable outdoor space. Although the interior terrace, rear spa and terraces would provide substantial outdoor recreational space with noise levels well within the 65 dB CNEL goal, noise in excess of this standard on individual balconies on the proposed Parcel OT project would be conservatively considered a significant and unavoidable impact. No feasible mitigation exists to reduce this impact to less than significant, as a six-foot wall composed of a combination of a solid base and 3/8-inch glass would be required to reduce the noise exposure to below 65 dB CNEL. This would essentially enclose the balconies.

Parcel 21

Parcel 21 is comprised of commercial uses only; therefore, noise requirements for recreational use are not applicable to this site.

Off-Site Noise Exposure

Parcel OT

The active seniors accommodations proposed for Parcel OT is not anticipated to generate noise that would affect off-site uses and therefore constitutes a less than significant impact associated with off-site noise exposure.

Parcel 21

HVAC Equipment

The primary noise concern for siting a commercial operation in proximity to off-site residences is that the activities in support of the commercial use may create a noise nuisance at the nearest noise-sensitive receivers. The proposed site use is marine commercial, with small retail, health club, and yacht club components. The yacht club would share the upper levels along with portion of parking structure.

A six-story apartment building (four levels of apartments above two levels of parking) was recently constructed adjacent to the east of Parcel 21. This building is adjacent to the proposed parking structure for Parcel 21 for which no mechanical equipment is anticipated. It is anticipated that HVAC equipment would be sited on the roof of the yacht club portion of the building. The apartments to the south of the project site, which are across Panay Way and are approximately 70 feet from the property line of Parcel 21, could experience a noise nuisance from this equipment. Therefore, the proposed project on Parcel 21

would result in a significant impact to noise-sensitive receivers related to HVAC equipment. **Mitigation Measure N-9** would reduce this impact to less than significant. These design strategies and conformity with County ordinances can help prevent conflicts due to commercial site operations in an area with little, but growing residential development.

Parking Structure

The project's consolidation of existing ground level parking areas into a single structure may reduce overall noise for adjacent receptors, because the structure would serve to dampen and contain nuisance noise. Surrounding residential uses, such as the apartments to the east of the site, contain their own two level parking garage. Sensitive receptors near the Parcel 21 would continue to experience noise both from the parking garages servicing their apartment buildings and from the consolidation of existing ground level parking on the project site into a single multi-level structure. However, because the site is already a parking lot, the introduction of the new parking structure is not a new use.

However, cars driving and turning in parking structures often produce tire squeal. This noise has a different character than that already occurring near the site from paved parking lots. Although this type of noise would have a less than significant impact to surrounding noise-sensitive receptors, **Mitigation Measure N-10** is recommended to assure that the effects of tire squeal are minimized.

Additionally, accidental car alarm initiation can also be an issue in a parking structure located close to off-site residences. Although this type of noise would also have a less than significant impact to surrounding noise-sensitive receptors, **Mitigation Measure N-11** is recommended to assure that the effects of accidental car alarm initiation are minimized.

4. Cumulative Impacts

Traffic Noise

Area build-out traffic growth would create moderate increases in traffic volumes. However, because of the logarithmic nature of traffic noise, it requires a very large increase in traffic volume to increase associated noise levels, especially for areas that are already built out with a relatively large traffic base. Cumulative traffic noise (comparing existing noise to 2014 "with project and other developments" in Table IV.B-8) shows the largest cumulative traffic noise increase on any segment to be +2.9 dB CNEL. This segment is Panay Way west of Via Marina. Not only is this increase less than the adopted +3 dB CNEL threshold, but the project itself does not contribute substantially to the noise increase. Noise levels are identical or nearly identical for the 2014 "no project" and 2014 'with project" scenarios (refer to Table IV.B-8). The next largest increase is +1.4 dB CNEL on Via Marina between Admiralty and Panay Way. Again, the project contributes negligibly to this growth in cumulative traffic noise. Therefore, the proposed project's traffic noise impacts associated with forecast area growth are not cumulatively significant along any analyzed roadway segment.

5. Mitigation Measures

Construction Noise

N-1 Noise monitoring shall be performed by a qualified acoustician, who shall be responsible for posting notices at the construction sites describing the nature of the project and the duration and hours of construction, providing a phone number at which noise complaints may be registered, and responding to such complaints. If any violations occur, the equipment in

question or barriers/shields shall be modified before pile driving or construction activities continue.

Pile Driving Noise

N-2 The pile driver shall be shielded through noise blankets or a temporary barrier sufficiently to meet the Los Angeles County noise ordinance levels.

N-3 Because the repetitive noise of pile driving may be intrusive even if ordinance standards are not exceeded, the allowable hours of pile driving shall be restricted from 8 a.m. to 4:30 p.m. from Monday through Friday.

Non-pile Driving Noise

The County of Los Angeles Ordinances requires that construction noise measured at nearby single-family residential property lines not exceed 75 dB from mobile noise sources. The construction noise standard for multi-family uses is 80 dB, and 85 dB for the adjacent hotel. This standard would be met if the following measures are implemented:

N-4 All construction and general maintenance activities, except in an emergency, shall be limited to the hours of 8 a.m. to 5 p.m. Monday through Saturday and shall utilize the quietest equipment available.

N-5 All on-site construction equipment shall have properly operating mufflers. Other measures shall be implemented wherever necessary to further reduce construction equipment noise. These may include, but are not limited to, utilizing ¾-inch plywood screening on semi-stationary equipment operating under full power for more than 60 minutes within a direct line of sight to any residential bedroom window.

N-6 All construction staging and delivery areas shall be located as far away as possible from the nearest homes (for development on Parcel OT, staging shall occur away from the northwestern portions of the site; and for development on Parcel 21, staging shall occur away from the easternmost and southernmost portions of the site), and shall be scheduled to occur from the mid-morning to mid-afternoon hours.

Operational Noise

Parcel OT Adjacent Roadway Noise

N-7 In order for the County interior standard of 45 dB CNEL to be met with a reasonable margin of safety, the applicant shall incorporate the use of dual-paned windows (STC=30 rated windows and/or sliding glass doors) and supplemental ventilation that includes a fresh air supply of 30 cubic feet per minute in the active seniors accommodations on Parcel OT.

Parcel OT Interior/Structural Noise

Construction of multiple family dwelling units requires compliance with all noise insulation requirements of the California Building Code, as applied to the project by the County Department of Public Works Building and Safety Division.

N-8 The applicant shall implement structural noise attenuation measures as required by the California Building Code. The Code requires the following noise insulation features for such units, as stated in CBC Appendix 1208A:

- Wall and floor-ceiling assemblies separating dwelling units from each other and from public spaces such as interior corridors and service areas shall provide airborne sound insulation for walls, and both airborne and impact sound insulation for floor-ceiling assemblies. Wall assemblies shall have a minimum STC rating of 50. Floor-ceiling assemblies shall have a minimum STC and IIC ratings of 50.
- Construction details for all sound- and impact-rated assemblies shall be provided on architectural plans. Laboratory test reports governing the STC and IIC ratings of these assemblies shall be specified.
- Entrance doors from interior corridors to dwelling units together with their perimeter seals shall have a minimum STC rating of 26. The 1-3/8-inch (35mm) solid core wood or 18-gauge insulated steel slab doors with resilient stop and compression seals all around, including threshold, are acceptable without other substantiating data.
- All penetrations or openings in construction assemblies for piping, electrical devices, recessed cabinets, bathtubs, soffits, or heating, ventilating or exhaust ducts shall be sealed, lined, insulated or otherwise treated to maintain the required ratings.
- All rigid conduit, ducts, plumbing pipes, and appliance vents located in sound assemblies shall be sealed, lined, insulated or otherwise treated to maintain the required ratings.
- Mineral fiber insulation shall be installed in joint spaces whenever a plumbing pipe or duct penetrates a floor-ceiling assembly or where such pipe or duct passes through the plane of the floor-ceiling assembly from within a wall. The insulation shall be installed to a point 12 inches (305mm) beyond the pipe or duct.
- Combustion air and kitchen and bathroom exhaust ducts within sound separation assemblies shall be wrapped with Type "C" insulation as shown in Table No. 6-D, Uniform Mechanical Code.
- Electrical penetrations in sound-rated wall and floor-ceiling assemblies shall conform to the following (outlet box used herein is defined as a box used for receptacles, switches, surface-mounted lighting fixtures, junction points, telephones, thermostats, television uses, etc.):
    - Outlet box dimensions shall not exceed six inches in length or width.
    - Only outlet boxes and ceiling exhaust fans in the bathrooms shall be permitted in walls and ceilings. All other equipment and devices including recessed fixtures, panel boards, heaters, kitchen exhaust fans, sound-producing equipment (bells, intercoms, etc.) shall not be installed in these sound-rated assemblies.
    - Light switches, outlet boxes and surface-mounted fixtures shall not be installed back-to-back. Plugs and switches shall be separated by 36 inches (914mm) minimum.

- Surface-mounted fixtures shall be separated by 24 inches (610mm) minimum. All openings shall be caulked to ensure integrity.
- Outlet boxes shall not exceed 1-1/2" (38mm) in depth so as to allow the required 2-inch (51mm) uncompressed insulation to be installed in a standard 2-inch X 4-inch (51mm by 104mm) wall. On walls of deeper dimensions, boxes of greater depths may be permitted.
- Conduits or raceways (stubouts) may penetrate the sound-rated assemblies provided the conduit is covered at the penetration point with permanently resilient sealant.
- Floor-ceiling assemblies between residential areas and equipment penthouses (a/c units, etc.) shall be installed in accordance with the sound separation requirements.

• Floor coverings such as carpet and pad which are required as part of a sound- and impact-rated assembly shall be installed prior to final inspection and that such coverings must be retained as a permanent part of the assembly and may be replaced only by other floor coverings which provide the required ratings.
• Wall-mounted lavatories and toilets are not permitted on sound-rated walls.

Parcel 21 Off-site Noise Exposure

N-9 Heating, ventilation, or air conditioning (HVAC) equipment on Parcel 21 shall not operate between the hours of 10 p.m. and 7 a.m., unless it is demonstrated by noise measurement that the noise level from such operation does not exceed a Leq_{50} of 45 dB at the closest residential property line.

N-10 Although noise from the Parcel 21 parking structure is not expected to be any greater than what sensitive receivers currently experience in the project area, the applicant shall incorporate into the parking structure a design that coats the floor with a treatment or provides a swirled concrete texture that reduces tire squeal.

N-11 Signage shall be posted that notifies parking structure users on Parcel 21 of possible penalties (such as reporting to the Sheriff's Department that may result in towing) for false alarms if their alarm does not comply with Los Angeles County Code limits on frequency or duration of triggering an alarm.

6. Significant Project Impacts After Mitigation

With implementation of the above mitigation measures in addition to **Mitigation Measure AQ-2** (while this measure requires that idling trucks or heavy equipment shall turn off their engines if the expected duration of idling exceeds five minutes, it would also serve to reduce noise generation from idling trucks/equipment), the proposed project's potentially significant noise impacts associated with construction noise, roadway noise, interior/structural noise, and off-site noise exposure would be reduced to less than significant. However, no feasible mitigation is available to reduce the exterior recreational use noise impact on Parcel OT at individual balconies to less than significant; therefore, this remains a significant and unavoidable impact of the proposed project. It should be noted that individual jurisdictions may not require noise protection for individual recreational space if noise-protected common space meets the minimum recreational area requirement. The significance conclusion made in this case is presented as a conservative depiction of the potential noise impact regarding outdoor noise at balconies proposed at Parcel OT.

C. WATER QUALITY

The following analysis is based upon the Marina del Rey Harbor - Mother's Beach and Back Basins Bacteria TMDL[1] Implementation Plan, dated October 2005; the Ballona Creek Watershed Management Plan, dated September 2004 and made available by the County of Los Angeles Department of Public Works; the Standard Urban Storm Water Mitigation Plan for Los Angeles County and Cities in Los Angeles County, dated March 2002; and the Drainage Concept/Hydrology Study/SUSMP reports prepared for Parcel OT and 21 by S.E.C. Civil Engineers, Inc. (June 2009), included in **Volume II**, **Appendix C**.

1. Existing Conditions

Environmental Setting

Marina del Rey and Ballona Creek Watersheds

Marina del Rey was constructed in the late 1950s and early 1960s from the remnants of the Ballona Creek Wetlands and Estuary, to offer residents in the County of Los Angeles boating and other recreation opportunities. This development transformed an area of coastal dunes and wetlands into a small craft marina, and the entrance channel (or Main Channel) is located immediately north of the Ballona Creek Channel, with a breakwater constructed at the mouth of the Creek. The Main Channel opens Marina del Rey Harbor to the Santa Monica Bay.

According to the County of Los Angeles Department of Public Works' Ballona Creek Watershed Management Plan (September 2004), the Ballona Creek Watershed Management Planning Area includes the coastal interface zone and surface waters of Marina del Rey, the Oxford Flood Control Basin, the Venice Canals, Ballona Lagoon, and Del Rey Lagoon, because the water quality in all these areas is interrelated. This Watershed is roughly bounded by the Santa Monica Mountains and Hollywood Hills to the north, Interstate 110 to the east, Baldwin Hills to the south, and the Pacific Ocean to the west. The major tributaries to Ballona Creek are Centinela Creek, Sepulveda Canyon Channel, Benedict Canyon Channel, and numerous storm drains. Ballona Creek drains approximately 130 square miles of area including the Cities of Los Angeles, Beverly Hills, Culver City, West Hollywood, and portions of the Cities of Santa Monica and Inglewood, as well as the Hollywood Hills and Santa Monica Mountains, and it is designed to discharge to Santa Monica Bay.[2]

While the Ballona Creek Watershed Management Planning Area includes portions of Marina del Rey waters, the Marina del Rey Harbor - Mother's Beach and Back Basins Bacteria TMDL Implementation Plan specifically addresses the Marina del Rey Watershed, which is approximately 1,855 acres in size and can be divided into three main parts: the Harbor water area, including the docks, back basins, Marina Beach, and Oxford Retention Basin (Oxford Basin), the land adjacent to the Harbor back basins, which is the Los Angeles County unincorporated area including individual parcels, streets, and other facilities; and the land outside the Los Angeles County unincorporated area draining into the Harbor waters, including the Cities of Los Angeles and Culver City, and Caltrans right of ways. The Harbor consists of the Main Channel and eight back basins (A-H). Marina Beach is located in the west end of Basin D. This watershed also includes five subwatersheds: Areas 1A, 1B, 2, 3, and 4. Subwatersheds 1A, 3 and 4 are direct tributaries to the back basins (Basins D, E, and F) of Marina del Rey. The Oxford Basin, located at

[1] TMDL = Total Maximum Daily Load. The Los Angeles Regional Water Quality Control Board (LARWQCB) has the responsibility of identifying the TMDL for each pollutant of concern and a conceptual implementation strategy to achieve the relevant water quality standard.

[2] County of Los Angeles Department of Public Works, "Ballona Creek Watershed." Accessed on January 22, 2007 from http://www.ladpw.org/wmd/watershed/bc/.

the north end of Marina del Rey Harbor, drains to Basin E through two slide gates and a culvert system. The Oxford Basin serves as a retention basin for the watershed and the slide gates control tidal influence on its water level.[3]

Most of the Ballona Creek Watershed drainage network is controlled by structural flood control measures, including debris basins, storm drains, underground culverts, and open concrete channels. Ballona Creek remains underground in the eastern portion of the Watershed and becomes an open channel near Venice Boulevard and Pickford Street, before it continues for nearly nine miles to Santa Monica Bay. A few channels, such as the Sepulveda Wash (Walnut Creek) and Centinela Creek, remain open for major portions of their length. Very few natural stream channels remain, mainly in the Santa Monica Mountains and Baldwin Hills. Some former streams in the major canyons have been channelized and remain open channels at some locations, including Stone Canyon Creek and Benedict Canyon Creek. A few remnant channels also exist on the coastal plain in some parks, private lands, golf courses, and country clubs. With nearly 40 percent of the Watershed covered with impervious surfaces, runoff enters the tributaries and Ballona Creek more rapidly, and the infiltration of precipitation to groundwater is reduced.

As most channels in the Watershed are lined with concrete, the natural processes of erosion and sedimentation are altered, with eroded sediment now transmitted to the mouth of Ballona Creek, where it periodically results in the partial closure of the boat entrance to Marina del Rey. The construction of levees in Ballona Creek together with the construction of Marina del Rey has reduced the extent of tidal wetlands and tidal flushing in the area. With imported water and extensive landscaping, runoff from landscape irrigation has created year-round flows in channels that were dry most of the year.

Surface Water Quality and Total Maximum Daily Loads

As mandated by the Federal Clean Water Act, the State Water Resources Control Board adopted a list of impaired water bodies [known as the "303(d)" list] for California. This list currently includes Ballona Creek, Ballona Wetlands, and Marina del Rey Harbor. The list was amended and updated in 2002 and identifies water quality impairments, such as trash, metals, pathogens, and organic pesticides, that restrict the beneficial uses identified in the Water Quality Control Plan for the Los Angeles Region (Basin Plan). To preserve the beneficial uses identified in the Basin Plan, the LARWQCB has the responsibility of identifying the Total Maximum Daily Load (TMDL) for each pollutant of concern and a conceptual implementation strategy to achieve the relevant water quality standard. The regulatory mechanisms used to implement the TMDL will include the Los Angeles County Municipal Storm Water NPDES Permit (MS4), the State of California Department of Transportation (Caltrans) Storm Water Permit, minor NPDES permits, general NPDES permits, general industrial storm water NPDES permits, general construction storm water NPDES permits. Nonpoint sources will be regulated through the authority contained in sections 13263 and 13269 of the Water Code, in conformance with the State Water Resources Control Board's Nonpoint Source Implementation and Enforcement Policy (May 2004). Each NPDES permit assigned a WLA shall be reopened or amended at re-issuance, in accordance with applicable laws, to incorporate the applicable WLAs as a permit requirement.

The following discussion addresses the state of surface water quality in Marina del Rey. Refer to the Regulatory Framework section, below, for more information on applicable water quality regulations.

Marina del Rey Harbor - Mothers' Beach and Back Basins Bacteria TMDL

According to the Marina del Rey Harbor - Mother's Beach and Back Basins Bacteria TMDL Implementation Plan, the water quality of the Harbor is affected by tidal influences, Main Channel

[3] Marina del Rey Harbor - Mother's Beach and Back Basins Bacteria TMDL Implementation Plan. October 2005.

configuration, back basin location and configuration, and discharge points. Basins D, E, and F of Marina del Rey Harbor have been identified as impaired water bodies. Of all the Basins in the Harbor, these three generally have the poorest circulation and tidal flushing, which is thought to influence water quality, especially at Marina, or Mother's, Beach. Urban runoff enters the Marina del Rey Harbor waters from the surrounding storm drains and culverts, the Oxford Basin, streets, parks, open space, and the parcels that adjoin the back basins. The Harbor waters have various potential pollution sources, including those from human activities and uses (recreational activities, for example) and those from natural sources (such as from fish, birds, mammals, marine life, and geomorphology). Mother's Beach has been closed for periods of time in the past due to high bacterial indicator densities. Basin E also experiences bacterial indicator issues, depending on the season. The Oxford Basin exchanges low flow urban runoff, stormwater, and tidal exchange through a culvert near the back of Basin E, and the Boone-Olive Pump Plant discharges both low flow urban runoff and stormwater in the back of Basin E. Basin F also experiences poor tidal circulation and receives some urban runoff from the adjoining parcels. Poor tidal circulation is also believed to play a role in elevated bacterial indicator densities.[4]

In 2004, the United Stated Environmental Protection Agency (USEPA) adopted the TMDL for bacteria at Marina del Rey Harbor - Marina Beach and Basins D, E, and F. The California Water Quality Control Plan, Los Angeles Region (Basin Plan) sets the beneficial uses and water quality standards for water bodies in the region, and Marina Beach and the back basins (Basins D, E, and F) were given a REC-1 beneficial use, which is defined as recreational water activities (swimming, wading, water-skiing, skin and scuba diving) involving body contact where ingestion of water is reasonably possible. Total coliform, fecal coliform, fecal-to-total coliform ratio, and enterococcus are used in the Basin Plan as bacteria indicators of the likely presence of disease-causing pathogens in marine waters. The goal of this TMDL is to reduce these bacteria indicator levels at Marina Beach and the back basins. The possible sources of bacteria are:

- Sanitary sewer leaks and spills;
- Illicit connections of sanitary lines to the storm drain system;
- Runoff from homeless encampments;
- Pet waste;
- Illegal discharges from recreational vehicle holding tanks;
- Direct illegal discharges from boats;
- Illicit discharges from private drains such as restaurants;
- Swimmer "wash-off";
- Fecal matter from animals and birds; and
- Vegetation and food waste.

The TMDL's Waste-Load-Allocations (WLAs) are expressed as allowable exceedance days, which are the maximum number of days where sampling results at a particular compliance monitoring site can surpass the established Assembly Bill 411 health standards without violating the TMDL. The TMDL's Numeric Targets are same as the AB411 health standards:

- Rolling 30-Day Geometric Mean Limits
  - Total coliform density shall not exceed 1,000 /100ml.
  - Fecal coliform density shall not exceed 200/100ml.

[4] Marina del Rey Harbor - Mother's Beach and Back Basins Bacteria TMDL Implementation Plan. October 2005.

  - Enterococcus density shall not exceed 35/100ml.
- Single Sample Limits
  - Total coliform density shall not exceed 10,000/ 100ml.
  - Fecal coliform density shall not exceed 400/100ml.
  - Enterococcus density shall not exceed 104/100ml.
  - Total coliform density shall not exceed 1,000/100 ml, if the ratio of fecal-to-total coliform exceeds 0.1.

These objectives are generally based on an acceptable health risk for marine recreational waters of 19 illnesses per 1,000 exposed individuals, as required by the USEPA. The TMDL requires the MDRWRA to submit a Coordinated Compliance Monitoring Plan (CMP) to the LARWQCB. The CMP proposes weekly water sampling at select locations of the impaired waters. Further, the CMP also proposes water quality monitoring sites in non-303(d) listed Marina del Rey Harbor Basins, in order to provide additional information of the water quality with respect to bacterial indicators at these non-listed water bodies.[5]

Marina del Rey Harbor Toxic Pollutants TMDL

Urban runoff, or stormwater, has been recognized as a substantial source of metals, and researchers have documented that the most prevalent metals in urban storm water are copper, lead, and zinc, which are consistently associated with suspended solids. Metals are typically associated with fine particles in storm water runoff; they have the potential to accumulate in marine sediments where they may pose a risk of toxicity. In addition, the majority of organic constituents in stormwater are associated with particulates.

In addition to bacteria-related TMDL identified above, the Regional Water Quality Control Board (RWQCB) adopted TMDL for toxic pollutants in the Marina del Rey Harbor in 2005. The back basins of the Marina del Rey Harbor are on the Section 303(d) list of impaired waterbodies for chlordane, copper, lea, zinc, polychlorinated biphenyls (PCBs), dichloro-diphenyl-trichloroethane (DDT), dieldrin, sediment toxicity, and a fish consumption advisory. However, review of data during development of these TMDLs indicated that dieldrin and DDT are no longer causes of impairment in this waterbody. The designated beneficial uses that are impaired by these pollutants are water contact recreation (REC-1), marine habitat (MAR), wildlife habitat (WILD), commercial and sport fishing (COMM), and shellfish harvesting (SHELL).

Numeric targets for the harbor sediments are based on the sediment quality guidelines compiled by the National Oceanic and Atmospheric Administration, which are used in evaluating waterbodies within the Los Angeles Region for development of the 303(d) list. The Effects Range-Low (ERLs) guidelines are established as the numeric targets for sediments in Marina del Rey Harbor:

- Numeric Targets for Metals in Sediment (mg/kg)[6]
  - Copper, 34.
  - Lead, 46.7.
  - Zinc, 150.
- Numeric Targets for Organic Compounds in Sediment (µg/kg)[7]

[5] Attachment A to Resolution No. 2003-012. Amendment to the Water Quality Control Plan – Los Angeles Region to incorporate the Marina del Rey Harbor - Mothers' Beach and Back Basins Bacteria TMDL. Adopted by the California Regional Water Quality Control Board, Los Angeles Region on August 7, 2003. Available at http://63.199.216.6/larwqcb_new/bpa/tmdl_detail.php?rbResNo=2005-012&no=32.

[6] mg/kg = milligram/kilogram.

[7] µg/kg = microgram/kilogram.

- Chlordane, 0.5.
- Total PCBs, 22.7.

In addition to these targets, water column and fish tissue targets are set for the PCB impairment in fish tissue. The California Toxics Rule (CTR) Chronic Criterion for the protection of aquatic life in saltwater has been selected as the numeric target for the fish tissue impairment by PCBs. This numeric target will remain in effect until advances in technology allow for analysis of PCBs at lower detection limits:

- Interim Target for total PCBs in the Water Column; 0.03mg/L[8]
- Final Target for total PCBs in the Water Column; 0.00017 mg/L

The numeric target for PCBs in fish tissue is the Threshold Tissue Residue Level that is derived from CTR human health criteria, which are adopted criteria for water designated to protect humans from consumption of contaminated fish or other aquatic organisms.

- Numeric Target for total PCBs in Fish Tissue, 5.3 mg/kg

Responsible jurisdictions and agencies shall conduct daily or systematic weekly sampling at the initial point of mixing with the receiving water at all major drains, at existing monitoring stations, and at other designated monitoring stations to determine compliance.[9]

Groundwater Occurrence

Ballona Creek Watershed Groundwater Occurrence

The Ballona Creek Watershed is primarily underlain by a groundwater formation known as the West Basin (comprised of the Hollywood and Santa Monica subbasins) and a small portion of the Central Basin, under the southeastern portion of the Watershed. Groundwater is located under most of the Watershed. The Hollywood subbasin is bounded on the north by the Santa Monica Mountains and the Hollywood Fault, on the east by the Elysian Hills, on the west by the Inglewood Fault zone, and on the south by a surface divide known as the "La Brea high," which is formed by an anticline that brings impermeable rocks close to the surface. The Santa Monica subbasin is bounded by the Santa Monica Mountains on the north, the Ballona escarpment on the south, the Inglewood Fault zone on the east, and the Pacific Ocean on the west. The Central Basin is bounded on the north by the La Brea high, and on the northeast and east by less-permeable rocks of the Elysian, Repetto, Merced, and Puente Hills. The southeast boundary of the Central Basin roughly follows Coyote Creek, while the southwest boundary is formed by the Newport-Inglewood Fault system.

Groundwater in the Ballona Creek Watershed is replenished by the percolation of rainfall and stream flow from the Santa Monica Mountains and Baldwin Hills. With approximately 40 percent of the Watershed covered by impervious surfaces and concrete lining most tributary channels, the land area open to direct infiltration of rainfall and percolation from stream channels has been substantially reduced.

Where groundwater levels are high, permeable rocks or confining structures, such as faults, may result in groundwater reaching the surface as areas of moist soil, a seep, or a spring. Historically, high

[8] mg/L = milligram/liter.

[9] Attachment A to Resolution No. 2005-012. Amendment to the Water Quality Control Plan – Los Angeles Region to incorporate the Marina del Rey Harbor Toxic Pollutants TMDL. Adopted by the California Regional Water Quality Control Board, Los Angeles Region on October 6, 2005. Available at http://63.199.216.6/larwqcb_new/bpa/tmdl_detail.php?rbResNo=2005-012&no=32.

groundwater levels in some portions of the Watershed resulted in marshes and surface springs. In general, most of these surface springs have ceased or been capped. However, natural springs still exist at various locations in the Santa Monica Mountains and at a few locations on the coastal plain. High groundwater levels exist in many of the same locations where they were historically found, including West Hollywood, La Cienega, Venice, and portions of Culver City. In these areas, the high groundwater table may pose issues for building foundations, result in seepage into below-grade spaces, and increase the risk of liquefaction during seismic events (discussed in detail in Section IV.A, Geotechnical Hazards, of this document).

Marina del Rey Watershed Groundwater Occurrence

Marina del Rey is located approximately two to three miles from Venice Beach, and as stated above, is linked with the Santa Monica Bay via the Main Channel. The soils around Marina del Rey are considered to be coastal sands and loamy soils, which have high percolation rates. The California Department of Conservancy, Division of Mines and Geology, evaluated Marina del Rey and determined that historically shallow ground-water levels exist in the Venice Quadrangle. The results from their study showed that the groundwater table around Marina del Rey has an average depth of five feet, but may fluctuate depending on the season and tidal influences.

Site-Specific Groundwater Occurrence

Free groundwater was encountered at Parcel OT in the test borings at depths of approximately ten to 17 feet below existing site grade. Groundwater within the Marina has been demonstrated to fluctuate significantly, primarily in response to tides. Based on the highest tide recorded in this part of the Southern California Coast (approximately 4.7 feet above msl), the shallowest anticipated groundwater would be approximately five to ten feet below existing ground surface, depending on which part of the site is considered (ground surface elevation ranges from approximately ten to 15 feet above msl).

Free groundwater was also encountered at Parcel 21 in the test borings at depths of approximately 12 to 16 feet below existing site grade. The historic shallowest groundwater in the site vicinity is approximately five feet below grade. Based on the highest tide recorded in this part of the Southern California Coast, the shallowest anticipated groundwater would be approximately five feet below existing ground surface.

Groundwater Quality

As the proposed project will not utilize groundwater as a source of water, the quality of groundwater at Parcels OT and 21 was not determined. As such, the following discussion describes the quality of groundwater throughout the Ballona Creek Watershed.

Information on groundwater quality under most of the Watershed is limited, as only the cities of Beverly Hills and Santa Monica use groundwater for domestic water supplies. In the Hollywood subbasin, water from one public supply (tested in 1998) showed a Total Dissolved Solid (TDS) content of 526 milligrams per liter (mg/L). In the Santa Monica subbasin, water samples from seven public supply wells indicated that an average TDS content of 916 mg/L (with a range of 729 to 1,156 mg/L). High TDS levels may interfere with the use of water between 500 and 1,000 mg/L, and at 1,000 mg/L, water is considered brackish and unusable. High TDS levels are commonly referred to as “hard” water, which contributes to the formation of calcium and other deposits on shower walls and other surfaces regularly exposed to water. High TDS water may also mix with low TDS sources (such as imported water) to make the water more usable for domestic purposes.

In addition to high levels of dissolved solids, which are common throughout most of Southern California, other contaminants from urban land uses may be present in groundwater. In urbanized areas, these may include volatile organic compounds (VOCs), hexavalent chromium (or Chromium 6), and N-nitrosodimethylamine (NDMA) from industrial activities and nitrates from the use of fertilizers and septic tanks. In the early 1990s, the State of California mandated upgrades to underground gasoline storage systems to prevent leakage of gasoline and migration to groundwater. In 1996, the discovery of the gasoline additive Methyl Tertiary Butyl Ether (MTBE) in groundwater extracted from wells in the City of Santa Monica indicated that such systems might not always be effective. The contamination prompted a shutdown of the City's wells and ultimately resulted in legislation that mandates the removal of MTBE from gasoline. The extent of possible MTBE contamination in soil and/or groundwater in the Ballona Creek Watershed is currently unknown, however.

Site Specific Drainage

Parcel OT

An asphalt parking lot currently occupies Parcel OT, which has minimal planting areas and an approximately 71 percent impervious surface area. At a 25-year rain event, 1.8 acres of the site sheet flows northeasterly towards Washington Boulevard, discharging approximately 5.0 cubic feet per second (cfs) into Washington Boulevard, which surface drains to the adjacent Oxford Retention Basin via storm drain inlets. The stormwater conveyed by this system eventually enters Basin E of Marina del Rey. The southern 0.06 acres of the site discharges 0.14 cfs that sheet flows to Admiralty Way westerly to an existing inlet structure and storm drain system. Eventually, this discharges into the Venice Grand Canal. In addition, the remaining 0.3 acres located on the eastern portion of the site discharges 0.76 cfs as sheet flow directly into the Oxford Retention Basin (then Basin E).

Parcel 21

Parcel 21 is comprised of mixed-uses and an asphalt parking lot. The site has minimal planting areas with an approximately 100 percent impervious surface area. At a 25-year rain event, 1.77 acres of the site generates 4.34 cfs, which sheet flows north towards a series of grating basins approximately 60-feet apart and outlets into Basin D via storm-drain pipes. In addition, the southern 0.10 acres of the site generates approximately 0.22 cfs in a 25-year rain event and sheet flows to Panay Way.

A Drainage Concept/Hydrology Study/SUSMP has been prepared for both Parcels OT and 21 and submitted for review and approval to the County of Los Angeles Department of Public Works (LADPW), as discussed in the Project Impacts section, below.

Regulatory Framework

Federal Government

Water pollution control and water quality management within the United States are regulated by the Clean Water Act (CWA), which was adopted by Congress in 1977. Under the Act, a national permitting system known as the National Pollutant Discharge Elimination System (NPDES) was established in order to regulate point discharges. As the basic Federal regulatory and enforcement tool under the CWA, the NPDES program incorporates specific discharge limitations to ensure that water quality standards are met. In 1987, there was growing concern that stormwater runoff was also contributing to the overall decline in water quality of some water bodies. As a result, the CWA now contains provisions for Total Maximum Daily Loads (TMDLs) to be developed as a way to address water quality impairments. It also contained a mechanism to categorize and list which water bodies are impaired [Section 303 (d)], based on the designated beneficial uses of the water bodies. A TMDL specifies the maximum amount of a

pollutant that a water body can receive without harming beneficial uses and exceeding the associated water quality standards. In the current 2002 303(d) List, Marina del Rey Harbor (Basins D, E, and F and Mothers' Beach), is listed as impaired due to bacteria, metals, and toxics.[10]

The Safe Drinking Water Act (SDWA) was established in 1974 to protect the quality of drinking water in the U.S. This law focuses on all waters actually or potentially designed for drinking use, whether from above ground or underground sources. It established maximum contaminant levels (MCLs) for a broad range of chemical compounds and other constituents deemed hazardous to human health. As such, it forms the basis of groundwater quality regulations.

State of California

In addition to standards and regulations established by the Federal program, California has adopted a number of other, more stringent legislative acts, such as the Porter-Cologne Water Quality Act, California Water Code, Title 23 of the California Code of Regulations, and the California Oceans Plan, in order to further strengthen State water quality standards.

Within California, the State Water Resources Control Board (SWRCB) is responsible for developing and implementing water quality control policy. SWRCB is the agency designated by the Environmental Protection Agency (EPA) for administering the applicable Federal CWA and SDWA programs, which include adopting water quality standards for State waters.

The nine Regional Water Quality Control Boards (RWQCBs) administer these Federal programs, including NPDES compliance. The Los Angeles RWQCB is responsible for water quality permitting in Marina del Rey and the adjacent areas of Los Angeles County. The LARWQCB adopted a Revised Water Quality Control Plan (Basin Plan) in 1994. The Basin Plan designates beneficial uses and establishes water quality objectives for groundwater and surface water within the Los Angeles Region.

Section 13260(a)(1) of the California Water Code (CWC) addresses waste discharges that could affect the State's waters. It requires that any person discharging wastes or proposing to discharge wastes that could affect the quality of State waters, into other than a community wastewater collection system, must file a Report of Waste Discharge with the RWQCB. The RWQCB would then prescribe requirements for the discharge or proposed discharge of wastes in accordance with provisions in Section 13260(i) of the CWC.

County of Los Angeles Department of Public Works

The proposed project lies within the County of Los Angeles Public Works Department jurisdiction for approvals and permitting relating to flood control and associated infrastructure. Therefore, the County of Los Angeles is the permitting agency for this project.

The County of Los Angeles is a Permittee under the "State of California California Regional Water Quality Control Board Los Angeles Region Order No. 01-182 NPDES Permit No. CAS004001 Waste Discharge Requirements For Municipal Storm Water And Urban Runoff Discharges Within The County of Los Angeles, and the Incorporated Cities Therein, Except The City of Long Beach", called the NPDES permit. The County discharges or contributes to discharges of storm water and urban runoff from municipal separate storm sewer systems, also called storm drain systems. The discharges, which flow into receiving waters of the Los Angeles Region, are covered under Countywide waste discharge requirements contained in Order No. 96-054 adopted by the Regional Board on July 15, 1996, which replaced Order No. 90-079 adopted by the Regional Board on June 18, 1990. Order No. 96-054 also

[10] Ibid.

serves as a National Pollutant Discharge Elimination System (NPDES) permit for the discharge of municipal storm water.

The County of Los Angeles NPDES Permit contains a requirement for Permittees to develop and implement programs for stormwater management within the County. The Development Planning Model Program specifically requires Permitees to develop a Standard Urban Storm Water Mitigation Plan (SUSMP), which serves as a model guidance document for use by builders, land developers, engineers, planners, etc. in selecting post-construction Best Management Practices (BMPs) and in obtaining approval for the urban stormwater runoff mitigation plan for a designated project prior to the issuance of building and grading permits.[11] Each Permittee must incorporate into its CEQA process procedures for considering potential storm water quality impacts and providing for appropriate mitigation when preparing and reviewing CEQA documents. The procedures require consideration of the following:

- Potential impact of project construction on storm water runoff;
- Potential impact of project post-construction activity on storm water runoff;
- Potential for discharge of storm water from areas from material storage, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous NPDES CAS004001 - 41 - Order No. 01-182 materials handling or storage, delivery areas or loading docks, or other outdoor work areas;
- Potential for discharge of storm water to impair the beneficial uses of the receiving waters or areas that provide water quality benefit;
- Potential for the discharge of storm water to cause significant harm on the biological integrity of the waterways and water bodies;
- Potential for significant changes in the flow velocity or volume of storm water runoff that can cause environmental harm; and
- Potential for significant increases in erosion of the project site or surrounding areas.

2. Thresholds of Significance

According to the Initial Study prepared for the proposed project by the Los Angeles County Department of Regional Planning and subsequent consultation with the County, the proposed project may potentially result in significant impacts associated with water quality if Parcels OT and 21 would:

- Be located in an area having known water quality problems and propose the use of individual water wells;
- Require the use of private sewage disposal systems;
- Utilize construction activities that could significantly impact the quality of groundwater and/or stormwater runoff to the stormwater conveyance system and/or receiving water bodies;
- Result in post-development activities that could potentially degrade the quality of stormwater runoff and/or contribute post-development non-stormwater discharges with pollutants to the stormwater conveyance system and/or receiving bodies; and/or
- Result in the degradation of water quality in the Marina del Rey waters and/or the Oxford Retention Basin (Marina Lagoon).

[11] County of Los Angeles Department of Public Works, "Stormwater Quality." Accessed on January 22, 2007 from http://www.ladpw.org/wmd/NPDES/

The proposed developments would be served by the Los Angeles County Waterworks District #80 and would not involve the use of private sewage disposal systems or individual water wells. Therefore, the following analysis evaluates the site on the remaining thresholds.

3. Project Impacts

Surface Water Quality

Construction Period Impacts

Stormwater runoff from construction sites, driveways, and parking areas carries debris, oil, grease and other materials. Runoff from landscaped areas may contain pesticides, herbicides and other chemical compounds as well. If urban pollutants were to leave the project site untreated during construction or operation, resulting in a change in water quality that violates Federal or State regulations, the proposed project would result in a significant impact on surface water quality.

During construction of the project, the applicant is required to implement a Stormwater Pollution Prevention Plan (SWPPP) to be prepared by a qualified engineer and subject to review and approval by the LADPW, which is an onsite, project specific document whose purpose is to minimize the discharge of pollutants associated with a specific construction site activity; either by stormwater or non-stormwater runoff. In addition, a construction project is subject to the General Permit/NPDES if it disturbs one acre or more of soil, or if the project results in the disturbance of less than one acre but is part of a larger common plan of development or sale of one or more acres. Construction sites that result in soil disturbance of one acre or greater will require the preparation and implementation of a SWPPP meeting the requirements of the General Permit. This is achieved through the selection and implementation of structural and non-structural Best Management Practices (BMPs). According to the California Stormwater Quality Association Construction Handbook[12] and the Drainage Concept and SUSMP Studies prepared for the proposed project, there are six BMP categories available for selection:

- Erosion Control;
- Sediment Control;
- Wind Erosion Control;
- Tracking Control;
- Non Stormwater Management; and
- Waste Management and Materials Pollution Control.

According to S.E.C. Civil Engineers, Inc., the proposed developments on Parcels OT (and a portion of Parcel P)[13] and 21 would utilize the following measures to alleviate the project's potential effects on water quality during the construction period:

- Erosion Control, including earth dikes and drainage swales and velocity dissipation devices;
- Sediment Control, including silt fencing, sediment basins, street sweeping and vacuuming, sand bag barriers, and storm drain inlet protection;
- Wind Erosion Control;
- Tracking Control, including stabilization of the construction site entrance/exit;

[12] Accessed from http://www.cabmphandbooks.net/Construction.asp on February 13, 2008.
[13] Hereafter, unless otherwise noted, the Oceana Retirement Facility project site is simply referred to as Parcel OT.

- Construction Site BMPs (Non-Stormwater Management BMPs), including water conservation practices, dewatering operations, paving and grinding operations, illicit connection/discharge, potable water irrigation, vehicle and equipment fueling, vehicle and equipment maintenance, concrete curing, and concrete finishing; and
- Construction Site BMPs (Waste Management and Materials Pollution Control BMPs), including materials delivery and storage, material use, stockpile management, spill prevention and control, solid waste management, hazardous waste management, concrete waste management, sanitary/septic waste management, and liquid waste management.

However, the construction of the proposed project is considered to have the potential for a significant water quality impact prior to implementation of such BMPs (refer to **Mitigation Measures WQ-1 and WQ-2**, below).

Operational Period Impacts

The Los Angeles County Standard Urban Stormwater Mitigation Plan (SUSMP) requires Best Management Practices (BMPs) to avoid water quality impacts during the project's operational phase, including measures to assure that urban pollutants do not leave a site without treatment during 24-hour rainfall events that produce a specific volume of runoff. A variety of filter treatment BMPs are available to meet regulatory requirements. Collection and treatment/filtering measures during operations to control site runoff and minimize possible contaminated runoff reaching the Oxford Retention Basin, Marina del Rey waters, Ballona Creek, or Pacific Ocean are anticipated as part of the proposed project, along with implementation of other BMPs as required to comply with existing State and Federal water quality regulations.

Parcel OT

According to the technical studies prepared by S.E.C. Civil Engineers, Inc., implementation of the proposed project would increase the imperviousness of Parcel OT to approximately 87 percent (from 71 percent). The northern portion of the site including approximately 1.8 acres would treat 5.0 cfs of stormwater by means of a series of bio-filtration planters, filterra bio-retention filtration system, or approved equivalent that meet TMDL requirements, which would discharge to Washington Boulevard and arrive at the Oxford Retention Basin (ultimately Basin E). The southern portion of the proposed development of approximately 0.1 acres (the proposed project changes the hydrological acreage from 0.6 acres due to the juxtaposition of the proposed buildings) in size would ultimately discharge to the Venice Grand Canal with 0.26 cfs. This discharge would be conveyed via a bio-filtration planter and a force main. The remaining eastern 0.3 acres decreases to 0.23 acres due to the building layout as well but would discharge the same amount of 0.76 cfs as sheet flow directly into the Oxford Retention Basin (then Basin E). Proposed drainage improvements on Parcel OT are subject to the approval of the County of Los Angeles and State of California per TMDL and BMP/SUSMP guidelines.

Parcel 21

The proposed project would reduce the imperviousness of Parcel 21 to approximately 91 percent (from 100 percent), due to the proposed park/plaza and new planting and landscaped areas. The northern portion of the site would generate a 25-year discharge of 4.36 cfs. Discharge from the portion of the site would be directed toward Bio-filter Planters and discharge to Basin D through the existing drains in the sea wall. The southern portion of the site (0.10 acres) would sheet flow to Panay Way as it does in the existing condition. Although the proposed project would reduce the amount of impervious area at Parcel 21, it would not reduce the generated discharge, and 0.02 cfs would be added to the 25-year storm event discharge from the northern portion of Parcel 21 (increase from 4.34 to 4.36 cfs). Proposed drainage

improvements on Parcel 21 would be subject to the approval of the County of Los Angeles and State of California per TMDL and BMP/SUSMP guidelines.

For purposes of this assessment, operation of the proposed project is considered to have the potential for a significant water quality impact prior to implementation of these BMPs (refer to **Mitigation Measure WQ-3**, below).

Groundwater Quality

The proposed project has the potential to affect groundwater quality through the introduction of urban contaminants, as described above under surface water quality. The potential for effects on groundwater depends on the extent to which contaminants infiltrate into groundwater sources. As described above, groundwater is present under both Parcels OT and 21. The proposed project's potential effects on surface water quality in the area may in turn result in potential impacts on groundwater quality due to infiltration. Although there are no known uses of this groundwater, the proposed project's potential indirect impacts on groundwater quality in this area are considered significant prior to implementation of BMPs, described in the Surface Water Quality discussion, above. Implementation of **Mitigation Measures WQ-1** through **WQ-3** would reduce this impact to less than significant.

4. Cumulative Impacts

Several related projects are proposed for development within the general study area (Marina del Rey, Los Angeles County, and the City of Los Angeles). These projects are generally similar or larger in scope compared to the proposed project. They represent a mix of residential, commercial, office, and hotel/motel projects, with some open space and associated recreational land uses. Urbanization (i.e., the development of related projects) of the Marina del Rey, Ballona Creek, and Santa Monica Mountains Watersheds is expected to have significant cumulative water quality impacts to Santa Monica Bay, of which the proposed project is a part. The proposed project's contribution to this cumulative condition is considered significant. Following proper implementation of project design measures and compliance with all applicable regulations and permit conditions (**Mitigation Measures WQ-1** through **WQ-3**), this impact would be less than significant.

5. Mitigation Measures

The following mitigation measures would reduce potential significant impacts on surface water quality and the associated indirect impacts on groundwater quality to less than significant. These measures may in part overlap with the applicant's project design measures and regulatory requirements imposed by the County of Los Angeles and the Los Angeles Regional Water Quality Control Board. However, they are included as mitigation measures in order to identify those project design features that are required for impact reduction and to assist in assuring the implementation of these features as well as other required BMPs. Implementation of these measures would reduce all project and cumulative impacts to less than significant levels.

Temporary Construction Impacts

WQ-1 Grading activities shall be planned during the Southern California dry season (April through October) to the extent feasible and practicable.

WQ-2 The applicant shall prepare a Stormwater Pollution Prevention Plan (SWPPP) and submit it with the grading plan to the County of Los Angeles Department of Public Works' Land

Development Division for review and approval and apply the appropriate BMPs identified. These may contain at a minimum the following items:

- During construction, contractors shall be required to utilize sandbags and berms to control runoff during on-site watering and periods of rain in order to minimize erosion, sedimentation, and surface water contamination.
- In order to intercept sediment-laden runoff generated during construction activities and trap and retain sediment, sediment basins shall be employed within the project site.
- Filter fences designed to intercept and detain sediment and trash while decreasing the velocity of runoff shall be employed within project sites.

Project Operational Impacts

WQ-3 The applicant shall prepare a Drainage Concept and Standard Urban Stormwater Mitigation Plan (SUSMP) for both Parcels OT and 21, subject to review and approval by the County of Los Angeles Department of Public Works' Land Development Division. The SUSMP shall include best management practices for controlling and treating polluted runoff and removing floating solids from runoff. Any such best management practices or devices shall be incorporated as shown on the Drainage Concept as approved by the County of Los Angeles Department of Public Works, if necessary, for compliance with applicable Total Maximum Daily Loads under the Los Angeles Regional Water Quality Control Board.

6. Significant Project Impacts After Mitigation

With implementation of the mitigation measures identified above, the proposed development's project and cumulative impacts on surface water quality and indirect impacts on groundwater quality would be reduced to a less than significant level.

D. AIR QUALITY

1. Existing Conditions

Meteorological Setting

Regional Climate

The North Pacific high-pressure cell is the dominant climatic influence over the eastern North Pacific Ocean, particularly during the summer months. This high-pressure cell produces a predominantly northwesterly flow of maritime air over the California coastal waters. During the winter, the Pacific High weakens and moves south, resulting in weaker and less persistent northwesterly winds along the California coast than in the warmer half of the year.

As the air mass approaches the coast of California, this large-scale circulation pattern is modified by local influences. The differential heating between the desert and the adjacent Pacific Ocean modifies the prevailing winds, enhancing them during the warmer half of the year and weakening the winds during the colder portion. On a local and sub-regional basis, the airflow in California is channeled by its mountain ranges and valleys. The coastal mountain ranges limit the flow of maritime air into the interior of California. This transition from a cool and damp marine environment to a dry and warm continental climate therefore occurs over a fairly short distance.

South Coast Air Basin

The South Coast Air Basin (SCAB, Basin, or Air Basin) is a 6,600 square mile coastal plain bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The SCAB includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. Warm summers, mild winters, infrequent rainfall, moderate onshore daytime breezes, and moderate humidity levels characterize basin-wide conditions.

All seasons generally exhibit onshore flows during the day and offshore flows at night, after the land cools below the temperature of the ocean. The likelihood of strong offshore flows, including Santa Ana winds, is greater during winter than during summer [California Air Resources Board (ARB) 1984].

The topography and climate of Southern California combine to produce unhealthful air quality in the SCAB. Low temperature inversions, light winds, shallow vertical mixing, and extensive sunlight, in conjunction with topographical features such as adjacent mountain ranges that hinder dispersion of air pollutants, combine to create degraded quality, especially in inland valleys of the basin.

Ambient Air Quality Standards AAQS

In order to gauge the significance of the air quality impacts of the proposed Parcels OT and 21 developments, those impacts, together with existing background air quality levels, must be compared to the applicable ambient air quality standards. These standards are the levels of air quality that are considered safe, with an adequate margin of safety, to protect the public health and welfare. They are designed to protect those people most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise, called "sensitive receptors." Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed. Recent research has shown, however, that chronic exposure to ozone (the primary ingredient in

photochemical smog) may lead to adverse respiratory health, even at concentrations close to the ambient standard.

National Ambient Air Quality Standards (AAQS) were established in 1971 for six pollution species with states retaining the option to add other pollutants, require more stringent compliance, or to include different exposure periods. The initial attainment deadline of 1977 was extended several times in air quality problem areas like Southern California. In 2003, the U.S. Environmental Protection Agency (EPA) adopted a rule that extended and established a new attainment deadline for ozone for the year 2021. As the State of California had established AAQS several years before the federal action, and because of unique air quality problems introduced by the restrictive dispersion meteorology, there is considerable difference between state and national clean air standards. Those standards currently in effect in California are shown in **Table IV.D-1**. Sources and health effects of various pollutants are shown in **Table IV.D-2.**

The Federal Clean Air Act Amendments (CAAA) of 1990 required that the U.S. EPA review all national AAQS in light of currently known health effects. The EPA was charged with modifying existing standards or promulgating new ones where appropriate and subsequently developed standards for chronic ozone exposure (eight or more hours per day) and for very small diameter particulate matter (called "PM-2.5"). New National AAQS were adopted on July 17, 1997.

Planning and enforcement of the Federal standards for PM-2.5 and for ozone (eight-hour) were challenged by trucking and manufacturing organizations. In a unanimous decision, the U.S. Supreme Court ruled that the EPA did not require specific congressional authorization to adopt national clean air standards. The Court also ruled that health-based standards did not require preparation of a cost-benefit analysis. The Court did find, however, that there was some inconsistency between existing and "new" standards in their respective attainment schedules. Such attainment-planning schedule inconsistencies centered mainly on the eight-hour ozone standard. The EPA subsequently agreed to downgrade the attainment designation for a large number of communities to “non-attainment” for the eight-hour ozone standard. Because the South Coast Air Basin is far from attaining the one-hour Federal standard, the eight-hour ozone non-attainment designation will not substantially alter the attainment planning process. The compliance deadline for the eight-hour ozone standard has been extended to 2021.

Evaluation of the most current data on the health effects of inhalation of fine particulate matter prompted the California Air Resources Board (ARB) to recommend adoption of the Statewide PM-2.5 standard that is more stringent than the Federal standard. This standard was adopted on June 20, 2002. The State PM-2.5 standard is more of a goal in that it does not have specific attainment planning requirements like a Federal clean air standard; it only requires continued progress towards attainment.

Similarly, the ARB extensively evaluated health effects of ozone exposure. A new state standard for an eight-hour ozone exposure was adopted in April 2005, which mirrors the Federal standard. The California eight-hour ozone standard of 0.07 parts per million (ppm) is more stringent than the Federal eight-hour standard of 0.08 ppm. The State standard, however, does not have a specific attainment deadline. California air quality jurisdictions are required to make steady progress toward attaining State standards, but there are no hard deadlines or any consequences of non-attainment. As part of the same re-evaluation process, the ARB adopted a new annual State standard for nitrogen dioxide (NO_2) that is more stringent than the corresponding Federal standard, and strengthened the State one-hour NO_2 standard.

Table IV.D-1
Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards		Federal Standards		
		Concentration	Method	Primary	Secondary	Method
Ozone (O_3)	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	-	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.07 ppm (140 µg/m^3)		0.08 ppm (157 µg/m^3)		
Respirable Particulate Matter (PM_{10})	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		Revoked (2006)		
Fine Particulate Matter ($PM_{2.5}$)	24 Hour	No Separate State Standard		35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetic Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	15 µg/m^3		
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m^3)	None	Non-Dispersive Infrared Photometry (NDIR)
	1 Hour	20 ppm (23 mg/m^3)		35 ppm (40 mg/m^3)		
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		–	–	–
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	0.030 ppm (56 µg/m$^{3)}$	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m^3)	Same as Primary Standard	Gas Phase Chemilumi-nescence
	1 Hour	0.18 ppm (338 µg/m^3)		–		
Lead	30-Day average	1.5 µg/m^3	Atomic Absorption	–	–	–
	Calendar Quarter	–		1.5 µg/m^3	Same as Primary Standard	High Volume Sampler and Atomic Absorption
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	–	Ultraviolet Fluorescence	0.030 ppm (80 µg/m^3)	–	Spectrophotometry (Pararosaniline Method)
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (365 µg/m^3)	–	
	3 Hour	–		–	0.5 ppm (1,300 µg/m^3)	
	1 Hour	0.25 ppm (655 µg/m^3)		–	–	
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per kilometer–visibility of 10 miles or more (0.07–30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape.		**No Federal Standards**		
Sulfates	24 Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

Table IV.D-2
Health Effects of Major Criteria Pollutants

Pollutants	Sources	Most Relevant Effects
Carbon Monoxide (CO)	• Incomplete combustion of fuels and other carbon-containing substances, such as motor exhaust. • Natural events, such as decomposition of organic matter.	• Reduced tolerance for exercise. • Impairment of mental function. • Impairment of fetal development. • Death at high levels of exposure. • Aggravation of some heart diseases (angina).
Nitrogen Dioxide (NO_2)	• Motor vehicle exhaust. • High temperature stationary combustion. • Atmospheric reactions.	• Aggravation of respiratory illness. • Reduced visibility. • Reduced plant growth. • Formation of acid rain.
Ozone (O_3)	• Atmospheric reaction of organic gases with nitrogen oxides in sunlight.	• Aggravation of respiratory and cardiovascular diseases. • Irritation of eyes. • Impairment of cardiopulmonary function. • Plant leaf injury.
Lead (Pb)	• Contaminated soil.	• Impairment of blood function and nerve construction. • Behavioral and hearing problems in children.
Fine Particulate Matter (PM-10)	• Stationary combustion of solid fuels. • Construction activities. • Industrial processes. • Atmospheric chemical reactions.	• Reduced lung function. • Aggravation of the effects of gaseous pollutants. • Aggravation of respiratory and cardio respiratory diseases. • Increased cough and chest discomfort. • Soiling. • Reduced visibility.
Fine Particulate Matter (PM-2.5)	• Fuel combustion in motor vehicles, equipment, and industrial sources. • Residential and agricultural burning. • Industrial processes. • Also, formed from photochemical reactions of other pollutants, including NOx, sulfur oxides, and organics.	• Increases respiratory disease. • Lung damage. • Cancer and premature death. • Reduces visibility and results in surface soiling.
Sulfur Dioxide (SO_2)	• Combustion of sulfur-containing fossil fuels. • Smelting of sulfur-bearing metal ores. • Industrial processes.	• Aggravation of respiratory diseases (asthma, emphysema). • Reduced lung function. • Irritation of eyes. • Reduced visibility. • Plant injury. • Deterioration of metals, textiles, leather, finishes, coatings, etc.
Source: California Air Resources Board, 2002.		

As part of EPA's 2002 consent decree on clean air standards, an additional review of airborne particulate matter (PM) and human health was initiated. A substantial modification of Federal clean air standards for PM was promulgated in 2006. Standards for PM-2.5 were strengthened, a new class of PM in the 2.5 to ten micron size (PM-10) was created, some PM-10 standards were revoked, and a distinction between rural and urban air quality was adopted.

Of the standards shown in Table IV.D-1, those for $O_3$and PM-10 and PM-2.5 are exceeded at times in the Air Basin. They are called "non-attainment pollutants." The CO standard is currently met in the Basin, and re-designation to "attainment/maintenance" is anticipated shortly. Due to the variations in both the regional meteorology and in area-wide differences in levels of air pollution emissions, patterns of non-attainment have strong spatial and temporal differences.

Baseline Air Quality

Existing levels of ambient air quality and historical trends and projections in the project area are well documented from measurements made by the South Coast Air Quality Management District (SCAQMD). The West Los Angeles monitoring station is closest to the project site, and is therefore most representative of the project area air quality. PM-10 data is not measured at the West Los Angeles station, but it is measured at the next closest SCAQMD monitoring station in Hawthorne. As neither station measures PM-2.5, measurements for PM-2.5 were not included in this study. **Table IV.D-3** is a six-year summary of monitoring data for the major air pollutants compiled from the two air monitoring stations.

Ozone (O_3) and particulates are seen to be the two most significant air quality concerns. Ozone, the primary ingredient in photochemical smog, is obviously an important pollution problem in the Los Angeles basin. However, in West Los Angeles, only once in the past six years was there a violation of the national hourly ozone standard. Less than two percent of all days exceed the California one-hour standard. The Federal eight-hour standard has been exceeded only once in the last six years. The new eight-hour state ozone standard has been exceeded an average of three times a year in the past four years. The hourly maximum was highest in 2003, but there has been some improvement since then. The coastal area ozone air quality problem is much less severe than in the greater Los Angeles air basin.

Table IV.D-3
Air Quality Monitoring Summary
(Number of Days Standards Were Exceeded and Maximum Levels During Such Violations)

Pollutant/Standard	2002	2003	2004	2005	2006	2007
Ozone						
1-hour > 0.09 ppm (S)	1	11	5	7	3	2
1-hour > 0.12 ppm (F)	0	1	0	0	0	0
8-hour > 0.07 ppm (S)	-	-	6	5	0	2
8-hour > 0.08 ppm	0	1	1	1	0	1
Max 1-hour Conc. (ppm)	0.118	0.134	0.107	0.114	0.100	0.117
Carbon Monoxide						
1-hour > 20. ppm (S)	0	0	0	0	0	0
8- Hour > 9. ppm (S,F)	0	0	0	0	0	0
Max 1-hour Conc. (ppm)	4.0	5.0	4.0	3.0	3.0	3.0
Max 8-hour Conc. (ppm)	2.7	2.7	2.3	2.1	2.3	1.9
Nitrogen Dioxide						
1-hour > 0.25 ppm (S)	0	0	0	0	0	0
Max 1-hour Conc. (ppm)	0.11	0.12	0.09	0.08	0.08	0.08
Respirable Particulates (PM-10)						
24-Hour > 50 $\mu g/m^3$ (S)	12/61	3/61	2/15	0/54	0/51	2/56
24-Hour > 150 $\mu g/m^3$ (F)	0/61	0/61	0/15	0/54	0/51	0/56
Max. 24-Hr. Conc. ($\mu g/m^3$)	121	58	52	44	45	96

Source: California Air Resources Board (ARB)
(S) = State ambient standard
(F) = Federal ambient standard

The project area also experiences frequent violations of standards for PM-10. High dust levels occur during Santa Ana wind conditions, as well as from the trapped accumulation of soot, roadway dust and byproducts of atmospheric chemical reactions during warm season days with poor visibility. Table IV.D-3 shows that almost 7 percent of all days in the last six years in the project vicinity experienced a violation of the State PM-10 standard; however, there was no violation in 2005 or 2006. The three-times less stringent Federal PM-10 standard has not been exceeded in the past six years. The maximum 24-hour concentration appears to be declining following a spike in 2002, through year 2007 was higher than prior years. The overall decline in the PM-10 levels may be due to a relocation of the air monitoring station from Hawthorne to a site near the Los Angeles International Airport (LAX). The current monitoring station is likely less influenced by freeways, construction, and other PM-10 sources than at its former location.

More localized pollutants such as CO, NOx, etc. are very low near the project site, because background levels never exceed allowable levels. There is substantial excess dispersive capacity to accommodate localized vehicular air pollutants, such as NOx or CO, without any threat of violating applicable AAQS.

Air Quality Planning

The Federal Clean Air Act (1977 Amendments) required that designated agencies in any area of the nation not meeting national clean air standards must prepare a plan demonstrating the steps that would bring the area into compliance with all national standards. The SCAB could not meet the deadline for O_3, nitrogen dioxide, CO, or PM-10. In the SCAB, the agencies designated by the governor to develop regional air quality plans are the SCAQMD and the Southern California Association of Governments (SCAG). The two agencies first adopted an Air Quality Management Plan (AQMP) in 1979 and revised it several times as earlier attainment forecasts were shown to be overly optimistic.

The 1990 Federal Clean Air Act Amendment (CAAA) required that all states having air-sheds with "serious" or worse O_3 problems submit a revision to the State Implementation Plan (SIP). Several amendments to the SIP have been proposed, revised and approved over the past decade. The most current regional attainment emissions forecast for ozone precursors (Reactive Organic Gases-ROG, and NOx) and for CO are shown in **Table IV.D-4.** Substantial reductions in emissions of ROG, NOx, and CO are forecast to continue throughout the next several decades. Unless new particulate control programs are implemented, PM-10 and PM-2.5 are forecast to slightly increase.

Table IV.D-4
South Coast Air Basin Emissions Forecasts (Tons/Day)

Pollutant	2005[1]	2010[2]	2015[2]	2020
NOx	957	756	586	496
ROG	684	567	517	492
CO	3838	2943	2395	2056
PM-10	276	278	284	292
PM-2.5	97	97	98	100

Source: California Air Resources Board, the 2006 California Almanac of Emission & Air Quality.
[1] 2005 Base Year.
[2] With current emissions reduction programs and adopted growth forecasts.

The Air Quality Management District (AQMD) adopted an updated clean air "blueprint" in August 2003. The 2003 AQMP was approved by the EPA in 2004. The Air Quality Management Plan (AQMP) outlines the air pollution measures needed to meet Federal health-based standards for O_3 by 2010 and for PM-10 by 2006. Components of the 2003 air plan included:

- How the Federal standard for CO was to be maintained;
- Control measures to further reduce emissions from business, industry and paints; and
- Measures to be adopted by CARB and EPA to further reduce pollution from:
  - Cars
  - Trucks
  - Construction equipment
  - Aircraft
  - Ships
  - Consumer products

With re-designation of the Air Basin as non-attainment for the eight-hour ozone standard, preparation of a new attainment plan has been developed. This plan shifts most of the one-hour ozone standard attainment strategies to the eight-hour standard. As previously noted, the O_3 attainment date will "slip" from 2010 to 2021. The updated attainment plan also includes strategies for ultimately meeting the Federal PM-2.5 standard.

The 2007 AQMP was adopted on June 1, 2007, after extensive public review. The 2007 AQMP recognizes the interaction between photochemical processes that create both ozone and the smallest airborne particulates (PM-2.5). The 2007 AQMP is therefore a coordinated plan for both pollutants. Key emissions reductions strategies in the updated air quality plan include:

- Ultra-low emissions standards for both new and existing sources (including on-and-off-road heavy trucks, industrial and service equipment, locomotives, ships and aircraft);
- Accelerated fleet turnover to achieve benefits of cleaner engines;
- Reformulation of consumer products; and
- Modernization and technology advancements from stationary sources (refineries, power plants, etc.).

Projects such as the proposed Marina del Rey Parcel OT and Parcel 21 developments do not directly relate to the AQMP, in that there are no specific air quality programs or regulations governing "general" development. Conformity with adopted plans, forecasts and programs relative to population, housing, employment, and land use is the primary yardstick by which impact significance of master planned growth is determined. If a given project incorporates any available transportation control measures that can be implemented on a project-specific basis, and if the scope and phasing of a project are consistent with adopted forecasts as shown in the Regional Comprehensive Plan (RCP), then the regional air quality impact of project growth would not be significant because of planning inconsistency. The SCAQMD, however, while acknowledging that the AQMP is a growth-accommodating document, does not favor designating impacts as less-than-significant just because the proposed development is consistent with regional growth projections. Air quality impact significance for the proposed project has therefore been analyzed on a project-specific basis.

2. Thresholds of Significance

Two sources were consulted during the development of thresholds of significance to evaluate the proposed project's potential impacts to air quality: Appendix G of the CEQA Guidelines and SCAQMD Emissions Significance Thresholds.

CEQA Significance Thresholds

Appendix G of the California CEQA Guidelines offers the following five tests of air quality impact significance. The proposed project may have a significant impact to air quality if it:

- Conflicts with or obstructs implementation of the applicable air quality plan;
- Violates any air quality standard or contributes substantially to an existing or projected air quality violation;
- Results in a cumulatively considerable net increase of any criteria pollutants 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);
- Exposes sensitive receptors to substantial pollutant concentrations; and/or
- Creates objectionable odors affecting a substantial number of people.

SCAQMD Significance Thresholds

Primary Pollutants

Air quality impacts generally occur on two scales of motion. Near an individual source of emissions or a collection of sources such as a crowded intersection or parking lot, levels of those pollutants that are emitted in their already unhealthful form will be highest. CO is an example of such a pollutant. Primary pollutant impacts can generally be evaluated directly in comparison to appropriate clean air standards. Many particulates, especially fugitive dust emissions, are also primary pollutants. Due to the non-attainment status of the South Coast Air Basin (SCAB) for PM-10, an aggressive dust control program is required to control fugitive dust. Therefore:

- As stated above, violations of clean air standards where they are currently met, or a measurable worsening of an existing or future violation, would be considered a significant impact of the proposed project.

Secondary Pollutants

Many pollutants, however, require time to transform from a more benign form to a more unhealthful contaminant. Their impact occurs regionally far from the source. Their incremental regional impact is minute on an individual basis and cannot be quantified except through complex photochemical computer models. Analysis of significance of such emissions is based upon a specified amount of emissions (pounds, tons, etc.) even though there is no way to translate those emissions directly into a corresponding ambient air quality impact.

Due to the chemical complexity of primary versus secondary pollutants, the SCAQMD has designated significant emissions levels as surrogates for evaluating impact significance independent of chemical transformation processes (see **Table IV.D-5**). Therefore:

- Projects with daily emissions that exceed any of the following emission thresholds are recommended by the SCAQMD to be considered significant:

Table IV.D-5
SCAQMD Emissions Significance Thresholds (Pounds/Day)

Pollutant	Emissions (Construction)	Emissions (Operational)
ROG	75	55
NOx	100	55
CO	550	550
PM-10	150	150
SOx	150	150
Lead	3	3
Source: SCAQMD CEQA Air Quality Handbook, November, 1993 Rev.		

Additional Indicators

In its CEQA Handbook, the SCAQMD also states that additional indicators should be used as screening criteria to determine the need for further analysis with respect to air quality. The additional indicators are as follows:

- The proposed project could interfere with the attainment of the federal or state ambient air quality standards by either violating or contributing to an existing or projected air quality violation;
- The proposed project could result in population increases within the regional statistical area which would be in excess of that projected in the AQMP and in other than planned locations for the project's build-out year; and/or
- The proposed project could generate vehicle trips that cause a CO hot spot.

The SCAQMD CEQA Handbook also identifies various secondary significance criteria related to toxic, hazardous, or odorous air contaminants. Hazardous air contaminants are contained within the small diameter particulate matter ("PM-2.5") fraction of diesel exhaust. Such exhaust would be generated by heavy construction equipment and by diesel-powered delivery trucks.

For PM-2.5 exhaust emissions, recently adopted policies require the gradual conversion of delivery fleets to diesel alternatives, or the use of "clean" diesel if emissions are demonstrated to be as low as those from alternative fuels. Because health risks from toxic air contaminants (TACs) are cumulative over an assumed 70-year lifespan, measurable off-site public health risk from TAC exposure from project-related activities (mainly construction using diesel equipment) would occur for only a brief portion early in project lifetime, and only in dilute quantity.

Additionally, during the SCAQMD's implementation of the Environmental Justice program, an analysis was performed to insure that already impacted communities not be unfairly impacted by additional air pollution, such as diesel exhaust. Local significance thresholds (LSTs) were developed for already impacted communities. LST's represent actual levels of local air quality rather than regional air pollution affected by emissions-based thresholds identified above. The SCAQMD has recommended that LSTs be incorporated for both construction and operations into CEQA analysis for all communities and not just

those with nearby rail yards, ports, trucking warehouses, etc. For commercial and residential uses, LSTs are only applicable to construction activities. Use of LST thresholds is, however, voluntary. Marina del Rey is not comparable to highly impacted low socio-economic areas of the basin. Nevertheless, the LST threshold for construction activities will be considered here to present a thorough analysis of project impact significance.

3. Project Impacts

Construction Period Impacts

Temporary construction activity emissions would occur during project build-out. Such emissions include on-site generation of dust and equipment exhaust from demolition, grading and construction activities, and off-site emissions from construction employee commuting and/or trucks delivering building materials.

Airborne Dust

Dust is normally the primary concern during construction of new buildings and infrastructure. As such emissions are not amenable to collection and discharge through a controlled source, they are called "fugitive" emissions. Emission rates vary as a function of many parameters (soil silt, soil moisture, wind speed, area disturbed, number of vehicles, depth of disturbance or excavation, etc.). These parameters are not known with any reasonable certainty prior to project development and may change from day-to-day. Any assignment of specific parameters to an unknown future date would be speculative.

Due to the inherent uncertainty in the predictive factors for estimating fugitive dust generation, regulatory agencies typically use one universal "default" factor based on the area disturbed, assuming that all other input parameters into emission rate prediction fall into mid-range average values. This assumption may or may not necessarily be applicable to site-specific conditions on the proposed Marina del Rey project site. As noted previously, emissions estimation for project-specific fugitive dust sources is therefore characterized by a considerable degree of imprecision. Average daily PM-10 emissions during site grading and other disturbance are stated in the SCAQMD Handbook to be 26.4 pounds/acre. This estimate is based upon required dust control measures in effect in 1993 when the AQMD CEQA Air Quality Handbook was prepared. Rule 403 was subsequently strengthened to require use of a greater array of fugitive dust control on construction projects. All construction projects in the SCAQMD are required to use strongly enhanced control procedures. Use of enhanced dust control procedures such as continual soil wetting, use of supplemental binders, early paving, etc. can achieve a substantially higher PM-10 control efficiency. Daily emissions with use of reasonably available control measures (RACMs) for PM-10 can reduce emission levels to around ten (10) pounds per acre per day. With the use of best available control measures (BACMs) the California Air Resources Board URBEMIS20007 computer model predicts that emissions can be reduced to 1-2 pounds per acre per day.

The proposed site is approximately two acres in size. The Air Resource Board URBEMIS2007 computer model predicts that 0.5 acres could be under simultaneous heavy construction at some point during the build-out lifetime of the project. With the use of RACMs, daily PM-10 emissions during the site grading would be five pounds per day (0.5 X10.0 = 5 lb/day). The SCAQMD significance threshold of 150 pounds per day would not be exceeded. With the use of Best Available Control Measures (BACM), daily PM-10 emissions can be further reduced. Because of the PM-10 non-attainment status of the air basin, construction activity dust emissions are considered to have a cumulatively significant impact. Use of BACMs is thus required to reduce this cumulatively significant impact to less than significant (refer to Section 4, below).

The entire project site (Parcels OT including a portion of Parcel P.[1] and 21) occupies approximately 4.67 acres, though only 1.8 acres were assumed by the URBEMIS2007 model to undergo simultaneous grading disturbance on any single day during the build-out lifetime of the project. With the use of RACMs, daily PM-10 emissions during site grading would be 18 pounds per day (1.8 X 10.0 = 18 lbs/day). The SCAQMD significance threshold of 150 pounds per day would not be exceeded. With the use of Best Available Control Measures (BACM), daily PM-10 emissions can be further reduced.

The two sites are sufficiently small such that the uses of enhanced dust control measures are not required to achieve less-than significant PM-10 dust emissions. Regardless, the non-attainment status of the air basin and the proximity of dust-sensitive land uses require that BACMs be used to minimize both regional cumulative PM-10 impacts and any potential local soiling nuisance from all construction activities, even if any single project does not cause thresholds to be exceeded. The menu of BACMs is included in the mitigation discussion.

Current research in particulate-exposure health suggests that the most adverse effects derive from ultra-small diameter particulate matter comprised of chemically reactive pollutants such as sulfates, nitrates or organic material. A national clean air standard for particulate matter of 2.5 microns or smaller in diameter (called "PM-2.5") was adopted in 1997. A limited amount of construction activity particulate matter is in the PM-2.5 range. PM-2.5 emissions are estimated by the SCAQMD to comprise 20.8 percent of PM-10. Other studies have shown that the fugitive dust fraction for PM-2.5 is closer to 10 percent. Daily PM-2.5 emissions during construction will be less than four pounds per day compared to the SCAQMD CEQA significance threshold of 55 pounds per day.

In addition to fine particles that remain suspended in the atmosphere semi-indefinitely, construction activities generate many larger particles with shorter atmospheric residence times. This dust is comprised mainly of large diameter inert silicates that are chemically non-reactive and are further readily filtered out by human breathing passages. These fugitive dust particles are therefore more of a potential soiling nuisance as they settle out on parked cars, outdoor furniture or landscape foliage rather than any adverse health hazard. The deposition distance of most soiling nuisance particulates is less than 100 feet from the source (EPA, 1995). The prevailing site winds are strongly from the west toward the east. Dust deposition during construction could create a soiling nuisance at the adjacent recreational uses. The standard dust control measures applied to all discretionary projects for PM-10 control would also limit the soiling nuisance.

Dust generation associated with project construction would be temporary, and the sizes of the sites proposed for development are relatively small. Therefore, dust impacts during project demolition, grading, and construction activities are considered adverse, but less than significant. Use of standard dust control measures, applied to all discretionary projects, would minimize the fugitive dust impacts during demolition and construction.

Construction-Related Exhaust Emissions

Exhaust emissions would result from on and off-site heavy equipment during grading. Emissions would also be generated during finish construction, especially during the application of paints or other coatings. The types and numbers of equipment would vary among contractors, such that these emissions cannot be quantified with certainty. During various construction activities on the project parcel, the equipment fleet in **Table IV.D-6** would likely be utilized, and has therefore been assumed as a basis for estimating

[1] Hereafter, unless otherwise noted, the Oceana Retirement Facility project site is simply referred to as Parcel OT.

maximum daily equipment exhaust emissions.

Table IV.D-6
Assumed Equipment Fleet for Project Construction

Demolition	Grading	Construction	Paving
1 Industrial Saw	1 Tractor/Loader/Backhoe	1 Crane	1 Paver
1 Dozer	1 Grader	1 Tractor/Loader/Backhoe	1 Paving Equipment
2 Tractor/Loader/Backhoes	1 Dozer	2 Forklifts	1 Tractor/Loader/Backhoe
	1 Water Truck	1 Generator Set	4 Cement Mixers
		3 Welders	1 Roller

The project is expected to generate 4,446 c.y. of demolition waste with approximately 74 truck trips over a period of seven days for both parcels. Additionally, 7,760 c.y. of soil are to be hauled over a period of 15 days with approximately 647 truck trips. The California ARB's URBEMIS2007 computer model was also used to estimate daily, unmitigated emissions during grading and finish construction, with the results shown in **Table IV.D-7**.

Table IV.D-7
Estimated Daily Emissions During Grading and Finish Construction (Pounds/Day)

Activity	ROG	NOx	CO	SO_2	PM-10	PM-2.5	$C0_2$
Demolition							
No Mitigation	2.5	24.2	12.0	0.0	15.5	4.2	2,803.8
With Mitigation	2.5	22.9	12.0	0.0	15.0	3.7	2,803.8
Grading							
No Mitigation	9.8	97.3	45.2	0.1	41.5	11.9	10,230.8
With Mitigation	9.8	93.4	45.2	0.1	15.5	4.5	10,230.8
Construction and Paving							
No Mitigation	10.4	20.1	22.7	0.0	1.5	1.3	3,260.3
With Mitigation	9.8	18.0	22.7	0.0	0.7	0.6	3,260.3
SCAQMD Threshold	75.0	100.0	550.0	150.0	150.0	55	-

As shown, the emissions for construction activity pollutants would be less than significant. The mobile nature of the on-site construction equipment and off-site trucks would prevent any micro-scale violation of standards. Construction equipment exhaust contains carcinogenic compounds within the diesel exhaust particulates. The toxicity of diesel exhaust is evaluated relative to a 24-hour per day, 365 days per year, 70-year lifetime exposure. Public exposure to heavy equipment operating in the distance would be an extremely small fraction of the above dosage assumption. Diesel equipment is also becoming progressively "cleaner" in response to air quality rules on new off-road equipment. Diesel exhaust emissions from up to four pieces of heavy equipment operating on-site would be dwarfed by diesel exhaust from hundreds of diesel trucks passing the site each day on Washington Blvd. Any public health risk associated with project-related heavy equipment operations exhaust is therefore not quantifiable, but less than significant. As with PM-10 emissions, the non-attainment status of the air basin and the cumulative impact of all regional construction suggest that all reasonably available control measures for

diesel exhaust should be implemented even if individual thresholds are not exceeded. The use of BACMs would be used to minimize both regional cumulative diesel exhaust impacts, even if any single project does not cause thresholds to be exceeded. As stated, the menu of BACMs is included in the mitigation discussion.

Local Significance Impacts

The SCAQMD has developed analysis parameters to evaluate ambient air quality on a local level in addition to the more regional emissions-based thresholds of significance. These analysis elements are called Local Significance Thresholds (LSTs). LSTs were developed in response to Governing Board's Environmental Justice Enhancement Initiative 1-4 and the LST methodology was adopted 2005.

Use of an LST analysis for a project is optional, because they were derived for economically or socially disadvantaged communities. For commercial and residential uses, LSTs are only applicable to construction activities. LSTs are only applicable to the following criteria pollutants: oxides of nitrogen (NOx), carbon monoxide (CO), and particulate matter (PM-10 and PM-2.5). LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable Federal or State ambient air quality standard, and they are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor.

The URBEMIS model estimates that the daily construction disturbance "footprint" will be 1.8 acres. LST pollutant screening concentration data is currently published for one, two and five-acre sites. Utilizing data for a two-acre site and a source receptor distance of 50 meters, the following thresholds are determined (pounds per day):

Table IV.D-8
Local Significance Thresholds Compared to Project Construction Emissions (Pounds/Day)

North/West Coastal Los Angeles County	CO	NOx	PM-10	PM-2.5
LST	1,082	207	19	5
Proposed Project				
Unmitigated	23-45	20-97	2-41	1-12
Mitigated	23-45	18-93	1-16	1-4

As shown, CO and NOx emissions would be below LST thresholds. Implementation of **Mitigation Measure AQ-1,** which represents a menu of BACMs, would reduce the potential PM-10 and PM-2.5 emissions impact to less than significant.

Operational Impacts

Operational emissions for project-related traffic were calculated using a computerized procedure developed by the California Air Resources Board (CARB) for urban growth mobile source emissions. The URBEMIS2007 model was run using the trip generation factors specified by the project traffic consultant for this specific project (included in **Volume II, Appendix D**). The model was used to calculate area source emissions and the resulting vehicular operational emissions for an assumed project

build-out year of 2014. A model was run to calculate emissions from net new uses, which will generate an additional 278 ADT. The results are shown in **Table IV.D-9.**

Table IV.D-9
Average Daily Project Mobile Source Air Pollution Emissions (Pounds/Day)

Year 2014-Net New Uses	ROG	NOx	CO	SO2	PM-10	PM-2.5	CO2
Area Source Emissions	6.4[1]	1.2	3.7	0.0	0.0	0.0	01,490.3
Mobile Emissions	2.3	2.3	21.4	0.0	4.7	0.9	2,836.8
Total	**8.7**	**3.5**	**25.1**	**0.0**	**4.7**	**0.9**	**4,327.1**
SCAQMD Significance Threshold	55	55	550	150	150	55	-
Exceeds Threshold?	No	No	No	No	No	No	NA
Percent of Threshold	16	6	5	<1	3	2	NA
Source: URBEMIS2007, Output in Appendix.							

The proposed project would not cause the thresholds of significance to be exceeded. Project-related emission levels for the two ozone precursor pollutants (ROG and NOx) would represent 17 and seven percent of the significance threshold, respectively. Carbon monoxide (CO) would similarly not exceed the suggested significance threshold by a large margin of safety. The proposed project's operational emissions would therefore be less than significant.

Micro-Scale Emissions Impacts

In addition to regional air quality concerns, which focus on the photochemical conversion of air pollution emissions to more harmful forms, vehicular exhaust may impact air quality immediately adjacent to the roadway travel lanes. Such micro-scale CO impacts occur during periods of maximum traffic congestion and minimum atmospheric dispersion.

Micro-scale air quality is traditionally analyzed within environmental studies in terms of any potential carbon monoxide (CO) "hot spots." Hot spots are possible violations of standards at sensitive receptor locations within very short distances of major intersections or other points of traffic stagnation. Such an analysis is not necessary for the proposed project, because:

- Background CO levels are low in Marina del Rey;
- The average CO emissions per vehicle will decrease by more than 50 percent in this next decade such that it becomes physically impossible to create enough of a vehicle concentration to generate enough CO emissions to exceed standards;[2] and
- The maximum background CO levels were 3.0 ppm in 2005. It would take an increase of more than 17 ppm to exceed the current one-hour standard of 20 ppm. CO modeling by the SCAQMD has shown that the worst-case CO impact at the largest intersection in the air basin operating at a

[2] The Emission Factors 2007 (EMFAC2007) computer model for CO emissions projections over time, and the SCAQMD Final 2003 AQMP, Appendix V, Modeling and Attainment Demonstration (Page V-4-26) for microscale CO impacts at highly congested major intersections [Wilshire & Veteran at peak hour (LOS=F) traffic].

level of service of "F" (Wilshire at Veteran) is currently much less than 10 ppm. Any local Marina del Rey impacts would be much less than the worst-case basin-wide location.

Therefore, micro-scale impacts associated with CO "hot spot" potential and the proposed project are considered less than significant.

4. Cumulative Impacts

On a cumulative basis, related projects as described in Section IV.H, Traffic/Access would add to the generation of air pollutants from construction activities and long-term traffic generation. Mitigation measures must therefore be considered and employed where applicable on a project-by-project basis. Regionally, air pollutant emission impacts would fall below the significance level with attainment of air quality planning goals. In the interim, the cumulative condition is significant. Operationally, the proposed project's emissions would not impact adopted significance thresholds. The proposed project's air quality impacts during construction would similarly not exceed significance thresholds. However, as the SCAB is in non-attainment for smog and PM-10 impacts from all Basin-wide construction activities (including diesel exhaust from construction vehicles) are cumulatively considerable, including the proposed project. However, implementation of **Mitigation Measures AQ-1 and AQ-2** (Best Available Control Measures) would reduce the proposed project's contribution to this cumulative condition to less than significant.

5. Mitigation Measures

As all construction projects can produce fugitive dust emissions, the County requires the application of standard dust control measures for all discretionary construction activities (RACMs). The following mitigation measures are recommended to minimize fugitive dust generation and equipment emissions to the maximum extent feasible (BACMs) and to reduce the proposed project's potential local significance thresholds impact and cumulative air quality impact to less than significant.

AQ-1 The applicant shall prepare a Construction Management Plan to control fugitive dust. At a minimum, the Plan shall include the following dust control measures:

- The simultaneous disturbance site should be minimized as much as possible.
- The proposed project shall comply with SCAQMD established minimum requirements for construction activities to reduce fugitive dust and PM-10 emissions. A plan to control fugitive dust through the implementation of best available control measures shall be prepared and submitted to the County for approval prior to the issuance of grading permits. The plan shall specify the dust control measures to be implemented. Such measures may include, but are not limited to, the following:

    a) Application of soil stabilizers to inactive areas;

    b) Preparation of a high wind dust control plan and implement plan elements and terminate soil disturbance when winds exceed 25 mph;

    c) Stabilization of previously disturbed areas if subsequent construction is delayed; and

    d) Covering all stock piles with tarps.

- The project proponent shall comply with all applicable SCAQMD Rules and Regulations including Rule 403 insuring the clean up of construction-related dirt on approach routes to the site. Rule 403 prohibits the release of fugitive dust emissions from any active operation, open storage pile or disturbed surface area visible beyond the property line of the emission source. Particulate matter on public roadways is also prohibited.
- Adequate watering techniques shall be employed to mitigate the impact of construction-related dust particulates. Portions of the site that are undergoing surface earth moving operations shall be watered such that a crust will be formed on the ground surface, and then watered again at the end of each day. Watering of exposed surfaces and haul roads three times/day is recommended.
- Any vegetative cover to be utilized onsite shall be planted as soon as possible to reduce the disturbed area subject to wind erosion. Irrigation systems required for these plants shall be installed as soon as possible to maintain good ground cover and to minimize wind erosion of the soil.
- Any construction access roads (other than temporary access roads) shall be paved as soon as possible and cleaned after each work day. The maximum vehicle speed on unpaved roads shall be 15 mph.
- Grading operations shall be suspended during any first stage ozone episodes.

AQ-2 The applicant shall prepare a Construction Management Plan to control vehicle and equipment emissions during construction. At a minimum, the Plan shall incorporate the following mitigation measures:

- Construction parking shall be configured to minimize the potential for traffic interference and vehicle idling.
- Any construction equipment using direct internal combustion engines shall use a diesel fuel with a maximum of 0.05 percent sulfur and a four-degree retard.
- Equipment and vehicle engines shall be maintained in good condition and in proper tune, according to manufacturer's specifications and per SCAQMD rules, to minimize exhaust emissions. 90 day Low NOx tune-ups shall be required for off-road equipment.
- Tier 3 rated engines shall be used for all equipment during site grading, if available.
- Equipment whose engines are equipped with diesel oxidation catalysts shall be utilized, if available.
- Construction operations affecting off-site roadways shall be scheduled by implementing traffic hours and shall minimize obstruction of through-traffic lanes. Construction operations that may affect traffic flow on the arterial system shall be limited to off-peak hours, as permitted. Truck deliveries occurring during construction shall be consolidated to the extent feasible.
- Idling trucks or heavy equipment shall turn off their engines if the expected duration of idling exceeds five (5) minutes as required by law.
- On-site heavy equipment used during grading and construction shall be equipped with diesel particulate filters unless it is demonstrated that such equipment is not available or its use is not cost-competitive.

- All building construction shall comply with energy use guidelines in Title 24 of the California Code of Regulations.
- To the extent that such measures are economically feasible/cost competitive, the applicant shall incorporate the following practices:
  - Utilizing electricity from power poles in place of temporary diesel or gasoline-powered generators;
  - Utilizing methanol or natural gas-powered mobile equipment and pile drivers in place of diesel; and
  - Utilizing propane or butane-powered on-site mobile equipment in place of gasoline.
- Construction equipment operations shall be suspended during any second stage smog alert.

6. Significant Project Impacts After Mitigation

The proposed project would not result in adverse significant construction period or operational air quality impacts at the project level. However, as the SCAB is in non-attainment for smog and PM-10, construction period impacts are cumulatively considerable. Implementation of the mitigation measures recommended above would assure that the proposed project's construction-related cumulative air quality impacts are reduced to less than significant.

E. BIOTA

The following analysis is based upon site-specific surveys conducted by Mr. Carl Wishner, Principal Biologist of Envicom Corporation, on January 23, 2006, which included the observation and recordation of on-site flora and fauna, as well as the Heron Assessment for Marina del Rey Lease Parcel OT & P, prepared by Dr. Jeffrey B. Froke, Ph.D. of Califauna, dated August 11, 2009 (**Appendix E**).

1. Existing Conditions

Parcel OT and the subject portion of Parcel P[1] is currently developed with a parking lot and landscaped trees and does not support natural or undeveloped land. Approximately 6,665 s.f. of Parcel P are currently developed with a portion of the Parcel OT public parking lot and the maintenance driveway for the Oxford Basin (**Figure IV.E-1**). The remainder of Parcel P is occupied by the Oxford Basin, a Los Angeles County Flood Control Facility. Similarly, Parcel 21 is developed with a parking lot, retail, health club, and marine commercial uses and does not support natural or undeveloped land. Following below is a description of the plant and wildlife that were observed or could be expected to occur onsite.

Non-sensitive Plant Life

Parcel OT

The plant species located on Parcel OT are exotic, comprised mainly of trees planted along the margins of the bounding streets, as well as a few in islands within the parking lot itself. Additional landscape trees are located on an approximately 35-foot wide earthen strip that separates the existing parking lot from the chain link fence, which demarcates the limits of the adjacent Oxford Retention Basin area. Tree species present include fig (*Ficus* sp.), palms, blue-gum (*Eucalyptus globulus*), New Zealand Christmas tree (*Metrosideros excelsa*), fig-leaf eucalyptus (*E. ficifolia*), Brazilian pepper-tree (*Schinus terebrinthifolius*), and ornamental cherry (*Prunus* sp.). Several shrubs are present, including Indian hawthorn (*Rhaphiolepis indica*), Natal-Plum (*Carissa macrocarpa*), and firethorn (*Pyracantha* sp.). A groundcover of ivy (*Hedera* sp.) is found along the northern edge. Additional perennial herbs, grasses, and several common introduced weeds were also observed, none of which are native. The lagoon to the east also supports small areas of cattail and pickleweed marsh along the margins.

Parcel 21

The plant species located on Parcel 21 are also exotic, comprised mainly of trees planted along the margins of the bounding streets, as well as a few in islands within the parking lot itself. Tree species present in the islands of the parking lot, within large pots, and in beds surrounding the buildings, include European olive (*Olea europea*), palms, pittosporum (*Pittosporum* spp.), fig (*Ficus* sp.), cypress (*Cupressus* sp.), and pines (*Pinus* spp.). Shrubs are present and include Indian hawthorn (*Rhaphiolepis indica*) and Natal-plum (*Carissa macrocarpa*). A groundcover of ivy (*Hedera* sp.) is found in one small area. Additional perennial herbs include bird-of-paradise (*Strelitzia regina*), lantana (*Lantana* sp.) banana (*Musa* sp.), iceplant or Hottentot fig (*Carpobrotus edulis*), papyrus (*Cyperus* sp.), aloe, bamboo, New Zealand flax (*Phormium tenax*), hibiscus, African daisy, agapanthus, and others. Non-native grasses and several common introduced weeds were observed in planters and along the street on the south side, as well as in cracks in the pavement.

[1] Hereafter, unless otherwise noted, the Oceana Retirement Facility project site is simply referred to as Parcel OT.

Aerial Source: I.K. Curtis Services, Inc., September 2005.

Revised: August 13, 2009

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Existing Parcel OT and Parcel P Conditions

FEET 0 60 120

FIGURE IV.E-1

Non-sensitive Wildlife

Parcel OT

Vertebrate animals in the area of Parcel OT were observed (casually and without formal surveys, which are not warranted) on January 23, 2006. No native species of mammals were observed, and none would be anticipated to occur, with the exception of Botta's pocket gopher and striped skunk. Expected, non-native mammals include fox squirrel, Virginia opossum, raccoon, Norway and/or black rat, house mouse, and domestic dog and cat. Owing to the presence of a brackish lagoon to the east of the site, native amphibians on-site (rare or occasional) could include Pacific chorus frog, western toad, black-bellied slender salamander, and garden salamander. Native reptiles may include western fence lizard and side-blotched lizard, southern alligator lizard, and gopher snake. Birds are the most conspicuous and abundant wildlife at the project site, including native and introduced species. Common introduced species are rock dove, European starling, and house sparrow. Native species include resident American crow, Brewer's blackbird, house finch, and gulls, augmented in winter by white-crowned sparrow, dark-eyed junco, ruby-crowned kinglet, Cassin's kingbird, and others. Hawks may be limited to Cooper's hawk, or sharp-shinned hawk, in winter. The potential for nesting of resident and summer resident bird species in the trees on the site, or nearby, is also likely.

Parcel 21

Native resident or migratory fish are not present on Parcel 21, due to the lack of aquatic habitat, but aquatic species are known or anticipated to utilize the project's surrounding marine habitat as a wildlife corridor or nursery site. Vertebrate animals in the area of Parcel 21 were observed casually on January 23, 2006. No native species of mammals were observed, and none are expected to occur, with the exception of Botta's pocket gopher and striped skunk. Expected, non-native mammals include fox squirrel, Virginia opossum, raccoon, Norway and/or black rat, house mouse, and domestic dog and cat. Native reptiles may include western fence lizard and side-blotched lizard, southern alligator lizard, and gopher snake. Birds are the most conspicuous and abundant wildlife at the project site and include native and introduced species. Common introduced species are rock dove, European starling, and house sparrow. Native species include resident American crow, Brewer's blackbird, house finch, and gulls, augmented in winter by white-crowned sparrow, dark-eyed junco, ruby-crowned kinglet, Cassin's kingbird, and others. Hawks may be limited to Cooper's hawk, or sharp-shinned hawk, in winter. The potential for nesting of resident and summer resident bird species in the trees on the site, or nearby, is also likely.

Sensitive Plants, Wildlife, and Their Habitat

The project sites are currently disturbed from their natural condition, and Federally protected wetlands, as defined by Section 404 of the Clean Water Act, would not be affected by development of either Parcel OT or Parcel 21. Additionally, in the certified 1996 Marina del Rey Land Use Plan (LCP), the California Coastal Commission found that there were no Environmentally Sensitive Habitat Areas (ESHAs) in the developed Marina del Rey proper. As such, no riparian habitat or other sensitive natural communities identified in local or regional plans, policies, or regulations were found to be present on either site. In the 1996 LUP, the primary purpose of the Oxford Basin was identified as a storm water retention facility, which does not represent an important component in the overall avian distribution in the Los Angeles area. In the April 23, 2009 periodic review of the 1996 LUP, the Coastal Commission suggested that the LCP be amended to strengthen the policies regarding the Oxford Retention Basin in order to recognize its biological significance in consideration of its restoration potential as nesting and roosting habitat for wading birds.

No sensitive, listed, candidate, or special status species identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game (CDFG) or U.S. Fish and Wildlife Service (USFWS) are known or anticipated to utilize Parcels OT and 21, except for Cooper's hawk and sharp-shinned hawk. These species are both California Species of Special Concern (CSC) as defined by the CDFG, and although neither were observed onsite, they may be expected to occur on both Parcels OT and 21.

On July 31 and August 1, 2009, Dr. Jeffrey Froke, Ph.D conducted a focused survey on Parcel OT and the portion of Parcel P to be added to Parcel OT to determine the presence of local herons and/or habitat to support nesting and foraging. Dr. Froke's study concluded that herons were not observed on the site, and the habitat present is not suitable for heron use. Furthermore, the site does not appear to support appreciable or accessible heron prey populations, with the possible exception of the ground along the extreme northeast band along the project boundary. The Oxford Basin Lagoon located on the remainder portion of Parcel P is known to be occupied by foraging herons. The principal heron resource within the Oxford Basin is the water body (habitat for aquatic prey) and the shore, which provides standing and wading habitat for foraging herons. Additionally, certain arboreal areas within the fenced area of Oxford Basin appear to be suitable for limited nesting. Heron species documented within the Oxford Basin include approximately 10 to 14 individuals of Great Blue Heron (*Ardea herodias*), Great Egret (*Ardea alba*), Snowy Egret (*Egretta thula*), and Black-crowned Night Heron (*Nycticorax nycticorax*).

2. Thresholds of Significance

Expected impacts on species and habitats have been identified by examining the Project Description in view of the existing biological setting. The significance of biological impacts was determined by evaluating each potential project impact according to the significance criteria associated with various governing policies given here.

County of Los Angeles Department of Regional Planning Initial Study

The County of Los Angeles Department of Regional Planning Initial Study identifies criteria for determining potential impacts on biological resources. According to these, a project may result in significant environmental impacts on biological resources if the project would:

- Be located within a Significant Ecological Area (SEA), SEA buffer, or coastal Sensitive Environmental Resources (ESHA, etc.), or if the site is relatively undisturbed and natural;
- Entail grading, fire clearance, or flood related improvements that would remove substantial natural habitat areas;
- Contain a major drainage course, as identified on USGS quadrangle sheets by a blue dashed line, on the project site;
- Contain a major riparian or other sensitive habitat (e.g. coastal sage scrub, oak woodland, sycamore riparian, woodland, wetland, etc.);
- Contain oak or other unique native trees;
- Comprise habitat for any known sensitive species (Federal or State listed endangered, etc.); and/or
- Result in other factors that may potentially result in biological impacts (such as the disruption of wildlife corridors or nesting habitat for birds).

As the Parcels proposed for development are neither located in an SEA, SEA buffer, nor coastal ESHA; do not contain major drainage courses as identified on USGS quadrangle sheets; do not contain major

riparian or other sensitive habitat, oak trees or other unique native trees; and would not remove substantial natural habitat areas, the proposed project will be evaluated by the remaining County of Los Angeles thresholds listed above, as well as the California Fish and Game (CDFG) and Migratory Bird Treaty Act thresholds described below.

California Fish and Game (CDFG) Code

Impacts to nesting bird species would be in violation of the CDFG Code General Provisions for Birds. Therefore, impacts to nesting birds would be considered a significant impact. Section 3500 et seq. of the Code states:

- §3503. It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto.
- §3503.5. It is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.

Migratory Bird Treaty Act

Among the laws, regulations, and policies under which the United States Fish and Wildlife Service operates is the Migratory Bird Treaty Act of 1918, which was last amended in 1989. This Act implements various treaties and conventions between the United States and Canada, Japan, Mexico, and the former Soviet Union for the protection of migratory birds. Under this Act, the taking, killing or possession of migratory birds is unlawful, and as such, impacts to such birds would be considered a significant impact. In summary, the Migratory Bird Treaty Act establishes the following:

- Unless permitted by regulations, the Act provides that it is unlawful to pursue, hunt, take, capture or kill; attempt to take, capture or kill; possess, offer to or sell, barter, purchase, deliver or cause to be shipped, exported, imported, transported, carried or received any migratory bird, part, nest, egg or product, manufactured or not.
- The Act makes it unlawful to: ship, transport or carry from one state, territory or district to another, or through a foreign country, any bird, part, nest or egg that was captured, killed, taken, shipped, transported or carried contrary to the laws from where it was obtained; import from Canada any bird, part, nest or egg obtained contrary to the laws of the province from which it was obtained.
- The Act should not be construed to prevent states and territories from making or enforcing laws or regulations not inconsistent with the Act or which give further protection to migratory birds, nests and eggs, if such laws and regulations do not extend open seasons, and the Act cannot be construed to prevent the breeding of migratory game birds on farms and preserves, and the sale of birds lawfully bred to increase the food supply.

3. Project Impacts

Non-sensitive Plant Life

Parcel OT

As previously mentioned, the project site is currently developed with a parking lot and does not contain natural or undisturbed land. The trees planted along the margins of the streets bordering the project site, on the islands within the parking lot, and within the earthen portion of Parcel P between the existing parking lot and fence line are exotic species. Perennial herbs, grasses, and several common introduced

weeds were also observed, but none are native species. The proposed building would be constructed over the entirety of the existing parking lot, and would extend 9 to 14 feet (2,732 s.f.) beyond the existing limits of the parking lot, which currently encroaches 21 feet (6,665 s.f.) into Parcel P (**Figure IV.E-2**). The project would remove the trees within the development footprint to accommodate for the proposed improvements. Additionally, construction of the County's 24-inch replacement water main would occur within the earthen portion of Parcel P between the existing parking lot and the fence line and would require removal of the trees currently located to the north of the proposed building location. Since all of the trees on-site are exotic species and are not considered sensitive or protected, the proposed removal of the trees would be considered less than significant. Due to the urbanized condition of the site and the lack of native species, development of Parcel OT would result in a less than significant impact associated with plant species in their undisturbed/natural habitat.

Parcel 21

Similar to the existing condition on Parcel OT, Parcel 21 is developed with a parking lot, as well as retail, health club, and marine commercial uses, which result in a site that does not support natural or undisturbed land. The plant species located on the site consist of exotic trees planted in the margins of the bordering streets, in islands within the parking lot itself or within large pots, and in beds surrounding the buildings. Exotic shrubs and perennial herbs are also present onsite, as are the non-native grasses observed in planters and along the street on the south side, as well as in cracks in the pavement. Given the paved, urbanized condition of the site and the lack of native species, development of Parcel 21 would result in a less than significant impact associated with plant species in their undisturbed/natural habitat.

Non-sensitive Wildlife

Parcel OT

As discussed above, Parcel OT is developed with a surface parking lot and limited landscaping consisting of exotic species. The occurrence of wildlife on the site is therefore limited due to a relatively high level of human activity and the lack of habitat onsite. No mammals were observed onsite and few mammal species are expected to occur onsite, as is the case with reptile species. Several of the amphibian species expected to occur onsite would be mainly associated with the adjacent Marina Lagoon. Several bird species are likely to occur on Parcel OT, and due to the trees onsite, the potential for nesting of resident and summer resident bird species in the trees onsite cannot be discounted. Removal of trees for construction of the proposed project and/or construction of the County's 24-inch water main along the northern portion of the property would result in a potentially significant impact to nesting birds, if active nests are present and harmed. Implementation of **Mitigation Measure BIO-1** would reduce the potential impacts to nesting birds to less than significant.

Parcel 21

Similar to Parcel OT, Parcel 21 is currently developed with surface parking, two structures, and limited landscaping, therefore the occurrence of wildlife onsite is limited due to a relatively high level of human activity and the lack of habitat. No mammals were observed onsite and few mammal species are expected to occur onsite, as is the case with reptile species. Amphibian species were not observed and are not expected to occur onsite. Several bird species are likely to occur on Parcel 21, and due to the trees onsite, the potential for nesting of resident and summer resident bird species in the trees onsite can be expected. As with Parcel OT, potential impacts to nesting birds on Parcel 21 due to construction of the project on-site and/or construction of improvements to the Panay Way water main infrastructure would constitute a potentially significant impact, mitigable to less than significant with implementation of Mitigation Measure BIO-1.

Aerial Source: I.K. Curtis Services, Inc., September 2005.

Revised: August 14, 2009

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Proposed Oceana Retirement Facility Development Footprint

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FIGURE IV.E-2

Sensitive Plants, Wildlife, and Their Habitat

With the exception of Cooper's hawk and sharp-shinned hawk, which are both California Species of Special Concern, other sensitive plant and wildlife species were not observed and are not expected to occur on either Parcel OT or Parcel 21. Sensitive habitat types were not observed on any of the Parcels. . Neither Cooper's hawk nor sharp-shinned hawk were observed on the Parcels, but both species can be expected to occur on both Parcels. Specifically, Cooper's hawk is a year round resident that nests in the region and may forage on the Parcels, but the presence of sharp-shinned hawk would be limited to the winter. Due to the low density of tree canopy on the Parcels, nesting by the Cooper's hawk is likely precluded.

As documented in the existing conditions section above, herons do not occupy and are not expected to nest or forage within Parcel OT and the portion of Parcel P to be added to Parcel OT. Nesting and foraging of herons are expected to occur within the aquatic habitat and heavier cover that exists in the central portions of the basin. The level surface of Parcel OT, where the majority of the Oceana Retirement Facility would occur is not contiguous with the Oxford Basin and heron habitat. Additionally, the proposed building would be located approximately 20 to 25 feet to the southwest of the existing fence line that surrounds the Oxford Basin, which is approximately 25 feet upslope from the lagoon habitat. The 20- to 25-foot buffer area between the proposed building and the fence line is proposed to be landscaped and improved with a public pathway that runs between Admiralty Way and Washington Boulevard. Based on Dr. Froke's experience in studying the herons within Oxford Basin, nesting and foraging herons are apparently not stressed or disturbed by the regular presence and actions of humans. As the proposed Oceana Retirement Facility is anticipated to introduce an urban use that is similar to other uses found on parcels surrounding the Oxford Basin, the physical separation between the proposed Oceana Retirement Facility and the intact aquatic habitat within the Oxford Basin created by: 1) the landscaped buffer, and 2) the additional setback between the fence line and the lagoon habitat, would effectively reduce or avoid the potential for adverse effects on herons within the remaining unchanged lagoon habitat.

Dr. Froke's prior experience has also documented that local nesting and foraging herons are not affected by noise and sounds generated by ambient and irregular event conditions such as sudden and loud noises created by motorcycles and automobiles travelling on Admiralty Way and Washington Boulevard. As discussed within Section IV-B (Noise) of this document, construction of the Oceana retirement facility is anticipated to generate noise levels during pile driving of up to 100 dB at 50 feet away without mitigation. However, mitigation measures N-1 through N-6 have been identified to reduce pile driving and other construction related noise. Based on Dr. Froke's experience, construction of the proposed Oceana Retirement Facility would not result in a significant disturbance to present or future heron resources within the Marina del Rey heronry, and specifically the Oxford Basin. Therefore, impacts to sensitive plants, wildlife and their habitat as a result of the proposed project would be less than significant.

As defined in the thresholds of significance listed above, impacts to nesting birds would result in a violation of both the CDFG Code Section 3500 et seq. and the Migratory Bird Treaty Act. Therefore, even the remote possibility of impacts to any bird resulting from tree removal would be considered a significant impact, mitigable to less than significant with implementation of **Mitigation Measure BIO-1**.

4. Cumulative Impacts

Several related projects are proposed for development within the general study area (Marina del Rey, Los Angeles County, and the City of Los Angeles). These projects are generally similar or larger in scope compared to the proposed project. They represent a mix of residential, commercial, office, and

hotel/motel projects, with some open space and associated recreational land uses. As Marina del Rey and the immediate areas are largely urbanized, the proposed project's contribution to the cumulative condition after proper implementation of the mitigation measure specified above is not cumulatively considerable. Therefore, the proposed project would result in a less than significant cumulative impact on biota.

5. Mitigation Measures

BIO-1 Tree removal shall be performed between the dates of August 1 through January 31 to avoid the nesting bird season. Should this not be feasible, a qualified biologist shall conduct a thorough examination of the tree to determine whether nesting birds are present, and if found, the status of the nest shall be noted. The nest survey shall take place not more than three days (72 hours) prior to the planned removal. If nesting birds are present, the biologist shall prepare a recommendation, which may include a delay of the removal until such time that nesting has been completed. The recommendation of the biologist shall be communicated to the local CDFG Agent for approval and consent prior to removal of the tree(s).

6. Significant Project Impacts After Mitigation

With implementation of the mitigation measure identified above, the proposed project's potential impact on biota would be reduced to a less than significant level. Therefore, the proposed project would not result in significant unavoidable adverse impacts on biota.

F. CULTURAL RESOURCES

The following analysis is based upon the Cultural Resources Investigations of the Marina del Rey LUP/LCP Parcels OT and 21, prepared by McKenna et al. (Parcel OT dated May 3, 2006 and Parcel 21 dated May 4, 2006), which are included in **Volume II, Appendix F**. The investigations consisted of an archaeological records check, historic research, Native American consultation, field surveys, and analysis and recordation.

1. Existing Conditions

Cultural History Background

Marina del Rey and the Surrounding Community

Marina del Rey and the proposed project are located within an area ethnographically associated with the Gabrielino/Tongva of Southern California, though it is suggested that the Chumash may have also occupied the area. Whether Gabrielino or Chumash, the prehistory of the area can be dated back 7,500 years with a significant presence of prehistoric populations within coastal areas. Both Parcel OT including a portion of Parcel P[1] and Parcel 21 are located north/northwest of Ballona Creek and south of the community of Venice, within the historic Rancho Ballona (Paso de las Carretas Grant), a grant of 1839. According to the tradition of the Taltmanted family, co-grantees of the rancho, the area was named after the city of Bayona in northern Spain, the home of one of their ancestors.

Construction of the jetties for the present-day entrance channel in Marina del Rey began in December 1957, but efforts towards a harbor at this location actually began some seventy years earlier in 1887 when M.C. Wicks organized the Port of Ballona Development Company under the auspices of the Santa Fe Railroad. Eventually, M.C. Wicks went bankrupt, and the area was taken over by duck hunters. Many attempts were made to establish a harbor, but it wasn't until 1956 that a general election resulted in the approval for financing the remainder of the project. By November of 1958, the entrance channel jetties were completed and the first tangible facilities had emerged. Formal dedication of the Marina del Rey Harbor was held on April 10, 1965.

In 1904, the vision of Abbot Kinney, a wealthy tobacco mogul, materialized when he began construction on the Grand Canal and amusement pier that popularized the community of Venice. During the teens, Venice obtained a professional baseball franchise, built the Fraser Pier, hosted a Grand Prix automobile race, and formed an aerial police force. In 1920, Venice's population had reached 10,385 residents and in 1930, oil was discovered on the Venice Peninsula. Within one year, over 148 oil wells were producing over 40,000 barrels of oil daily.

In 1946 The Kinney Pier's lease expired and it was ordered to be dismantled by the Los Angeles Parks and Recreation Department. Their plan was to dismantle all the piers along the coastline in order to widen the beaches. However, the neighboring Ocean Park Pier was converted to a nautical theme park and remained in existence until 1967. In the 1960's Venice was in a severe state of decay and in desperate need of redevelopment. It wasn't until the 1970's that Venice experienced a rebirth that has sustained to today.

[1] Hereafter, unless otherwise noted, the Oceana Retirement Facility project site is simply referred to as Parcel OT.

Cultural Resources in the Project Area

Prehistoric and Historic Archaeological Resources

The potential for historic resources to exist in Marina del Rey area was explored in the Marina del Rey LUP (February 1996). Although the coastal and Ballona Creek-adjacent region was known to be inhabited by Native Americans, the Plan concludes that, "any resources on Marina land already altered or designated for development have been or probably have been already impacted." Though technically within an urban setting, the potential exists for the intact and/or undisturbed prehistoric resources within or near the project area to be uncovered, especially during grading activities. Resources, if identified, may be associated with either the Gabrielino/Tongva or Chumash depending on the nature of the find.

As reported by McKenna et al., research into previous studies regarding the project area was completed at the California State University, Fullerton, and South Central Coastal Information Center on April 17, 2006. The results identified that fourteen cultural resource studies have occurred within a half-mile of Parcels OT and 21, independently (refer to Volume II, Appendix F for details). Despite the coverage, no prehistoric or historic archaeological resources have been recorded within one half mile of the project area. This is largely due to past disturbance for existing development.

Nevertheless, recent investigations along Ballona Creek (Statistical Research, Inc., in preparation) have resulted in the identification and removal of hundreds of Native American burials and numerous prehistoric features representing a significant occupation of the area by prehistoric populations. Therefore, there is still a relative level of sensitivity for prehistoric resources within the Ballona Lagoon. Similarly, research resulted in the identification of the project area as part of the landfill area for the community of Venice and the development of the Marina del Rey facilities. As such, there is a strong potential for buried historic archaeological resources. McKenna et al. recommends that the area be considered sensitive for both prehistoric and historic archaeological resources.

Paleontological Resources

The Marina del Rey LUP states that potential impacts on known or unknown paleontological resources are reviewed by the County through permit processing and environmental procedures. When it is determined that a project may pose adverse impacts on paleontological resources, a survey prepared by a qualified paleontologist is required. According to McKenna et al., Parcel OT, Parcel 21, and the lagoon adjacent to Parcel OT are not conducive for paleontological resources, and as such the issue does not warrant further analysis.

Historic Resources

Neither the surface parking lot located on Parcel OT nor the structure or surface parking lot located on Parcel 21 are considered historically significant, as reported by McKenna et al. The structures do not meet the CEQA Section 15064.5 (Determining the Significance of Impacts to Archeological and Historical Resources) or California Register of Historical Resources [Public Resources Code §5024.1, Title 14 CCR, Section 4850 et seq. and 4852, 5024.1(g), 5020.1(j), 5020.1(k),] criteria for any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California.

2. Thresholds of Significance

Based on the CEQA Appendix G Environmental Checklist Form and the Initial Study prepared for the proposed project by the County of Los Angeles Department of Regional Planning, the proposed project would result in a significant impact on cultural resources if:

- The project site is in or near an area containing known archaeological resources or containing features (drainage course, spring, knoll, rock outcroppings, or oak trees) that indicate potential archaeological sensitivity;
- The project site contains rock formations indicating potential paleontological resources;
- The project site contains known historic structures or sites;
- The project would cause a substantial change in the significance of a historical or archaeological resource as defined in Section 15064.5 of the CEQA Guidelines; and/or
- The project would directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

As Parcel OT and Parcel 21 were found to not be conducive to paleontological resources nor contain historic resources, development of the proposed project is evaluated on the remaining thresholds identified above for archaeological resources.

3. Project Impacts

Prehistoric and Historic Archaeological Resources

While no prehistoric or historic resources have been recorded within one-half mile of the property, the identification of the historic Venice Landfill as being located near both Parcel OT and Parcel 21 and recent investigations in nearby Ballona Creek resulting in the discovery of hundreds of native American burials and numerous prehistoric features indicates a sensitivity of the project area for prehistoric and historic archaeological resources. As the potential exists for such resources to be uncovered during grading and excavation activities for the proposed developments, prior to mitigation, the proposed project may result in a significant impact to prehistoric and historic archaeological resources. Implementation of **Mitigation Measures CUL-1** through **CUL-6** would reduce these impacts to less than significant.

4. Cumulative Impacts

As discussed above, the proposed project is not expected to result in adverse significant impacts to paleontological or historic resources, because the project sites are not considered conducive for paleontological resources and the existing development does not meet the criteria for historical significance. Therefore, the proposed project is not cumulatively considerable with regard to paleontological or historic resources.

With regard to prehistoric and historic archaeological resources and the potential of the proposed project to uncover these, the proposed project constitutes Phase II development of Marina del Rey, and any resources on Marina land already altered or designated for development have been or probably have been already impacted, according to the Marina del Rey LUP. If for some reason this is not the case, and grading and/or excavation of Phase II development uncovers such resources, the project would be considered cumulatively considerable to this effect. However, as buildout of the County of Los Angeles General Plan and Marina del Rey LUP occurs, each future project would be subject to CEQA review and appropriate cultural resources reporting. As with the proposed project, implementation of mitigation measures would reduce cumulative project impacts to a less than significant level.

5. Mitigation Measures

Prehistoric and Historic Archaeological Resources

Parcel OT and Parcel 21

CUL-1 During the removal of asphalt paving and subsequent grading of the sites, the sites shall be monitored by a qualified archaeological monitor. Should evidence of any prehistoric or historic resources be uncovered, the archeologist must be notified and work in the find area shall cease until the monitor arrives. The State Historic Preservation Office and Los Angeles County Department of Regional Planning shall also be notified if such resources are uncovered. The archeological monitor shall have the authority to halt any activities adversely impacting potentially significant archeological resources, while the find is evaluated in accordance with CEQA criteria for significance.

CUL-2 Should evidence of any prehistoric or historic archaeological resources be uncovered, a Phase II evaluation must be conducted in accordance with Section 15064.5(f) of the CEQA Guidelines.

CUL-3 Following §30116(d) of the Coastal Act, any cultural resource found in the portion of the LUP study area planned for development shall be collected and maintained at the Los Angeles County Museum of Natural History or other appropriate location as otherwise provided by State law.

CUL-4 Should human remains be discovered during the removal of asphalt paving and subsequent grading of the sites, the County Coroner shall be contacted and permitted access to the site for preliminary identification of the remains. If the remains are found to be of Native American origin, the Native American Heritage Commission must be notified and permitted to identify the Most Likely Descendant (MLD), and, in consultation with the proponent and archaeological monitor, determine the appropriate disposition of the remains, as stated in Section 15064.5(d) of the CEQA Guidelines.

CUL-5 As part of the Coastal Development Permit application involving disturbance of native soils or vegetation, including but not limited to excavation, pile driving or grading, the applicant shall provide evidence that they have notified the Office of State Historic Preservation and the Native American Heritage Commission of the location of the proposed grading, the proposed extent of the grading, and the dates on which the work is expected to occur.

CUL-6 Should an Archaeological Recovery Program be warranted, it shall require a Coastal Development Permit consistent with the provisions of the certified Marina del Rey LCP.

6. Significant Project Impacts After Mitigation

With implementation of the mitigation measures specified above, potential project and cumulative impacts to prehistoric and historic archaeological resources would be reduced to a less than significant level.

G. VISUAL QUALITIES

The following analysis is based upon site-specific surveys conducted by Dr. Jack Blok, Principal Cartographer of Envicom Corporation, on April 7, 2006, as well as visual simulations prepared by Interacta, Inc., August 11, 2008.

1. Existing Conditions

In addition to the scenic highways concept (County of Los Angeles General Plan), the Marina del Rey LCP, along with the Marina del Rey Specific Plan, seek to protect, maintain and enhance public views to and along the waterfront in Marina del Rey through the creation of view corridors. The proposed Oceana Retirement Facility (proposed for Parcel OT and a portion of Parcel P)[1] and Holiday Harbor Courts (proposed for Parcel 21) developments would be located in Marina del Rey, which is an unincorporated Los Angeles County community centered around a small craft boat harbor and marina. Marina del Rey was developed in low-lying, nearly flat, coastal marshland (as shown on the Venice, California, U.S. Geological Survey 7.5 minute topographic quadrangle) and as such, does not provide elevated terrain locations that could offer expansive scenic vistas. The highest elevations within a half-mile radius of each Parcel are less than 25 feet above mean sea level (msl).

A key feature of the urban design concept for Marina del Rey is its envisioning of a "bowl concept" in which taller buildings are to be located along the outer and northern edges of the Marina as defined by Admiralty Way and Via Marina, while only lower buildings would be permitted on the moles projecting into the Marina. In acknowledgment of the importance of the protection of public views of the waterfront, measures have been incorporated within Community-wide Design Guidelines of the Specific Plan to maintain such views by means of preservation and enhancement of view corridors where they are physically feasible between structures and across lots situated on parcels located adjacent to the Marina and along its mole roads.

The proposed Oceana Retirement Facility site is located 3,900 feet (0.47 mile) inland from Venice Beach and approximately 300 feet northerly of the western end of Basin E of Marina del Rey. The Oxford Basin abuts the eastern side of the site, Admiralty Way is to the south/southeast, a hotel to the west/southwest, and Washington Boulevard to the north/northwest. The existing site is currently used as a parking lot that includes perimeter landscaping. Views of the site and surrounding land uses are shown in **Figures IV.G-1** and **IV.G-2**. Valued and protected views in the area consist of views of 1) Marina and coastal resources (which are available only from the shoreline and along the edge of the Marina, or from the upper floors of area buildings), as well as 2) urban views from selected public roadways.

The Holiday Harbor Courts site is located on one of the four moles that jut eastward into the Marina from along its western shoreline (refer to Figure IV.G-1). The mole is the second of four moles in Marina del Rey, as arrayed from north to south. The mole is bordered to the north by Basin D and to the south by Basin C. Much of the length of the mole is accessed along Panay Way, which extends easterly from Via Marina, ending in a cul-de-sac toward its eastern end. The site fronts the northern side of Panay Way, and the depth of the parcel extends from the roadway to the edge of the quay of Basin D. Under existing conditions, on-site buildings housing a health club, retail establishments, commercial uses, and mature trees, block northerly views from approximately 265 feet of the frontage of the site along Panay Way. The surface parking lots account for approximately 476 feet of the frontage (see **Figure IV.G-3**). The existing visual qualities of the site are largely the products of aging parking lots and buildings that lack architectural designs that would make them standout as contributing distinctively to the scenic qualities of

[1] Hereafter, unless otherwise noted, the Oceana Retirement Facility project site is simply referred to as Parcel OT.

Aerial Source: I.K. Curtis Services, Inc., September 2005.

OCEANA RETIREMENT FACILITY AND HOLIDAY HARBOR COURTS EIR

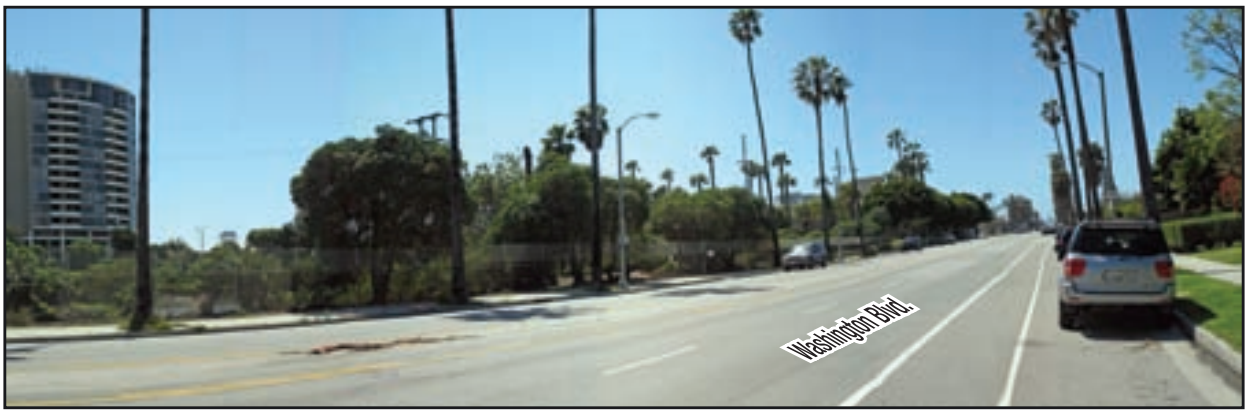
ENVICOM CORPORATION

Location and Orientation of Parcel OT and Parcel 21 Views

FEET 0 250 500

FIGURE IV.G-1

Westerly view of Parcel OT from sidewalk along south side of Admiralty Way. The row of palm trees approximates the easterly boundary of the site, while the Marina International Hotel approximates the westerly boundary of the site.



Southwesterly view toward Parcel OT from Washington Boulevard. Tree and shrub landscaping along the perimeter of the Marina Lagoon screens views of the on-site Parcel OT parking lot.

Northeasterly view of Parcel OT from sidewalk at intersection of Palawan Way and Admiralty Way. The Marina International Hotel pictured in the foreground (left of the on-site parking lot) serves as the westerly Parcel OT boundary. Three multi-level residential structures are located southeast of Parcel OT (one is partially pictured on the left side of this photograph in the background).

Existing Conditions Photographs of Parcel OT

FIGURE IV.G-2

An east-northeasterly view in front of Parcel 21 from Panay Way depicting the existing on-site parking lot and health club (left), as well as the off-site, adjacent multi-level apartment building to the east of the Parcel (center background).

Northeasterly view from Panay Way in front of the parking lot of Parcel 21. Views of the masts of small crafts moored in Basin D are possible; however, views of the water are not.

Westerly view of the sidewalk along the waterfront of Parcel 21 (to be replaced with an improved promenade). The building housing the health club is at the far end of the lot. The health club building would be demolished under the proposed project, and this portion of Parcel 21 would be deeded back to the Los Angeles County Department of Beaches and Harbors.

Existing Conditions Photographs of Parcel 21

FIGURE IV.G-3

the Marina's waterfront. The parking lots are slightly raised above street level, and they are fronted along their street sides by 10 intermittently spaced mature streetscape trees. The parking lots contain two single-story utility buildings housing restrooms and storage spaces, adjacent fenced trash dumpsters, and interior landscaped islands. The above features, including the presence of parked vehicles, interfere with views directed across the site as seen from vehicles moving along Panay Way.

Visual Resources and Scenic Vistas Proximate to the Project Sites

Oceana Retirement Facility Site (Parcel OT)

Views of the shoreline or Marina are not available from the parking lot on this site, from Washington Boulevard north of the site, or in south-facing views afforded from surrounding properties that overlook the site (see Figure IV.G-2). Views are impeded by the fact that the elevation of Admiralty Way is higher than the elevation of Washington Boulevard, along which existing residential and commercial uses are located. Under current conditions, single-story and multi-story structures that border area roadways (including Admiralty Way, Washington Street, and Palawan Way) in the immediate project vicinity are of sufficient height to block or confine views to nearby foreground public roadway locations and nearby buildings, such that the water surfaces of the Marina are not visible from public roadways (Figure IV.G-2).

The Marina del Rey LCP and Scenic Highway Element of the County of Los Angeles General Plan identify a local route circling the Marina area, including the portion of Admiralty Way proximate to the site, as a First Priority Route (Proposed for Further Study) on the Scenic Highway System Map. This means that the local route, identified in the Scenic Highway Element as First Priority Route 4, or the Coastal Alignment, has not yet been designated as a scenic road or highway. Route 4, or the Coastal Alignment, includes, among other roadways: Via Marina to Admiralty Way and to Fiji Way. This route, in effect, circles the Marina and offers brief views of the masts of pleasure boasts moored in the Marina between buildings in some locations; however, neither the Marina's water surfaces nor the Venice Beach shoreline are visible from the portion of Admiralty Way on which the site is located.

Holiday Harbor Courts Site (Parcel 21)

The mole containing this site is bracketed to the north and south by equally long moles respectively served by Palawan Way and Marquesas Way. The structures developed along the waterfronts of these mole roads are located along the south side of Panay Way, opposite the proposed development Parcel. These structures are generally configured and situated in such a fashion that foreground visibility of the site is effectively confined to Panay Way street locations and the waterfront promenade and sidewalk locations that immediately border the quays of Basin D. Slightly more distant views are available from the western end of Basin D where it ends in an arching public beach (Mother's Beach). Views oriented toward the site are typically impeded by intervening structures and landscaping established along both the eastern side Via Marina and the southerly-facing side of Admiralty Way. As the surroundings of the site consist of urbanized landscapes with irregular street patterns, middle-distance views (from 0.5 mile to 1.0 mile away) and distant views (from more than 1.0 mile away) have, in effect, been eliminated.

The structures developed along Panay Way are situated between the roadway and the waterfront edges of the mole. Sidewalks were not included as a part of the right-of-way design for the Panay Way, making the movement of vehicular traffic the primary service function of the roadway. The opportunity to experience scenic views and vistas of the waterfront from the mole was not assigned to the public roadway, rather those opportunities were assured by the location of easily accessible pedestrian promenades and sidewalks open to the public around the perimeter of the mole.

As stated above, the Coastal Alignment, or First Priority Route 4, is Proposed for Further Study to become a scenic road or highway in the vicinity of the proposed project site. Via Marina, Admiralty Way, and Fiji Way, local streets that flank the western, northern, and eastern sides of the Marina, are also designated as First Priority Routes under the Scenic Highway System (as parts of Route 4). Parcel 21 is situated approximately 260 feet east of Via Marina and approximately 500 feet southeasterly of the intersection of Via Marina and Admiralty Way, the closest of the First Priority ranked Scenic Highway Routes that surround the Marina. In addition to scenic routes, specific scenic vantage points have also been identified within Marina del Rey. They include Fisherman's Village, Burton Chace Park, and the ends of mole roads on the main channel (as listed on the Marina del Rey LUP, Page 9-2).

Sources of Light and Glare

Oceana Retirement Facility (Parcel OT)

This site is removed from the Marina in a northwesterly direction and as such is not subject to potential reflected sun light glare effects that can occur on either the easterly or westerly sides of the Marina, which result from additional sunlight being reflected off water surfaces during early morning or later afternoon times of day.

Sources of potential nighttime glare in an urban setting such as that of the site would stem from the nearby streets that surround and pass through the Marina, which are lined with combinations of high-rise and low-rise structures that collectively contribute many nighttime light sources typical of an urban environment. The site is currently utilized as an open surface parking lot that contributes to the nighttime lighting conditions when it is illuminated to accommodate nighttime use. When in use at night, the glare of headlights and taillights of vehicles from within the lot and upon their leaving and entering the lot contribute sources of glare associated with such traffic effects. As the parking lot is devoid of structures, it permits off-site sources of light to spill across its open portions in any direction.

Holiday Harbor Courts Site (Parcel 21)

During the day, reflected sunlight from the surface water of the Marina contributes to glare effects, particularly in westerly and easterly directions during the morning and evening times of day when lower sun angles prevail. The existing buildings on this site (the structure housing the health club, the two single-story restrooms, locker facility structures that serve the owners of boats moored in the Marina, and the two-story commercial/retail structures) have dark wood siding and/or balcony structures that absorb light rather than reflect it. Most of the open areas of the parcel consist of an asphalt-surfaced parking lot that is broken up and surrounded by planters containing well-established ground cover, mature shrubs, and trees. The tones and textures of ground surfaces and building materials present on-site are such that the site is not one that could be characterized as being responsible for creating noteworthy or significant sources of either daytime glare or nighttime light and glare in the vicinity.

The Marina is surrounded by urban development that casts a multitude of nighttime light sources into the interior of the Marina from a number of directions. Night lighting spills into the central area of the Marina from the high-rise structures that line Admiralty Way and from Via Marina, although the latter sources are located slightly farther away. An abundance of light sources in the area are also contributed by the lower-rise commercial and residential structures developed along the immediate perimeter edges of the Marina, as well as from the development in place along the moles that protrude into it. The “bowl-shaped” urban design structure of the Marina’s setting assures that direct night lighting and reflections of it on the open water surfaces in the Parcel’s vicinity are abundant. The site generally has unobstructed foreground nighttime views of the lighting in the development located along the southern side of the quay served by Palawan Way along the north side of Basin D and such lighting that may illuminate the

sidewalks along the promenades along the quays and from boats moored in the basin. Along its southern side the parcel is illuminated by spillover lighting from the streetlight poles emplaced within the center median of Panay Way. The headlight and taillight glare from vehicles using the street is largely screened at street level by a landscaped buffer containing shrubs and low-growing trees.

Existing Shade/Shadow Patterns

Oceana Retirement Facility (Parcel OT)

As this project site is currently developed with a surface parking lot, shadows cast are predominately the result of the trees onsite included as part of the landscape palette. The trees are not tall enough to cast shade/shadows on shade/shadow-sensitive uses, such as routinely useable outdoor spaces associated with residential, recreational, or institutional (e.g., schools, convalescent homes) land uses, commercial uses such as pedestrian-oriented outdoor spaces or restaurants with outdoor eating areas, nurseries, and existing solar collectors. Rather, such shade/shadows are more likely to fall upon the parking lot, sidewalk, or slight portion of the streets bordering the parking lot.

Holiday Harbor Courts Site (Parcel 21)

There are currently two structures located on this site that house a health club, retail, and marine commercial uses. These structures are two stories, or approximately 30 feet high, which is generally not of a height that would cast substantial shade/shadows (see discussion below in Thresholds of Significance). Any shade/shadows cast by the structures on the site would fall upon the surface parking lot located onsite or portions of the sidewalk and marina docks/slips, which are considered to be shade/shadow sensitive uses.

2. Thresholds of Significance

Based on the CEQA Appendix G Environmental Checklist Form and the Initial Study prepared for the proposed project by the Los Angeles County Department of Regional Planning, the proposed project would have a significant impact on visual qualities if:

- It is substantially visible from or will obstruct views along a scenic highway, or is located within a scenic corridor or otherwise impacts the viewshed;
- It is substantially visible from or will obstruct views from a regional riding or hiking trail;
- It is located in an undeveloped or undisturbed area that contains unique aesthetic features;
- Its proposed uses are out of character in comparison to adjacent uses because of height, bulk, or other features;
- It is likely to create substantial sun shadow, light or glare problems; and/or
- It substantially contributes to other factors, such as grading or landform alteration.

The City of Los Angeles CEQA Thresholds Guide (2006) was consulted to provide a more quantitative assessment of potential shade/shadow impacts resulting from project implementation. As the community of Venice, which is located within the City of Los Angeles, is located north/northwesterly of Parcel OT, the use of the City's thresholds is deemed applicable. According to these thresholds, the screening criteria for determining shade/shadow impacts is as follows: *would the proposed project include light-blocking structures in excess of 60 feet in height above the ground elevation that would be located within a distance of three times the height of the proposed structure to a shadow sensitive use on the north, northwest, or northeast?* Shade/shadow sensitive uses include routinely useable outdoor spaces associated with residential, recreational, or institutional (e.g., schools, convalescent homes) land uses,

commercial uses such as pedestrian-oriented outdoor spaces or restaurants with outdoor eating areas, nurseries, and existing solar collectors. If the proposed project meets these criteria, then a significant impact may occur if:

- Shadow-sensitive uses would be shaded by project-related structures for more than three hours between the hours of 9:00 a.m. and 3:00 p.m. Pacific Standard Time (PST) (between late October and early April), or for more than four hours between the hours of 9:00 a.m. and 5:00 p.m. Pacific Daylight Time (PDT) (between early April and late October).

The effective building height proposed for the Holiday Harbor Courts development on Parcel 21 is approximately 56 feet (measured from grade to the rooftop), with a maximum height of approximately 59 feet to the top of the parapet. Therefore, based on the City of Los Angeles CEQA Thresholds Guide screening criteria for shade/shadow impacts, the development would not result in shade/shadow impacts on shade/shadow-sensitive uses and is not further analyzed. The building height of the Oceana Retirement Facility proposed for Parcel OT is approximately 67 feet and seven inches along Admiralty Way and 75 feet along Washington Boulevard. Generally north of Parcel OT, across Washington Boulevard, lie residential uses in the City of Los Angeles, Venice Beach community, which are located within 204 feet of the structure proposed on Parcel OT. Therefore, the shade/shadow effects of Parcel OT on shade/shadow sensitive uses is further analyzed below.

Further, the developments proposed for Parcel OT and Parcel 21 would not be substantially visible from, or obstruct views from, a regional riding or hiking trail; would not be located in undeveloped or undisturbed areas that contain unique aesthetic features; and would not entail significant landform alteration. As such, the proposed project is evaluated on the remaining thresholds of significance.

3. Project Impacts

Potential Impacts to Visual Resources and Scenic Vistas

As discussed above, the Marina del Rey LCP and Scenic Highway Element of the County of Los Angeles General Plan identify a local route circling the Marina area, as a First Priority Route (Proposed for Further Study) on the Scenic Highway System Map. This local route, identified in the Scenic Highway Element as First Priority Route 4, or the Coastal Alignment, has not yet been designated as a scenic road or highway. Route 4, or the Coastal Alignment, includes, among other roadways: Via Marina to Admiralty Way and to Fiji Way. This route offers brief views of the masts of pleasure boasts moored in the Marina between buildings in some locations.

Oceana Retirement Facility (Parcel OT)

Views of the Marina or shoreline are not possible from the immediate vicinity of this site, including from Washington Boulevard to the north and Admiralty Way to the south/southeast (which has not yet been designated as a scenic road or highway); therefore, development on the site would not impede any such views. The proposed Oceana Retirement Facility would not result in the creation of a significant impact upon visually sensitive views of the ocean or other shoreline features. Additionally, views of the proposed Oceana Retirement Facility would be limited to those from nearby foreground public roadway locations. Therefore, the proposed project at this site would have less than a significant impact on visual resources and scenic vistas.

Holiday Harbor Courts Site (Parcel 21)

The western edge of this site is 260 feet east of Via Marina, the nearest public street to the project site that carries a First Priority (Proposed for Further Study) scenic route status designation by Los Angeles County. Although the redevelopment of this site would alter the visual conditions along the north side of Panay Way, public views of the site from Marina-skirting roads such as Admiralty Way, Via Marina and Fiji Way (that carry a County of Los Angeles First Priority status/not yet been designated as a scenic road or highway) are substantially screened or entirely blocked by intervening development. Also, as the mole containing this site is flanked by parallel ones of equal length and development status to the north and south, the design of the Marina itself assures that views of the site would be restricted to public locations within or bordering Basin D of the Marina that immediately abut and face the northern sides of the site. Where Via Marina skirts to within 260 feet due west of the site boundary, all that separates Via Marina from the site is a surface public parking lot that provides spaces for users of the public beach at the westerly end of Basin D (Mother's Beach), and easterly public views of the interior of the site are currently blocked by the width of the building housing the health club. This health club would be demolished as part of the proposed project, therefore, the westerly façade of the proposed building would be briefly visible from Via Marina. However, potential future easterly public views of the waterfront of Basin D that may be possible across the public parking lot from Via Marina are not blocked by existing structures on the site, nor would they be by new ones proposed for the site. Therefore, the proposed project at this site would result in a less than significant impact on visual resources and scenic vistas.

Potential Light and Glare Impacts

Oceana Retirement Facility (Parcel OT)

Daytime Glare

As stated earlier, this site is removed from the Marina and is not subject to potential reflected sunlight glare effects that can occur on either the easterly or westerly sides of the Marina, which result from additional sunlight being reflected off water surfaces. As proposed, the lower levels of the building's exterior surfaces would be surfaced in a variegated textured and earth-toned material resembling natural stone. When coupled with its setback buffer of groundcover, shrub, and low ornamental tree landscaping, the structure's walls would not become a likely source of glare along any of the building's sides. Therefore, the additional sources of glare that would be introduced by the proposed development on this site would have a less than significant impact on the views in the sites' vicinity during the day.

Nighttime Glare and Lighting

The completion of the Oceana Retirement Facility would transform the night lighting of this site from that of a parking lot to that introduced by an occupied retirement structure and subterranean parking. Glare associated with the use of the site as an open surface parking lot with minimal perimeter shielding of vehicle lights would come to an end, as would any incidental glare effects of spillover lighting that may cross the site from off-site sources. The proposed project would introduce light sources as well, such as from windows at heights above the ground where none now exist, from exterior landscape and walkway accent lighting placed to enhance pedestrian safety, and from inadvertent ambient light introduced by indirect, hooded and directed pedestrian lighting. However, the proposed parking facilities would be subterranean, eliminating views of headlights and taillights of moving vehicles onsite as a potentially significant source of glare and spill over light. Outdoor flood lamps would not be used to provide architectural highlight or accent lighting. Exterior building lighting marking building entry/exit doorways would be hooded to prevent lighting of the nighttime sky. All exterior lighting used for such purposes would be carefully directed to prevent spillover lighting into neighboring properties. Lighting used to provide for public safety along exterior pedestrian walkways would also adhere to all County regulations

and would consist of low level positioned lights that are specifically aimed at key walkway points and screened by lens-covering light grills to eliminate potential glare effects.[2]

Numerous multistory buildings exist on adjacent properties and/or in relatively close proximity to the site, and a number of high-rise residential towers and hotels can be found along the southerly side of Admiralty Way, typical of an urban environment. The sources of light that would be introduced by the proposed development are expected to be consistent with the existing urban environment. Therefore, as the project has been designed to utilize hooded and carefully directed lighting fixtures, and it is located in an already urbanized community subject to the effects of night lighting, the potential for adverse night lighting or glare stemming from the proposed development at this site would be less than significant.

Holiday Harbor Courts Site (Parcel 21)

Daytime Glare

Although reflected sunlight from the surface water of the Marina contributes to glare effects, particularly in westerly and easterly directions during the morning and evening times of day, the water-facing sides of the proposed structures on this site would be north-facing and would not figure effectively in sunlight being reflected by them into the waters of the Marina, where it could contribute significantly to increased daytime glare effects. Therefore, the additional sources of glare that would be introduced by the proposed development would have a less than significant impact on views in the sites' vicinity during the day.

Nighttime Glare and Lighting

The Marina is surrounded by urban development that casts a multitude of nighttime light sources into the interior of the Marina from a number of directions. Night lighting spills into the central area of the Marina from the high-rise structures that line Admiralty Way and from Via Marina, although the latter sources are located slightly farther away from the site. An abundance of light sources in the area are also contributed by the lower-rise commercial and residential structures developed along the immediate perimeter edges of the Marina, as well as from the development in place along the moles that protrude into it. The "bowl-shaped" urban design structure of the Marina's developed setting assures that direct and indirect night lighting and reflections of it on the open water surfaces in the Parcel's vicinity are abundant.

The parking facility on this site would be enclosed within a parking structure whose exterior wall panels would consist of pre-stressed concrete panels that would not allow for the passage of vehicle lights. Where ventilation gaps exist in the exterior shell of the parking structure, they would be covered by grills that are configured to contain interior light. The proposed waterfront structures would introduce additional light sources (from windows at heights above the ground where none now exist, from exterior landscape and walkway accent lighting placed to enhance pedestrian safety, and from inadvertent ambient light introduced by indirect, hooded and directed pedestrian lighting used along the southern side of Basin D at night). However, exterior/outdoor flood lamps would not be used to provide architectural highlight or accent lighting of either the garage or any of the other structures proposed for the site. Exterior building lighting marking entry/exit doorways would be located and hooded to prevent upward lighting of the nighttime sky. All exterior lighting used for such purposes would be carefully directed to prevent spillover lighting into neighboring properties. Lighting would be used to provide for public safety along exterior pedestrian walkways along the waterfront, as required by the County to provide for public safety and Marina security. This lighting would consist of low level positioned lights that are specifically aimed at key walkway points and screened by lens-covering light grills to eliminate potential glare effects.[3]

[2] Personal communication Kobi Moses, GMPA Architects, on April 10, 2007.
[3] Ibid.

Several multistory residential buildings exist on adjacent properties and/or in relatively close proximity to the site along Panay Way. The sources of light that would be introduced by the proposed development are expected to be consistent with the existing urban environment. Therefore, as the project has been designed to utilize hooded and carefully directed lighting fixtures, and it is located in an already urbanized community subject to the effects of night lighting, the potential for adverse night lighting or glare stemming from the proposed development at this site would be less than significant.

Potential Impacts to Compatibility with Surrounding Land Uses and Local Plans

Oceana Retirement Facility (Parcel OT)

The evaluation of visual qualities also includes the analysis of a project to ascertain if the proposed structures fit within the existing visual character of the area. The proposed building and landscaping have been designed to contribute a positive aesthetic to the views from Admiralty Way, particularly when compared to the existing conditions of the parking lot inclusive of its landscaping. The project would incorporate decorative detailing, a varied profile and facade, and the building would include a stone-like base, ornamental railings and tile roofing, coupled with metal-framed glass walls and projecting metal canopies. The structure would be stepped back at the second and third floors along Admiralty Way and along the Marina Lagoon side (east side), creating large private stepped terraces, allowing for outdoor seating, dining and recreation. Balconies are also provided for other exterior rooms. Some of the materials that are to be incorporated into the building design include red-hued mission tiles on the roof, and light, neutral paint colors on wall and window frames.

Figures IV.G-4, **IV.G-5**, and **IV.G-6** demonstrate how the proposed Oceana Retirement Facility would fit into the built environment ("bowl concept"), by showing the projected project building height in relation to surrounding rooflines. As shown in Figure IV.G-2, the most visually prominent buildings in Marina del Rey are three round high-rise residential structures. These residential towers are located on the opposite side of Admiralty Way from the project site, on the Marina side of the street. The closest of these is located approximately 220 feet east of the project site. Allowable building heights are then scaled back outside of the "bowl" area, including the area of the proposed project site. Being designated for parking, the allowable height for development on Parcel OT is 90 feet. The portion of Parcel P to be added to Parcel OT is currently designated open space and therefore has an allowable height of 25 feet. The project height is proposed to be 67 feet and seven inches along Admiralty Way and 75 feet along Washington Boulevard, which is within the allowable height for the parking designation, but is in excess of the height limitation for the open space designation on the existing portion of Parcel P. Under the proposed project, the Applicant has requested to designate both Parcel OT and the portion of the Parcel P to be added to Parcel OT as Active Senior Accommodations with an allowable height limit of up to 225 feet. Through the amendments to the LCP, which would include creation of the new land use category and re-designation of the project site to Active Senior Accommodations, the project would be consistent with the height limitations on the Parcel OT project site, and compatible with the surrounding land uses and bowl concept.

The architectural elevations of the active seniors accommodations also feature setbacks of the upper stories along Admiralty Way and the adjacent lagoon property to lessen the visual massing effects of the structure. At five stories, the architecture of the Oceana Retirement Facility would not be out of character with its visual surroundings, which include several low and high-rise structures on Admiralty Way including the Marina International Hotel (40 feet in height, but with a LCP allowable height of 225 feet), as well as the Marina City Club (three round, high-rise residential structures of varying heights ranging from 172 to 182 feet), Ritz Carlton Hotel (166 feet in height), New Admiralty Apartments (61 feet with a

View of Parcel OT as of July 2008

Source:Interacta, Inc., August 2008.

View of Parcel OT Built as the Oceana Retirement Facility

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Visual Simulation 1 – Westerly View of Parcel OT from Admiralty Way

FIGURE IV.G-4

View of Parcel OT as of July 2008

View of Parcel OT Built as the Oceana Retirement Facility

Source:Interacta, Inc., August 2008.

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Visual Simulation 2 – Southeasterly View of Parcel OT from the Intersection of Washington Boulevard and Wilson Avenue

FIGURE IV.G-5

View of Parcel OT as of July 2008

View of Parcel OT Built
as the Oceana Retirement Facility

Source:Interacta, Inc., August 2008.

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Visual Simulation 3 – Northeasterly View of Parcel OT from Admiralty Way

FIGURE IV.G-6

maximum height of 73 feet, and the Marriott Marina Beach (152 feet).[4] While the proposed project building would be substantially taller than the residences across the street (north/northwest/northeast) of Washington Boulevard (Figure 1V.G-5), the project design remains consistent with the "bowl concept" identified in the local plans. Additionally, the proposed development has received conceptual approval from the Marina del Rey Design Control Board, which found the proposal to be consistent with the Marina del Rey LCP design policies (refer to Appendix A). In consideration of these factors and that views of the Marina or shoreline are not possible from the immediate vicinity, including from Washington Boulevard (north of the project site) and Admiralty Way (south/southeast of the project site), implementation of the proposed development at this site would therefore result in a less than significant impact to the existing visual quality of the site and its surroundings.

Holiday Harbor Courts Site (Parcel 21)

Figures IV.G-7, **IV.G-8**, and **IV.G-9** demonstrate how the proposed development at this site would fit into the Panay Way mole community by showing the projected project building height in relation to surrounding rooflines. The project site plans have been developed in accordance with applicable guidelines and standards established by the Marina del Rey LCP and are intended to preserve and enhance the visual character of Marina del Rey. The structure proposed has been designed to reflect nautical themes and would lend visual interest to the waterfront. The architectural designs of the proposed structures would complement several of the residential structures recently completed along Panay Way. The site plan includes provisions for two view corridors between the proposed structures that would have frontage widths along Panay Way of 105 feet and 50 feet, respectively (as arrayed from west to east). The effective building height of the development proposed for this site (56 feet) corresponds to that of a recently completed adjacent project (to the east). A structure height of 56 feet requires mandated view corridors that total to at least 27.33 percent of the parcel's frontage along Panay Way. The project's two view corridors combine to a width of 155 feet, or 28.5 percent of the parcel's frontage (543 feet), thereby meeting the above mandated requirement. Additionally, the site plan calls for an improved pedestrian promenade along the entire waterfront side of the project that, with its width expanded to 28 feet, would enhance opportunities for scenic waterfront views for pedestrians. The proposed development has received conceptual approval from the Marina del Rey Design Control Board, finding it to be consistent with the Marina del Rey LCP design policies (refer to Appendix A). However, despite the above provisions and design features of the proposed project, the building to be developed on this site would represent an increase in height and massing from the current condition on this segment of the Panay Way mole road. Although views to the north of the site are limited to motorists along Panay Way (there are no sidewalks south of the site) and mainly include brief views of the masts of boats and not the water or shoreline, the proposed development would occupy a greater portion of the site at a greater height, as compared to scattered, smaller structures that currently exist on the site. As stated above, Panay Way is not a designated scenic highway or vista; however, the proposed increase in building mass and height on this site, located on a relatively narrow mole road with limited area, is conservatively considered to be a potentially significant and unavoidable visual quality impact of the proposed project related to incompatibility with the scale of structures in Marina del Rey that are shorter in height and represent less massing.

Potential Impacts to Shade/Shadow-sensitive Uses

Oceana Retirement Facility (Parcel OT)

Where the northwestern side of this site abuts Washington Boulevard, prevailing street elevations are approximately 10 feet lower than along the southeasterly side of the parcel where it fronts on Admiralty

[4] Personal Communication with Ismael Lopez. Los Angeles County Department of Beaches and Harbors. July 2009.

View of Parcel 21 as of July 2008

Source:Interacta, Inc., August 2008.

View of Parcel 21 Built as the Holiday Harbor Courts

ENVICOM CORPORATION

Visual Simulation 4 – Southeasterly View of Parcel 21 from Mother's Beach

FIGURE IV.G-7

View of Parcel 21 as of July 2008

Source:Interacta, Inc., August 2008.

View of Parcel 21 Built as the Holiday Harbor Courts

Visual Simulation 5 – Southerly View of Parcel 21 from Palawan Way

View of Parcel 21 as of July 2008

Source:Interacta, Inc., August 2008.

View of Parcel 21 Built as the Holiday Harbor Courts

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Visual Simulation 6 – East/Northeasterly View of Parcel 21 from Panay Way

FIGURE IV.G-9

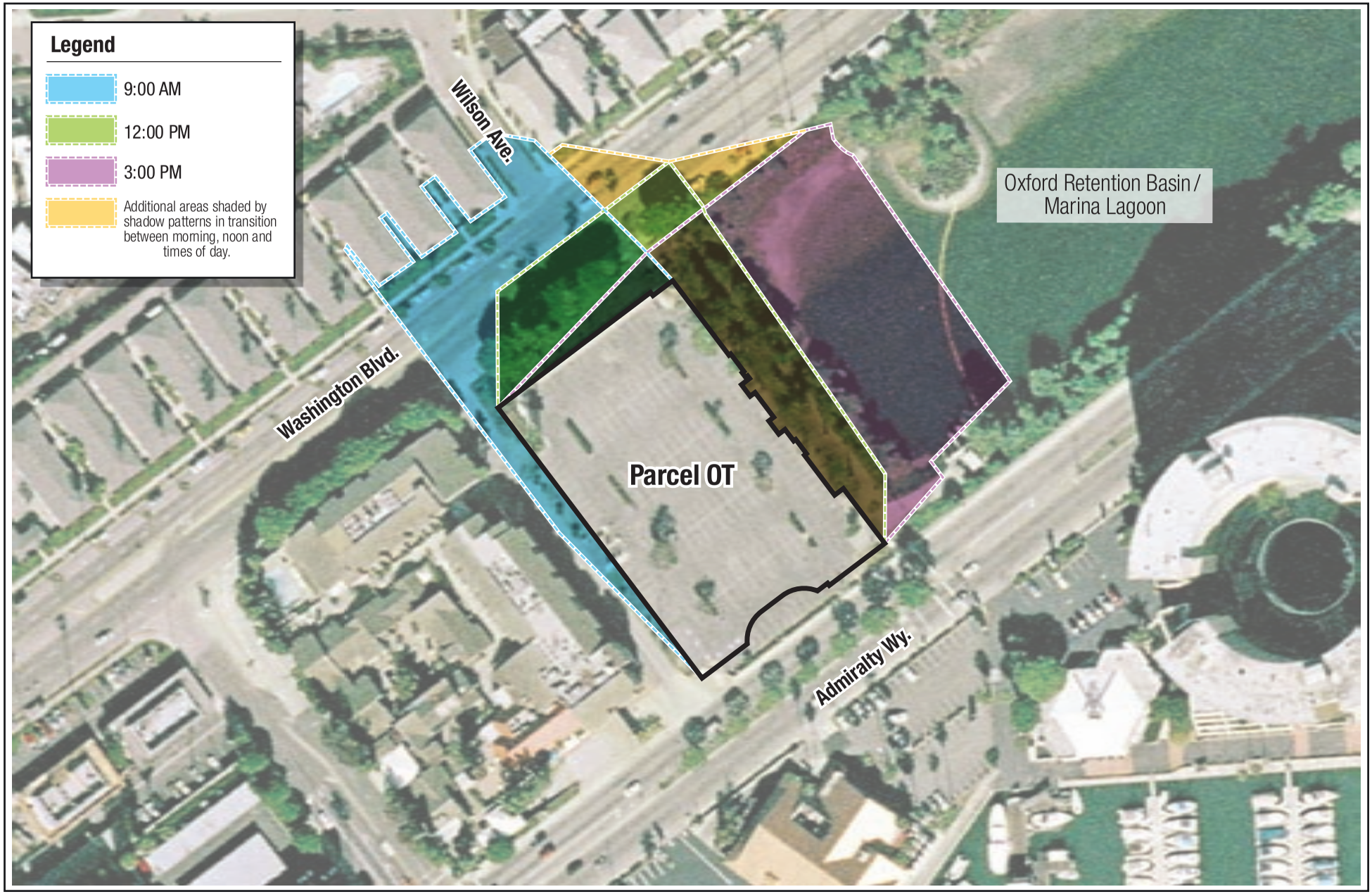
Way. Correspondingly, the Washington Boulevard-facing architectural elevation of the proposed structure would have a maximum height of approximately 69 feet, while on the Admiralty Way side, the building would reach approximately 59 feet above the prevailing grade. As a consequence, westerly to northwesterly shadows would be cast by the building during typical morning times of day, because of the higher building elevation facing Washington Boulevard.

An analysis of the winter solstice shadow pattern (December 22, and the time of year when the building's shadows would be at their longest) indicates that, at 9:00 a.m., the shadows cast by the proposed structure would extend northwesterly for approximately 206 feet. The mid-morning shadow pattern would extend across Washington Boulevard to shade the landscaped yards (assumed to be a shade/shadow-sensitive use) of three multi-family residential structures situated along the north side of the street, as counted southwesterly from the intersection with Wilson Avenue (**refer to Figure IV.G-10**). Landscaped pathways (also assumed to be shade/shadow-sensitive uses) between the three structures would also be shaded by the mid-morning shadow. The yard spaces of the residential structures facing Washington Boulevard would no longer be shaded by 10:00 a.m. An outdoor swimming pool and recreation area of the multi-family residential complex, situated north of the tier of residential structures that would be partially shaded by the proposed structure, lies 290 feet from the proposed structure and would not be shaded by the proposed structure at any time of day at any time of year. The longest afternoon shadows would be cast northeasterly of the proposed structure, where they would shade the landscaped side of the proposed structure's grounds and the adjacent Marina Lagoon/Oxford Retention Basin, which is not a shade-sensitive use. No buildings would be shaded to the northeast of the project site. As no routinely useable outdoor spaces associated with residential, recreational, or institutional (e.g., schools, convalescent homes) land uses, commercial uses such as pedestrian-oriented outdoor spaces or restaurants with outdoor eating areas, nurseries, and existing solar collectors would be shaded for more than three hours during the winter solstice, the proposed project would have a less than significant impact on shade/shadow-sensitive uses during the winter solstice.

As equinox and summer solstice shadows would be shorter than those cast during the winter solstice, the residential buildings along the north side of Washington Boulevard would not be shaded during this time of year (between early April and Late October). Owing to the greater westerly azimuth of morning shadows near the summer solstice, project shadows would shade portions of the roof of the adjacent Marina International Hotel. Partial shading of the adjacent building's roof and the alley between the hotel and the site (during mid-morning for less than two hours) during the warm summer months would occur; however, these are not shade/shadow-sensitive uses. No shade/shadow-sensitive uses as defined above would be shaded by equinox and summer solstice shadows cast by the proposed project, therefore, the development on this site would have a less than significant impact on shade/shadow-sensitive uses during the equinox and summer solstice.

4. Cumulative Impacts

Implementation of Phase II Marina del Rey development would gradually result in the alteration of the existing visual character of the Marina del Rey, as larger and taller structures (greater massing) are becoming more common in the community. As such, when Phase II development is complete and viewed cumulatively, impacts to visual quality within the Marina del Rey community could be considered significant, given the intensification of development that is occurring. However, regulations are in place to assure that proposed projects in Marina del Rey do not adversely affect visual resources in the area. The proposed project has received conceptual approval from the Marina del Rey Design Control Board, and it would be constructed so as to comply with the Marina del Rey LCP height, density, and view corridor requirements. The current allowable height on Parcel OT for the parking designation is 90 feet,



Aerial Source: I.K. Curtis Services, Inc., September 2005.

Revised: August 8, 2008

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Winter Solstice Shadow Diagram for Parcel OT

FEET 0 60 120

FIGURE IV.G-10

and the proposed project on this site would reach a maximum height of 75 feet as measured from Washington Boulevard to the top of the roof. The allowable height for Parcel 21, designated marine commercial on a mole road, is 45 feet. Per the LUP, a maximum height of 75 is permitted when a 40 percent view corridor is provided. The effective height of the project on this site would be 56 feet, and would provide the required view corridor. Related projects must also comply with the Marina del Rey /LCP policies and be approved by the Marina del Rey Design Control Board. However, despite these provisions of the proposed project, the buildings to be developed on Parcel OT and Parcel 21 would incrementally contribute to the intensification of development occurring in Marina del Rey. Therefore, the proposed project is conservatively considered to have a significant and unavoidable cumulative impact on visual quality.

Development of the proposed project and related projects would introduce new or expanded sources of light and glare into Marina del Rey. As the Marina and the surrounding area are highly urbanized, however, the additional light sources created by these projects are not of a substantial magnitude to alter the existing daytime glare or evening lighting environment, especially given the fact that building materials require approval by the Marina del Rey Design Control Board and Lighting Plans must be submitted to and approved by the County of Los Angeles. Cumulative daytime glare and night lighting impacts are therefore concluded to be less than significant.

Several related (cumulative) projects are planned for Marina del Rey and the surrounding area (refer to Section IV.H, Traffic/Access) that may result in shade/shadow impacts on shade/shadow-sensitive uses. However, as current development in Marina del Rey represents Phase II development, the majority of these related projects are replacing existing uses, such as the Marina International Hotel rehabilitation adjacent to Parcel OT.[5] Further, the final dimensions of such future proposed projects cannot be known with specificity at this time. As with cumulative impacts related to visual resources, daytime glare, and nighttime lighting discussed above, all Phase II development in Marina del Rey must be approved by the Marina del Rey Design Control Board, adhere to the Marina del Rey LCP policies, as well as possibly be subject to the CEQA process. Taking into consideration all these factors, the proposed project is expected to have a less than significant impact on cumulative shadows.

5. Mitigation Measures

The potential impacts that may arise from implementation of the proposed project on 1) visual resources and scenic vistas and 2) compatibility of the proposed development with surrounding land uses and local plans have been identified above as less than significant. In the case of impacts related to the project's compatibility with surrounding land uses and local plans, this less than significant determination results from the provision that, as specified in the Marina del Rey LCP, the Marina del Rey Design Control Board reviews all development proposals prior to any application for development being submitted to the County of Los Angeles Department of Regional Planning for case processing. As such, the Marina del Rey Design Control Board found the project to meet the design requirements of the LUP, which found the project to meet the requirements of the Marina del Rey LCP.

However, the following mitigation measure is set forth to clarify proposed project features on Parcels OT and 21 that will assure less than significant visual impacts associated with lighting:

VIS-1 The applicant shall develop and submit a Lighting Plan for the proposed project for County of Los Angeles review and approval. The Lighting Plan shall include the following features, at a minimum:

[5] Personal Communication. Los Angeles County Department of Beaches and Harbors. July 2009.

- Exterior lighting, including landscape lighting, shall consist of low intensity, shielded, hooded fixtures and shall be directed downward or toward the area to be illuminated, so that backscatter to the nighttime sky is minimized and light trespass outside the project boundary is prevented.
- Outdoor flood lamps shall not be used to provide architectural highlight or accent lighting.
- Lighting used to provide for public safety along exterior pedestrian walkways shall consist of low level positioned lights that are specifically aimed at key walkway points and screened by lens-covering light grills to eliminate potential glare effects.

6. Significant Project Impacts After Mitigation

Project and cumulative impacts regarding scenic highways and vistas, light and glare, and shade/shadows are less than significant due to project design features and the nature of adjacent land uses; however, Mitigation Measure VIS-1 is presented here for clarification and informational purposes regarding lighting. A residual, significant adverse project-level impact associated with visual quality, due to the increase in building height and massing of the Holiday Harbor Courts site along the Panay Way mole road would occur as a result of project implementation, as would a residual, significant adverse cumulative impacts associated with the increase in building height and massing on both project sites. It should be noted that these residual impacts have been conservatively identified as such, because the proposed project has received conceptual approval from the Marina del Rey Design Control Board and complied with and exceeded the view corridor requirement for the proposed height.

H. TRAFFIC/ACCESS

This Traffic/Access section is based on the Traffic Analysis (June 2008) and the Development Transfer Amendment on Parcel OT (July 2009) prepared by Crain & Associates for the proposed project, as well as the County of Los Angeles Department of Public Works Traffic and Lighting Division review (November 24, 2008) of the June 2008 Traffic Analysis (provided in **Volume II, Appendix G)**.

1. Existing Conditions

Street System

The following 14 study intersections were selected for analysis in order to determine potential impacts related to the proposed project:

1. Washington Boulevard/Ocean Avenue/Via Marina
2. Washington Boulevard/Palawan Way
3. Lincoln Boulevard/Washington Boulevard
4. Admiralty Way/Via Marina
5. Admiralty Way/Palawan Way
6. Via Marina/Panay Way
7. Via Marina/Marquesas Way
8. Admiralty Way/Bali Way
9. Admiralty Way/Mindanao Way
10. Admiralty Way/Fiji Way
11. Lincoln Boulevard/Marina Expressway
12. Lincoln Boulevard/Bali Way
13. Lincoln Boulevard /Mindanao Way
14. Lincoln Boulevard / Fiji Way

The intersections are located within the area surrounding the project sites and were selected for detailed analyses, because they are expected to be those locations most directly impacted by the proposed project's traffic generation. The selected locations include intersections under the control of the County of Los Angeles, the City of Los Angeles, Caltrans, or more than one of these jurisdictions. The locations of the study intersections are shown in **Figure IV.H-1, Project Site Vicinity and Study Intersection Locations**. All of the study intersections are traffic signal-controlled, with the exception of Washington Boulevard and Palawan Way, which is a "tee" intersection and stop-sign controlled for the Palawan Way approach. Additionally, all of the signalized intersections are upgraded with the City of Los Angeles' Automated Traffic Surveillance and Control (ATSAC) and second generation Adaptive Traffic Control System (ATCS) traffic signal coordination systems. These signal coordination systems monitor and evaluate traffic demands throughout the study area in real time, and adjust the traffic signal timings and phasings accordingly to maximize traffic capacity.

Freeways

San Diego Freeway

The San Diego Freeway (Interstate 405, or I-405) is the most important traffic facility in the area, traversing north-south through the Greater Los Angeles metropolitan area and providing convenient

Source: Crain & Associates, 2007

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Project Site Vicinity and Study Intersection Locations

No Scale

FIGURE IV.H-1

project access, via the regional freeway system, to all other areas of the Los Angeles region. This route is also an important link to the other parts of California. Interstate 405 in this vicinity is a nine- or ten-lane facility, depending on the segment, and currently carries in excess of 298,000 vehicles per day (VPD). A high-occupancy vehicle (HOV) lane is at present being added to this facility. Interstate 405 provides a full interchange with the western portion of the Marina Freeway/Expressway.[1] Northbound-to-eastbound, and westbound-to-southbound movements are not allowed at this interchange.[2]

Marina Freeway/Expressway

The Marina Freeway/Expressway (State Route 90) is a short regional facility serving a roughly east-west alignment between Slauson Avenue (east of Sepulveda Boulevard) and Lincoln Boulevard. The elevated freeway sections of this facility, between Culver Boulevard on the west and the Slauson Avenue terminus on the east, provides a three-lane per direction configuration, with additional lanes provided at the interchange with the San Diego Freeway. Surface street access ramps are currently provided only from Sepulveda Boulevard (to the eastbound Marina Freeway), and at Centinela Avenue (full ramp set). However, the freeway is being extended and an interchange is now being built at Culver Boulevard. Additional extension of the freeway to Admiralty Way is also being planned. This portion of State Route 90 carries more than 75,000 VPD. The at-grade expressway portion of the facility, between Culver Boulevard and Lincoln Boulevard, exhibits a two-lane per direction configuration, with localized flarings at intersections to accommodate additional left and/or right-turn lanes. State Route 90 is a divided roadway, with no crossover traffic permitted, except from the cross street intersections with Culver Boulevard and Mindanao Way.

Streets and Highways

Important surface highway facilities in the area near the proposed project include Washington Boulevard, Lincoln Boulevard, and Admiralty Way. Washington Boulevard is designated as a Class II Major Highway on the General Plan for the City of Los Angeles. Lincoln Boulevard is designated as a Class I Major Highway south of Washington Boulevard and a Class II Major Highway north of Washington Boulevard. Admiralty Way is a collector facility that traverses along the northern and eastern edges of Marina del Rey between Via Marina, just to the west of Parcel OT (and the subject portion of Parcel P)[3] and northwest of Parcel 21, and Fiji Way near Lincoln Boulevard. Admiralty Way provides the proposed project's most direct access to/from the Marina Freeway/Expressway (via Mindanao Way) and other regional travel facilities. Brief descriptions of the important roadways in the project site vicinity are provided in the following paragraphs:

Washington Boulevard is an east-west Class II Major Highway that forms the northern boundary of the Parcel OT site. In the project vicinity, Washington Boulevard is approximately 80 feet wide and provides two through lanes in each direction, plus full left-turn channelization at most cross streets. Bicycle lanes are provided and on-street parking is allowed along Washington Boulevard in the project vicinity.

Admiralty Way is a four-lane collector facility, serving as a "frontage road" around the north and east portions of the Marina, between Via Marina on the west and Fiji Way on the southeast. Admiralty Way

[1] The "western portion" refers to the section of SR-90 located west of the I-405. The interchange provides traffic movements from the I-405 in the northbound and southbound directions to westbound SR-90, and from the SR-90 in the eastbound direction to the I-405 in the northbound and southbound directions. The northbound-to-westbound, southbound-to-westbound, eastbound-to-northbound, and eastbound-to-southbound movements are allowed.

[2] The SR-90 extends for about one-half-mile east of the I-405 where it terminates at Slauson Avenue. The northbound-to-eastbound and westbound-to-southbound movements are not allowed at this interchange.

[3] Hereafter, unless otherwise noted, the Oceana Retirement Facility project site is simply referred to as Parcel OT.

provides two lanes per direction plus left-turn channelization at key intersections. A raised center median exists along the length of Admiralty Way. Admiralty Way "tees" at both ends, into Fiji Way on the south and into Via Marina to the west.

Via Marina is generally a north-south facility that serves the western portion of Marina del Rey. Via Marina extends from the water entrance to the Marina north to Washington Boulevard (where it aligns with Ocean Avenue) and then the roadway becomes Venice Way, bends to the west, and terminates at Pacific Avenue. Via Marina provides two to three through lanes in each direction plus left-turn channelization at key intersections.

Lincoln Boulevard (State Route 1) is developed to a typical width of 80 feet north of Washington Boulevard and a variable width (80 to 96 feet wide) roadway on the segment between Washington Boulevard and Culver Boulevard. South of the Culver Boulevard overpass, Lincoln Boulevard widens to provide three through lanes in each direction plus a raised median island. In the project area, this facility is striped to provide a six-lane roadway with left-turn channelization (designated or permissive left turn lanes) at most intersections. A raised median island exists on Lincoln Boulevard from Fiji Way north to the Marina Expressway intersection. On-street parking is prohibited on this portion of Lincoln Boulevard at all times but is allowed on a time-restricted basis on both sides of the street north of Maxella Avenue.

Palawan Way is designated a local street. This facility provides two lanes per direction on the segment between Admiralty Way and Washington Boulevard, separated by a raised median island. However, at the "tee" intersection with Washington Boulevard, northbound Palawan Way narrows to provide a right-turn lane only. This intersection is unsignalized but is instead controlled by a stop sign on the Palawan Way approach. Conversely, at the signalized intersection with Admiralty Way, Palawan Way provides three lanes, including a left-turn only lane, a through lane, and a right-turn only lane. South of Admiralty Way, Palawan Way provides access to restaurant and commercial uses.

Panay Way is designated a local street and provides direct access to the Parcel 21 site. This roadway also provides access to the Marina del Rey "Basin C" and "Basin D" areas. Panay Way provides one lane in each direction.

Marquesas Way is designated a local street. This two-lane facility is located opposite Via Dolce at Via Marina and provides access to the "Basin B" and "Basin C" areas.

Bali Way is a short local street providing access from Lincoln Boulevard and Admiralty Way to the Marina del Rey "Basin F" and "Basin G" areas. Bali Way provides only a single lane in each direction.

Mindanao Way is a Secondary Highway providing two lanes in each direction, although some sections are widened to permit additional traffic lanes and/or turn-lane channelization, particularly at the Marina Expressway and Lincoln Boulevard intersections. At Lincoln Boulevard, Mindanao Way provides dual left-turn channelization. East of Alla Road, Mindanao Way changes names to become Short Avenue, which terminates at Centinela Avenue approximately 2/3 of a mile east of Alla Road. West of Lincoln Boulevard, Mindanao Way crosses Admiralty Way to provide access to Burton Chase Park and the Marina del Rey "Basin G" berths. Mindanao Way also provides the closest surface street link to the Marina Expressway to the east in the project area (other than the somewhat circuitous route using the Lincoln Boulevard connection).

Fiji Way is designated a local street. This facility is discontinuous and provides one lane per direction plus on-street parking from east of Lincoln Boulevard to the eastern terminus at La Villa Marina. West of

Lincoln Boulevard, Fiji Way typically provides two lanes per direction, and serves as access to the "Fisherman's Village" portion of Marina del Rey as well as to residential development and the U.S. Coast Guard Harbor Patrol station near the Ballona Creek "point." On-street parking is prohibited west of Lincoln Boulevard.

Local Public Transit Services

The Los Angeles County Metropolitan Transportation Authority (Metro) has established an extensive grid system of bus routes throughout the Los Angeles region, including the project vicinity, and adjacent jurisdictions, such as the City of Los Angeles and the City of Culver City, also provide transit service through the Marina del Rey study area. In the project area, several bus routes pass by within convenient walking distance of the project sites, along Washington Boulevard and Admiralty Way. These bus routes, including Metro Line 108, LADOT Commuter Express Line 437, and Culver City Line 1, are detailed in Volume II, Appendix G. In addition to these key transit routes that are within walking distance of the project sites, other bus routes that also serve the Marina del Rey community (e.g. along or near Lincoln Boulevard) include the Culver City Lines 2 and 7, as well as the Santa Monica Line 3 and Rapid 3. Many more bus routes are also available via transfers to other routes or transit providers. When transfer opportunities are considered, the project is well served by public transit. Thus, it is expected that some of the trips generated by the proposed project could choose to utilize public transportation as their primary travel mode instead of private vehicles.

Existing Traffic Conditions

Existing Traffic Volumes

Traffic volume count data were obtained from counts conducted in 2006 and 2007 by The Traffic Solution (an independent traffic data collection company) and Crain & Associates, with the exception of counts at the intersection of Washington Boulevard and Palawan Way that were conducted in October 2005. While traffic count data was also collected at this intersection in 2007, it was found to be lower than the 2005 data. Therefore, the more conservative data from 2005 is utilized in this analysis. San Diego Freeway and Marina Expressway (SR-90) count data were obtained from the California Department of Transportation (Caltrans). The traffic counts conducted in 2005 and 2006 were growth factored by 0.6 percent, compounded annually, to estimate 2007 traffic conditions. All traffic data sheets are included in Volume II, Appendix G of this EIR.

Study Intersection Evaluation Methodology

The methodology used for the analysis and evaluation of traffic operations at each study intersection is based on procedures outlined in Circular Number 212 of the Transportation Research Board.[4] In the discussion of Critical Movement Analysis for signalized intersections, procedures have been developed for determining operating characteristics of an intersection in terms of the "Level of Service" provided for different levels of traffic volume and other variables, such as the number of signal phases. The term "Level of Service" describes the quality of traffic flow. Levels of Service A to C operate quite well. Level D typically is the level for which a metropolitan area street system is designed. Level E represents volumes at or near the capacity of the highway, which might result in stoppages of momentary duration and fairly unstable flow. Level F occurs when a facility is overloaded and is characterized by stop-and-go traffic with stoppages of long duration. A determination of the Level of Service at an intersection, where traffic volumes are known or have been projected, can be obtained through a summation of the critical

[4] Interim Materials on Highway Capacity, Circular Number 212, Transportation Research Board, Washington, D.C., 1980.

movement volumes at that intersection. Once the sum of critical movement volumes has been obtained, the values indicated in **Table IV.H-1**, below, can be used to determine the applicable Level of Service.

Table IV.H-1
Critical Movement Volume Ranges for Determining Levels of Service[1]

	Maximum Sum of Critical Volumes (VPH)		
Level of Service	**Two Phase**	**Three Phase**	**Four or More Phase**
A	900	855	825
B	1,050	1,000	965
C	1,200	1,140	1,100
D	1,350	1,275	1,225
E	1,500	1,425	1,375
F	N/A	N/A	N/A

[1] For planning applications only, i.e., not appropriate for operations and design applications.

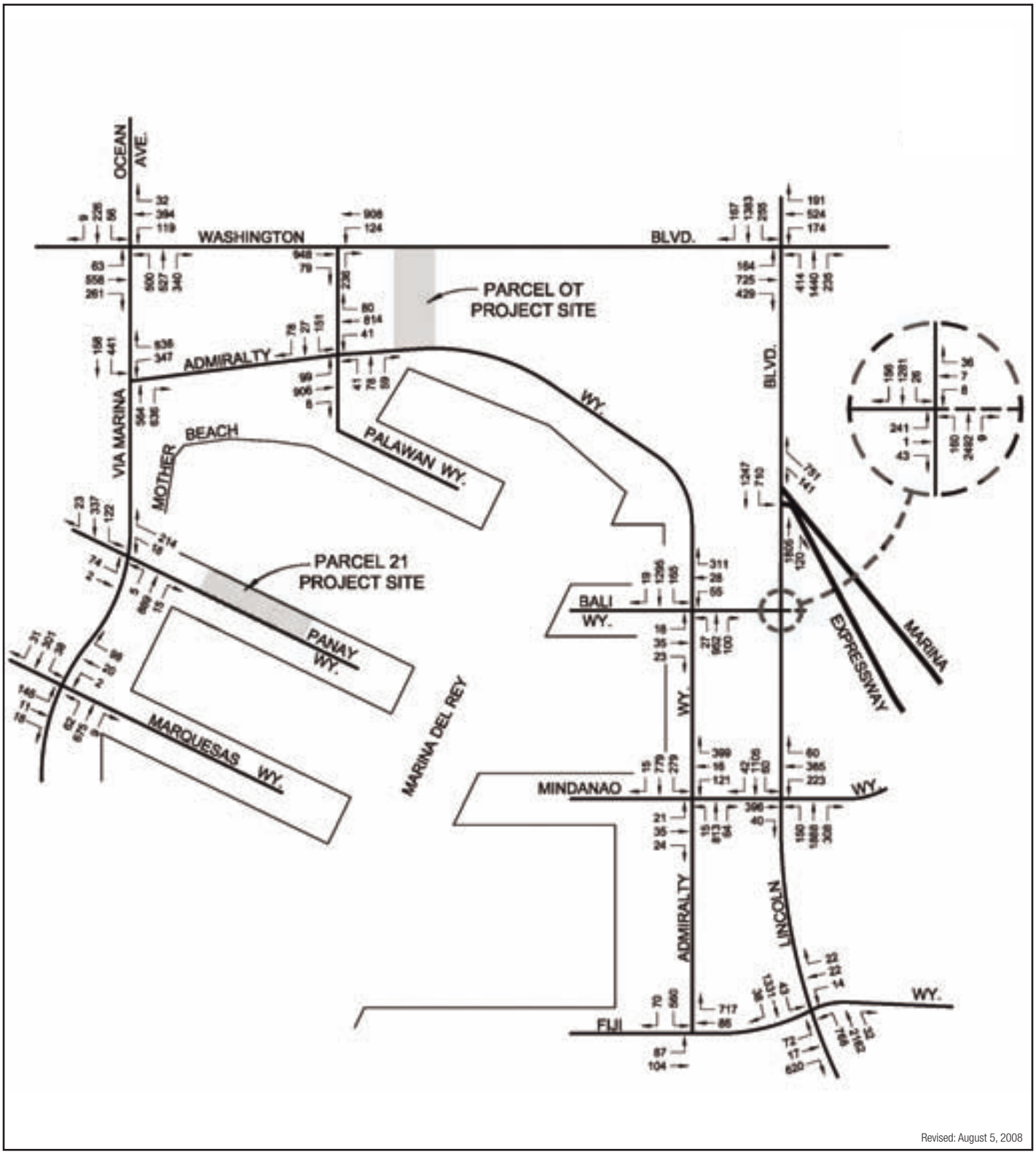
"Capacity" represents the maximum total hourly vehicle volume movement in the critical lanes, which has a reasonable expectation of passing through an intersection under prevailing roadway and traffic conditions. For planning purposes, capacity equates to the maximum value of Level of Service E, as indicated above. The Critical Movement Analysis (CMA) indices used in this study were calculated by dividing the sum of critical movement volumes by the appropriate capacity value for the type of signal control present or proposed at the study intersections. Thus, the Level of Service corresponding to a range of CMA values is shown in **Table IV.H-2**.

Table IV.H-2
Level of Service as a Function of CMA Values

Level of Service	Description of Operating Characteristics	Range of CMA Values
A	Uncongested operations; all vehicles clear in a single cycle.	≤ 0.60
B	Same as above.	$> 0.60, \leq 0.70$
C	Light congestion; occasional backups on critical approaches.	$> 0.70, \leq 0.80$
D	Congestion on critical approaches; but intersection functional. Vehicles required to wait through more than one cycle during short peaks. No long-standing lines formed.	$> 0.80, \leq 0.90$
E	Severe congestion with some long-lasting lines on critical approaches. Blockage of intersection may occur if traffic signal does not provide for protected turning movements.	$> 0.90, \leq 1.00$
F	Forced flow with stoppages of long duration.	> 1.00

Existing Levels of Service at the Study Intersections

From this analysis procedure, the CMA values and corresponding Levels of Service (LOS) for the study intersections were calculated. The AM and PM peak hour CMA and LOS at the study intersections are summarized in **Table IV.H-3**. The existing traffic volumes at the study intersections are shown in **Figures IV.H-2a, Existing (2007) Traffic Volumes – AM Peak Hour, and IV.H-2b**, **Existing (2007) Traffic Volumes – PM Peak Hour**. (Summary data worksheets of the manual traffic counts at the study intersections are contained in Volume II, Appendix G.)



Revised: August 5, 2008

Source: Crain & Associates, 2007

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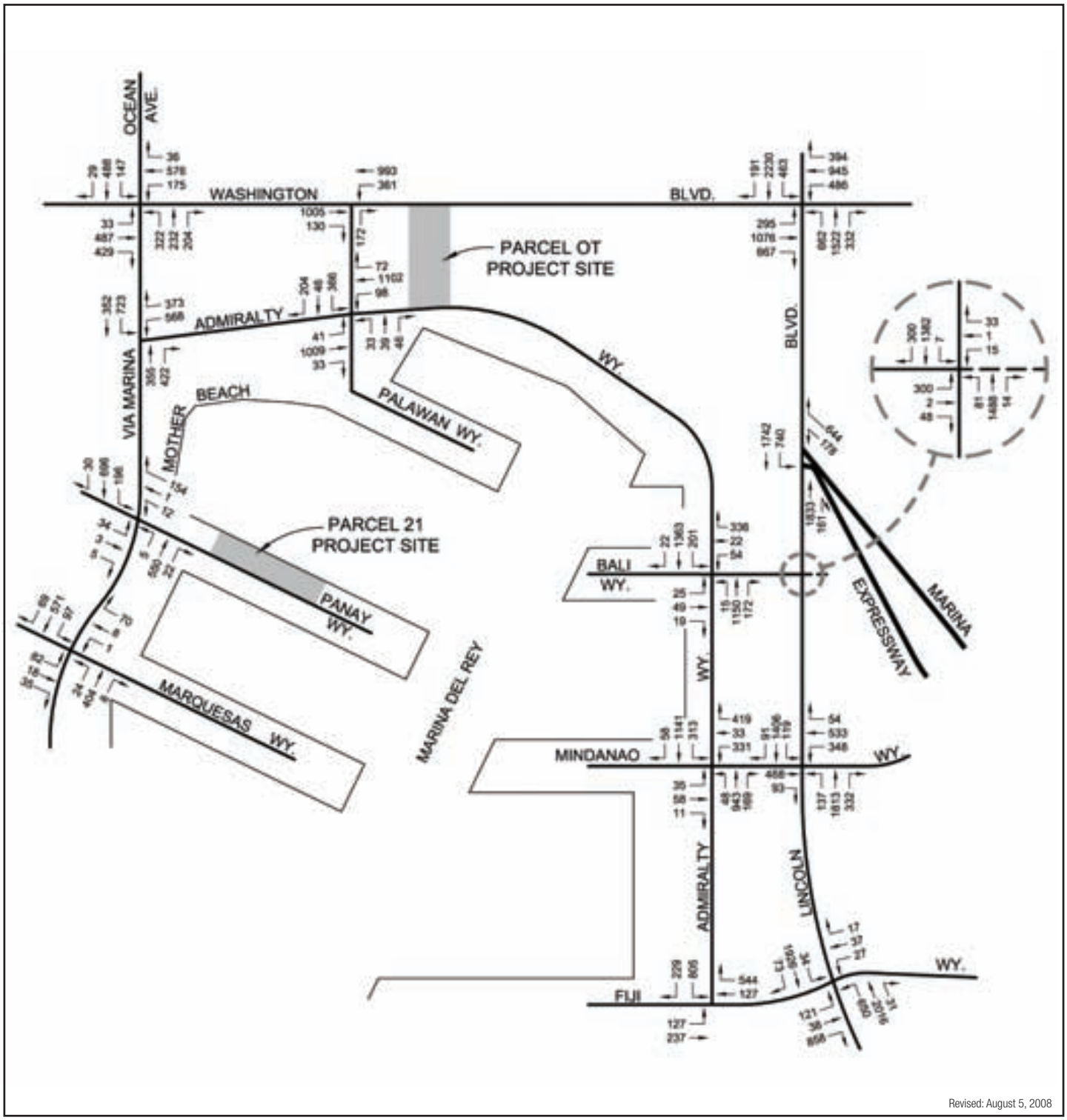
Existing (2007) Traffic Volumes – AM Peak Hour

No Scale

FIGURE IV.H-2a



Source: Crain & Associates, 2007

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Existing (2007) Traffic Volumes – PM Peak Hour

No Scale

FIGURE IV.H-2b

Table IV.H-3
Existing Traffic Conditions

No.	Intersection	Am Peak Hour		Pm Peak Hour	
		CMA	LOS	CMA	LOS
1	Washington Blvd. & Ocean Ave./Via Marina	0.714	C	0.768	C
2	Washington Blvd. & Palawan Wy.	0.643	B	0.719	C
3	Lincoln Blvd. & Washington Blvd.	0.775	C	1.337	F
4	Admiralty Wy. & Via Marina	0.701	C	0.751	C
5	Admiralty Wy. & Palawan Wy.	0.424	A	0.604	B
6	Via Marina & Panay Wy.	0.347	A	0.254	A
7	Marquesas Wy. & Via Marina	0.262	A	0.181	A
8	Admiralty Wy. & Bali Wy.	0.459	A	0.577	A
9	Admiralty Wy. & Mindanao Wy.	0.626	B	0.743	C
10	Admiralty Wy. & Fiji Wy.	0.257	A	0.372	A
11	Lincoln Blvd. & Marina Expressway	0.679	B	0.721	C
12	Lincoln Blvd. & Bali Wy.	0.651	B	0.512	A
13	Lincoln Blvd. & Mindanao Wy.	0.724	C	0.849	D
14	Lincoln Blvd. & Fiji Wy.	0.587	A	0.732	C

As indicated in Table IV.H-3, 12 of the 14 study intersections are presently operating at LOS C or better during both the AM and PM peak hours under existing conditions. The following study intersection currently operates at LOS D during the peak hour shown below under existing conditions:

No. 13: Lincoln Blvd. & Mindanao Wy. PM Peak Hour: CMA = 0.849, LOS D

The following study intersection currently operates at LOS F during the peak hour shown below under existing conditions:

No. 3: Lincoln Blvd. & Washington Blvd. PM Peak Hour: CMA = 1.337, LOS F

2. Thresholds of Significance

The County of Los Angeles Department of Regional Planning Initial Study prepared for the project, as well as the Traffic Impact Analysis Report Guidelines prepared by the LADPW were consulted to compile thresholds of significance for traffic/access impacts. It was determined that the proposed project may result in significant impacts related to traffic/access if:

- It contains 25 dwelling units, or more, and is located in an area with known congestion problems (roadway or intersections);
- It would result in parking problems with a subsequent impact on traffic conditions;
- Inadequate access during an emergency (other than fire hazards) would result in problems for emergency vehicles or residents/employees in the area;
- The Congestion Management Program (CMP) Transportation Impact Analysis thresholds of 50 peak hour vehicles added by project traffic to a CMP highway system intersection or 150 peak hour trips added by project traffic to a mainline freeway link would be exceeded; and/or
- An increase in CMA occurs under any of the following conditions:

- A CMA increase of 0.010 or more when the final ("With Project") LOS is E or F (CMA > 0.900);
- A CMA increase of 0.020 or more when the final ("With Project") LOS D (CMA > 0.800 to 0.900),
- A CMA increase of 0.040 or more when the final ("With Project") LOS C (CMA > 0.700 to 0.800).[5]

3. Project Impacts

Construction Period Impacts

Implementation of the proposed project on Parcel OT would include 1) the upsizing of an existing on-site County eight-inch sewer line to a ten-inch line and relocation of the line to the Admiralty Way roadway to tie into an existing County 15-inch line, and 2) electrical infrastructure improvements within Washington Boulevard. Additionally, the Los Angeles County Department of Public Works Waterworks District No. 29 (District) has plans to upsize an existing on-site 14-inch water main to a 24-inch water main in its current location, which would also require work in the Admiralty Way roadway. Depending on the timing of the District's upsizing project, the applicant may be required to construct and/or relocate the upsized water main, potentially necessitating work to be performed in the Admiralty Way roadway. Further, the proposed project on Parcel 21 requires upgrading the water main infrastructure in Panay Way in order to provide adequate water and pressure to meet fire flow demands. Construction of the proposed project on Parcels OT and 21, as well as the upsized sewer and water main projects, would require the designation of construction vehicle and haul routes and construction period management of roadways, sidewalks, and public transportation routes. As such, the proposed project would result in potentially significant, but temporary, construction traffic impacts. Implementation of **Mitigation Measure TA-1** would reduce construction period traffic impacts to less than significant.

During the construction period, parking on the subject parcels would become temporarily unavailable. Public parking on these parcels would be diverted to underutilized public parking lots within the Marina as identified by the Draft Right-Sizing Parking Study. Construction parking for the Parcel OT project would be provided by the Applicant via a valet, with the spaces being provided on Parcel 76, which is under lease to the Applicant. Parking for the tenants and construction crew on Parcel 21 during the construction period would be temporarily provided through a valet by the Applicant on Parcel 18, which is also under lease to the Applicant. Although the proposed project would result in the temporary loss of both public and private parking on the sites during the construction period, the proposed provision for private parking and the availability of underutilized public parking throughout the Marina is anticipated to accommodate the parking demand. Therefore construction period impacts to parking supply would be less than significant.

Operational Period Impacts

Site Access Impacts

Parcel OT

Vehicular access for the Parcel OT site would be available directly from Washington Boulevard and Admiralty Way, as well as from an existing two-way driveway that extends between these two roadways

[5] The County of Los Angeles Department of Transportation (LADOT) defines a significant traffic impact based on a "stepped scale" as defined in the Traffic Impact Analysis Report Guidelines prepared by the LADPW (January 1997). The impact definition recognizes that intersections at high volume-to-capacity ratios are more sensitive to additional traffic than those operating with available surplus capacity. A significant impact is therefore identified when any of these conditions occur.

(refer to **Figure IV.H-3a**). Parcel OT would provide parking via upper level and lower level parking levels. Access to these parking levels would be gained from two access points located off of the existing westerly driveway between Parcel OT and the Marina International Hotel, as well as a driveway along Washington Boulevard on the northerly side of the site.

Currently, the existing Parcel OT driveway provides full left- and right-turn access at Washington Boulevard. As part of the proposed project, the left-turn access from westbound Washington Boulevard to the existing driveway would be prohibited. At Admiralty Way, the Parcel OT driveway is restricted to "right-in/right-out" operation due to the raised median island on Admiralty Way. The driveway access at Admiralty Way would remain the same with the proposed project. Parcel OT vehicular access to the lower parking level would also be provided from the existing driveway and from a new driveway located off of Washington Boulevard. From the existing driveway, access for the lower parking level would be located approximately 140 feet south of Washington Boulevard. The new Parcel OT driveway on Washington Boulevard would align with Wilson Avenue. All turning operations would be available between the new driveway and Washington Boulevard, except the left-turn egress operation at the new driveway that will be prohibited.

The general public would access on-site upper level parking from the driveway located on the westerly side of the structure (the side adjacent to the Marina International Hotel), closest to Admiralty Way on the southerly side of Parcel OT. This driveway would have two separate designated gated areas; one for public parking and one for residents of the retirement facility. The second driveway located on the westerly side of the structure, closest to Washington Boulevard, would be reserved for residents of the retirement facility and patrons of the on-site retail spaces; as would the access from Washington Boulevard along the site's northerly side. These entries would lead to both the upper and lower parking levels. General public and building use parking spaces will be designated with signage.

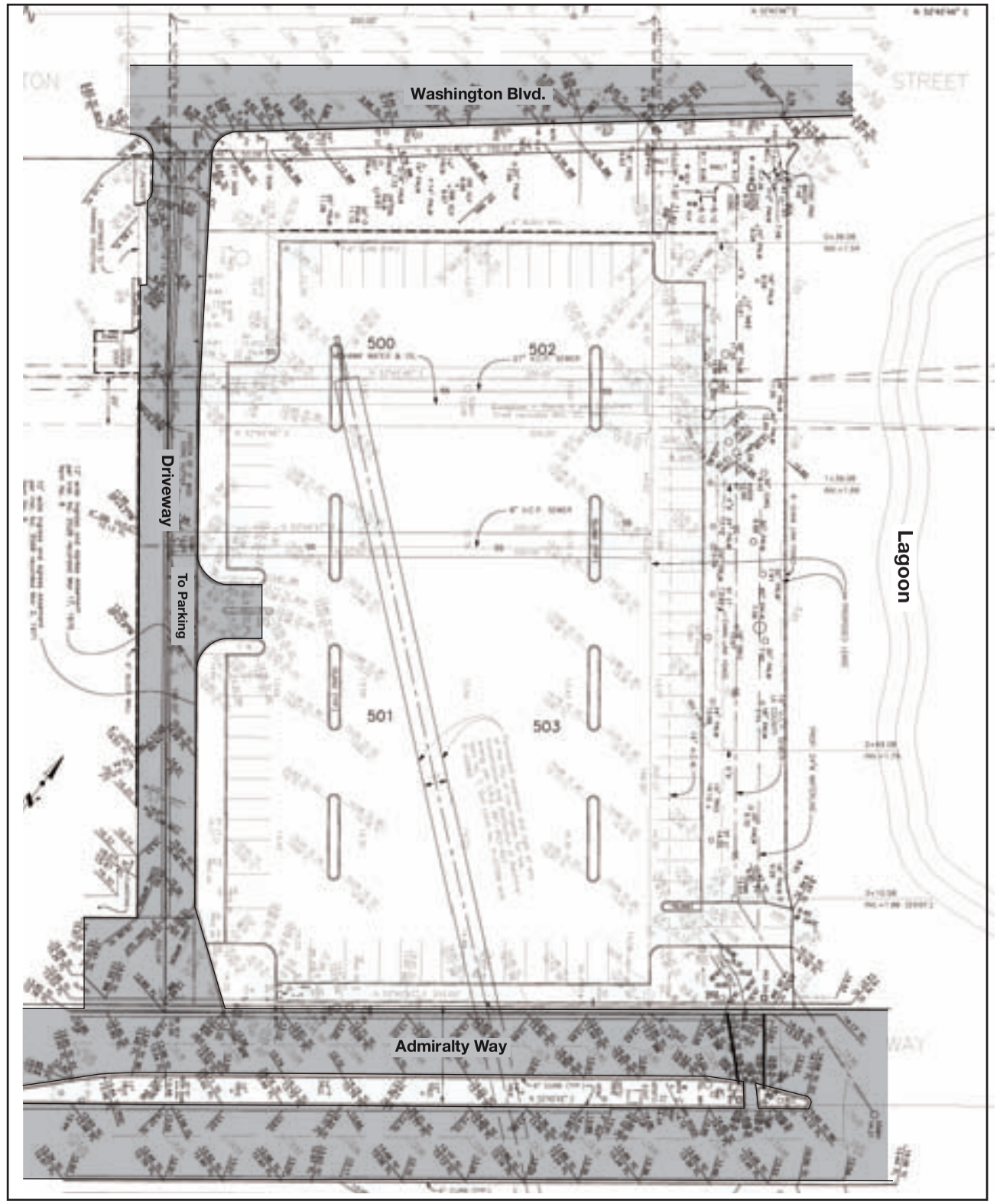
In addition to the three project driveway locations, the Parcel OT site would also have one ingress-only driveway and one egress-only driveway on Admiralty Way. These two driveways would provide access to the porte cochere area, which is to be located in front of the active seniors accommodations. Access would be restricted to right-turn-only due to the raised median on Admiralty Way.

Parcel 21

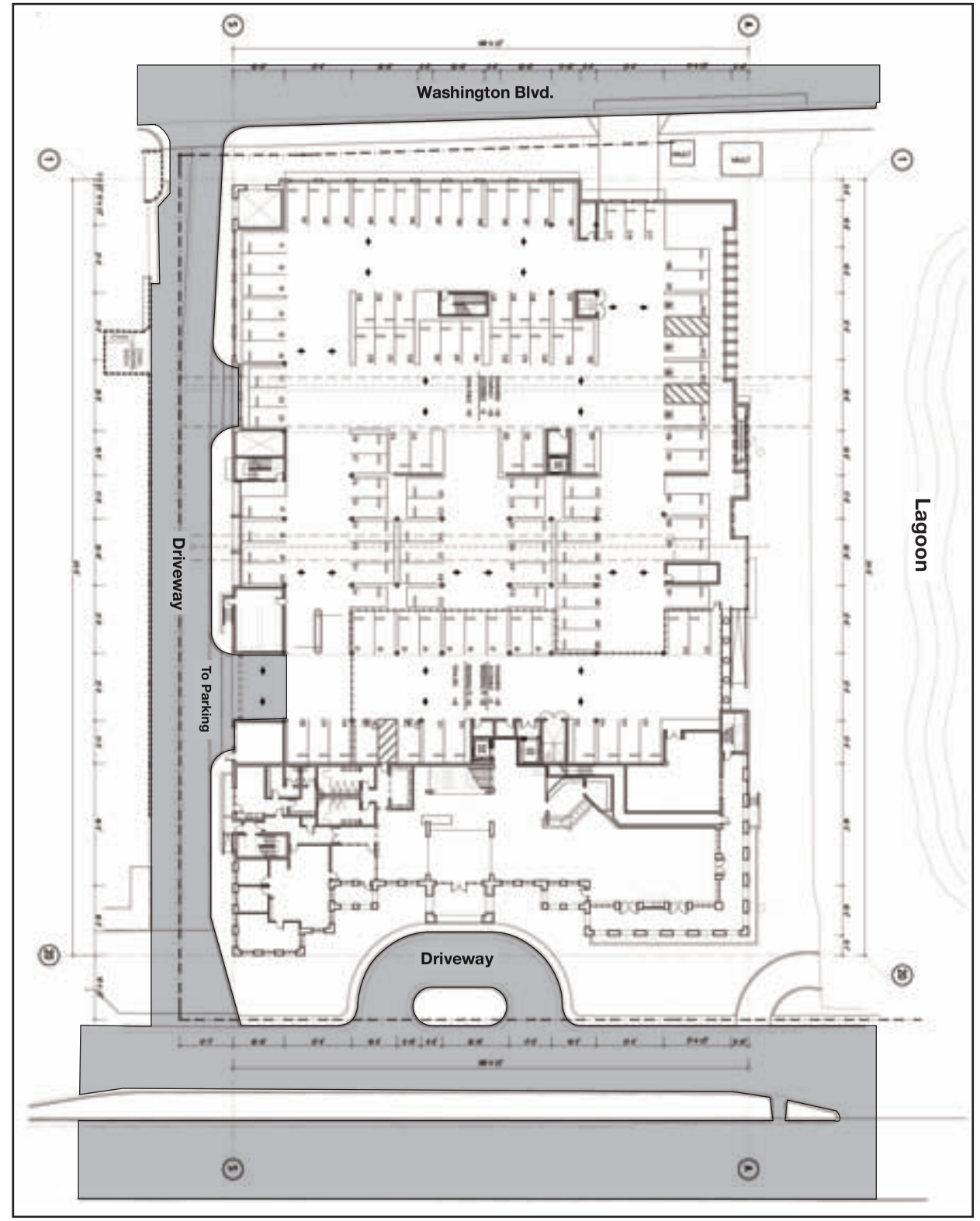
Vehicular access to the parking facility to be located on Parcel 21 would be available on Panay Way via two driveways (refer to **Figure IV.H-3b**). Both Parcel 21 driveways would provide one ingress lane and one egress lane. Full left- and right-turn access would be allowed at the two driveways. Additionally, the promenade to be located along the north side of Parcel 21 is designed to serve as a fire lane, to satisfy Los Angeles County Fire Department requirements. Tenant parking for Parcel 21 would be accessed from a driveway located on the easterly side of the proposed structure, while general public parking would be accessed from a driveway on the southerly portion of the structure. General public parking would be located on-site on Levels 0.5, 1, 1.2, 1.5, and 2, while tenant parking would be provided on Levels 1.5, 2, 2.5, 3. 3.5, 4, 4.5, 5, 5.5 and the roof level. Tenant parking would serve both employees and patrons of on-site uses. General public and tenant parking spaces would be designated with signage, and a security gate would also separate tenant and public parking on Levels 1.5 and 2.

The proposed project is therefore expected to result in a less than significant impact related to site access for both Parcel OT and Parcel 21. Further, adequate access during an emergency is provided and the proposed project is not expected to result in problems for emergency vehicles or residents/employees in the area.

Existing Parcel OT Site Access



Proposed Parcel OT Site Access



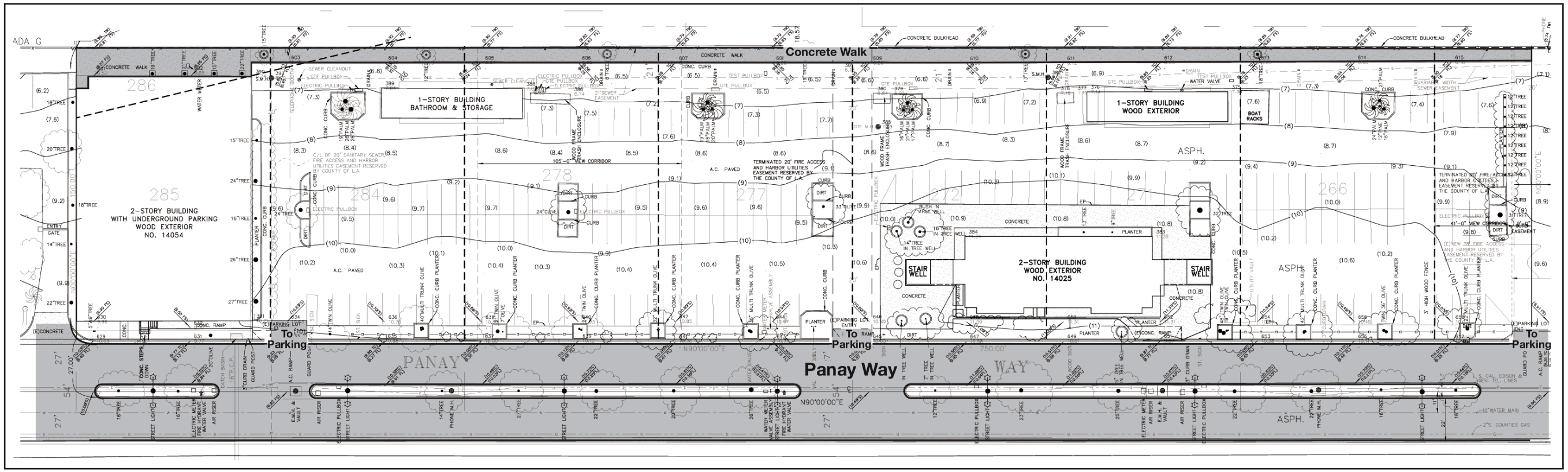
Sources: (Existing) S.E.C. Civil Engineers, June 2003, (Proposed)

Revised: August 5, 2008

Existing and Proposed Parcel OT Site Access

FEET 0 20 40

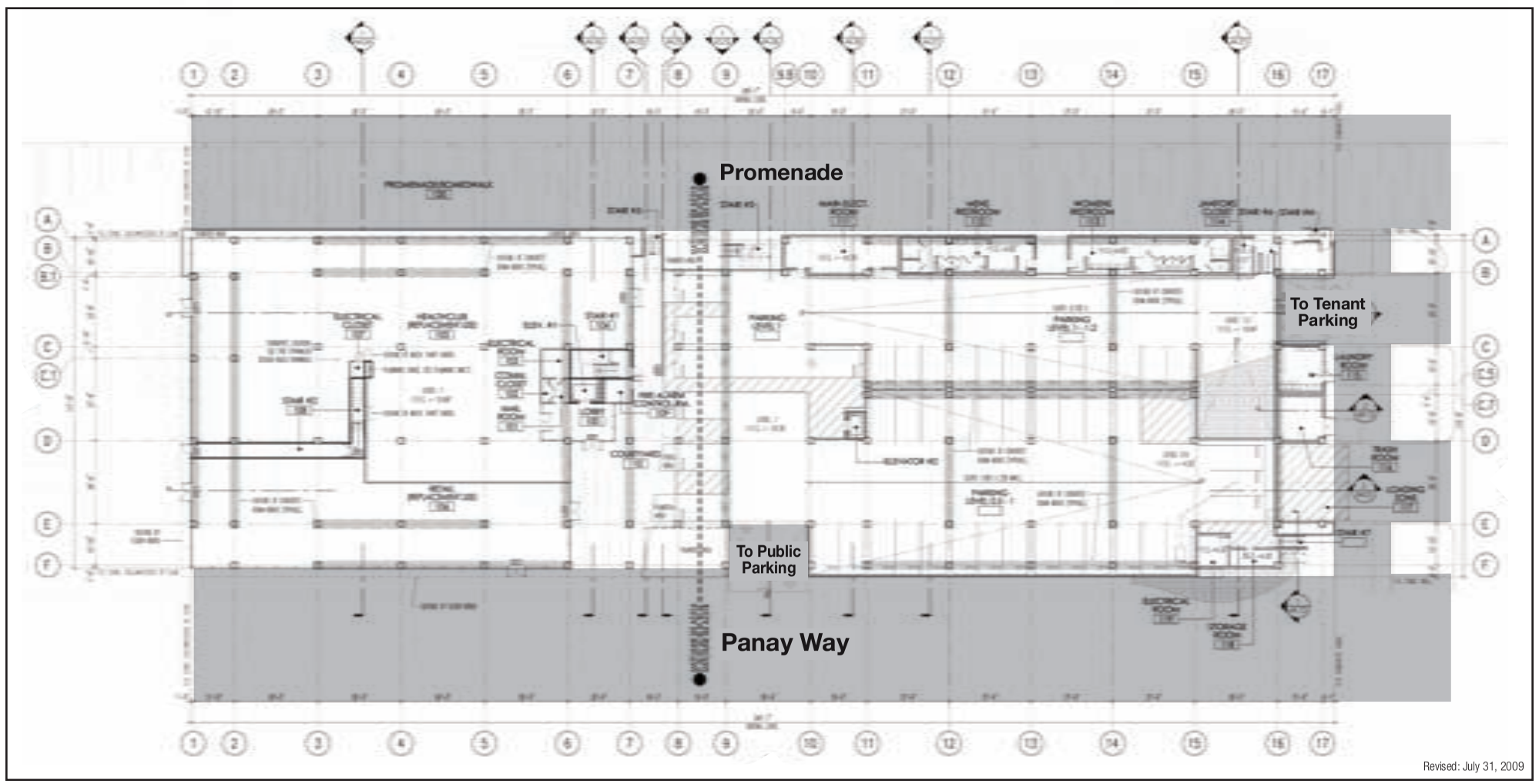
FIGURE IV.H-3a



Existing
Parcel 21
Site Access

Source: Fine Line Systems Consulting Civil Engineers

Revised: August 5, 2008



Proposed
Parcel 21
Site Access

Revised: July 31, 2009

Source: GMPA Architects, July 2009.

OCEANA RETIREMENT FACILITY AND HOLIDAY HARBOR COURTS EIR

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Existing and Proposed Parcel 21 Site Access

FEET 0 25 50

FIGURE IV.H-3b

Site Parking

Parcel OT

Parcel OT would provide a total of 154 spaces, including 114 spaces on an upper ground parking level and 40 spaces on a lower ground parking level. The upper ground parking level would provide 42 spaces for the active seniors accommodations and 92 public parking spaces. The resident parking spaces would be designated and gated in the structure. The lower ground parking level would provide 20 spaces for the retail use. **Table IV.H-4** shows a summary of the number of parking spaces that would be provided on Parcel OT.

Table IV.H-4
Parking Summary for Parcel OT

Component	Size	Parking Ratio	Parking Spaces Required	Parking Spaces Provided
Active Seniors Accommodations	114 units	0.36 spaces per unit[1]	41	42
Retail	5,000 s.f.	4 spaces per 1,000 s.f.	20	20
Replacement Parking Spaces[2]	-	-	92	92
Total	-	-	***153***	***154***

[1] Parking rate based on parking demand observed at Palm Court, a retirement facility site located in Culver City, that is similar to the proposed active seniors accommodations.
[2] The existing 183-space public parking lot will be removed as a part of the project. Of the 186 parking spaces permitted at the site, approximately 92 spaces would be replaced on Parcel OT and the remaining 94 spaces would be relocated to Parcel 21.

Parcel OT is currently occupied by a 183-space public parking lot.[6] This public lot would be removed in anticipation of the proposed development on this parcel. The project proposes to replace 92 of the LCP allowed 186 parking spaces on Parcel OT. These 92 spaces would be clearly marked with appropriate signage for easy access by the public. The remaining 94 public spaces to be removed would be relocated to Parcel 21, which is located to the south of Parcel OT on Panay Way. Thus, all of the 186 spaces would be replaced and located on either of these parcels. It should be noted that, in addition to the use of these spaces for Mother's Beach and special events, the FantaSea Yachts and Yacht Club retains a Coastal Development Permit for the non-exclusive right to use up to 92 public parking spaces on Parcel OT after 6:00 pm and on weekends and holidays. The relocation of 94 spaces to Parcel 21 is expected to provide safer and more convenient parking for Mother's Beach, as visitors will no longer have to cross two public streets, as is currently the case with the public parking on Parcel OT.

The parking requirement for the proposed project is based on the rates from the Los Angeles County parking code. For Parcel OT, the project would provide 20 spaces for the retail use, or two spaces above the code requirement. For the proposed active seniors accommodations, this component is unique since it would provide transportation services to residents via limousines that would dramatically reduce the need to own and park a vehicle. As a result, the proposed Oceana Retirement Facility is not expected to

[6] According to the Draft Right-Sizing Parking Study for the Public Parking Lots in Marina del Rey, California, prepared by Raju Associates, Inc. (March 2009), based on the field inventory surveys performed by the Los Angeles County Department of Beaches and Harbors, the number of public parking spaces available on Parcel OT is 183. This is different from the number of spaces noted in the Marina del Rey Land Use Plan (LUP), which is 186 spaces, due to restriping of the lot after publication of the LUP to accommodate handicapped spaces. This EIR analysis conservatively uses the 186 space estimate in order to provide for a greater number of replacement parking spaces under the proposed project.

operate like a traditional retirement facility. Since no rates are set in the parking code for active seniors accommodations that provide this type of transportation service, the parking rate was based on parking observations at a similar retirement facility site located in Culver City that provides transportation services to residents. The Culver City site has 98 units and provides 35 parking spaces. Observation shows that there is sufficient parking at the Culver City site. To be conservative, it was assumed that the parking rate would equal the number of spaces provided divided by the number of units at the Culver City facility, or 0.36 space per unit. Based on the parking rate of 0.36 space per unit, the proposed active seniors accommodations on Parcel OT would require approximately 41 spaces. The project proposes to provide 42 spaces for the active seniors accommodations, or a surplus of two parking spaces above the number of parking spaces required. Thus, sufficient parking would be provided for the active seniors accommodations.

Parcel 21

Parking for Parcel 21 would be available in a six-level parking structure, which would be partially subterranean and attached to the easterly side of the proposed four level mixed-use structure housing the yacht club, among other uses. The parking structure would have a total of approximately 447 spaces, including the 94 replacement parking spaces from Parcel OT, as noted previously. **Table IV.H-5** summarizes the amount of parking that would be provided for each project land use on Parcel 21.

Table IV.H-5
Parking Summary for Parcel 21

Component	Size	Parking Ratio	Parking Spaces Required	Parking Spaces Provided
Replacement for Parcel 21				
Retail	2,916 s.f.	4.0 spaces per 1,000 square feet	12	12
Marine Commercial Office	3,132 s.f.	2.5 spaces per 1,000 square feet	8	11
Health Club Replacement	10,000 s.f.	[1]	16	20
Subtotal	-	-	*36*	*43*
Replacement from Parcel 20				
Yacht Club	5,000 s.f.	[2]	106	106
Marine Commercial Office	2,300 s.f.	2.5 spaces per 1,000 square feet	6	6
Subtotal	-	-	*112*	*112*
New Uses				
Marine Commercial Office	6,000 s.f.	2.5 spaces per 1,000 square feet	15	15
Replacement Boaters Parking				
Slips from Parcel 21	92 slips	0.75 spaces per boat slip	69	71
Slips from Parcel 20	149 slips	0.75 spaces per boat slip	112	112
Subtotal	-	-	*183*	*183*
Replacement Parking from Parcel OT				
			94	94
Total			***440***	***447***

[1] The 16 parking spaces that currently serve the existing 16,000 square foot health club will be replaced by 20 spaces for the reduced 10,000 square feet health club.
[2] The 106 parking spaces will serve as replacement spaces for the existing yacht club.

The amount of parking required for the Parcel 21 site is summarized in Table IV.H-5. This table shows that Parcel 21 would require a total of 163 spaces for the proposed uses, 183 spaces for the replacement of

boater parking, and 94 replacement spaces from Parcel OT, for a total parking requirement of 440 spaces. As described previously, Parcel 21 would provide a total of approximately 447 on-site parking spaces. Thus, Parcel 21 would provide a surplus of approximately seven spaces above the number required. In addition, through a partial lease termination, Parcel 21 would be reduced by 207 feet, or 31,050 s.f., with a corresponding increase in the area of Parcel GR. Under separate proposal, the Los Angeles County Department of Beaches and Harbors is considering expanding the number of existing surface parking spaces provided on Parcel GR to include surface parking on the proposed area of expansion. Therefore, the project would facilitate the provision of additional public parking within the Marina and no parking spillover or parking-related impacts are expected.

As discussed in the preceding analysis and shown in Tables IV.H-4 and IV.H-5, the proposed project would result in a less than significant impact related to site parking on both Parcel OT and Parcel 21. For all proposed land uses, the required amount of parking spaces is either met or exceeded by the project site plans.

Traffic Congestion Impacts

Project Trip Generation Methodology

Vehicle trip generation rates for various types of developments within the Marina are specified in Appendix G (Transportation Improvement Program, TIP) of the Marina del Rey Local Implementation Program, which is in effect for the project sites. This document provides the PM peak hour trip rates for land uses, including the proposed project's active seniors accommodations, specialty retail, and marine commercial office components. However, the TIP does not provide a PM peak hour trip rate for health club uses. Furthermore, the TIP also does not specify daily and AM peak hour trip generation rates for any of the proposed uses. Thus, daily and AM peak hour trip rates for the proposed uses and the PM peak hour trip rate for the health club were derived from the current edition of Trip Generation, published by the Institute of Transportation Engineers (ITE)[7]. This document is the current industry standard for trip generation data. For trip rates that were not available in the Trip Generation manual, trip rates from the San Diego Traffic Generators were assumed.[8] The trip rates used in the traffic analysis for the proposed project are listed in **Table IV.H-6**.

The project's trip generation accounts for changes that would occur as compared to existing physical conditions; it does not assess the changes in trip generation relative to buildout of the LUP.

[7] Trip Generation, 7th Edition, Institute of Transportation Engineers, Washington, D.C., 2003.
[8] San Diego Traffic Generators, San Diego Association of Governments (SANDAG), 2002.

Table IV.H-6
Project Trip Generation Rates

Proposed Land Use	Trip Ends (T)	Inbound Trip Percent (%) (I/B)	Outbound Trip Percent (%) (O/B)
Congregate Care Facility (per dwelling unit)-Land Use 253			
Daily	T=2.02 (U) [3]	-	-
AM Peak Hour	T=0.06 (U)	I/B=59	O/B=41
PM Peak Hour	T=0.17 (U)	I/B=55	O/B=45
Specialty Retail (per 1,000 square feet)			
Daily	T=44.32 (A) [4]	-	-
AM Peak Hour[2]	T=1.2 (A)	I/B=60	O/B=40
PM Peak Hour[1]	T=4.44 (A)	I/B=43	O/B=57
Health/Fitness Club (per 1,000 square feet)			
Daily	T=32.93 (A)	-	-
AM Peak Hour	T=1.21 (A)	I/B=42	O/B=58
PM Peak Hour	T=4.05 (A)	I/B=51	O/B=49
General Office Building (per 1,000 square feet)			
Daily	T=11.01 (A)	-	-
AM Peak Hour	T=1.55 (A)	I/B=88	O/B=12
PM Peak Hour	T=2.21 (A)	I/B=16	O/B=84

[1] PM peak hour trip generation rate from Marina del Rey Land Use Plan, County of Los Angeles, February 8, 1996.
[2] AM peak hour trip generation rate not provided in ITE Trip Generation manual. Assumed AM peak hour trip generation rate from San Diego Traffic Generators, San Diego Association of Governments (SANDAG), 2002.
[3] U=Units.
[4] A=Building area in 1,000's square feet.

The site generation rates shown above were selected in accordance with TIP procedures. The base trip rates for the daily and AM peak hour periods present "worst case" trip generation conditions applicable only to suburban locations, as the Trip Generation rates do not account for such trip-reducing factors as multi-purpose (internal), public transit, walk-in and pass-by trips (refer to Volume II, Appendix G, for a complete description of these factors). These factors play a role in determining the actual traffic-generating characteristics of the proposed project. Project trip adjustments were deemed appropriate based on the characteristics of the project sites and anticipated operations and were also discussed with and approved by the County of Los Angeles Department of Public Works (DPW). The trip discounts were then applied to the trip generation for the daily and AM peak hour periods. Trip generation discounts were not assumed for the PM peak hour, because PM peak hour trip generation rates were obtained from the Marina del Rey Local Coastal Program, which derived trip generation rates from actual survey data of Marina del Rey sites. The trip generation discount factors are therefore assumed to be inherent in the PM peak hour rates. Due to the distance between Parcel OT and Parcel 21, the trip adjustments were applied to each site individually.

Project Trip Generation Results

When the trip generation rates and the trip discounts are applied, the traffic expected to be generated by the proposed project is expected to be as summarized in **Table IV.H-7**. As shown in this table, the Parcel OT component of the proposed project is expected to generate approximately 387 net new trips per day, including about ten trips occurring during the morning peak hour and 41 trips occurring during the evening peak hour. The proposed redevelopment on Parcel 21 would result in a net decrease of

approximately 109 trips per day, including a net increase of about two trips occurring during the morning peak hour and a net decrease of about 11 trips occurring during the evening peak hour. The two proposed sites combined are expected to generate a total of approximately 278 net new daily trips, including about 12 trips occurring during the morning peak hour and 30 trips occurring during the evening peak hour. This net project trip generation will be added to the project area roadway network once the proposed project is completed and fully occupied.

Table IV.H-7
Proposed Project Trip Generation

Land Uses/Description	Size	Daily	AM Peak Hour			PM Peak Hour		
			I/B	O/B	Total	I/B	O/B	Total
Parcel OT Proposed Uses								
Active Seniors Accommodations	114 units	230	4	3	7	10	9	19
Specialty Retail	5,000 s.f.	222	4	2	6	10	12	22
Subtotal	-	*452*	*8*	*5*	*13*	*20*	*21*	*41*
***Less Internal Trip Capture*[1]**								
Active Seniors Accommodations	10%	(23)	(1)	0	(1)	0	0	0
Specialty Retail	10%	(22)	(1)	0	(1)	0	0	0
Driveway & Adjacent Intersection Trips (Parcel OT)	**-**	**407**	**6**	**5**	**11**	**20**	**21**	**41**
Less Pass-by Trips (% of External Auto)[1]								
Specialty Retail	10%	(20)	(1)	0	(1)	0	0	0
Net Area Intersection Trips (Parcel OT)	**-**	**387**	**5**	**5**	**10**	**20**	**21**	**41**
Parcel 21 Net New Project Uses[2]								
Health Club	(6,000) s.f.	(198)	(3)	(4)	(7)	(12)	(12)	(24)
Marine Commercial Offices	6,000 s.f.	66	8	1	9	2	11	13
Parking Relocation from Parcel OT to Parcel 21	94	0	0	0	0	0	0	0
Subtotal	-	*132*	*5*	*(3)*	*2*	*(10)*	*(1)*	*(11)*
***Less Public Transit/Walk-in*[1]**								
Health Club	5%/10%	30	0	1	1	0	0	0
Marine Commercial Offices	5%/10%	(7)	(1)	0	(1)	0	0	0
Net New Project Trips (Parcel 21)	-	(109)	4	(2)	2	(10)	(1)	(11)
Total Net Project Trips (Parcels OT and 21)	**-**	**278**	**9**	**3**	**12**	**10**	**20**	**30**

[1] Trip generation discounts are not assumed for the PM peak hour. PM peak hour trip generation rates obtained from the Marina del Rey Local Coastal Program which derived trip generation rates from actual survey data of Marina del Rey sites. The trip generation discount factors are therefore assumed to be inherent in these rates.
[2] Uses relocated from Parcel 20 to Parcel 21 will not have any net change in trip generation and were not included in this table.

It should be noted that a manual count of the existing Parcel OT parking lot was conducted during the AM and PM peak hours in order to evaluate the replacement of parking spaces from Parcel OT to Parcel 21. The existing parking lot on Parcel OT currently has 183 spaces (186 are allowed under the LCP). Of the 186 spaces 92 spaces would be replaced on Parcel OT and the remaining 94 spaces would be replaced on Parcel 21 under the proposed project. Based on the manual count, the existing Parcel OT parking lot currently has approximately two inbound trips and one outbound trip during the morning peak hour and

nine inbound trips and zero outbound trips during the afternoon peak hour. For this analysis, it was assumed that all of the AM and PM peak hour trips from the existing Parcel OT lot would shift to Parcel 21, since these off-site spaces are expected to provide more convenient and safe parking for Mother's Beach visitors. (All of the existing 183 spaces may be used for some special events.) The manual count sheet is found in Volume II, Appendix G.

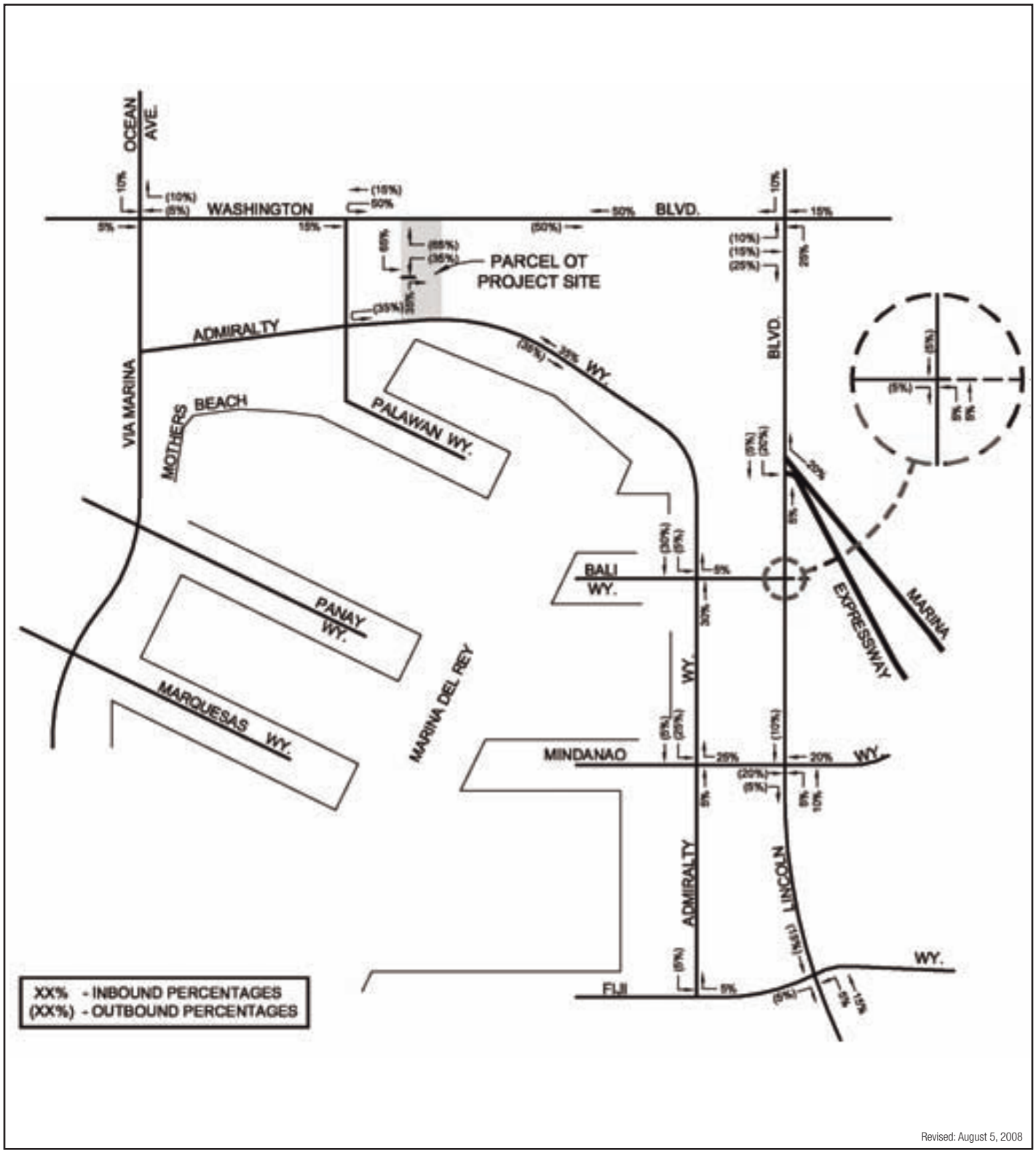
Trip Distribution and Trip Assignment

In order to determine the geographic distribution of generated trips, a primary factor used in this analysis is the relative distribution of recreation, residential and retail centers from which residents, patrons and employees of the project would be drawn. Another key factor is the availability of roadway access to and from the project sites. Data from the Los Angeles Regional Transportation Study (LARTS) forecasts, as well as information presented in the current Los Angeles County Congestion Management Plan (CMP), were analyzed in order to estimate regional traffic distribution. Lastly, actual vehicle turning movements in and around the project vicinity were observed, and general geographic trip distribution characteristics were developed. The percentage split of trips, by direction, is shown in **Table IV.H-8**.

Table IV.H-8
Directional Trip Distribution

Direction	Parcel OT		Parcel 21
	Active Seniors Accommodations	Retail	
North	20%	25%	15%
East	55%	35%	55%
South	20%	30%	22%
West	5%	10%	8%
Total	***100%***	***100%***	***100%***

The general geographic trip distribution percentages shown above were then assigned to specific travel routes in the study area. These assignment percentages are shown in **Figures IV.H-4a, Trip Distribution Percentages – Retirement Facility on Parcel OT; IV.H-4b, Trip Distribution Percentages – Retail Component on Parcel OT;** and **IV.H-4c, Trip Distribution Percentages – Parcel 21,** and are assumed to be the same during both the AM and PM peak hours. Based on these directional distribution percentages, the number of project trips along each roadway was calculated. The traffic assignments for the AM and PM peak hour project traffic on the nearby street system are shown in **Figures IV.H-5a, Total Net Project Generated Traffic Volumes – AM Peak Hour, and IV.H-5b, Total Net Project Generated Traffic Volumes – PM Peak Hour**. In addition, the traffic counts from the existing Parcel OT lot were assigned to the local roadway network and re-distributed to Parcel 21 in order to determine the net traffic impacts of replacing the 94 spaces from Parcel OT to Parcel 21. It was assumed that the traffic shift would only affect the five study intersections located on Via Marina at Washington Boulevard, Admiralty Way and Panay Way, and on Palawan Way at Washington Boulevard and Admiralty Way due to the close proximity of Parcel OT to Parcel 21. Volume II, Appendix G shows the traffic volume shifts for the AM and PM peak hours. The results of the project traffic assignment are shown in **Figures IV.H-6a, Project Net Traffic Volumes Including Parking Space Relocation Impacts – AM Peak Hour,** and **IV.H-6b, Project Net Traffic Volumes Including Parking Space Relocation Impacts – PM Peak Hour**. The traffic volume shifts provide the necessary level of detail to conduct the traffic analysis that follows below. Figures IV.H-5a and IV.H-5b contain these volumes for the AM and PM peak hour, respectively.



Source: Crain & Associates, 2007

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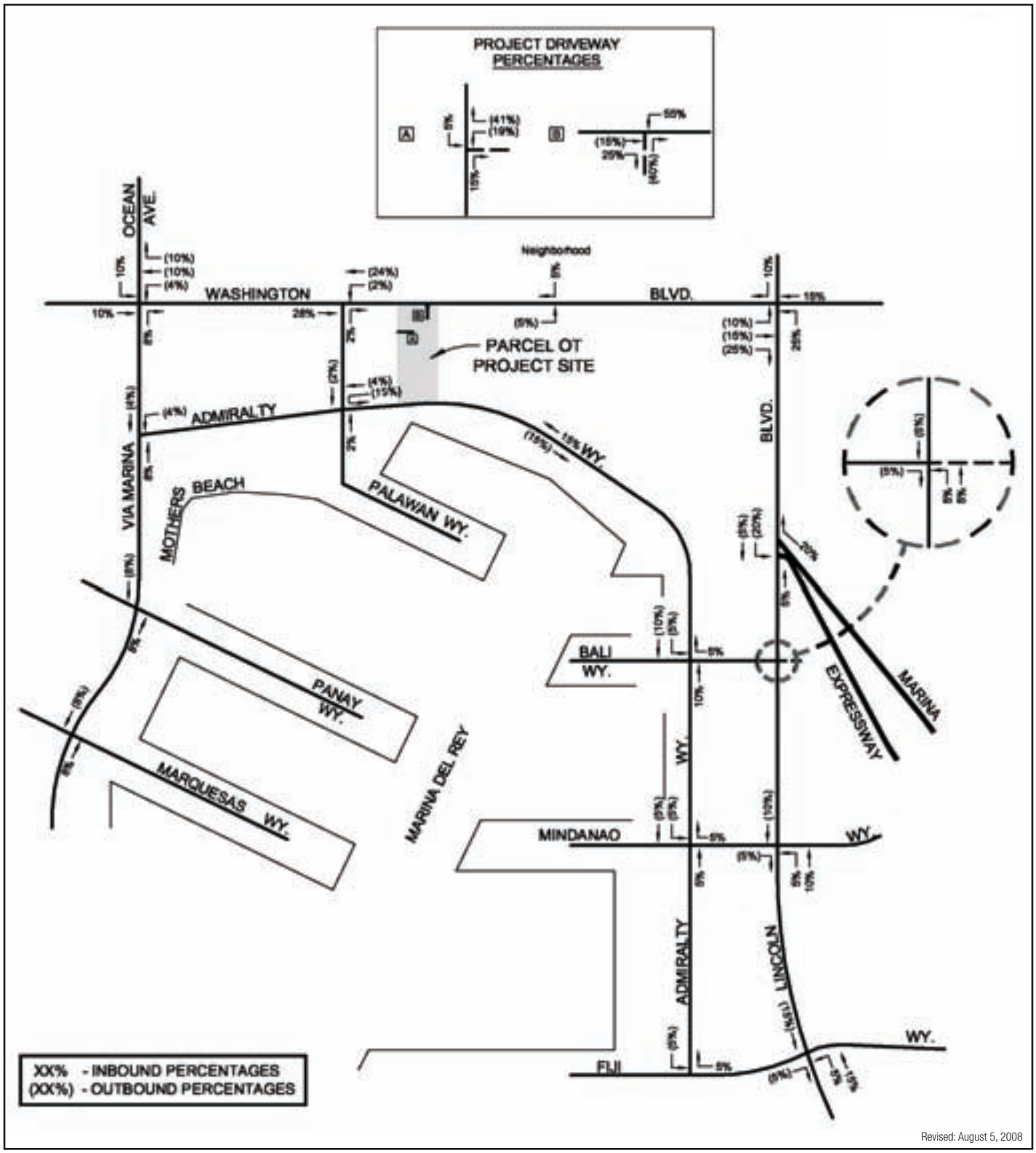
Trip Distribution Percentages – Retirement Facility on Parcel OT

No Scale

FIGURE IV.H-4a



Source: Crain & Associates, 2007

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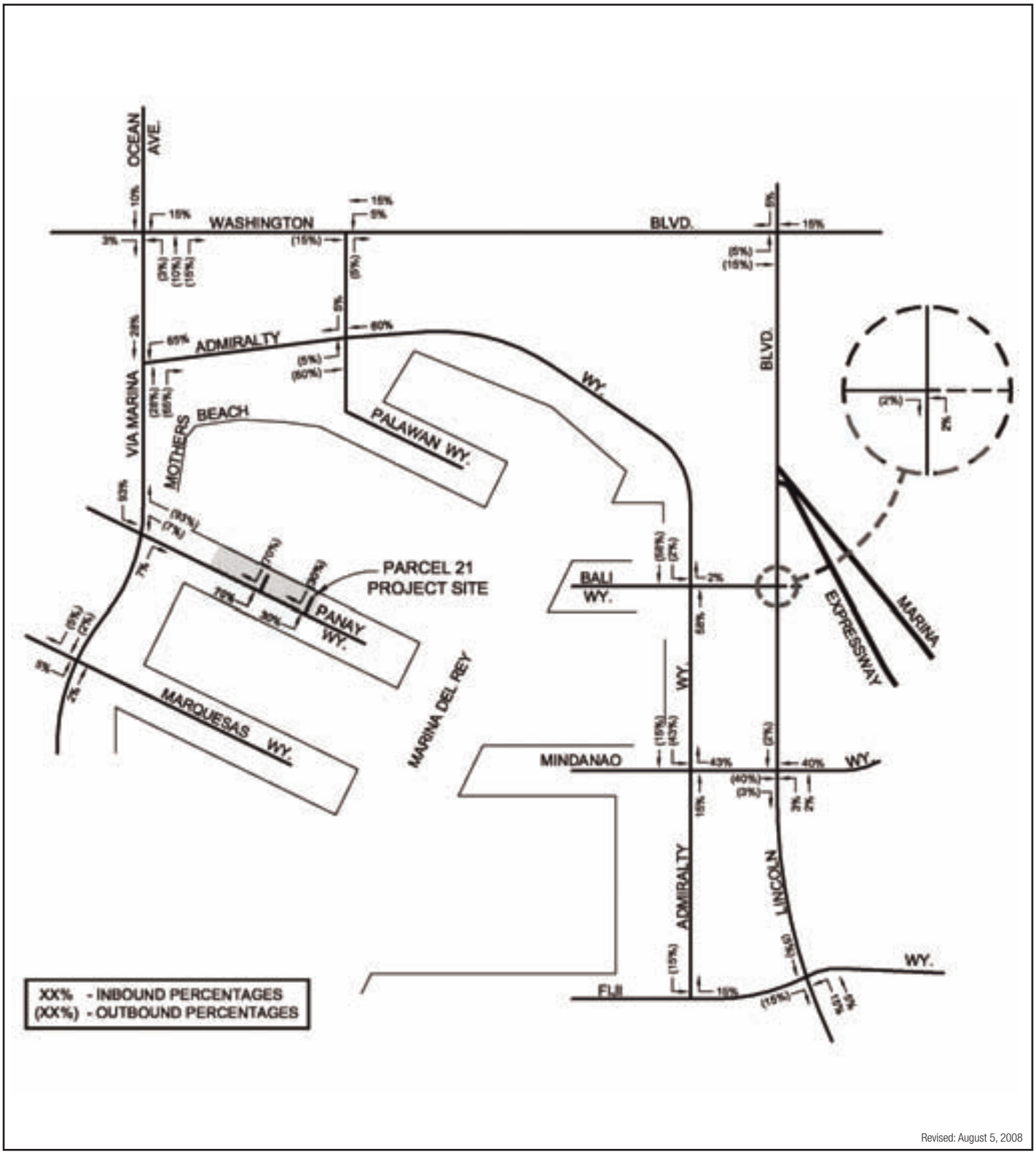
Trip Distribution Percentages – Retail Component on Parcel OT

No Scale

FIGURE IV.H-4b



Revised: August 5, 2008

Source: Crain & Associates, 2007

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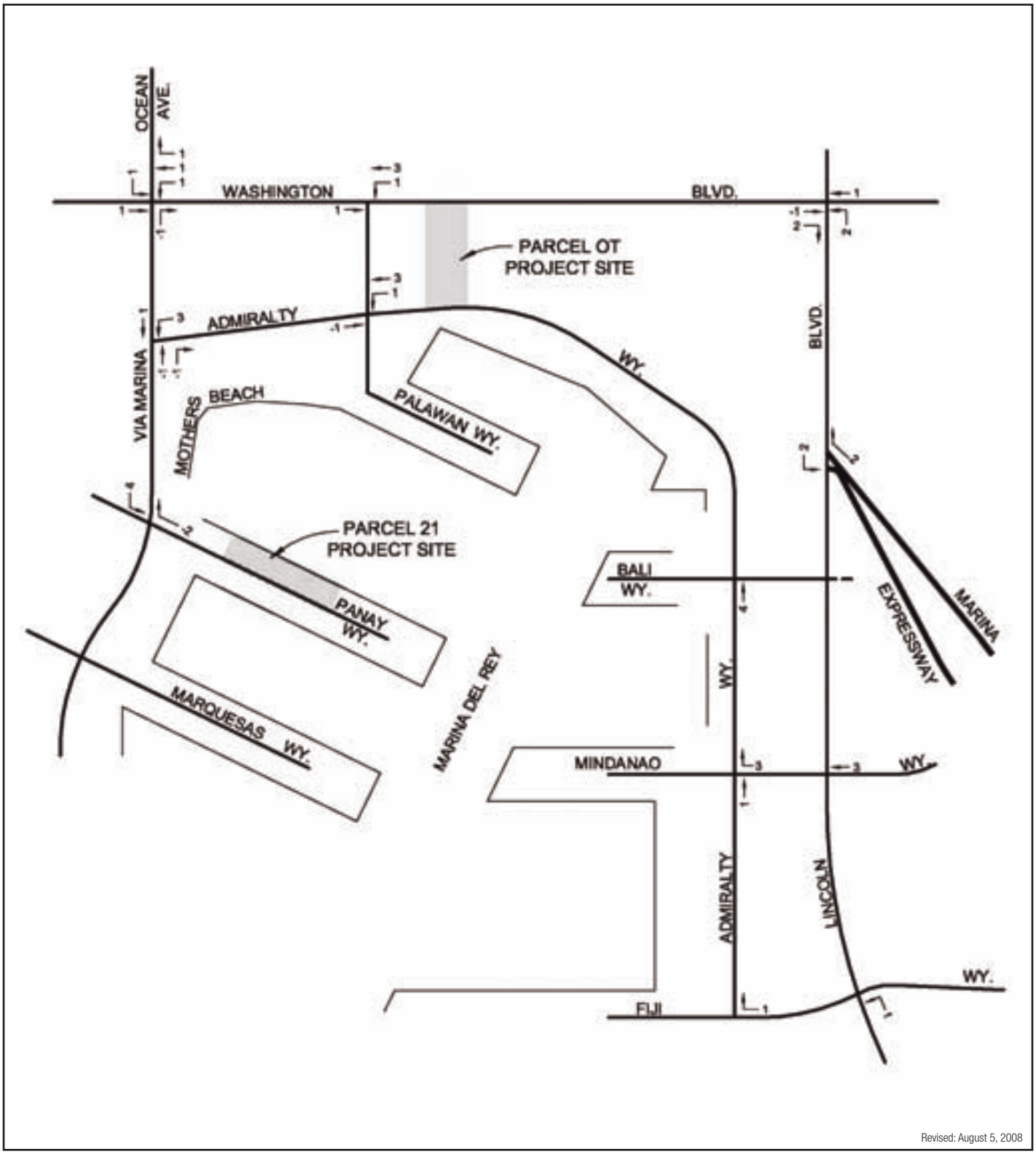
Trip Distribution Percentages – Parcel 21

No Scale

FIGURE IV.H-4c



Source: Crain & Associates, 2007

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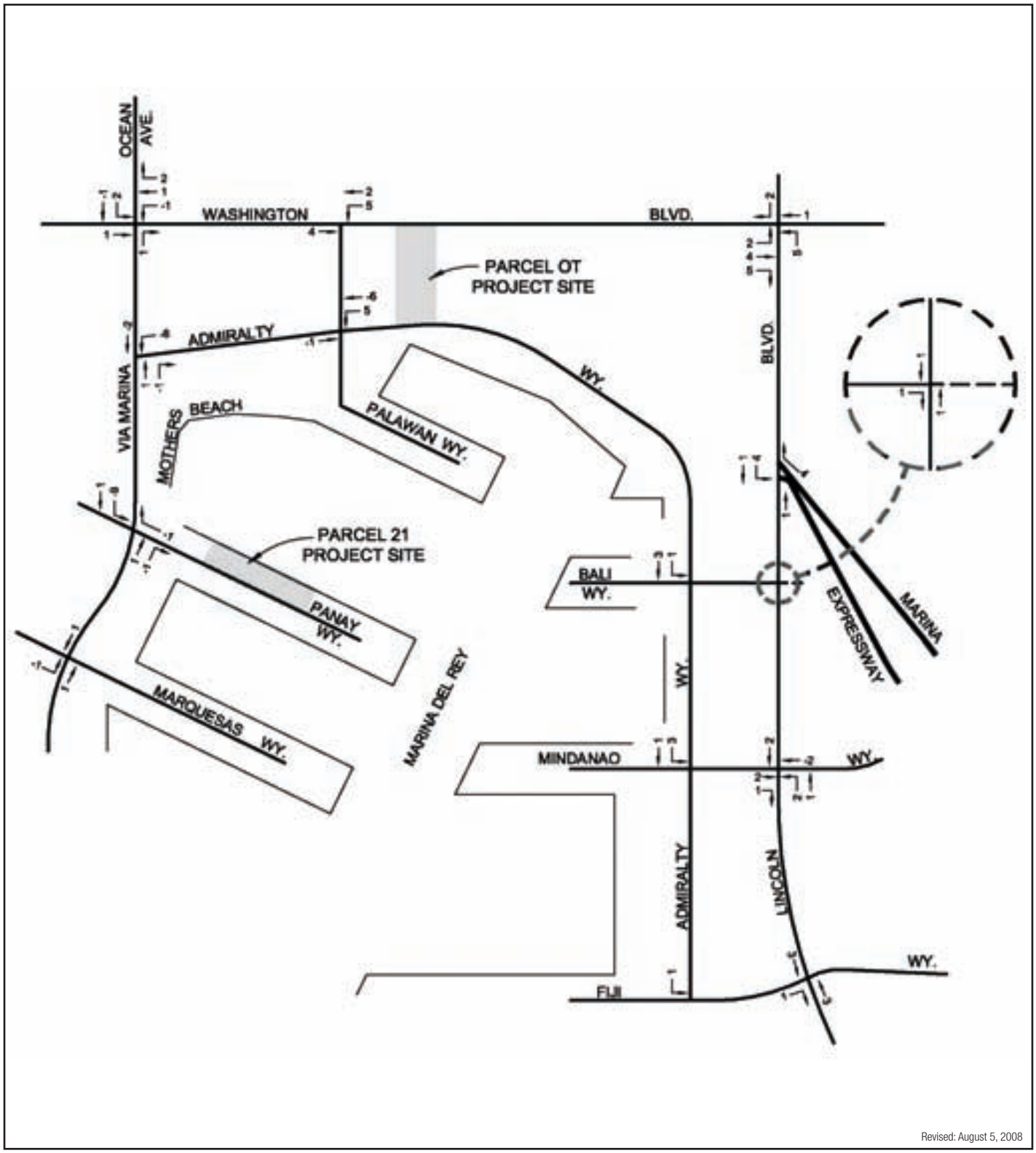
Total Net Project Generated Traffic Volumes – AM Peak Hour

No Scale

FIGURE IV.H-5a



Revised: August 5, 2008

Source: Crain & Associates, 2007

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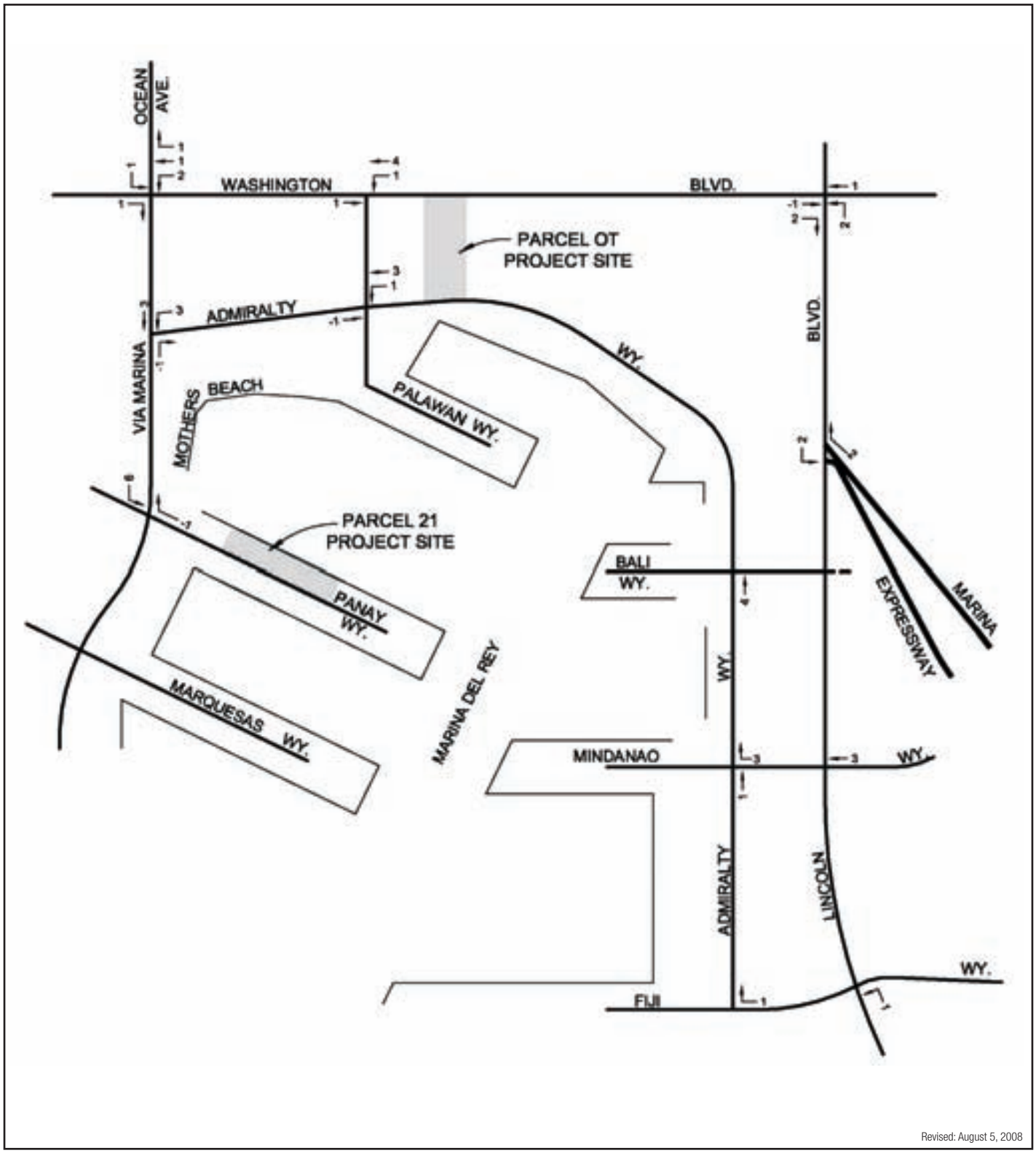
Total Net Project Generated Traffic Volumes – PM Peak Hour

No Scale

FIGURE IV.H-5b



Source: Crain & Associates, 2007

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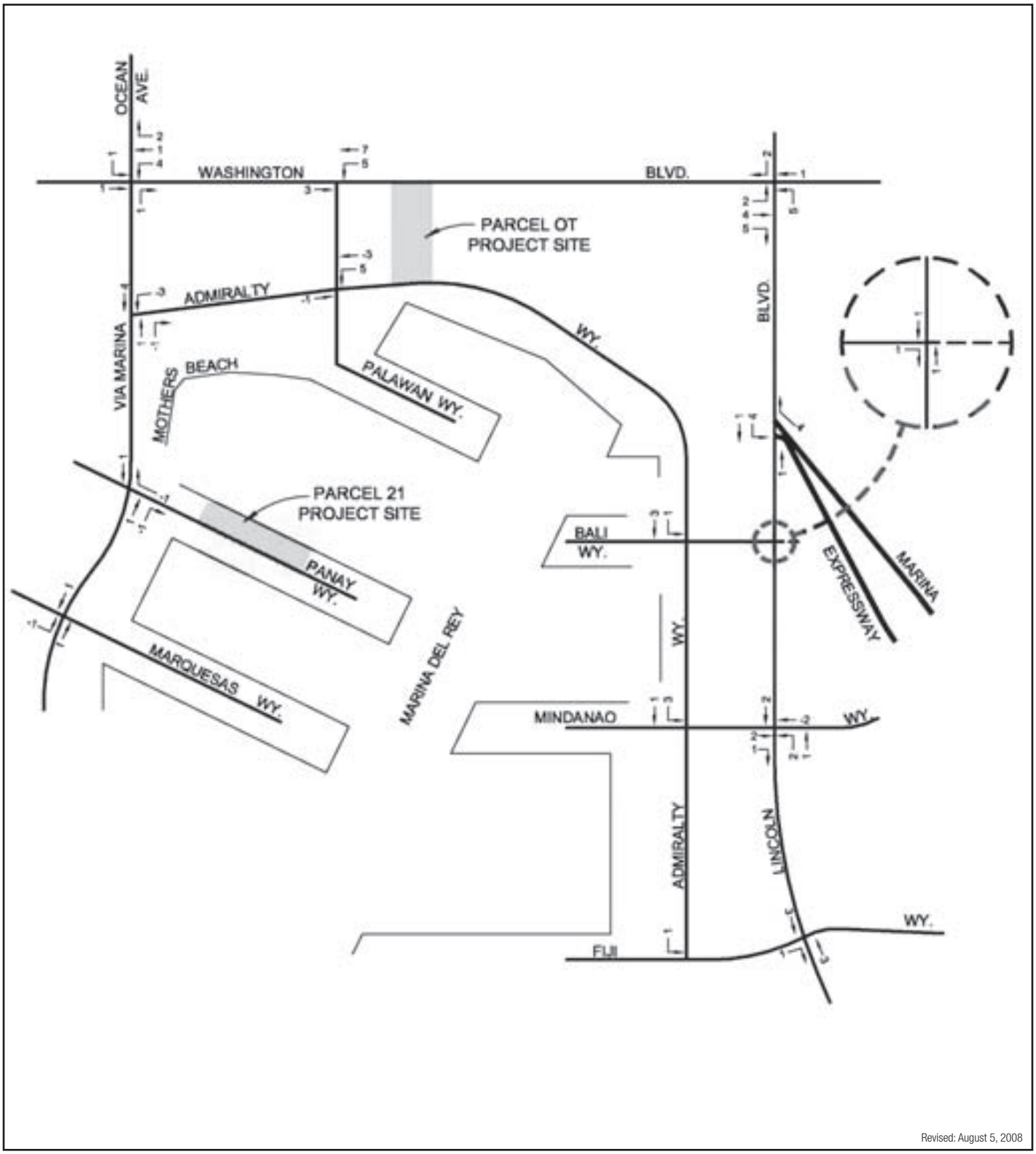
Project Net Traffic Volumes Including Parking Space Relocation Impacts – AM Peak Hour

No Scale

FIGURE IV.H-6a



Source: Crain & Associates, 2007

OCEANA RETIREMENT FACILITY AND HOLIDAY HARBOR COURTS EIR

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Project Net Traffic Volumes Including Parking Space Relocation Impacts – PM Peak Hour

No Scale

FIGURE IV.H-6b

Future (2014) Traffic Conditions Evaluation Methodology

Other developments in the study vicinity could add traffic to the project area. For this reason, the analysis of future traffic conditions has been expanded to include potential traffic from yet undeveloped or unoccupied projects. Briefly, the methodology for estimating future traffic volumes was as follows: First, current traffic volumes were determined by traffic counts (as described in a preceding section). Next, a traffic growth factor of 0.6 percent, compounded annually, was applied to the existing traffic volumes to produce "With Ambient Growth" traffic estimates for the future study year of 2014. The annual growth rate of 0.6 percent was estimated to be the growth rate for the study area and was agreed to with the County of Los Angeles DPW. The year 2014 was chosen as the study year as the development will likely be constructed and fully occupied within this 7 year time frame. Traffic expected to be generated by the proposed project, as calculated earlier in this report, was then added to the baseline traffic volumes to form the year 2014 "With Ambient Growth Plus Project" conditions, to determine any traffic effects directly attributable to the project's development. In addition, the replacement of existing parking spaces from Parcel OT to Parcel 21 would result in a traffic shift at the study intersections near these two parcels. This traffic shift was also considered as a result of the project's development.

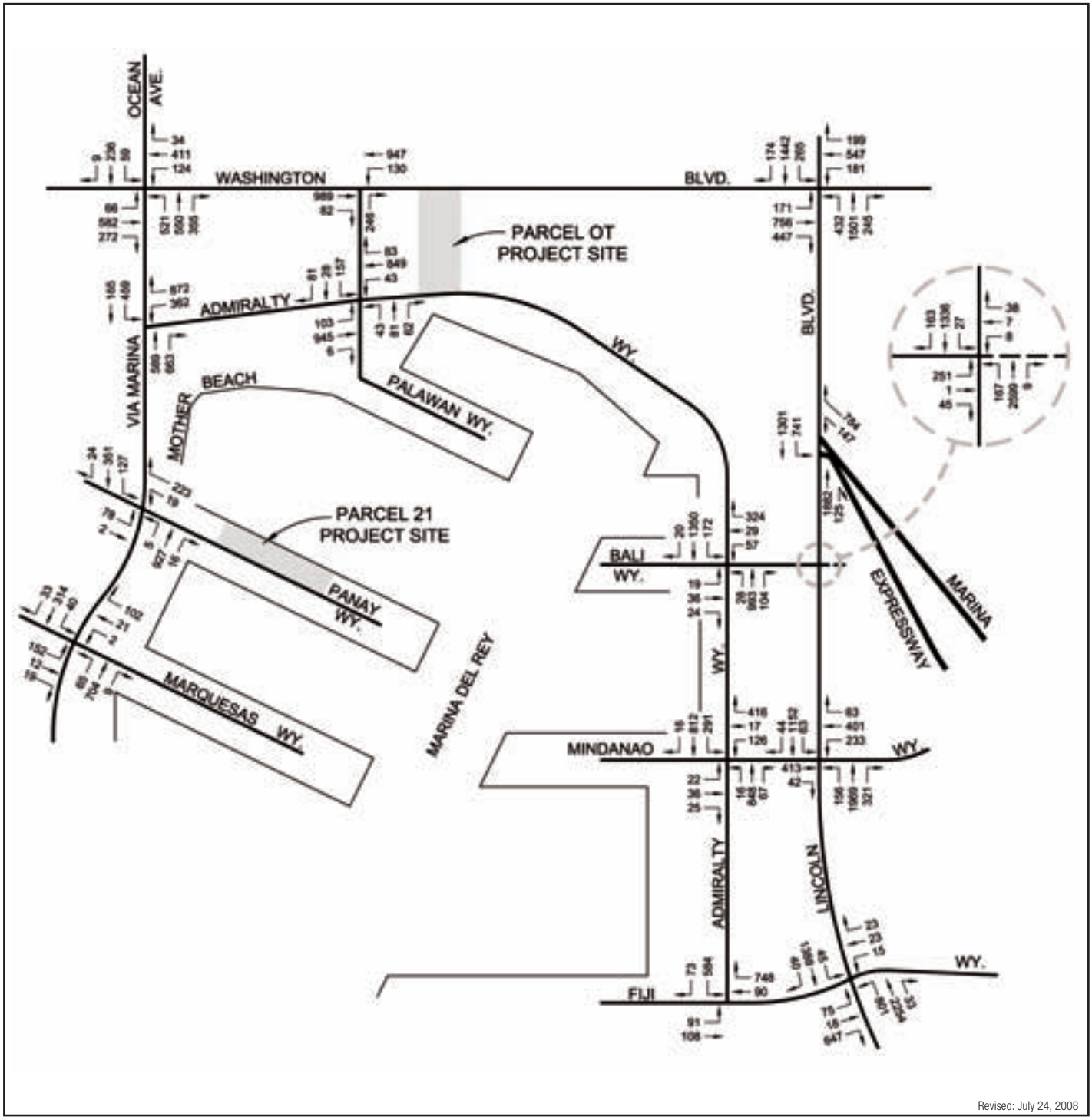
The analysis of future conditions in the project area was performed using the same critical movement analysis procedures described previously. For future project conditions, the roadway system was considered to have no improvements beyond existing conditions, as no significant highway improvements in the project area, other than some of the improvements listed as cumulative mitigation, were identified by either the County or City of Los Angeles as on-going or likely to be completed within the year 2014 project development timeline.

Future (2014) Ambient Growth Traffic Conditions – Without Project and With Project/Impacts

The 2014 baseline "Without Project (With Ambient Growth Only)" traffic volumes are shown in **Figures IV.H-7a, Future (2014) Traffic Volumes Without Project (With Ambient Growth Only) – AM Peak Hour, and IV.H-7b, Future (2014) Traffic Volumes Without Project (With Ambient Growth Only) – PM Peak Hour**. Future year 2014 "With Ambient Growth Plus Project" traffic volumes are shown in **Figures IV.H-8a, Future (2014) Traffic Volumes With Ambient Growth Plus Project – AM Peak Hour, and IV.H-8b, Future (2014) Traffic Volumes With Ambient Growth Plus Project – PM Peak Hour**. The results of the Critical Movement Analysis for future traffic conditions at the study intersections are summarized in **Table IV.H-9**.

This table shows that the incremental project traffic would result in a less than significant impact on the LOS forecasts at the study intersections. The proposed project would also result in a less than significant traffic impact at any of the study intersections.

This traffic impact analysis focuses on the impacts of the proposed development as compared to existing physical conditions, rather than conditions under buildout of the LUP without the proposed transfer of 5,000 square feet of permitted retail use from DZ 5 Parcel 97 to DZ 6 Parcel OT. However, it is noted that traffic at four intersections in the study area would be different if buildout of the 5,000 square feet were to occur at Parcel OT rather than Parcel 97. The affected intersections are: Washington Boulevard and Via Marina/Ocean Avenue, Washington Boulevard and Palawan Way, Admiralty Way and Via Marina, and Admiralty Way and Palawan Way. The CMA impact levels at these intersections would be either the same or lower than those that would be expected without the transfer. Under either scenario, no significant impacts would occur.



Source: Crain & Associates, 2008

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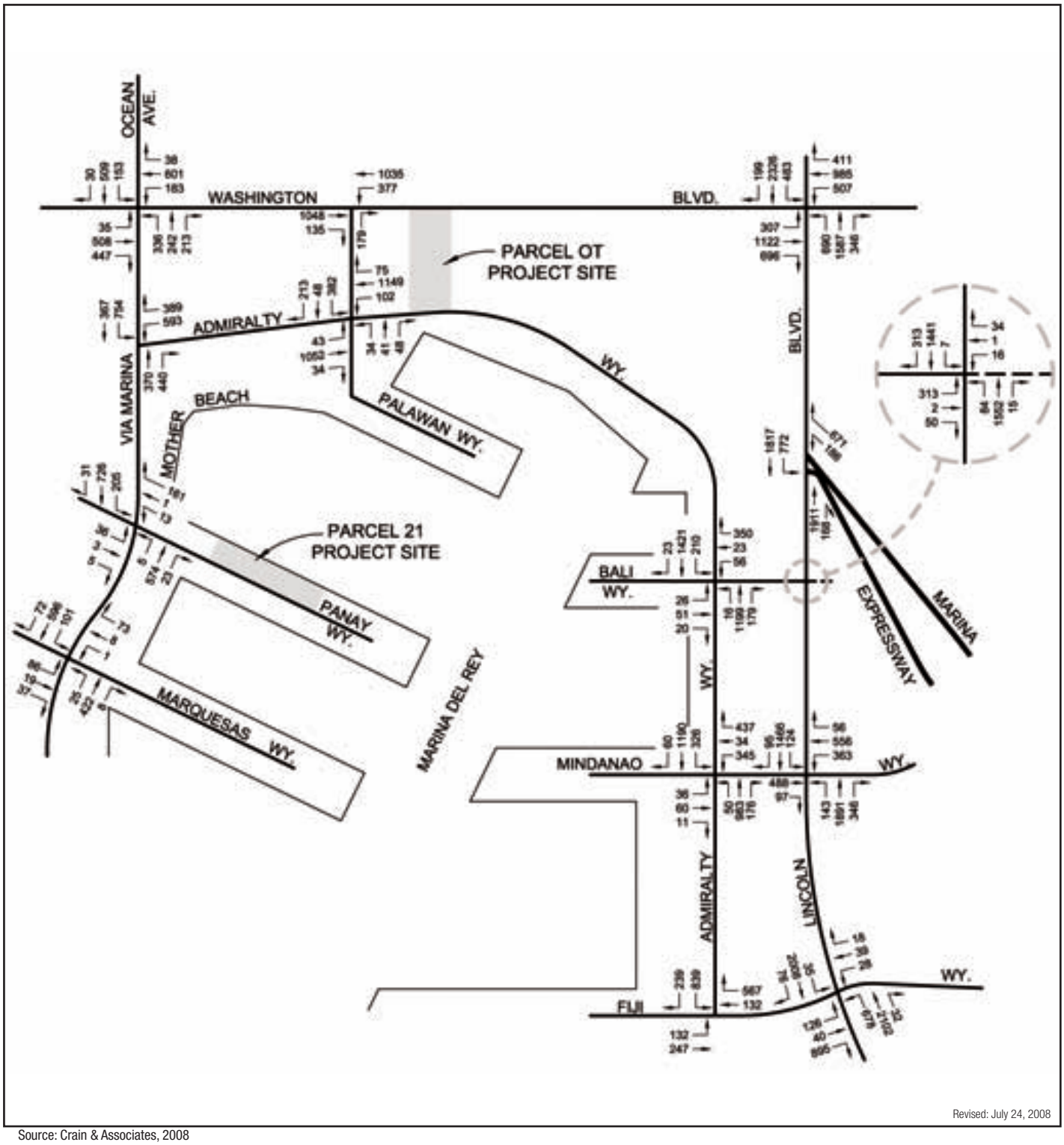
Future (2014) Traffic Volumes Without Project (With Ambient Growth Only) – AM Peak Hour

No Scale

FIGURE IV.H-7a



Revised: July 24, 2008

Source: Crain & Associates, 2008

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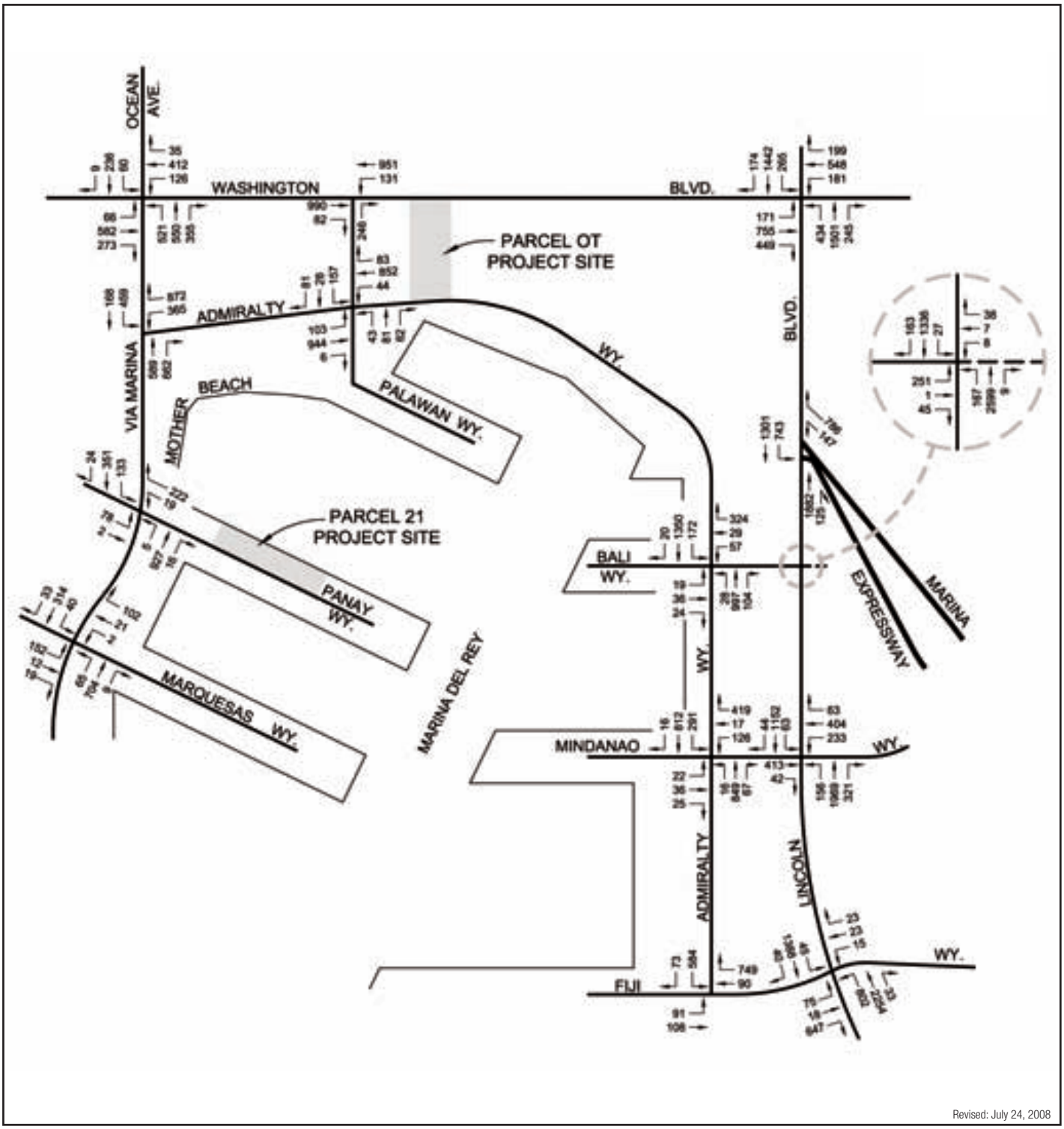
Future (2014) Traffic Volumes Without Project (With Ambient Growth Only) – PM Peak Hour

No Scale

FIGURE IV.H-7b



Source: Crain & Associates, 2008

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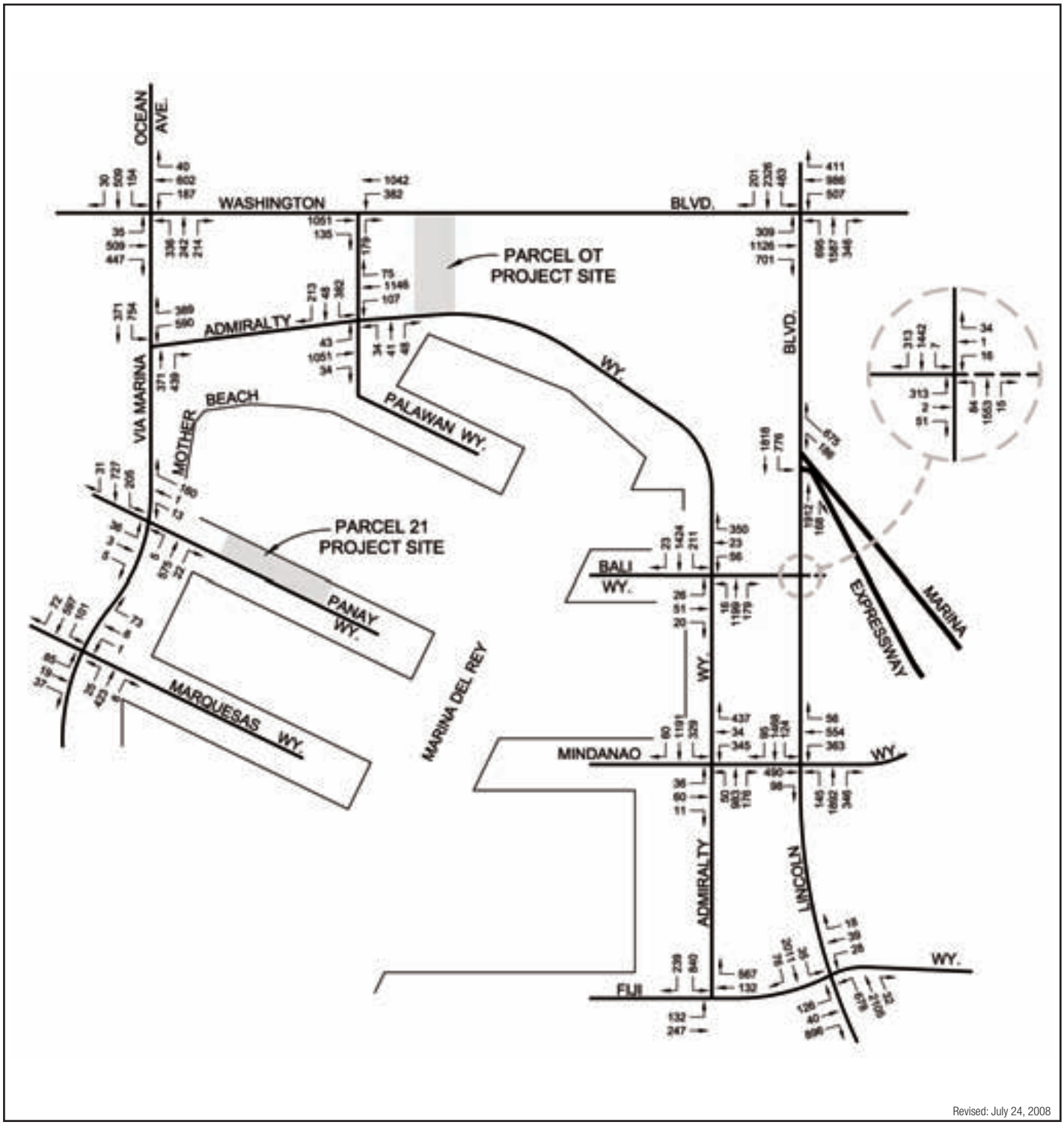
Future (2014) Traffic Volumes With Ambient Growth Plus Project – AM Peak Hour

No Scale

FIGURE IV.H-8a



Source: Crain & Associates, 2008

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Future (2014) Traffic Volumes With Ambient Growth Plus Project – PM Peak Hour

No Scale

FIGURE IV.H-8b

Regional Transportation Impacts

To address the increasing public concern that traffic congestion was impacting the quality of life and economic vitality of the State of California, the CMP was enacted by Proposition 111. The intent of the CMP is to provide the analytical basis for transportation decisions through the State Transportation Improvement Program (STIP) process. A Countywide approach has been established by the Metropolitan Transportation Authority, the Local CMP agency, to implement the statutory requirements of the CMP.

Table IV.H-9
Summary of Critical Movement Analysis
Future (2014) Ambient Growth Traffic Conditions – Without and With Project

No.	Intersection	Peak Hour	With Ambient Growth		With Ambient Growth Plus Project		
			CMA	LOS	CMA	LOS	Impact
1	Washington Blvd. & Via Marina/Ocean Ave.	AM	0.748	C	0.750	C	0.002
		PM	0.805	D	0.807	D	0.002
2	Washington Blvd. & Palawan Wy.	AM	0.671	B	0.672	B	0.001
		PM	0.751	C	0.757	C	0.006
3	Lincoln Blvd. & Washington Blvd.	AM	0.813	D	0.813	D	0.000
		PM	1.400	F	1.403	F	0.003
4	Admiralty Wy. & Via Marina	AM	0.734	C	0.734	C	0.000
		PM	0.788	C	0.787	C	-0.001
5	Admiralty Wy. & Palawan Wy.	AM	0.446	A	0.447	A	0.001
		PM	0.635	B	0.633	B	-0.002
6	Via Marina & Panay Wy.	AM	0.362	A	0.363	A	0.001
		PM	0.266	A	0.266	A	0.000
7	Marquesas Wy. & Via Marina	AM	0.273	A	0.273	A	0.000
		PM	0.189	A	0.189	A	0.000
8	Admiralty Wy. & Bali Wy.	AM	0.482	A	0.483	A	0.001
		PM	0.607	B	0.607	B	0.000
9	Admiralty Wy. & Mindanao Wy.	AM	0.658	B	0.660	B	0.002
		PM	0.778	C	0.779	C	0.001
10	Admiralty Wy. & Fiji Wy.	AM	0.268	A	0.268	A	0.000
		PM	0.387	A	0.387	A	0.000
11	Lincoln Blvd. & Marina Expressway	AM	0.713	C	0.713	C	0.000
		PM	0.756	C	0.758	C	0.002
12	Lincoln Blvd. & Bali Wy.	AM	0.682	B	0.682	B	0.000
		PM	0.539	A	0.539	A	0.000
13	Lincoln Blvd. & Mindanao Wy.	AM	0.760	C	0.760	C	0.000
		PM	0.891	D	0.892	D	0.001
14	Lincoln Blvd. & Fiji Wy.	AM	0.617	B	0.617	B	0.000
		PM	0.767	C	0.768	C	0.001

The Countywide approach includes designating a highway network that includes all State highways and arterials with the County and monitoring the network's LOS standards. This monitoring of the CMP

network is one of the responsibilities of local jurisdictions. If LOS standards deteriorate, then local jurisdictions must prepare a deficiency plan to be in conformance with the Countywide plan.

Thus, the potential impacts of project traffic on the regional freeway system were also examined. According to the CMP, a traffic analysis is required at all arterial monitoring intersections where the proposed project would add 50 or more trips during either the AM or PM weekday peak hours. One CMP intersection, Lincoln Boulevard and the Marina Expressway, was identified in the project area. The proposed project is not expected to add 50 or more trips to this intersection during either the AM or PM weekday peak hours. However, this intersection was analyzed due to its close proximity to the project sites. In addition, a traffic analysis is also required at all mainline freeway monitoring locations where the project would add 150 or more trips, in either direction, during either the AM or PM weekday peak hours. A review of the project's net trip generation, as shown previously, indicates that the proposed project is not expected to generate 150 trips during either peak hour. The maximum amount of project traffic added to any particular freeway segment would occur along the westbound and eastbound Marina Expressway/Freeway east of Mindanao Way during the PM peak hour. During this time, the proposed project would add approximately six trips, which is significantly less than the Los Angeles County CMP threshold of 150 peak hour trips added to any segment of any freeway in a single direction. Based on this information, the impact criteria would not be exceeded; therefore, the proposed project would result in a less than significant impact on the regional transportation system.

4. Cumulative Impacts

Traffic resulting from related projects in Marina del Rey and the surrounding area would also contribute to impacts at the study intersections. In order to gauge the effects of this additional traffic, an additional level of analysis was conducted. Although the 0.6 percent annual growth factor is expected to fully represent all area traffic increases, for the purposes of conservative analysis, traffic generated from nearby related projects was added to these future baseline traffic volumes, to form the basis for the "Without Project" conditions. Listings of potential related projects located in the study area were obtained from the Los Angeles County Regional Planning Department, the City of Los Angeles Department of Transportation, and from the Cities of Santa Monica and Culver City. From a review of these lists, it was determined that traffic from 43 projects near the study sites could produce additional traffic at the 14 study intersections.[9] The locations of the related projects are shown in **Figure IV.H-9, Related Projects Location Map**. A description and an estimate of the daily and peak hour traffic volumes expected to be generated by these related projects are summarized in **Table IV.H-10**.

[9] In order to present a conservative analysis of future conditions, all of the 43 related projects were assumed to be completed and fully occupied by the study year (2014), although in reality, many of the related projects are still speculative, have not yet been approved, or are sufficiently large or complicated that they will not be constructed and fully occupied within the assumed study timeframe.

Source: Crain & Associates, 2007

Revised: August 5, 2008

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Related Projects Location Map

No Scale

FIGURE IV.H-9

Table IV.H-10
Related Projects Descriptions and Trip Generation

Map No.	Location (Address)	Size	Unit[1]	Description	AM Peak Hour			PM Peak Hour	
					Daily	In	Out	In	Out
1	NWC Princeton Dr./Carter Av. [1]	298	d.u.	Apartment	860	(70)	103	47	(79)
		(24,000)	*s.f.*	*Light Manufacturing (to be removed)*					
		(21,600)	*s.f.*	*Office (to be removed)*					
		(40,000)	*s.f.*	*Auto Service/Repair (to be removed)*					
2	4055, 4063 & 4071 S. Redwood Ave	140	d.u.	Condominium	820	11	51	66	32
3	4004 S. Lincoln Blvd.	98	d.u.	Condominium	574	7	36	46	23
		6,020	s.f.	Retail	267	4	3	13	17
				Total	**841**	**11**	**39**	**59**	**40**
4	2005 Lincoln Blvd.	6	Vfp	Service Station with Convenience Store	977	30	30	11	11
5	1430 Lincoln Bl.	188,600	s.f.	Retail	10,257	140	89	501	543
		280	d.u.	Apartment	1,882	29	114	127	69
				Total	**12,139**	**169**	**203**	**636**	**613**
6	115 Lincoln Bl.	8,800	s.f.	Shopping Center (addition)	378	5	4	61	67
7	901 Abbot Kinney Bl. [2]	57	Rm	Hotel	757	19	11	33	24
		1,200	s.f.	Retail					
		4,300	s.f.	Restaurant					
8	2100 Abbot Kinney Bl.	15,180	s.f.	Office	167	21	3	7	36
9	4333 Admiralty Wy.	600	d.u.	Condominium	3,516	45	219	133	63
10	4363 Lincoln Bl. [3]	158	d.u.	Condominium	386	0	47	53	18
		3,178	s.f.	Specialty Retail					
		(48,000)	*s.f.*	*Car rental Facility (to be removed)*					
11	NWC Admiralty Wy./Palawan Wy. (Parcel 140) [4]	179	d.u.	Apartment	650	11	51	34	24
		(64)	d.u.	*Apartment (to be removed)*	*(233)*	*(4)*	*(18)*	*(12)*	*(9)*
				Total	**417**	**7**	**33**	**22**	**15**
12	514-586 Washington Bl. Bet. Via Marina/Palawan Wy. (Parcel 97) [5]	6,236	s.f.	Retail	18	1	0	1	1
		(5,750)	s.f.	Retail (to be removed)					
13	S/s Washington Bl. Bet. Via Marina/Via Dolce (Parcel 95/LLS) 72	72	d.u.	Apartment	484	7	30	16	7
		400	St	Restaurant (10,000 sf)	1,144	6	6	64	36
		22,400	s.f.	Retail	993	16	11	43	56
		(9,130)	s.f.	Office (to be removed)	(101)	(12)	(2)	(3)	(17)
		(165)	s.f.	Restaurant (to be removed)	(472)	(3)	(2)	(26)	(15)
		(7,500)	s.f.	Drive-in Bank (to be removed)	(1,849)	(52)	(41)	(17)	(16)
				Total	**199**	**(38)**	**2**	**77**	**51**

Map No.	Location (Address)	Size	Unit[1]	Description	AM Peak Hour			PM Peak Hour	
					Daily	In	Out	In	Out
14	S/s Admiralty Wy. E/s Via Marina (Parcel IR)	147	Rm.	Hotel	1,201	50	32	23	29
15	13340 Washington Bl.	41	d.u.	Condominium	240	3	15	14	7
16	E/s Via Marina (Parcels 10R, FF and 9U) [6]	526	d.u.	Apartment	3,104	87	166	132	96
		174	Slip	Boat Dock					
		288	Rm.	Hotel					
		1.47	Acre	Public Park					
		(136)	*d.u.*	*Apartment (to be removed)*					
		(184)	*Slip*	*Boat Dock (to be removed)*					
17	South of Jefferson Bl./E/o Lincoln Bl. (Playa Vista Phase 1)	3,206,950	s.f.	Office	38,733	2,455	1,540	1,777	3,217
		3,246	d.u.	Condominium					
		35,000	s.f.	Retail					
		120,000	s.f.	Community Serving Uses					
18	W/s Via Marina (Parcel 100 and 101) [7]	544	d.u.	Apartment	2,154	34	156	120	57
		(202)	*d.u.*	*Apartment (to be removed)*	*(1,354)*	*(13)*	*(57)*	*(45)*	*(21)*
				Total	**800**	**21**	**99**	**75**	**36**
19	E/s Via Marina bet. Panay Way./Marquesas Way (Parcels 12, 15) [8]	940	d.u.	Apartment	1,785	31	140	106	46
		82	d.u.	Senior Apartment					
		4,000	s.f.	Retail					
		6,000	s.f.	Commercial					
		439	Slip	Boat Dock					
20	S/s Admiralty Wy. E/s Palawan Wy. (Parcel 33/NR)	351	d.u.	Apartment	2,359	36	143	78	36
		24,300	s.f.	Retail	1,077	17	12	46	62
		266	Seat	Restaurant (10,000 sf)	761	4	4	45	22
		(1,067)	*Seat*	*Restaurant (to be removed)*	*(3,052)*	*(17)*	*(15)*	*(179)*	*(88)*
				Total	**1,145**	**40**	**144**	**(10)**	**32**
21	E/o Lincoln Bl. Betw. SR90 & Maxella Av.[9]	**Villa Marina Mixed-Use Project**			903	11	84	73	10
		244	d.u.	Condominium					
		9,000	s.f.	Shopping Center					
		(21,038)	s.f.	*Shopping Center*					
22	13464 W. Washington Bl. [10]	81	d.u.	Condominium	1,401	11	32	83	75
		37,041	*s.f.*	Retail					
		(22)	*Rm.*	*Motel (to be removed)*					
		(7,525)	s.f.	*Retail (to be removed)*					
		(8,500)	s.f.	*Industrial (to be removed)*					
23	Southern Terminus of Fiji Wy. (Parcel 64) [11]	478	d.u.	Multi-family Residential	1,106	17	76	58	30
		500	s.f.	Restaurant					
		34	Slip	Boat Dock					
		(224)	*d.u.*	*Apartment (to be removed)*					
24	NWC Pacific Av./Culver Bl. [12]	35	d.u.	Townhome	548	16	24	34	22
		2,000	s.f.	Retail					
		2,000	s.f.	Restaurant					
25	12801-23 Washington Bl.	12	d.u.	Live/Work	81	1	5	5	2
		12	d.u.	Apartment	81	1	5	5	2

Map No.	Location (Address)	Size	Unit[1]	Description	AM Peak Hour			PM Peak Hour	
					Daily	In	Out	In	Out
				Total	**162**	**2**	**10**	**10**	**4**
26	8030-8040 Manchester Av.	204	d.u.	Apartment	1,371	21	83	93	50
27	8601 Lincoln Blvd. [13]	547	d.u.	Apartment	905	(128)	136	124	(10)
		17,000	s.f.	Shopping Center					
		4,000	s.f.	Retail					
		5,000	s.f.	High-Turnover Restaurant					
		3,000	s.f.	Quality Restaurant					
		(500)	*Rm.*	*Hotel (to be removed)*					
		(10,420)	*s.f.*	*Retail (to be removed)*					
		(10,590)	*s.f.*	*Office (to be removed)*					
		(4,800)	*s.f.*	*High-Turnover Restaurant (to be removed)*					
28	7400 80th St. [14]	120	d.u.	Single-Family Residential	1,220	25	70	82	46
29	South of the intersection of Jefferson Bl./ Westlawn Av. [15]	175,000	s.f.	Office	24,220	577	1,049	1,275	1,027
		2,600	d.u.	Apartment					
		150,000	s.f.	Retail					
		40,000	s.f.	Community Serving Uses					
30	12700 Braddock Dr.	134,557	s.f.	Warehouse	667	50	11	54	161
		1,357	s.f.	Office	15	2	0	1	3
		(58,323)	*s.f.*	*University of CA laundry building (to be removed)*	*(223)*	*(33)*	*(10)*	*(17)*	*(30)*
				Total	**459**	**19**	**1**	**38**	**134**
31	11501-11509 Washington Blvd.	2	d.u.	Apartment	13	0	1	1	0
		950	s.f.	Office	37	4	1	14	66
		2,359	s.f.	Retail	105	2	1	3	3
				Total	**155**	**6**	**3**	**18**	**69**
32	11611 Washington Pl.	20	d.u.	Senior Day Care Facility (9,970 sf)	43	1	0	2	1
		(9,970)	s.f.	*Furniture manufacturing/ warehouse (to be removed)*	*(38)*	*(5)*	*(2)*	*(3)*	*(4)*
				Total	**5**	**(4)**	**(2)**	**(1)**	**(3)**
33	4025 Wade St	4	d.u.	Condominium	23	0	2	2	1
34	12337-12449 Washington Blvd.			Phase A					
		12,070	s.f.	Commercial	535	8	6	15	18
		60	d.u.	Condominium	352	4	22	21	10
				Phase B					
		3,890	s.f.	Commercial	172	3	2	5	6
		18	d.u.	Condominium	105	1	7	6	3
				Total	**1,164**	**16**	**37**	**47**	**37**
35	4061 Grand View Blvd.	70	d.u.	Assisted Living Facility	151	2	2	7	5

Map No.	Location (Address)	Size	Unit[1]	Description	AM Peak Hour			PM Peak Hour	
					Daily	In	Out	In	Out
36	W/O Lincoln Bl., N/O Fiji Wy. (Parcels 50 & 83)	4,700	s.f.	Retail	208	4	2	9	12
37	SWC Admiralty Way & Palawan Way (Parcel 27)	111	Rm.	Hotel	907	38	24	18	21
		42	*Rm.*	*Hotel (to be removed)*	(343)	(15)	(9)	(7)	(8)
				Total	**564**	**23**	**15**	**11**	**13**
38	West of Fiji Wy. Near Terminus – Fisherman's Village (Parcels 55/56W) [16]	132	Rm.	Hotel	2,375	41	57	114	95
		1,230	Seat	Restaurant					
		24,250	s.f.	Retail					
		5,200	s.f.	Office					
		26	Slip	Boat					
		(12,984)	*s.f.*	*Retail/ Commercial (to be removed)*					
		(16,149)	*s.f.*	*Restaurant (to be removed)*					
		(17)	*Slip*	*Boat (to be removed)*					
39	N/O Panay Wy., E/O Via Marina (Parcel 20, Phase II)	26,000	s.f.	DBH Office	286	35	5	10	47
40	N/s Fiji Wy., W/o Admiralty Wy. (Parcels 52/GG)	345	Vessel	Dry Stack Storage Facility	995	15	28	17	30
		30	Vessel	Mast Up Storage Space	86	1	3	1	3
		1,500	s.f.	Sheriff Boatwright Facility	-	-	-	-	-
				Total	**1,081**	**16**	**31**	**18**	**33**
41	13365 Washington Boulevard	5,000	s.f.	Retail	222	4	2	6	8
		19	d.u.	Condominium	111	1	7	7	3
				Total	**333**	**5**	**9**	**13**	**11**
42	841 California Ave.	420	St	High School	718	119	53	28	31
43	5401 Beethoven St.	420	St	Private School (K-8)	N/A	208	170	120	136

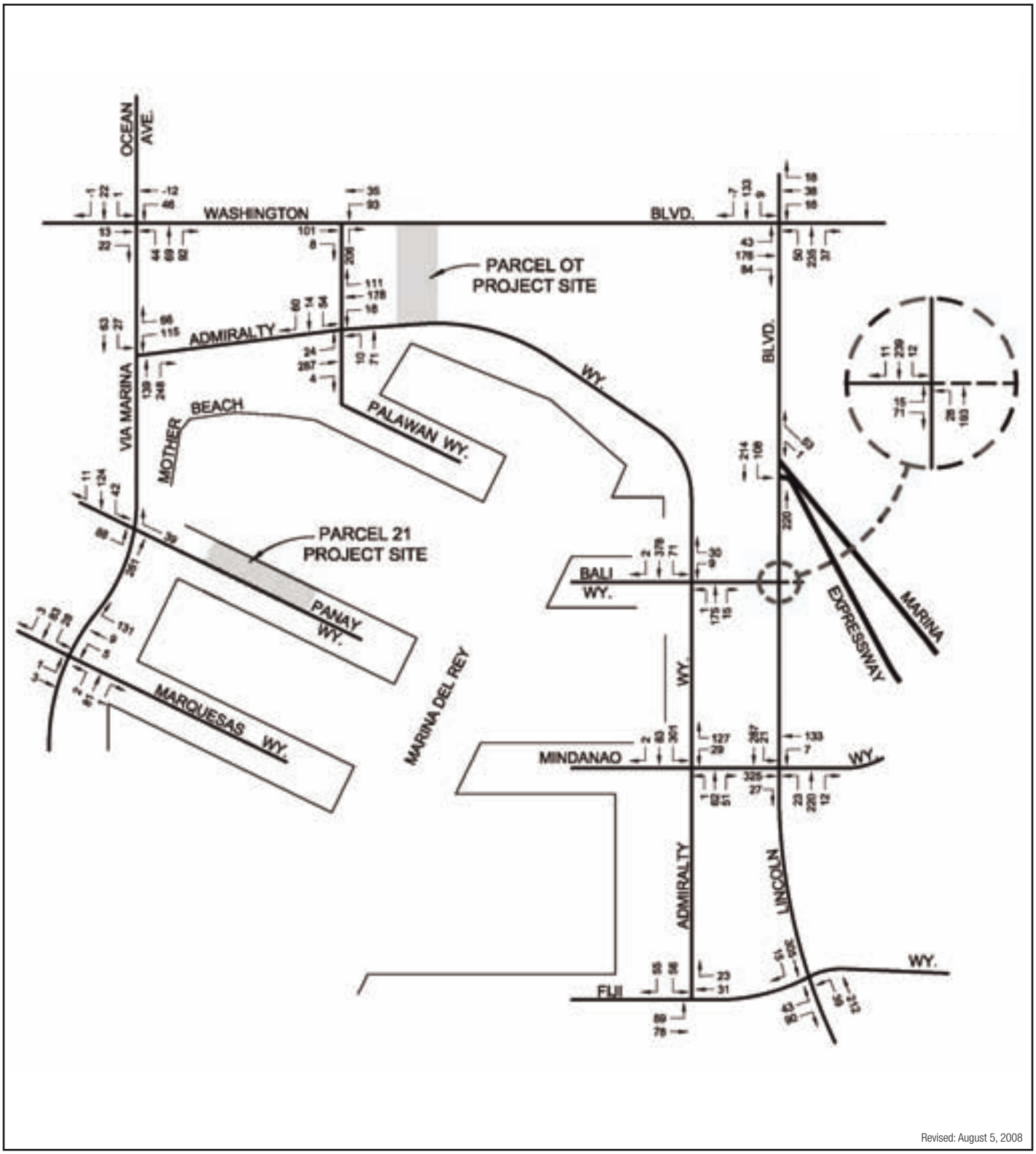
Sources:
[1] Traffic Analysis for a Proposed 298-unit Residential Development on Princeton Drive in the Oxford Triangle Neighborhood of the City of Los Angeles, Crain & Associates, Revised January 2004.
[2] Los Angeles Department of Transportation Traffic Study Memorandum of Understanding (MOU), The Ambrose Hotel, Crain & Associates, April 17, 2006.
[3] Los Angeles Department of Transportation Scoping for Traffic Study for Marina del Rey Mixed-Use Platt Project, Crain & Associates, May 22, 2006.
[4] Traffic Analysis for a Proposed 179-unit Residential Development at 4160 Admiralty Way (Parcels 140) in Marina del Rey, Crain & Associates, May 22, 2006.
[5] Traffic Analysis for 6,236 sf Retail Development at 514-586 Washington Boulevard, between Via Marina and Palawan Way, in Marina del Rey, Crain & Associates, November 2002.
[6] Traffic Analysis for Proposed Residential and Hotel Development on Parcels 10R, FF and 9U in Marina del Rey, Crain & Associates, January 2007. Project anticipated to be constructed and operational between October 2012 and November 2013.
[7] Traffic Analysis for a Proposed 544-unit Residential Development on Parcels 100 and 101 in Marina del Rey, Crain & Associates, August 2005.
[8] Traffic Analysis for 1,201-unit Residential Development on Panay Way, via Marina, and Marquesas Way in Marina del Rey, Crain & Associates, Revised March 2000, revised per approved development.
[[9] Final EIR for The Villa Marina Mixed-Use Project, PCR Services Corporation, March 2005.
[10] Los Angeles Department of Transportation Scoping for Traffic Study for Washington & Glencoe Mixed-use Project, Crain & Associates, October

Map No.	Location (Address)	Size	Unit[1]	Description	AM Peak Hour			PM Peak Hour	
					Daily	In	Out	In	Out

10, 2006.
[11] Traffic Analysis for a Proposed 478-unit Residential Development on Parcel 64 in Marina del Rey, Crain & Associates, January 2007.
[12] Traffic Analysis for Proposed Mixed-Use Development at Pacific Avenue and Culver Boulevard, Playa del Rey, City of Los Angeles, Crain & Associates, November 2004.
[13] Traffic Impact Study for Residential Mixed-Use Project at Lincoln Boulevard/Manchester Avenue (8601 Lincoln Boulevard), City of Los Angeles, Crain & Associates, November 2002.
[14] Traffic Analysis for 120-unit Single-Family Residential Development Located on 80th Street in the City of Los Angeles, Crain & Associates, January 1998.
[15] Traffic Analysis for The Village at Playa Vista Project, Kaku Associates, Inc. and Raju Associates, Inc., July 2003.
[16] Traffic Study for the Fisherman's Village Retail and Commercial Development Project, Hirsch Green Traffic Consultant, March 2007.

[1] d.u.=density unit
s.f.=square feet
Rm.=room

Figures IV.H-10a, Related Projects Traffic Volumes – AM Peak Hour, and IV.H-10b, Related Projects Traffic Volumes – PM Peak Hour, show the anticipated traffic at the study intersections resulting from the expected cumulative development in the study area. The related project traffic volumes were added to the "With Ambient Growth Plus Project" traffic volumes shown previously in Figures IV.H-7a and IV.H-7b to obtain projections of the ultimate expected future year 2014 traffic. These cumulative traffic volumes are shown in **Figures IV.H-11a, Future (2014) Traffic Volumes With Cumulative Projects – AM Peak Hour, and IV.H-11b, Future (2014) Traffic Volumes With Cumulative Projects – PM Peak Hour.** The analysis of the cumulative traffic conditions was performed using the same CMA methodology described earlier. The results of the cumulative development analysis are summarized in **Table IV.H-11**. This table shows the impact for the cumulative development including the project. The same criteria that were applied to the project impact are applied to the cumulative impact.



Revised: August 5, 2008

Source: Crain & Associates, 2007

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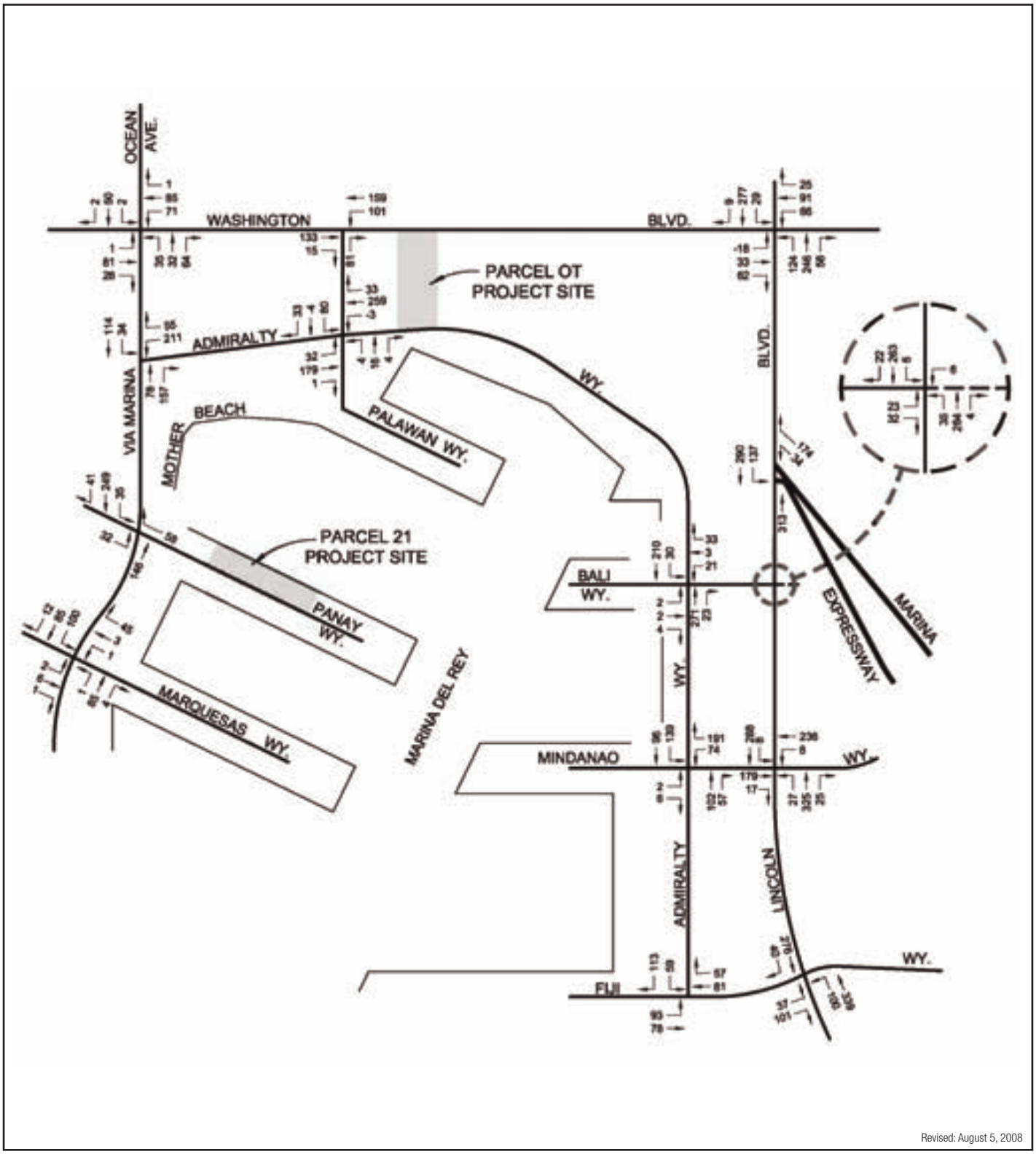
Related Projects Traffic Volumes – AM Peak Hour

No Scale

FIGURE IV.H-10a



Revised: August 5, 2008

Source: Crain & Associates, 2007

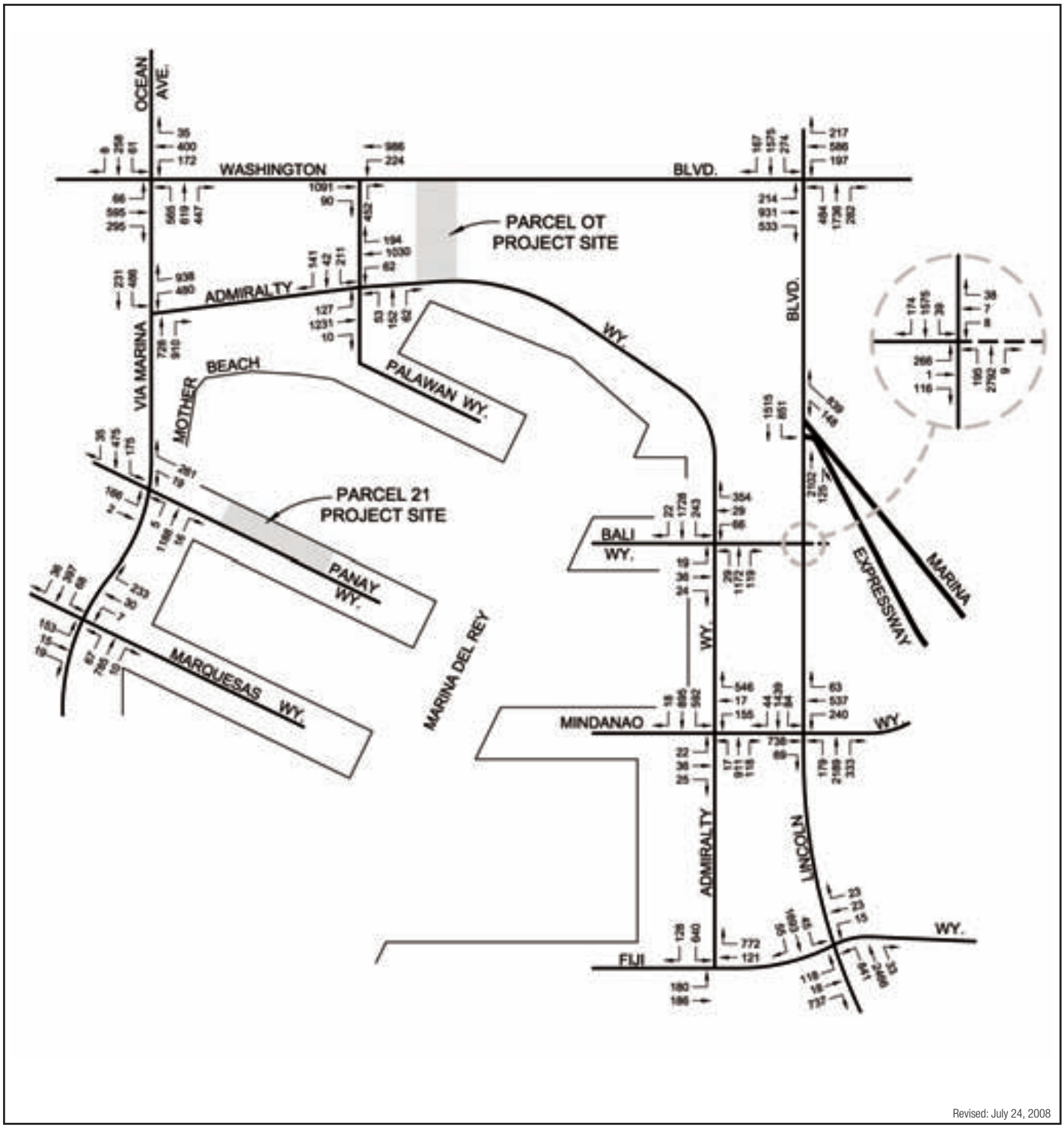
OCEANA RETIREMENT FACILITY AND HOLIDAY HARBOR COURTS EIR

ENVICOM CORPORATION

Related Projects Traffic Volumes – PM Peak Hour

No Scale

FIGURE IV.H-10b



Revised: July 24, 2008

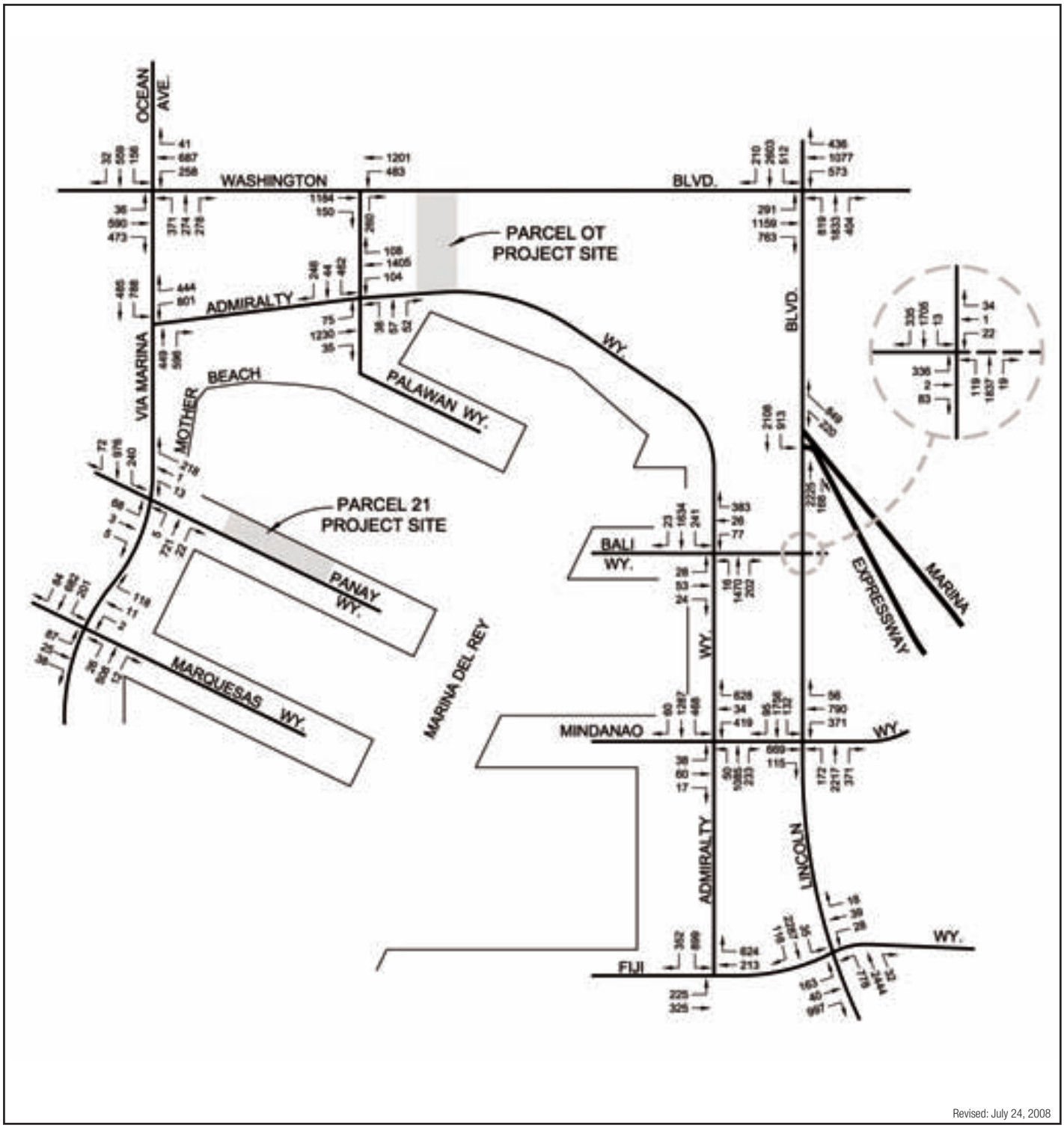
Source: Crain & Associates, 2008

ENVICOM CORPORATION

Future (2014) Traffic Volumes With Cumulative Projects – AM Peak Hour

No Scale

FIGURE IV.H-11a



Revised: July 24, 2008

Source: Crain & Associates, 2008

ENVICOM CORPORATION

Future (2014) Traffic Volumes With Cumulative Projects – PM Peak Hour

No Scale

FIGURE IV.H-11b

Table IV.H-11
Summary of Critical Movement Analysis
Future (2014) Traffic Conditions With Cumulative Development

No.	Intersection	Peak Hour	With Ambient Growth		With Ambient Growth Plus Project			With Cumulative Development (Related Projects)			Project Percent of Impact
			CMA	LOS	CMA	LOS	Impact	CMA	LOS	Impact	
1	Washington Blvd. & Via Marina/ Ocean Ave.	AM	0.748	C	0.750	C	0.002	0.851	D	0.103[1]	1.9%
		PM	0.805	D	0.807	D	0.002	0.924	E	0.119[1]	1.7%
2	Washington Blvd. & Palawan Wy.	AM	0.671	B	0.672	B	0.001	0.925	E	0.254[1]	0.4%
		PM	0.751	C	0.757	C	0.006	0.911	E	0.160[1]	3.8%
3	Lincoln Blvd. & Washington Blvd.	AM	0.813	D	0.813	D	0.000	0.933	E	0.120[1]	0.0%
		PM	1.400	F	1.403	F	0.003	1.560	F	0.160[1]	1.9%
4	Admiralty Wy. & Via Marina	AM	0.734	C	0.734	C	0.000	0.826	D	0.092[1]	0.0%
		PM	0.788	C	0.787	C	-0.001	0.920	E	0.132[1]	-0.8%
5	Admiralty Wy. & Palawan Wy.	AM	0.446	A	0.447	A	0.001	0.623	B	0.177	0.6%
		PM	0.635	B	0.633	B	-0.002	0.814	D	0.179[1]	-1.1%
6	Via Marina & Panay Wy.	AM	0.362	A	0.363	A	0.001	0.510	A	0.148	0.7%
		PM	0.266	A	0.266	A	0.000	0.349	A	0.083	0.0%
7	Marquesas Wy. & Via Marina	AM	0.273	A	0.273	A	0.000	0.365	A	0.092	0.0%
		PM	0.189	A	0.189	A	0.000	0.255	A	0.066	0.0%
8	Admiralty Wy. & Bali Wy.	AM	0.482	A	0.483	A	0.001	0.609	B	0.127	0.8%
		PM	0.607	B	0.607	B	0.000	0.746	C	0.139[1]	0.0%
9	Admiralty Wy. & Mindanao Wy.	AM	0.658	B	0.660	B	0.002	0.894	D	0.236[1]	0.8%
		PM	0.778	C	0.779	C	0.001	1.021	F	0.243[1]	0.4%
10	Admiralty Wy. & Fiji Wy.	AM	0.268	A	0.268	A	0.000	0.348	A	0.080	0.0%
		PM	0.387	A	0.387	A	0.000	0.521	A	0.134	0.0%
11	Lincoln Blvd. & Marina Expressway	AM	0.713	C	0.713	C	0.000	0.806	D	0.093[1]	0.0%
		PM	0.756	C	0.758	C	0.002	0.897	D	0.141[1]	1.4%
12	Lincoln Blvd. & Bali Wy.	AM	0.682	B	0.682	B	0.000	0.744	C	0.062[1]	0.0%
		PM	0.539	A	0.539	A	0.000	0.645	B	0.106	0.0%
13	Lincoln Blvd. & Mindanao Wy.	AM	0.760	C	0.760	C	0.000	0.963	E	0.203[1]	0.0%
		PM	0.891	D	0.892	D	0.001	1.057	F	0.166[1]	0.6%
14	Lincoln Blvd. & Fiji Wy.	AM	0.617	B	0.617	B	0.000	0.738	C	0.121[1]	0.0%
		PM	0.767	C	0.768	C	0.001	0.906	E	0.139[1]	0.7%

[1] Indicates significant cumulative traffic impact, prior to mitigation, per Los Angeles County Department of Public Works "Traffic Impact Analysis Report Guidelines", January 1, 1997.

As this table shows, the potential additional traffic resulting from area-wide development would significantly impact 11 of the 14 study intersections, resulting in some locations near or above capacity. The proposed project would contribute incrementally to these cumulative impacts, although its contributions are 3.8 percent or less of the cumulative impact at all locations. Nevertheless, the proposed project would result in a significant cumulative impact related to traffic congestion. The implementation of **Mitigation Measure TA-2** would reduce the significant cumulative impact to less than significant at the intersections of Admiralty Way at Via Marina, Admiralty Way at Palawan Way, and Admiralty Way at Bali Way.

In addition, the proposed project would contribute incrementally to the cumulative impacts expected to occur at the intersections of Washington Boulevard at Palawan Way, Washington Boulevard at Ocean Avenue/Via Marina, and Admiralty Way at Mindanao Way. The implementation of **Mitigation Measures TA-3**, **TA-4**, and **TA-5** would reduce the significant cumulative impact to less than significant at these three intersections. While no physical improvements are feasible at the intersection of Washington Boulevard at Ocean Avenue/Via Marina, the improvements proposed for the intersection of Washington Boulevard at Palawan Way (see TA-3, below) will provide adequate mitigation for this impact.[10]

The project would also contribute incrementally to the cumulative impacts expected to occur at five other intersections, including Lincoln Boulevard at Washington Boulevard, Lincoln Boulevard at SR-90, Lincoln Boulevard at Bali Way, Lincoln Boulevard at Mindanao Way, and Lincoln Boulevard at Fiji Way. For these intersections, there is currently no feasible physical improvement available to mitigate the potential cumulative impact of the proposed project. The Marina del Rey Local Implementation Program (LIP) list of Category 3 improvements includes several regional transportation circulation improvements, one of which is the proposed extension of SR-90 (the Marina Expressway) to connect to Admiralty Way. According to the County of Los Angeles Department of Public Works Traffic and Lighting Division, the five intersections listed above will be subject to cumulative impacts until the SR-90 extension or another project of equal effectiveness is built.[11] At this point, the SR-90 extension is not a programmed project. Therefore, this cumulative analysis conservatively assumes that the SR-90 extension will not be constructed before the proposed project is operational. As such, the proposed project's incremental contribution to the cumulative impacts at the intersections of Lincoln Boulevard at Washington Boulevard, Lincoln Boulevard at SR-90, Lincoln Boulevard at Bali Way, Lincoln Boulevard at Mindanao Way, and Lincoln Boulevard at Fiji Way remain significant and unmitigable.

As described above, this traffic impact analysis focuses on the impacts of the proposed development as compared to existing physical conditions, rather than conditions under buildout of the LUP without the proposed transfer of 5,000 square feet of permitted retail use from DZ 5 Parcel 97 to DZ 6 Parcel OT. However, it is noted that traffic at four intersections in the study area would be different if buildout of the 5,000 square feet were to occur at Parcel OT rather than Parcel 97. The affected intersections are: Washington Boulevard and Via Marina/Ocean Avenue, Washington Boulevard and Palawan Way, Admiralty Way and Via Marina, and Admiralty Way and Palawan Way. The cumulative CMA impact levels at these intersections would be either the same or lower than those that would be expected without the transfer. However, the analysis conclusions in terms of the number and locations of intersections that would experience a significant cumulative impact would be the same under either scenario.

[10] Letter from the County of Los Angeles Department of Public Works Traffic and Lighting Division (Dean D. Efstathiou, Acting Director of DPW and William Winter, Assistant Deputy Director of T and L), November 24, 2008.
[11] Ibid.

In addition to cumulative traffic impacts resulting from development of the proposed project in combination with the related projects identified above, several public infrastructure projects are planned for the Marina del Rey community that may result in cumulative traffic congestion impacts during construction. Development of the proposed project is expected to begin in 2012, with construction of the Oceana Retirement Facility on Parcel OT estimated to occur over two years, while construction of the Holiday Harbor Courts project is estimated to occur over 18 months. According to the County of Los Angeles Department of Public Works, construction of the Oxford Retention Basin Flood Protection Multiuse Enhancement Project is anticipated to occur from April 2013 through April 2014.[12] In addition, the City of Los Angeles Department of Public Works Bureau of Engineering is expected to begin construction of the Venice Pumping Plant Dual Force Main Sewer Project in 2010. According to the EIR prepared for that project (URS, December 2007), construction of that project is estimated to occur over two years.[13] As discussed previously, the City of Los Angeles Department of Public Works Waterworks District has plans to upsize the water main on Parcel OT from 14 inches to 24 inches, and approximately 20,000 feet of new 18-inch diameter steel pipeline would replace aged and undersized 10-inch and 14-inch-diameter water mains located in Panay Way. The timing of the water main project on Parcel OT has not been specified and may occur before or simultaneously with the proposed Parcel OT project, and the water main project in Panay Way would likely occur during construction of the Parcel 21 project. As such, the timing of construction of the proposed project may occur with various other planned City and County of Los Angeles projects that would likely necessitate work to be performed in roadways. This cumulative impact is considered significant prior to mitigation. Traffic control plans, as required by Mitigation Measure T-1 for the proposed project, would be required for such planned projects. Implementation of these plans, as approved by the applicable City and County traffic agencies, would reduce potential cumulative traffic impacts associated with the construction of cumulative projects to less than significant.

In addition to the cumulative traffic impact analysis, an analysis of the cumulative construction parking impacts was conducted to determine the availability of public parking should the project and all of the related projects be constructed concurrently. According to the Draft Right-Sizing Parking study prepared for the Los Angeles County Department of Beaches and Harbors, there are a total of 2,498 public parking spaces available throughout the Marina, including a total of 1,917 public parking spaces provided on parcels other than the project and the related project list. Public parking lots included within the project and related projects list include Parcels OT (Lot 8), NR (Lot 9), IR (Lot 10) and FF (Lot 12), which all occur within the Mother's Beach Activity Area with the exception of Parcel FF. There are a total of 581 public parking spaces provided within Parcels OT, IR and NR, and 201 spaces provided within Parcel FF. Assuming that all of the public parking spaces within the Mother's Beach Activity Area (worst case assumption as parking utilization is documented by activity area, not by parcel) and Parcel FF were not available at the same time, a total of 850 underutilized public parking spaces would be still be available in other public parking lots throughout the Marina. This is an excess of 269 underutilized public parking spaces not including the number of underutilized public parking spaces within Parcel GR (Lot 11). Therefore, the project would contribute incrementally to cumulative construction parking impacts; however, even under a worse case scenario assuming concurrent temporary loss of public parking on the project sites and the related projects, excess underutilized parking would be available. Cumulative construction parking impacts are anticipated to be less than significant.

[12] County of Los Angeles Department of Public Works. Oxford Retention Basin Flood Protection Multiuse Enhancement Project Presentation on March 23, 2009. http://beaches.lacounty.gov/BandH/DPWOxBasPres032609.pdf. Accessed July 27, 2009.

[13] City of Los Angeles Department of Public Works. http://eng.lacity.org/techdocs/emg/Environmental_Review_Documents.htm. Accessed July 27, 2009.

5. Mitigation Measures

For construction period traffic impacts:

TA-1 Traffic Control Plans for both Parcel OT and Parcel 21 shall be submitted to the County of Los Angeles Department of Beaches and Harbors and the County of Los Angeles Department of Public Works Traffic and Lighting Division for review and approval. The Traffic Control Plans shall designate haul routes for construction-related vehicles, the location of access to the construction site, and staging and parking areas for workers and equipment. The Plans shall also specify the permitted hours of construction, methods of safeguarding traffic flow, methods of re-routing or detouring traffic if necessary, and the placement/utilization of traffic control devices (including signs, flashing arrows, traffic cones and delineators, barricades, flaggers, temporary modifications to existing signals and signal timing, etc.), as necessary. Further, the Plans shall address the provision of signage for alternative pedestrian and bicycle access routes where affected, coordination with emergency service providers, and coordination with pubic transit providers (such as the MTA, LADOT Commuter Express, and Culver City Bus).

For the intersections of Admiralty Way at Via Marina, Admiralty Way at Palawan Way, and Admiralty Way at Bali Way:

TA-2 Pursuant to the Marina del Rey Specific Plan Transportation Improvement Program (TIP), the applicant shall provide a "fair share" contribution toward the funding of Category 1 (local Marina) and Category 3 (regional) roadway improvements, based on the amount of project PM peak hour trips. [As the County's traffic mitigation fee structure is currently $5,690 per PM peak hour trip, the proposed project shall be required to pay $170,700 in trip mitigation fees, based on the expected project trip generation of 30 net new PM peak hour trips, with a portion of these fees being designated toward the Category 3 (regional) transportation improvements].

For the intersections of Washington Boulevard at Palawan Way, Washington Boulevard at Ocean Avenue/Via Marina,[14] and Admiralty Way at Mindanao Way:

TA-3 The applicant shall contribute "fair share" funding to provide 1) a new traffic signal at the intersection of Washington Boulevard and Palawan Way, 2) realignment at the south leg of the intersection to reduce the angle of the northbound right-turn only lane for a more perpendicular approach in addition to northbound dual left-turn lanes, and 3) two northbound left-turn lanes onto westbound Washington Boulevard and an exclusive right-turn lane (add a second left-turn). The proposed project shall contribute 3.8 percent of the impact at this location. While cost estimates for this improvement are currently being finalized, they are estimated to be $332,500, with a project responsibility of $12,635.[15]

TA-4 The proposed project shall contribute "fair share" funding to either 1) a second southbound left-turn lane at the Admiralty Way at Mindanao Way intersection or 2) the conversion of the shared left-turn/through lane to a shared through/left-/right-turn lane on

[14] Ibid. According to the County of Los Angeles Department of Public Works Traffic and Lighting Division, while no physical improvements are feasible at this intersection, the improvements recommended for the Washington Blvd. at Palawan Wy. Intersection would provide adequate mitigation to reduce the impact to less than significant.

[15] Ibid.

the westbound approach to the Admiralty Way at Mindanao Way intersection with optimization of signal operation at adjacent intersections at this intersection when plans are finalized by the applicable discretionary agencies.

TA-5 The proposed project shall dedicate the necessary right of way for the future widening of Admiralty Way as well as an eight-foot sidewalk along the project frontage on Admiralty Way.

6. Significant Project Impacts After Mitigation

Potentially significant project impacts associated with construction period traffic would be mitigated following implementation of Mitigation Measure TA-1. Potentially significant project impacts related to access, parking, traffic congestion, or the regional transportation system requiring mitigation are not expected to occur as a result of project implementation. The proposed project's potentially significant cumulative impact related to traffic congestion at the intersections of Admiralty Way at Via Marina, Admiralty Way at Palawan Way, and Admiralty Way at Bali Way would be reduced to less than significant with implementation of Mitigation Measure TA-2. Mitigation Measures TA-3, TA-4, and TA-5 would reduce the proposed project's potentially significant cumulative impact to traffic congestion at the intersections of Washington Boulevard at Palawan Way, Washington Boulevard at Ocean Avenue/Via Marina, and Admiralty Way at Mindanao Way to less than significant. However, the proposed project's incremental contribution to the cumulative impacts at the intersections of Lincoln Boulevard at Washington Boulevard, Lincoln Boulevard at SR-90, Lincoln Boulevard at Bali Way, Lincoln Boulevard at Mindanao Way, and Lincoln Boulevard at Fiji Way remain significant and unmitigable.

I. UTILITIES (WATER SUPPLY)

1. Existing Conditions

Marina del Rey Water Purveyors

The County of Los Angeles Department of Public Works Waterworks District that serves the project site is collectively referred to as the Los Angeles County Waterworks District No. 29, Malibu, and Marina del Rey Water System (herein the District).[1] The Los Angeles County Waterworks Districts are public water systems formed pursuant to Division 16, County Waterworks Districts of the California Water Code. There are currently five Districts providing retail water service to Kagel Canyon, Malibu, Val Verde, Acton, and the Antelope Valley. The Districts also began operating and maintaining the Marina Del Rey Water System on behalf of the Los Angeles County Department of Beaches and Harbors. The Marina del Rey Water System is a smaller system served directly off the transmission main delivering water to the Malibu System. Marina del Rey's service area encircles the Marina del Rey harbor, providing service to businesses, as well as apartment and condominium complexes in the Marina del Rey area through 300 service connections.

The District purchases the majority of its water from the West Basin Municipal Water District (WBMWD), which is a member agency of the Metropolitan Water District of Southern California (MWD). The MWD is comprised of 26 cities and water districts that provide water to nearly 18 million people in parts of Los Angeles, Orange, San Diego, Riverside, San Bernardino, and Ventura Counties. The WBMWD wholesales the imported water to cities, mutual water companies, investor-owned utilities, and private companies in southwest Los Angeles County. The District also purchases imported water from the City of Los Angeles Department of Water and Power (LADWP) and the Las Virgenes Municipal Water District through emergency interconnections. The source of water is the Sacramento River/San Joaquin Delta, by way of the State Water Project and from the Colorado River Aqueduct, which begins at Lake Havasu in Arizona.

West Basin Municipal Water District Historical Water Demand

The key factors that affect water demands are growth in population, increases in land use development, industrial growth, and hydrology. However, since the end of the drought that persisted from 1989-1992, retail water demands in the WBMWD's service area have remained fairly consistent. The WBMWD region did not experience significant increases in water demands from 1990-2005 despite population growth at an average rate of 3,875 persons per year and continued in-fill development in the WBMWD's service area. The WBMWD's Fiscal Year 2004-2005 retail water demand was 183,916 acre-feet. Total water use, or demand, within West Basin's service area includes retail demand and groundwater replenishment. Retail demand is defined as all municipal (residential, firefighting, parks, etc.) and industrial uses, and represents the population's total direct water consumption. Replenishment uses, including deliveries to the saline barriers (West Coast and Dominguez Gap Barriers), are not directly delivered to the public but enable continued groundwater production and helps to satisfy retail demand.

[1] Personal Communication with Shawky Bakhoum, EA III for the Los Angeles County Waterworks District, January 30, 2007.

Marina del Rey Water Supply and Water Use

Current Water Supply and Water Use

The MWD currently delivers an average of 1.7 billion gallons of water per day to a 5,200 square mile service area.[2] The WBMWD service area used 198,000 acre-feet (one acre foot equates to 326,000 gallons) of water in fiscal year 2005-2006. Of this amount, the District used approximately 9,533 acre-feet.[3] According to the 2005 Urban Water Management Plan (UWMP) for the County of Los Angeles Department of Public Works Waterworks District No. 29, Malibu, and the Marina del Rey Water Sytstem, the WBMWD supplied the District with 11,587 acre-feet of water in 2005. The document also states that the Marina del Rey Water System accounts for 17 percent of the water supplied to the District from the WBMWD. Therefore, in 2005, the Marina del Rey Water System supply accounted for approximately 1,970 acre-feet, or 5.40 acre-feet per day (1,760,400 gallons per day, or gpd), of the District's water.

The UWMP also states that during the Fiscal Year 2004-2005, water use by the District numbered 9,941 acre-feet. Assuming that the Marina del Rey Water System also accounts for 17 percent of the water used by the District, the Marina del Rey Water System water use accounted for approximately 1,690 acre-feet, or 4.63 acre-feet per day (1,509,380 gallons per day), of the District's water in Fiscal Year 2004-2005.

Projected Water Supply and Water Use

The UWMP projects that the year 2030 water supply made available by the WBMWD to the District will be 15,557 acre-feet for that year. The document also projects that the District will use 14,816 acre-feet in the year 2030. As the Marina del Rey Water System accounts for 17 percent of the water supplied to the District from the WBMWD, it would use 2,519 acre-feet of the District's allocation from the WBMWD, or approximately 6.9 acre-feet per day (2,249,400 gallons per day), based on the UWMP projections.

Water Infrastructure

According to the UWMP, the District has an interconnection with WBMWD in the City of Culver City. A 35-mile transmission watermain along Pacific Coast Highway conveys water from this interconnection with WBMWD to the western boundary of the District. The water is pumped from the transmission watermain into various gravity storage tanks in Malibu and Topanga. The District also has four emergency interconnections; two with the City of Los Angeles Department of Water and Power and two with the Las Virgenes Municipal Water District. The District's major system facilities include approximately 200 miles of watermain (approximately five percent or 53,600 linear feet are above ground), 32 pump stations, and 52 tanks with a storage of approximately 20 million gallons of storage capacity. Currently, the District has storage capacity for approximately three days. The Marina del Rey Water System supply is served directly off the transmission watermain delivering water to the District. There are no pump stations or storage tanks within the Marina del Rey water system. However, the Marina del Rey water system also has two emergency interconnections with the City of Los Angeles Department of Water and Power.

The Marina del Rey LUP states that water enters the Marina del Rey Water System by way of a 14-inch service line on Washington Street near Palawan Way. Water mains along the perimeter roads connect to lines for each mole (such as Panay Way, along which Parcel 21 is located), as well as a pipeline crossing under the main channel between Parcel 62 and Parcel 113. Connections for emergency water service

[2] The Metropolitan District of Southern California website, http://www.mwdh2o.com/mwdh2o/pages/about/about01.html, accessed February 5, 2007.
[3] West Basin Municipal Water District Water Use Report for Fiscal Year 2005-2006.

provided by the City of Los Angeles are located at Marquesas Way and Via Dolce, as well as at Mindanao Way and Lincoln Boulevard. A10-inch water line currently runs parallel along Panay Way. This water main infrastructure would be replaced and upgraded as part of the proposed project to serve the proposed development on Parcel 21. A 14-inch water line currently runs in a northwest-southeast fashion near the southern edge of the Oxford Retention Basin on the portion of Parcel P that will be added to Parcel OT. The District currently has plans to upsize this water main to a 24-inch line. The proposed improvements are discussed in further detail in the Project Impacts section, below.

Regulatory Framework

In 2001, the California State legislature enacted two pieces of legislation, Senate Bills 221 and 610, which aim to assure that water supply will be available for new development. SB 610 (Costa) requires additional rigor and thoroughness in preparing and updating Urban Water Management Plans and the reporting of water supply information in CEQA documents for projects over a certain size (generally of a size greater than: 500 dwelling units, shopping centers of 500,000 square feet, office buildings of 250,000 square feet, or mixed use projects with water demands greater than that required for 500 dwelling units). The second bill, SB 221 (Keuhl), serves as a "backstop" in the event that long-range water supply planning does not take place. The bill prohibits a city or county from approving a tentative tract map or parcel map (or a development agreement including land division) of more than 500 units unless there is written verification that a sufficient and reliable water supply will be available prior to the completion of the project.

In response to SB 610, local water purveyors (with over 3,000 connections or 3,000 acre-feet of service) are required to prepare Urban Water Management Plans and update them every five years. In addition, water plans must now contain information on groundwater management. Non-compliance results in removal of eligibility for Department of Water Resource funding. SB 610 also requires that cities and counties request an assessment of whether projects over the noted size were included in the latest Urban Water Management Plan. Where a proposed project over the noted size is not included in the water plans, then the city or county must request a water supply assessment from the local water purveyors. In response to SB 221, cities and counties must ask for water plans and water assessments from local water purveyors.

2. Thresholds of Significance

According to the Initial Study prepared for the proposed project by the County of Los Angeles Department of Regional Planning as well as Appendix G of the CEQA Guidelines, the proposed project may result in a significant impact to water supply and service if:

- The project site is located in an area known to have an inadequate public water supply to meet domestic needs or to have an inadequate ground water supply and proposed water wells;
- The proposed project would require or result in the construction of new water facilities or the expansion of existing facilities, the construction of which could cause significant environmental effects; and/or
- The project site is in an area known to have an inadequate water supply and/or pressure to meet fire fighting needs.

3. Project Impacts

Marina del Rey Water Supply

The following analysis serves to estimate the proposed project's daily water demand relative to the regional water supply, based on the sewage generation rates compiled by the City of Los Angeles for its 2006 CEQA Thresholds Guide for various land uses. Water demand is assumed to be equivalent to the amount of sewage generated. Information from both the UWMP and Marina del Rey LCP are used to project the proposed project's water use.

Parcel OT Water Demand

Development on Parcel OT (including a portion of Parcel P)[4] requires a Marina del Rey LCP amendment to transfer development potential, including 114 hotel spaces from the Admiralty DZ #7 and 5,000 s.f. of retail uses from the Palawan/Beach DZ #5 to Parcel OT in the Oxford DZ #6. On Parcel OT, the amendment would also be used to change the land use designations from Parking (Parcel P) and Open Space (portion of Parcel P to be added to Parcel OT) to the proposed Active Seniors Accommodations land use category with a Mixed Use Overlay Zone (MUZ). As such, the 114 hotel rooms and 5,000 s.f. of retail uses planned for in the Admiralty DZ #7 and Palawan/Beach DZ #5 would not be constructed, and instead, 114 bedrooms and 5,000 s.f. of retail uses would be developed in an active seniors accommodations facility on Parcel OT in the Oxford DZ #6.

To determine water demand expected as a result of development on Parcel OT, the demand for water generated by 114 rooms in an active seniors accommodations facility and 5,000 square feet (s.f.) of retail space must be determined. According to the City of Los Angeles CEQA Thresholds Guide (2006), retail uses require 80 gallons of water per day per 1,000 gross s.f., a one bedroom apartment demands approximately 120 gallons of water per day, and a two bedroom apartment demands approximately 160 gallons water per day.[5] As 5,000 square feet of retail space, 67 one bedroom and 47 two bedroom units are proposed for development on Parcel OT, the proposed development on this Parcel is expected to demand approximately 15,960 gallons of water per day. This does not account for any water use that may currently be demanded of the parking lot on Parcel OT (minimally landscaped areas); therefore, the net water demand of the proposed project is expected to be less than this estimate.

Parcel OT SB 610 and 221 Water Analysis

As discussed above, SB 610 requires the reporting of water supply information in CEQA documents for projects over a certain size, and SB 221 provides additional enforcement of that rule. Such Water Supply Assessments are required for projects that include 500 dwelling units, shopping centers of 500,000 square feet, office buildings of 250,000 square feet, or mixed-use projects with water demands greater than that required for 500 dwelling units. The proposed project on Parcel OT is by nature a mixed-use project; therefore, the mixed-use threshold (mixed-use projects with water demands greater than that required for 500 dwelling units) has been applied for this analysis.

According to the Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 of 2001 (California Department of Water Resources, October 2003), one acre-foot of water can serve two to three

[4] Hereafter, unless otherwise noted, the Oceana Retirement Facility project site is simply referred to as Parcel OT.

[5] Apartment uses as described in the City of Los Angeles CEQA Thresholds Guide (2006) were assumed to more closely estimate water demand in an active seniors accommodations facility than those of a rest home. However, as the units in the proposed development on Parcel OT would not include individual kitchens as apartments would, these figures are provided as conservative estimates.

households on an annual basis. Therefore, one dwelling unit is expected to consume up to 0.5 acre-feet of water per year. A 500 dwelling unit project is thus expected to consume 250 acre-feet of water per year, or 81,462,855 gallons per year (approximately 223,186 gpd). Demonstrated above, the proposed the development on this Parcel is expected to demand approximately 15,960 gpd, which is below the 223,186-gpd Water Supply Assessment threshold. As the proposed project represents the development of land uses transferred from other Parcels in the Marina del Rey Land Use Plan, the proposed project is considered to be included in Countywide growth projections and accounted for in the 2005 Urban Water Management Plan. Therefore, the proposed project on Parcel OT would result in a less than significant impact on water supply.

Parcel 21 Water Demand

As discussed in Section III., Project Description, the land uses proposed for Parcel 21 are replacing existing uses on Parcel 21 and transferring uses approved for Parcel 20, Phase II, such that the existing/approved and proposed developed area on this Parcel is 29,348 s.f. (there are 22,048 s.f. currently on Parcel 21 and 7,300 s.f. approved for Parcel 20 to be transferred to Parcel 21).

Parcel 21 Existing Conditions Water Demand

April 3, 2008 through April 2, 2009 water bills for existing Parcel 21 land uses have been compiled in order to determine the current water consumption. Water bills were issued every other month, and water consumption was as follows:

- April 3, 2008 – June 4, 2008 (62 day period); 68,100 cubic feet (cf) or 509,388 gallons
- June 4, 2008 – August 5, 2008 (62 day period); 47,400 cf or 354,552 gallons
- August 5, 2008 – October 6, 2008 (62 day period); 89,200 cf or 667,216 gallons
- October 6, 2008 – December 4, 2008 (59 day period); 52,400 cf or 391,952 gallons
- December 4, 2008 – February 3, 2009 (61 day period); 40,200 cf or 300,696 gallons
- February 3, 2009 – April 2, 3009 (58 day period); 36,300 cf or 271,524 gallons

Over this 364-day period, the land uses on Parcel 21 consumed 2,495,328 gallons, or approximately 6,855.30 gallons per day (gpd).

Replacement Uses on Parcel 21

The demand for water to serve only the proposed health club, retail, and a portion of the marine commercial uses on Parcel 21 can be expected to be similar to that currently used on Parcel 21 for the existing health club, retail, and marine commercial uses. The one exception is that the proposed project would reduce the health club area from 16,000 s.f. to 10,000 s.f. and increase marine commercial area by 6,000 s.f. Based on the City of Los Angeles CEQA Thresholds Guide, a health club/spa uses 800 gallons per day per 1,000 gross s.f., while commercial and retail uses can be expected to require 80 gallons per day per 1,000 gross s.f. The water demand of the replacement uses proposed on Parcel 21 are estimated based on 10,000 s.f. of health club area, 2,916 s.f. of retail area, and 9,132 s.f. of marine commercial area The water demand of the replacement uses on Parcel 21 is therefore expected to be 8,964 gallons of water per day (8,000 gallons per day for the health club, 233.3 gallons per day for the retail use, and 730.6 gallons per day for the marine commercial uses).

Uses to be Transferred to Parcel 21

In addition to the uses to be replaced on Parcel 21 by the proposed project, additional marine commercial uses and a yacht club, approved for Parcel 20 (Phase II) but not built, would be transferred to Parcel 21. According to the City of Los Angeles CEQA Thresholds Guide, commercial uses are expected to use 80 gallons of water per day per 1,000 gross s.f.. While the City of Los Angeles CEQA Thresholds Guide does not provide an estimate for yacht club water use, the estimate for health clubs/spas is used here, which numbers 800 gallons of water per day per 1,000 gross s.f. (this is used as a conservative estimate, as the yacht club is not expected to house a pool). Therefore, the transferred uses to Parcel 21 of 2,300 s.f. of marine commercial use and a 5,000 s.f. yacht club would represent a demand of approximately 4,184 gallons of water per day.

Total Parcel 21 Water Demand

The proposed replacement land uses on Parcel 21 are expected to demand 8,964 gallons of water per day, as described above. With the expected water demand of the transferred uses, which is 4,184 gallons of water per day, the proposed project on Parcel 21 is expected to demand 13,148 gallons of water per day. This represents 6,292.70 gallons of water per day more than the existing uses on Parcel 21.

Parcel 21 SB 610 and 221 Water Analysis

As with the proposed development on Parcel OT, proposed uses for Parcel 21 are mixed-use by nature. Therefore, the threshold stating that mixed-use projects with water demands greater than that required for 500 dwelling units has been applied again for this analysis. Using the 250 acre feet per year or 223,186 gpd) threshold set forth in the Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 of 2001, it has been determined that the proposed project would not reach the Water Supply Assessment threshold, as it is expected to result in a net increase in water consumption of approximately 6,293 gallons per day (or 13,148 gpd not considering existing water consumption at the site). As the proposed project represents a replacement of existing uses and development of uses approved for Parcel 20 but not yet built, the proposed project is considered to be included in Countywide growth projections and accounted for in the 2005 Urban Water Management Plan. Therefore, the proposed project on Parcel 21 would result in a less than significant impact on water supply.

Total Project Water Demand

Collectively, the proposed project would represent a water demand of 29,108 gallons of water per day. This figure is approximately 22,253 gpd more than the existing/approved condition, not taking into account any water demand from the existing parking lot on Parcel OT.

Based on the most recent water use information made available by the UWMP, the Marina del Rey Water System used (demanded) 1,509,380 gallons per day in Fiscal Year 2004-2005. Therefore, although the proposed project would represent an increase of approximately 22,253 gpd over the existing uses, this translates to 1.5 percent of the Marina del Rey Water System water use (demand). In addition, the proposed project represents a replacement of existing land uses on Parcel 21, as well as a transfer of development potential (as provided for in Marina del Rey Land Use Plan) and/or otherwise approved uses not yet built on Parcels OT and 21. Therefore, the proposed project is considered to be accounted for in 2005 Urban Water Management Plan and other Countywide growth projections and is expected to have a less than significant impact on water supply. However, **Mitigation Measures WS-1** and **WS-2** are provided below for added enforcement and to assure proper implementation of regulatory requirements.

Local Water Infrastructure

The applicant has obtained "will serve" letters from the District for both Parcel OT and Parcel 21 (attached in **Volume II, Appendix H**). These letters indicate that water lines exist in the project area; however, the "will serve" letters are subject to the following conditions:

- The appropriate connection fees are paid to Los Angeles County Waterworks Districts by the applicant;
- Any water system improvements are required to be installed by the applicant subject to the Los Angeles County Waterworks Districts and Fire Department requirements; and
- Public water and sewage disposal systems must be in compliance with Health Department separation requirements.

Impacts associated with the payment of fees and adherence to Health Department requirements are considered less than significant. However, implementation of **Mitigation Measures WS-3** and **WS-4** would assure that the requirements of the District and Health Department are met by the proposed project. Infrastructure improvements to the Marina del Rey water system and associated impacts are discussed in detail below.

The County of Los Angeles Fire Department has performed a review of the proposed project and determined the following requirements for development on each Parcel (correspondence included in **Volume II, Appendix A**):

- Each of the proposed developments at Parcel OT and Parcel 21 are required to achieve a fire flow of 5,000 gallons per minute (gpm) for five hours, and the water mains in the streets fronting the properties must be capable of delivering this flow at 20 pounds per square inch (psi) residual pressure. Three hydrants flowing simultaneously may be used to achieve the required flow.
- Each of the proposed developments at Parcel OT and Parcel 21 are required to achieve a fire flow for private on-site hydrants of 2,500 gpm, and each private on-site hydrant must be capable of flowing 1,250 gpm at 20 psi with two hydrants flowing simultaneously, one of which must be furthest away from the public water source.
- For Parcel OT, the applicant must verify the installation of two six-inch by four-inch by 2.5-inchfire hydrants, conforming to the American Water Works Association (AWWA) C503-75 or an approved equivalent. For Parcel 21, the applicant must verify the installation of one six-inch by four-inch by 2.5-inchfire hydrant, conforming to the same requirements.

In response to the above-stated requirements and additional District requirements, water infrastructure improvements are proposed as a part of the project on both Parcels OT and 21, as follows:

Parcel OT Water Infrastructure Improvements

The District currently has plans to upsize the 14-inch water main, that currently traverses a portion of Parcel P to be added to Parcel OT, to a 24-inch water main within the same alignment. The existing and approved water mains are located within the footprint of the proposed Parcel OT building, and thus construction of the proposed building would require relocation of the water main. The applicant has identified a proposed alignment approximately 36 feet to the northeast of the existing alignment that would accommodate both the upsized water main and the proposed project within the subject property. To ensure that the water main is relocated to accommodate the foundation of the proposed project, installation of the water main will occur via one of the three following options:

1) Should the timing of the District's water main project result in its construction prior to approval of the proposed project, the District would upsize the water main in its current location, as planned. During construction of the proposed project, the applicant would then relocate the upsized water main approximately 36 feet to the northeast and abandon the current alignment. The applicant shall be responsible for the costs of relocating the water main in this situation.
2) If the proposed project is approved prior to the District initiating construction of the water main project, the District would upsize the water main in the proposed alignment, approximately 36 feet to the northeast of the current alignment, and abandon the current alignment. Under this scenario, the applicant shall be responsible for compensating the District for costs associated with design and construction of the water main in the new alignment to accommodate the project.
3) Should the proposed project be approved and ready for construction prior to the District's water main project, the applicant would have the option to construct the upsized water main in the proposed alignment, approximately 36 feet to the northwest of the current alignment and abandon the existing alignment. The applicant shall be responsible for the costs of designing and constructing the water main in the new alignment in this situation.

The conflict between the location of the proposed building and the water main would result in a potentially significant impact to local water infrastructure. Through implementation of **Mitigation Measure WS-5**, the potential impact would be reduced to less than significant.

Construction of the 24-inch water main in the proposed alignment, approximately 36 feet northeast of the current alignment, would result in the removal of exotic trees located on the property. The impacts to biota associated with disturbing nesting birds in the trees are discussed in Section IV.E, Biota, and Mitigation Measure BIO-1. Additionally, a portion of the water main project would cross Admiralty Way at the southeast corner of the project site. Whether this section of the water main is constructed by the District or the applicant, the construction process would result in temporary construction period traffic impacts to Admiralty Way. These impacts are discussed in Section IV.H, Traffic/Access, and Mitigation Measure TA-1. Following implementation of these Mitigation Measures, impacts associated with upsizing and relocation of the 14-inch water main that traverses Parcel OT would be less than significant.

With regard to fire flow demand, adequate water and pressure are available from the City and County of Los Angeles on Parcel OT to meet the demand of the proposed project (refer to **Volume II, Appendix H**). Implementation of **Mitigation Measure WS-6** would further assure that County of Los Angeles Fire Department requirements are met.

Parcel 21 Water Infrastructure Improvements

As stated above, an existing 10-inch water main delivers water to properties along Panay Way. Based on available fire flow data, this line would not be able to provide the required water and pressure to accommodate the proposed project on Parcel 21. As such, the proposed project includes replacing this water main infrastructure with a water line that is up to 18 inches in diameter within the Panay Way right-of-way to provide the required fire flow. The inadequate water infrastructure for firefighting demand at Parcel 21 would result in a potentially significant impact related to local water infrastructure. Through implementation of **Mitigation Measure WS-7**, the potential impact would be reduced to less than significant. Implementation of Mitigation Measure WS-6 would further assure that County of Los Angeles Fire Department requirements are met.

Construction of the upgraded water main infrastructure near Parcel 21 may result in impacts to biota associated with the disturbance of nesting birds, which are discussed in Section IV.E, Biota, and

Mitigation Measure BIO-1. Additionally, the water main project associated with Parcel 21 would occur in Panay Way, resulting in temporary construction period traffic impacts at that roadway. These impacts are discussed in Section IV.H, Traffic/Access, and Mitigation Measure TA-1. Following implementation of these Mitigation Measures, impacts associated with upgrading the water main infrastructure in Panay Way would be less than significant.

4. Cumulative Impacts

Buildout of the Marina del Rey Specific Plan is planned through the establishment of Development Zones and the development potential (various land uses) initially allocated to each and as amended. Generally, developments outside of planned conditions need to be assessed for adequate local and regional water supplies. To meet future domestic water demands and fire protection water demands in the community, the District prepared a master plan to upgrade the domestic water distribution network in Marina del Rey, which is based on the existing demand and growth projections, as well as redevelopment land uses proposed in the Marina del Rey Land Use Plan. Phase I of the improvement plan was completed in 2002, which resulted in the replacement of a 14-inch line with a new 24-inch line from the Water Works District No. 29 metered connection in Venice Boulevard to Marina del Rey. The project also includes the installation of approximately 20,000 feet of new 18-inch diameter steel pipeline to replace aged and undersized 10-inch and 14-inch-diameter water mains currently serving Marina del Rey. Phase II will consist of installing approximately 9,500 linear feet of water main along Via Marina, Admiralty Way, and a portion of Fiji Way, while Phase III will consist of installing approximately 9,800 linear feet of water main along Via Marina, Bora Bora Way, and Fiji Way. Phase II of the project is scheduled to begin construction in early 2010.[6]

Although the proposed project requires amendment to the Marina del Rey LCP, the preceding analysis demonstrates that it is not expected to demand a significant water supply in relation to the overall capacity of the Marina del Rey Water System. However, until completion of Phases II and III of the system upgrade described above, fire flow water capacity may be insufficient for new development within the community, as indicated by the District. However, this is determined on a case-by-case basis through the execution of a flow analysis for the lines that would serve proposed projects. Where flow capacity would be inadequate, developers may choose to finance required improvements, as with the proposed project on Parcel 21. As both short and long-term strategies have been developed to manage potential water supply/fire protection water demand deficiencies, the proposed project would not result in a significant adverse cumulative impact on water supply.

5. Mitigation Measures

The conflicts between 1) the location of the proposed building on Parcel OT and the on-site water main and 2) upgrading the inadequate off-site water main in Panay Way would result in a potentially significant impacts to local water infrastructure. Through implementation of required Mitigation Measures WS-5 and WS-7, these potential impacts would be reduced to less than significant. Mitigation Measures WS-1, through WS-4 and WS-6 are provided for added enforcement and to assure proper implementation of regulatory requirements governing water supply and infrastructure:

WS-1 The applicant shall prepare a landscape plan that meets all provisions of Title 26 of the Los Angeles County Code, Chapter 71, Water Efficient Landscaping.

[6] Los Angeles County Department of Public Works website, http://dpw.lacounty.gov/wwd/web/projects/designprojects/Marina%20Del%20Rey%20Water%20Main%20Replacement%20Phases%20II%20and%20III.pdf. Accessed April 9, 2009.

WS-2 The applicant shall incorporate into the building plans water conservation measures as outlined in the following:

- State of California Health and Safety Code Section 17921.3, requiring low-flow toilets and urinals;
- Title 24, California Administrative Code, which establishes efficiency standards for shower heads, lavatory faucets, and sink faucets, as well as requirements for pipe insulation that can reduce water used before hot water reaches equipment or fixtures; and
- Government Code Section 7800, which requires that lavatories in public facilities be equipped with self-closing faucets that limit the flow of hot water.

WS-3 The applicant shall adhere to the conditions of the Los Angeles County Waterworks District "will serve" letters issued for Parcel OT and Parcel 21, including, but not limited to, the payment of connection fees and adherence to Health Department separation requirements.

WS-4 The construction of on-site facilities shall meet all health and safety codes, and all domestic water service meter and fire protection connections shall have a backflow device to prevent contamination of the public water system.

WS-5 The District has prepared a water main relocation and expansion plan for the 14-inch water main that currently traverses Parcel OT. Prior to issuance of the grading permit for the proposed project, the upsized water main shall be installed and operational on Parcel OT, unless the water main upsizing is to be constructed and made operational as a part of the proposed project. The applicant shall be responsible for costs associated with relocating the water main on Parcel OT or compensating the District for such incurred costs.

WS-6 The applicant shall complete the following tasks, for review and approval by the County of Los Angeles Fire Department:

Parcel OT

- Prepare a Fire Safety Plan;
- Verify and perform Fire Flow Availability tests on 1) the nearest existing public fire hydrant on Admiralty Way (Los Angeles County Waterworks), and 2) the nearest existing public fire hydrant on Washington Boulevard (District);
- Submit architectural plans to the Fire Prevention Engineering Division in Hawthorne; and
- Submit an original Fire Flow Availability Form (196).

Parcel 21

- Prepare a Fire Safety Plan;
- Verify the nearest existing public fire hydrant to the property;
- Submit architectural plans to the Fire Prevention Engineering Division in Hawthorne; and

- Submit an original Fire Flow Availability Form (196).

WS-7 Prior to issuance of the grading permit for the proposed project, the water main infrastructure in Panay Way shall be replaced with a water main that is up to 18 inches in diameter and operational in order to meet the fire flow demand of the project on Parcel 21.

6. Significant Project Impacts After Mitigation

The conflicts between 1) the location of the proposed building on Parcel OT and the on-site water main and 2) upgrading the inadequate off-site water main in Panay Way would result in potentially significant impacts to local water infrastructure, which are mitigable to less than significant with implementation of Mitigation Measures WS-5 and WS-7. Required adherence to the laws and codes pertaining to both water supply and infrastructure, provided above in Mitigation Measures WS-1 through WS-4 and WS-6, further assures that the proposed project would not result in residual impacts to water supply and infrastructure.

J. ENVIRONMENTAL SAFETY

The following analysis is based on the Report on Parking Lot Soil Drilling and Sampling for the Property Known as Parcel OT (Enviropro, Inc., February 2006), the Soil Boring, Sampling, and Environmental Analysis prepared for Parcels 19, 20, and 21 (Enviropro, Inc., March 2006), and the Subsurface Methane Gas Investigation prepared for Parcel OT by GeoKinetics and dated March 2004 (included in **Volume II, Appendix I** of this EIR).

1. Existing Conditions

Source of Potential Soil Toxicity

The project area has been identified as part of the former landfill area for the community of Venice and the development of the original Marina del Rey facilities. As a result, the nature of the fill material and debris underlying Phase I development in Marina del Rey is unknown. Therefore, as the developments proposed for Parcels OT and 21 both entail subterranean, or partially subterranean, parking facilities and associated excavation of soils during grading activities, the soils on both Parcels have been analyzed for toxicity.

Results of Soil Drilling and Testing

The soil toxicity investigation conducted by Enviropro, Inc. consisted of a field boring and soil sampling program, as well as associated chemical analyses performed by American Analytics, Inc.

Parcel OT

Drilling depths on Parcel OT were seven feet for locations 1-6 and approximately 14-15 feet for locations 7 and 8 (refer to Volume II, Appendix I for locations). Locations 7 and 8 were approximately one foot separated from locations 5 and 8, respectively. Eight soil samples, which were identified as PSL-1 through PSL-8, were collected from Parcel OT in January 2006, using a Geoprobe sampling rig. The samples were prepared, identified, and taken to the American Analytics laboratory for chemical tests under California Environmental Protection Agency (Cal EPA) procedures. As the site is located above portions of a former landfill, specific information on the types of materials/debris in the soils under it is not available. Therefore, Enviropro, Inc. analyzed for priority pollutants that may render the fill toxic waste if excavated for disposal, including:

- California Assessment Manual (CAM) heavy metals, less Hg, by EPA 6000/7000;
- Volatile organic compounds (VOCs) by EPA 8260B/5035;
- Semi-volatile organic compounds by EPA 8270C;
- Pesticides;
  - Organic chlorine pesticides by EPA 8081A
  - Herbicides by EPA 8151A
- TPH gas and fuel oxygenates by EPA 8260B/5035;
- Carbon chain characterization by EPA 8015M; and
- Total mercury by EPA 7470/7471A.

The test results show that several samples had detectable levels of certain metals, volatile organic compounds, pesticides, and petroleum-based compounds considered as regulated contaminants. The primary contaminants of concern included elevated levels of lead and copper. For the most part, the detectable concentrations were below residential "Preliminary Remediation Goals" (PRG), which are

used as regulatory guidelines, with the exception of high levels of lead. The PRG guidelines, however, are very general and must be applied on a case-by-case basis according to specific site considerations. More importantly, several sample test results exceeded a figure of ten times their respective "Solubility Threshold Level Concentration" (STLC). This result indicates that some of the soils would be classified as hazardous, if excavated.

Parcel 21

Five random undisturbed soil samples (identified as S-1 through S-5) were collected from Parcels 19, 20, and 21 in February 2006, using a Geoprobe sampling rig (soil samples S1, S2, and S3 were collected from Parcel 21, as shown in Volume II, Appendix I). The samples that were destined for VOC analysis were collected in accordance with the requirements of EPA Method 5035. Drilling depths were five feet below ground surface at each boring location. The samples were prepared, identified, and taken to the American Analytics laboratory for chemical tests under California Environmental Protection Agency (Cal EPA) procedures. Since the site is an old ocean fill, specific information on the fill materials under it is not available. Therefore, Enviropro, Inc. analyzed for the same priority pollutants as were analyzed for Parcel OT (see list above) that may render the fill toxic waste if excavated for disposal.

Several samples had detectable levels of certain regulated metals. However, these concentrations may be attributed to naturally occurring metals, and if they are part of an artificial fill, the levels are very low and below any regulatory criteria. The analytical results for all samples are not high enough for rendering the materials hazardous waste, if excavated. No organic priority pollutants were detected. Therefore, the analytical results indicate that no waste or toxic fill is part of the samples analyzed.

Methane Occurrence and Characteristics

Parcel OT

The presence of methane in the subsurface is common within former oil production areas and other locations where organic material (grass, wood, manure, etc.) are present in the soil. Methane is generated by the bacteriological digestion, or biodegradation, of organic matter in the absence of oxygen. Where oxygen is present, carbon dioxide rather than methane is typically produced as a result of the biodegradation of the organic material.

Methane is not toxic, however, it is combustible and potentially explosive at concentrations above 53,000 parts per million (ppm) in the presence of oxygen. This concentration is referred to as the Lower Explosive Level (LEL). Methane is lighter than air and has a tendency to rise to the ground surface where it typically dissipates into the atmosphere. The presence of non-pressurized methane at shallow depths beneath the ground surface is normally not problematic, and the rates at which methane is generated and/or migrates towards the ground surface are slow enough such that the gas dissipates naturally under normal circumstances. However, as methane migrates to the ground surface, the potential exists for its accumulation beneath slab-on-grade foundation systems or other relatively impermeable ground coverings. If the gas accumulates to high concentrations and becomes pressurized, and a crack or other penetration is present in the floor slab of the structure, detectable levels of methane may enter the interior of the building.

The Methane Buffer Zone

The subject property is located approximately 500 feet to the north of the administrative limits of the Playa del Rey Oil Field and approximately 1,000 feet to the east of the Venice Oil Field. Based upon California Department of Conservation, Division of Oil, Gas & Geothermal Resources field maps, the

closest oil wells to the property are located more than 1,000 feet away within these fields. However, the site appears to lie within the "Methane Buffer Zone" for the Playa del Rey and Venice fields as identified by the Los Angeles Department of Building and Safety (LADBS).

Results of Methane Gas Field Investigation

The field investigation consisted of 1) screening for combustible gas emissions at the ground surface using a photo-vac Flame Ionization Detector (FID) and a GA-90 methane-specific infrared gas analyzer, and 2) installing and monitoring six subsurface gas probes (labeled P-1 through P-6).

Gas pressures and concentrations were measured in each of the gas probes during three monitoring events. One of the gas sampling tips (P-3 at five feet below ground surface) was found to be flooded during each of the monitoring events and could not be sampled, but similar conditions were not encountered at any of the remaining seventeen sampling tips. Based upon the findings of the technical report, methane gas was detected at three of the six installations at concentrations ranging from 10,000 to 28,000 (ppm). Slightly elevated soil gas pressures were identified in only one of the sixteen sampling tips (P-3 at eight feet). A maximum gas pressure of 0.2 inches was measured at that installation.

The concentration of oxygen in the atmosphere at sea level is approximately 21 percent. Depressed oxygen levels were found at each of the gas probe installations. Fully depleted oxygen levels were found in gas probe P-6 at eight feet bgs. The highest oxygen levels measured were on the order of ten percent. The average concentration of carbon dioxide in the atmosphere at sea level is approximately 0.03 percent. Subsurface carbon dioxide levels were elevated above typical atmospheric levels at each of the six installations. The carbon dioxide levels measured in the gas probes at the site ranged from approximately four to 14 percent. The depressed subsurface oxygen levels and elevated carbon dioxide concentrations are likely indicative of the ongoing biodegradation of organic material in the onsite soils.

2. Thresholds of Significance

Based on the Soil Boring, Sampling, and Environmental Analysis prepared for Parcels 19, 20, and 21, the Report on Parking Lot Soil Drilling and Sampling for the Property Known as Parcel OT, the Subsurface Methane Gas Investigation prepared for Parcel OT, and information provided by the County of Los Angeles Department of Public Works (DPW), and according to the Initial Study prepared for the proposed project by the County of Los Angeles Department of Regional Planning, the proposed project may result in a significant impact to environmental safety if:

- There have been previous uses that indicate residual soil toxicity of the sites; and/or
- The project would create a significant hazard to the public or the environmental involving the accidental release of hazardous materials into the environment.

The issue of residual soil toxicity is addressed for both Parcels OT and 21 below, as the Parcels appear to be located on portions of the former Venice Landfill (Parcel OT) or old ocean fill (Parcel 21). Parcel OT is also located within the Methane Buffer Zone for the Playa del Rey and Venice fields and subsurface methane gas concentrations were measured on the parcel; therefore this issue is addressed in the following analysis as well. However, Parcel 21 does not share this characteristic with Parcel OT (it is not located within a Methane or Methane Buffer Zone); therefore Parcel 21 is not analyzed in light of methane gas impacts in the subsequent text.

3. Project Impacts

Soil Toxicity

Parcel OT

The analytical results show that several samples had detectable levels of certain metals, volatile organic compounds, pesticides, and petroleum-based compounds considered as regulated contaminants, and the primary contaminants of concern included elevated levels of lead and copper. Levels of lead were above the residential PRG. Additionally, several sample test results exceeded a figure of ten times their respective STLC. This result indicates that some of the soils would be classified as hazardous, if excavated. As such, development of Parcel OT including a portion of Parcel P[1] would result in a significant impact associated with soil toxicity prior to implementation of **Mitigation Measures ES-1 and ES-2**.

Parcel 21

The analytical results for all soil samples collected by Enviropro, Inc. were not high enough for rendering the materials hazardous waste during excavation. Development of Parcel 21 is therefore expected to result in a less than significant impact associated with soil toxicity. However, in the event that any previously unidentified hazardous soils conditions are discovered during site grading activities, implementation of Mitigation Measure ES-2 would reduce the impact to a less than significant level.

Parcel OT Methane Concentrations

Where subsurface methane concentrations exceed 5,000 ppm, mitigation improvements are typically required by the oversight agency (such as the Department of Building and Safety). As methane concentrations as high as 28,000 ppm were measured during the investigation of Parcel OT, and development of the site would require grading and result in the construction of a facility, this is identified as a significant impact prior to implementation of **Mitigation Measures ES-3** through **ES-6**.

4. Cumulative Impacts

Several related projects are proposed for development within the general study area (Marina del Rey, Los Angeles County, and the City of Los Angeles). Buildout of Marina del Rey is planned for through the County of Los Angeles General Plan, Marina del Rey Specific Plan, and Marina del Rey Land Use Plan and Local Coastal Program, as well as annual budgeting processes. Cumulative, or related, projects, as they are developed, would be subject to the same law/code requirements as the proposed project. Thus, when related projects undergo the CEQA process, they would be individually evaluated on the same criteria as the proposed project relative to environmental safety, as well as the other issues included in the EIR scope. The proposed project's contribution to the cumulative condition after proper implementation of mitigation measures and compliance with all applicable regulations and permit conditions therefore results in a less than significant cumulative impact.

5. Mitigation Measures

ES-1 The applicant shall adhere to all applicable County, State, and Federal guidelines regarding the handling, excavation, disposal, and/or remediation of soils classified as hazardous waste, which may include, but not be limited to, the development and implementation of a Soil Management Work Plan (SMWP) for the project, as well as

[1] Hereafter, unless otherwise noted, the Oceana Retirement Facility project site is simply referred to as Parcel OT.

correspondence with the Regional Water Quality Control Board (RWQCB) and Department of Toxic Substances Control (DTSC) to determine the level of any necessary remediation efforts.

ES-2 In the event that previously unidentified waste or debris is discovered during construction/grading activities, and the waste or debris is believed to involve hazardous waste or materials, the contractor shall: immediately stop work in the vicinity of the suspected contaminant; remove workers and the public from the area; notify the resident inspector; secure the area as directed by the resident inspector; and notify the County of Los Angeles Hazardous Waste/Materials Coordinator and the Fire Department. Work in the affected area shall cease until the proper approval is granted by the appropriate governmental oversight agency and a work plan is implemented, if necessary.

ES-3 The applicant shall install a passive ventilation system beneath the building foundation system on Parcel OT. The sub-slab vent system typically consists of four-inch diameter perforated polyethylene piping installed within 12-inch deep gravel-filled trenches beneath the building. These vent lines are normally spaced no more than 20 to 30 feet apart in order to effectively ventilate the subgrade beneath the building. The sub-slab vent lines are connected to vent risers installed within the building walls. As with typical sanitary sewer vent lines, the methane vent risers terminate above the roofline of the building. A dewatering system shall be required if the methane vent lines are less than one foot above the historic high groundwater level at the site.

ES-4 The applicant shall install a gas membrane beneath the building foundation system of Parcel OT. The sub-slab gas barrier typically consists of a continuous Liquid Boot™ membrane installed beneath the floor slab of the building. This membrane has a minimum required thickness of 100-mills (0.10 inch). Gas tight seals are required at all locations where utilities or conduits penetrate the membrane. At the completion of the installation, the membrane is smoke tested using a procedure developed by GeoKinetics in order to confirm its integrity.

ES-5 The applicant shall install conduit seals on dry utilities servicing the building the Parcel OT. Conduit seals shall be installed on dry utility conduits (e.g. electrical, telephone, cable T.V.) that terminate on the interior of the building. These seals are intended to prevent the migration of methane through the conduits to interior areas. Also, in order to reduce the potential for methane to migrate through the sand backfill of any utility trenches, which extend up to and/or beneath the building, “dams” consisting of a lean sand/ cement/ bentonite slurry shall be installed within the trench lines at the perimeter of the building.

ES-6 Upon finalization of the foundation and/or architectural plans for the structure on Parcel OT, and prior to issuance of the Grading Permit, the project subsurface methane gas consultant shall review such plans and provide further recommendations for methane gas mitigation measures, if necessary. Any additional recommendations by the subsurface methane gas consultant shall be adhered to by the applicant.

6. Significant Project Impacts After Mitigation

With implementation of the mitigation measures identified above, the proposed project’s potentially significant impact regarding environmental safety would be reduced to a less than significant level.

K. LAND USE

This section describes the existing land uses in the project area, as well as the project's consistency with applicable governing land use plans. The methodologies used for this analysis include a site investigation to examine existing land use conditions, aerial photograph interpretation, review of applicable plans and ordinances, consultation with the County of Los Angeles Department of Regional Planning and Department of Beaches and Harbors staff, and analysis of the conclusions reached for other issues addressed in this EIR that have implications for policy consistency with the governing land use documents.

1. Existing Conditions

Project Site

As described in Section III, Project Description, the proposed project entails the development of the Oceana Retirement Facility, retail space and parking on Parcel OT and a portion of Parcel P.[1] The Holiday Harbor Courts commercial development with parking is proposed for Parcel 21. Development on Parcel OT would replace an existing surface parking lot and transfer development potential from the Admiralty DZ #7 and Palawan/Beach DZ #5 to the Oxford DZ #6. Development on Parcel 21 would replace existing marine commercial uses and parking, as well as transfer development potential within the Panay DZ #4 from Parcel 20 to Parcel 21.

Surrounding Vicinity Land Uses

A variety of land use types are located adjacent to the project site. The surrounding area contains a mix of land uses that generally include commercial and residential development, hotels, and parking, as well as Mother's Beach and several parks and open space areas. Adjacent and surrounding land uses are summarized on **Table IV.K-1**, further described in the following text, and shown in Section III, Project Description, on Figure III-2, Surrounding Land Use.

Table IV.K-1
Summary of Adjacent Existing Uses and Marina del Rey LCP Designations

Marina del Rey Land Use Plan Parcel	Direction from Parcel	Existing Land Use	Marina del Rey Land Use Plan Land Use Designation[1]
Parcel OT	West	Hotel	Hotel
	East	Oxford Retention Basin (Marina Lagoon)	Open Space
	North/Northwest	Washington Boulevard	None allocated
	South/Southeast	Admiralty Way	None allocated
Parcel 21	West	Parking	Parking
	East	Residential	Residential III
	North	Water	Water
	South	Panay Way	None allocated

[1] Marina del Rey Land Use Plan, a Component of the Los Angeles County Local Coastal Program, February 8, 1996.

[1] Hereafter, unless otherwise noted, the Oceana Retirement Facility project site is simply referred to as Parcel OT.

Adjacent and Surrounding Land Uses, Parcel OT

North/Northwest: Parcel OT is bordered on the north/northwest by the northeast-southwest trending Washington Boulevard. North, northeast, and northwest of Parcel OT, beyond Washington Boulevard, lies the City of Los Angeles, which is a part of the Venice Coastal Zone Specific Plan Area. This area is comprised of residential multiple family and single family uses, as well as commercial and open space/public facility uses.

South/Southeast: Parcel OT is bordered on the south/southeast by Admiralty Way, which is northeast-southwest trending in that area. Commercial (Edie's Diner and Harbor House Seafood) and public parking uses comprise the area south/southeast of Parcel OT, beyond Admiralty Way.

East: The Oxford Retention Basin, or Marina Lagoon, lies generally east of Parcel OT, and residential uses (Marina City Club Towers) mainly comprise the area farther east of Parcel OT Admiralty Way.

West: The Marina International Hotel (40 feet in height) lies westerly of Parcel OT, which is bordered on its west side by Palawan Way. Residential and hotel uses, including the New Admiralty Apartments (up to 73 feet) and Marriott Marina Beach (152 feet), respectively lie farther west of Palawan Way.

Adjacent and Surrounding Land Uses, Parcel 21

North: Parcel 21 is bordered on the north by the waters of Marina del Rey ("Basin D" in this location) and the anchorage known as Holiday Harbor Marina, where docks and slips are located. The Palawan Mole Road is located north of Basin D.

South/Southeast: Panay Way is located south of Parcel 21, and residential (Dolphin Marina Apartments) and commercial uses (The Chart House) are located south/southeast of Panay Way. The waters of Marina del Rey ("Basin C" in this location) with docks and slips comprise the area south of the Panay Mole Road, and the Marquesas Mole Road is located south of Basin C.

East: The Capri Apartments (Parcel 20) are located east of Parcel 21, and additional residential uses (more of the Dolphin Marina Apartments) are located east of Parcel 20.

West: A surface public parking lot, situated at the northeast corner of Via Marina and Panay Way, is located west of Parcel 21. Via Marina forms the western border of the parking lot, and residential uses (Kingswood Village Apartments) lie farther west of Via Marina.

Land Uses Along Project Vicinity Access Routes

The access into and out of Parcel OT would be from Washington Boulevard and Admiralty Way. Traffic to and from Parcel OT would most likely enter/exit from Washington Boulevard or Admiralty Way. Traveling northeast on Washington Boulevard from Parcel OT, land uses primarily consist of hotel and a variety of residential uses. Admiralty Way is a collector facility that traverses along the northern and eastern edges of Marina del Rey between Via Marina, just to the west of Parcel OT, and Fiji Way near

Lincoln Boulevard. Admiralty Way provides the project's most direct access to/from the Marina Freeway/Expressway (via Mindanao Way southeast of Parcel OT) and other regional travel facilities. Land uses along this route consist of commercial, retail, parking, open space, and residential uses.

Primary access to/from Parcel 21 would be from Panay Way. Traffic to and from Parcel 21 would enter/exit Panay Way from Via Marina and would travel along that roadway to either Admiralty Way or Washington Boulevard. Existing land uses along Panay Way and Via Marina include residential, commercial, hotel, and parking.

Land Use Plans and Policy

Land use plans are generally designed to ensure land use compatibilities, establish and maintain the desired character for a given area, provide uniform codes to govern similar land uses and ensure safety, and to protect environmental resources. Land use planning and policy for the project site are set forth in the Los Angeles County General Plan and the Marina del Rey Land Use Plan and Local Coastal Program (LUP and LCP). Other applicable land use plans that provide for specific land use considerations within the area include the Marina del Rey LCP Amendment 1-01 and the Marina del Rey Specific Plan (as amended). A description of each of these land use planning documents as they relate to the project site is provided below.

Los Angeles County General Plan

The State of California Government Code Section 65300 requires that each City and County adopt a General Plan to govern the future development of a community. As required by State law, a General Plan must contain at least seven elements, which include Land Use, Circulation, Housing, Conservation, Open Space, Noise and Safety. In accordance with the State Law described above, the County of Los Angeles General Plan contains Land Use; Circulation; Housing; Conservation, Open Space, and Recreation; Noise, Safety, Public Facilities; and Economic Development Elements. The County of Los Angeles General Plan was adopted on November 25, 1980, with various elements being amended since 1986. It consists of those Countywide chapters and elements mandated by the California Government Code, as well as a series of Community-wide plans that set forth more detailed growth and development policies for specific unincorporated communities. The General Plan has not been comprehensively updated since its adoption in 1980; however, the Department of Regional Planning is currently in the process of doing so in compliance with Government Code Sections 65300.7, 65301, and 65302. The multi-year planning effort is intended to reflect changes in demographics, growth, and infrastructure conditions in the County.

The General Plan is primarily a public interest tool for initiating and responding to change. The General Plan provides a framework for coordinating short and medium range actions and sets forth guidelines for how the County of Los Angeles should allocate its resources in meeting identified needs over the next few decades. The General Plan addresses two levels of planning: Countywide and local. As stated in the General Plan, adopted local plans, such as the Marina del Rey Land Use Plan, establish detailed standards and criteria tailored to conditions within the community, and they are also consistent with the general Countywide provisions. In cases where a decision involves both local and regional concerns, it is the Countywide component that sets the broad policy parameters while local plans provide more specific direction. As local plans constitute the primary tools for guiding decisions relative to local land use and development patterns and those plans are consistent with the County General Plan, this land use analysis focuses on the proposed project's consistency with the more specific policies included in the Marina del Rey LUP rather than the more broad provisions set forth in the Los Angeles County General Plan.

Marina del Rey Local Coastal Program (Land Use Plan and Local Implementation Program)

In accordance with the Coastal Act, the County of Los Angeles General Plan calls for the completion of the Marina del Rey Local Coastal Program (LCP), which consists of the Marina del Rey Land Use Plan (LUP) and the Local Implementation Program (LIP). As part of the LIP, the County has adopted a Marina del Rey Specific Plan, as discussed below, which provides more specific land use standards applicable to the Marina. The Marina del Rey LCP is integrated with the County of Los Angeles General Plan as a component of the Countywide Coastal Element.

The purpose of the Marina del Rey LCP is to provide a vision for the future development of Marina del Rey and establish explicit goals, objectives, and policies from which land use decisions are based. The LCP was developed to address future land use, new access, recreation and resource protection areas, and improvement of existing facilities. It establishes the following general principles regarding future development in the existing Marina portion of the LCP study area: increased boating opportunities, increased visitor-serving facilities, enhanced coastal access and harbor view opportunities, and additional residential units. The Marina del Rey LUP was approved by the Los Angeles County Board of Supervisors on September 13, 1984 and was subsequently certified by the California Coastal Commission on October 11, 1984. The Marina del Rey LUP was recertified in December 1986, following annexation of Playa Vista Areas B and C by the City of Los Angeles. A Major Amendment to the Marina del Rey LUP was approved by the Los Angeles County Board of Supervisors on November 3, 1994 and was subsequently recertified by the California Coastal Commission again on February 8, 1996. The amended 1996 LCP was intended to encourage the recycling of the older development in the Marina with newer development at higher intensities in exchange for more view corridors.[2] The supplementary development designated in the 1996 amended LCP included additional residential units, hotel rooms, and public park land, as well as visitor-serving commercial, office, and marine commercial space.[3] In addition, as discussed in the 1995 California Coastal Commission staff report (revised findings, Marina del Rey LCPA 1-94, December 1995), public parking on Parcel OT will be converted to commercial and residential uses.[4] The Marina del Rey LCP serves as the community plan for the Marina del Rey area.

Project Site and Surrounding Land Use Designations

The Marina del Rey LCP currently designates Parcel OT for parking, Parcel P for open space, and Parcel 21 for marine commercial uses, and all sites are currently utilized as such. The Legend of Land Use Categories in the LCP defines parking and marine commercial uses:

> ***Parking:*** *Permitted parking lots and structures open to the public, in most cases multi-use and fee-charging. Multi-use includes commercial and office parking lots made available during non-business hours. Height limit of 90 feet for parking structures, except on mole roads and waterfront parcels where the limit is 45 feet.*
>
> ***Marine commercial:*** *Permitting coastal-related or coastal-dependent uses associated with operation, sales, storage and repair of boats and marine support facilities. Uses include public boat launching (and associated launching ramp hoists), boat rentals, boating schools, dry boat storage, yacht club facilities (with associated dry storage and launch hoists), marine chandleries, boat repair yards, yacht brokerages, charter boat operations, and associated ancillary retail and office uses. Height limit of 45 feet for habitable structures and up to 75 feet for public dry stack boat storage.*

[2] California Coastal Commission, Marina del Rey Periodic LCP Review Adopted Revised Findings, April 23, 2009. Page 44.
[3] Ibid. Page 85.
[4] Ibid. Page 83.

Properties immediately adjacent to Parcel OT to the west have a hotel land use designation and an open space land use designation exists to the east. A hotel currently lies adjacent to Parcel OT to the west and the Marina Lagoon/Oxford Retention Basin is located on the remainder of Parcel P to the east. Parcel OT is bound by Washington Boulevard to the north and Admiralty Way to the south.

> ***Hotel:*** *Permitting hotels and motels to provide overnight accommodations and attendant visitor-serving services including dining and entertainment areas. Height limit of 225 feet, except on moles where the limit is 45 feet. Special height standards may apply to mole roads.*
>
> ***Open Space:*** *Permitting recreational uses including open viewing areas, promenades, bikeways, beaches, parks, picnic facilities, nature/interpretive centers, associated surface parking and landscaping. Height limit of 25 feet.*

Properties immediately adjacent to Parcel 21 to the west have a parking land use designation (utilized as such), but while a marine commercial land use designation exists to the east, an apartment building was recently constructed there. Parcel 21 is bound by the Marina waters to the north and Panay Way to the south.

Marina del Rey LCP Amendment 1-01

On January 7, 2002, the California Coastal Commission (CCC) approved the County of Los Angeles' Marina del Rey LCP Amendment 1-01. This approval effectively certified the Los Angeles County Board of Supervisors' resolution approving LCP Amendment Case No. 98-172-(4), effecting amendments to the Marina del Rey LUP and Specific Plan (see below), as well as Ordinance No. 2002-0010 amending Title 22-Planning and Zoning of the Los Angeles County Code, relating to the Marina del Rey Specific Plan.

The approved amendment changed the Marina del Rey LUP, LUP Map, and the Specific Plan (part of the Implementation Plan). Specifically, the amendment allowed for 1) the change of the land use designation of Parcel 20 from Marine Commercial (essentially boating related)-Waterfront Overlay Zone to Residential IV (medium-high density multi-family residential)-Waterfront Overlay Zone, and 2) the transfer of 97 development units from the Bora Bora Development Zone (DZ) #1 to the Panay DZ #4.

Marina del Rey Specific Plan (as Amended)

The Marina del Rey Specific Plan is a component of the LIP for Marina del Rey, and it is designed to implement the Marina del Rey LUP through the application of site-specific development standards and guidelines. The Marina del Rey Specific Plan has four objectives:

- Document various development, preservation, and reconstruction strategies set forth on the certified LUP;
- Establish development standards and guidelines which are the regulatory basis for future development, preservation, and reconstruction efforts in Marina del Rey;
- Require design concepts to guide reconstruction on individual parcels, to aid in the development of vacant land, and to help preserve significant resources; and
- Establish the governmental review process for new development proposals in Marina del Rey and describe the long-term implementation efforts necessary to accommodate future development.

Where provisions of the Specific Plan are in conflict with other provisions of the Los Angeles County Code, Title 22, Planning and Zoning, the Specific Plan prevails, but for matters on which the Specific Plan is silent, other applicable provisions of Title 22 control the matter. Notwithstanding the provisions of Section 22.46.030 of Title 22, amendments to the County Code that affect sections cited in the Specific Plan do not apply to the Specific Plan until certified as amendments to the Marina del Rey LCP by the California Coastal Commission. Until such changes are certified, only the versions of the County Code previously certified by the Commission apply.

The regulation of development in Marina del Rey is accomplished by zoning the entire Marina del Rey area as Specific Plan (SP), and development in the Specific Plan Zone is guided by the certified Marina del Rey LUP, as implemented by the land use categories and parcel-specific development standards and guidelines in the Marina del Rey Specific Plan. One zoning document, the Specific Plan, will be referred to for all land use regulations and development standards for each parcel in Marina del Rey.

Development Zones

For the purposes of allocating future development potential, the Marina de1 Rey Specific Plan area is divided into twelve Development Zones (DZs), with a DZ including one or more parcels grouped together for the purposes of analyzing traffic movements and impacts. These DZs are directly associated with the traffic analysis zones created for and used by DKS Associates in the Marina de1 Rey Traffic study (see Figure 5 of the Marina del Rey LUP). This study provides the basis for analyzing traffic impacts from proposed development in the Marina study area. The zones are designed to isolate traffic impacts on individual intersections in the Marina. The common unit of conversion among land uses within a DZ is the number of P.M. peak hour traffic trips generated by each land use, using the standard trip generation table found in the 1991 DKS study of Marina de1 Rey Traffic. The number of peak hour trips generated by the added development of the recipient use shall not exceed the number of peak hour trips generated by the donor use. The conversion of allocated development shall be monitored such that the development converted is deducted from the zone balance for the donor use and added to the zone balance for the recipient use. Conversion of existing development shall be similarly monitored to ensure no increase in trip generation occurs as a result of the conversion. Conversion is limited to development within a respective Development Zone; conversion shall not be construed to allow transfer of development between Development Zones. The transfer of development between Development Zones necessitates an Amendment to the Marina del Rey LCP.

The proposed project involves 1) the transfer of existing marine commercial and yacht club land uses within the Panay DZ #4 from Parcel 20, Phase II (also referred to as Parcel 19) to Parcel 21, 2) the replacement of existing marine commercial land uses on Parcel 21, and 3) the relocation of parking from Parcel OT in the Oxford DZ #6 to the Panay DZ #4. Further, an Amendment to the Marina del Rey LCP is required for the 1) creation of an Active Seniors Accommodations Land Use Category in the /LCP, 2) re-designation of Parcel OT from Parking to an Active Seniors Accommodations parcel with the Mixed Use Overlay Zone (MUZ), and 3) the transfer of development potential (approved land uses not built) in the form of 114 hotel units from the Admiralty DZ #7 (Parcel 132) and 5,000 square feet of retail space from the Palawan/Beach DZ #5 (Parcel 97) to Parcel OT in the Oxford DZ #6. The transfer of existing marine commercial and yacht club land uses from Parcel 20, Phase II, to Parcel 21 and the relocation of parking from Parcel OT to Parcel 21 also requires a Modification to the Marina del Rey LCP Amendment No. 1-01.

Zoning

A zoning ordinance is designed as a tool to implement a jurisdiction's General Plan. The Los Angeles County Zoning Ordinance is located in the Los Angeles County Code, Title 22, Planning and Zoning. Parcel OT and Parcel 21 are both located within the Marina del Rey Specific Plan Zone. Therefore, the Specific Plan is the appropriate document for determining the consistency of the proposed project with zoning.

2. Thresholds of Significance

According to the Initial Study prepared for the proposed project by the Los Angeles County Department of Regional Planning, the proposed project would result in a significant impact if:

- It can be found to be inconsistent with the plan designation(s) of the subject property;
- It can be found to be inconsistent with the zoning designation of the subject property;
- It can be found to be inconsistent with Hillside Management Criteria or Significant Ecological Area (SEA) Conformance Criteria; and/or
- It would physically divide an established community.

Further, according to the CEQA Guidelines, Appendix G, the proposed project would result in a significant impact if it would:

- Conflict with any applicable habitat conservation plan or natural community conservation plan.

As the proposed project would not divide an established community, there are no habitat conservation plans or natural community conservation plans applicable to the project site, and the proposed project is not located in a Hillside Management Area or SEA, the proposed project is evaluated on the remaining thresholds of significance.

3. Project Impacts

The proposed project would add a retirement facility for active seniors and retail uses to Parcel OT, as well as replace marine commercial uses on Parcel 21. Private and public parking would also be provided on Parcels OT and 21. This mix of land uses would be consistent with the existing surrounding urban land uses and would not add a new anomalous element to the Marina del Rey community. Consistency of the project with the applicable City land use plans, policies, and zoning is discussed below.

Consistency with Land Use Policies and Zoning Designations

The Marina del Rey Land Use Plan (part of the Local Coastal Program) and Specific Plan (part of the Local Implementation Program) are the governing documents in establishing the land use designations and development standards for Parcel OT and Parcel 21. The Land Use Plan Map of the LCP provides the policies and standards of development applicable to redevelopment, renovation, and intensification of development in Marina del Rey. **Table IV.K-2** provides a consistency analysis of the proposed project with the LCP. The Table includes discussion relative to both Parcel OT and Parcel 21.

Table IV.K-2
Land Use Consistency

Policy Requirement	Consistency Discussion
Policies And Actions	
Shoreline Pedestrian Access **Public Access to Shoreline a Priority.** Maximum public access to and along the shoreline within the LCP area shall be a priority goal of this Plan, balanced with the need for public safety, and protection of private property rights and sensitive habitat resources. This goal shall be achieved through the coordination and enhancement of the following components of a public access system: pedestrian access, public transit, water transit, parking, bikeways, circulation network, public views and directional signs and promotional information. Existing public access to the shoreline or waterfront shall be protected and maintained. All development shall be required to provide public shoreline access consistent with Policy 1. All development in the existing Marina shall be designed to improve access to and along the shoreline. All development adjacent to the bulkhead in the existing Marina shall provide pedestrian access ways, benches and rest areas along the bulkhead. All development in the existing Marina shall provide for public access from the first public road to the shoreline along all fire roads and across all dedicated open space areas consistent with the Shoreline Access Improvements, shown on Map 4.	**Shoreline Pedestrian Access** The proposed development on Parcel OT would include an improved landscaped pedestrian and bicycle access way between Admiralty Way and Washington Boulevard along the eastern boundary of the site and west of the lagoon. This would allow for improved public access to the lagoon. The proposed Parcel 21 improvements would include a park plaza and promenade, which would provide direct views of the marina, as well as, direct public access to the waterfront (i.e. marina small craft water uses and Mother's Beach). This project also includes a 5.5-foot wide sidewalk along the Panay Way Frontage.
Directional Signs Public awareness of shoreline access ways and public areas shall be promoted by the provision of appropriate signs, outdoor exhibits and brochures. All development in the existing Marina shall be required to incorporate the following informational features to improve the public's awareness of access opportunities and the coastal environment: • Outdoor maps indicating the location and type of public access ways and parks; • Identifying and directional signs; • As appropriate, facilities for brochures and other informational aids: and • Outdoor exhibits describing historical, biological and recreational aspects of the Marina, coast, wetlands and other aspects of the coastal environment, which should be coordinated and integrated with similar such exhibits which may be established in other areas of the Playa Vista project.	**Directional Signs** The marina has necessary signs and outdoor exhibits and brochures to provide public awareness of the marinas access opportunities and coastal environment in place. It has not been determined that new additional exhibits or directional signs would be required as a result of the proposed developments.

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Waterfront Viewing Opportunities Public opportunities for viewing the Marina's scenic elements, particularly the small craft harbor water areas, shall be enhanced and preserved. • All development on the waterfront side of Via Marina, Admiralty Way and Fiji Way shall provide windows to the water, wherever possible, while, at the same time, screening unsightly elements such as parking areas and trash receptacles with landscaping. • All development particularly visitor-serving commercial uses proposed adjacent to the main channel shall provide additional opportunities and vantage points for public viewing of boating activity. • All development, redevelopment or intensification on waterfront parcels shall provide an unobstructed view corridor of no less than 20 percent of the parcel's waterfront providing public views of the Marina boat basins and/or channels.	**Waterfront Viewing Opportunities** Parcel 21 is located along the waterfront, and the proposed development would include two corridors that would enhance viewing opportunities of the marina. The project would provide over 28 percent of the parcel's waterfront, which would allow people to view the boat basins or channels.
Recreation and Visitor-Serving Uses As defined by the Coastal Act and specified in the specific design guidelines for each parcel in the Local Implementation Program, new development shall provide additional recreational opportunities including trails, bikeways (additions and/or extensions of existing bike path), open space/park areas and viewing areas as appropriate. Adequate support facilities (bike storage lockers, drinking fountains, etc.) shall also be provided. Existing and proposed recreation and visitor-serving uses in the Marina, as shown on Map 5, Existing/Proposed Visitor-Serving Facilities, shall be protected. Lower cost visitor-serving facilities shall be protected and, to the extent feasible, new lower cost visitor-serving uses shall be encouraged and provided within the existing Marina. Any new proposal for construction of facilities in the existing Marina that is a non-coastal priority or non-marine related use shall require offsetting mitigation. Mitigation shall be accomplished by contribution to a Coastal Improvement Fund. This Fund is primarily intended to finance construction of local park facilities. Uses exempt from this policy requirement include hotels, visitor-serving commercial, office, and marine commercial uses.	**Recreation and Visitor-Serving Uses** The proposed Parcel OT development includes the creation of an improved landscaped pedestrian and bicycle access way between Admiralty Way and Washington Boulevard along the eastern boundary of the project with viewing opportunities of the lagoon to the west. The proposed development at Parcel 21 would include a plaza and 28-foot wide promenade that would offer opportunities for recreational and viewing of the waterfront.
Parking Policies **Applicable Regulations.** All development, including redevelopment, expansion projects or new construction, shall be subject to the applicable parking requirements set forth in Los Angeles County Code, Title 22 (Zoning), as certified by the Commission in Appendix B of the LIP Specific Plan. In	**Parking Policies** The required parking spaces for the each of the proposed developments are provided in Section III, Project Description. Overall there would be no decrease in public parking and the projects would provide an adequate number of spaces to support the development

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addition, public recreation areas shall be supported with visible public parking, consistent with the standards of Title 22, except that boat launch, boat storage, and marina parking and design shall be provided as specified in the Dept. of Beaches and Harbors' Specifications and Minimum Standards of Architectural Treatment and Construction, adopted in 1989.	uses. Parking proposed for Parcel 21 would be in accordance with Title 22 of the County Code[5]. Title 22, however, does not offer a parking requirement for the type of active seniors accommodations proposed on Parcel OT (one that offers routine transportation service). A parking requirement for this aspect of the proposed project was therefore based on parking observations at a similar retirement facility site located in Culver City, California.[6] Parking proposed with the project would additionally incorporate the Department of Beaches and Harbors' Specifications and Minimum Standards of Architectural Treatment and Construction. The proposed project is also seeking a parking permit for the transfer of development potential, parking, and trip generations between Parcels OT, 21, and 20. On Parcel OT, the general public would access on-site upper level parking from the driveway located on the westerly side of the structure (the side adjacent to the Marina International Hotel), closest to Admiralty Way on the southerly side of Parcel OT. This driveway would have two separate designated gated areas; one for public parking and one for residents of the retirement facility. The second driveway located on the westerly side of the structure, closest to Washington Boulevard, would be reserved for residents of the retirement facility and patrons of the on-site retail spaces, as would the access from Washington Boulevard along the site's northerly side. These entries would lead to both the upper and lower parking levels. General public and building use parking spaces will be designated with signage. Tenant parking for Parcel 21 would be accessed from a driveway located on the easterly side of the proposed structure, while general public parking would be accessed from a driveway on the southerly portion of the structure. General public parking would be located on-site on Levels 0.5, 1, 1.2, 1.5, and 2, while tenant parking would be provided on Levels 1.5, 2, 2.5, 3. 3.5, 4, 4.5, 5, 5.5 and the roof level. Tenant parking would serve both employees and patrons of on-site uses. General public and tenant parking spaces would be designated with signage, and a security gate would also separate tenant and public parking on Levels 1.5 and 2.

[5] Parking requirements for "commercial areas" are described in Title 22-Planning and Zoning, Chapter 22.52-General Regulations, Part 11-Vehicle Parking Space, Section-22.52.100 of the Los Angles County Code.

[6] The Culver City site has 98 units and provides 35 parking spaces. Observation shows that there is sufficient parking at the Culver City site. To be conservative, it was assumed that the parking rate would equal the number of spaces provided divided by the number of units at the Culver City facility, or 0.36 space per unit. Refer to Section IV.H, Traffic/Access, of this EIR.

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Parking **Facility Design.** Parking facilities shall be integrated into the overall design of all development and landscaped to soften their visual appearance. All parking shall be located either below grade, or within multi-story structures, or, if on level grade, shall be attractively designed with a buffer of landscaping, berms or other screening materials**.**	The proposed projects on both Parcel OT and Parcel 21 include parking structures. The design of structures would be integrated into the design of the primary structures and would provide landscaping and other screening materials where appropriate.
Public Lots. Public parking lots shall not be assigned to, nor allocated for use by private leasehold uses for the purposes of satisfying parking requirements for such private uses. All private uses shall satisfy their parking requirements on site. Parking agreements that predate the California Coastal Act, or which have been incorporated into a coastal development permit vested prior to LCP certification shall be exempt from this requirement. No designated public parking areas, including, but not limited to Lots OT, UR or FF shall be converted to uses other than public parking or public park purposes. Parking spaces lost as a result of conversion of public parking areas to public park uses, shall be replaced on a 0.5:1 basis, either on-site or elsewhere in the Marina.	The proposed project is seeking 1) a LCP Amendment to change the Parcel OT land use designation from Parking to Hotel with a Mixed Use Overlay Zone (MUZ)[7] (allowing for the mixed-use active seniors accommodations, retail uses, and parking) and 2) Modifications to LCP Amendment No. 1-01 for the transfer of 94 required parking spaces from Parcel OT to Parcel 21. The proposed project would provide adequate private parking on-site to meet the parking standards of the County Code. Parcel OT would retain 92 public parking spaces. Parcel 21 would provide 94 replacement public parking for those 94 spaces to be converted at Parcel OT (1:1 ratio), and 112 spaces transferred from Parcel 20. It is important to note that on page 2-5 of the Marina del Rey LUP, the County states that: "This LUP contemplates the potential conversion of three of the parking lots to other uses. These lots are FF, OT, and 52 with a total parking capacity of 638 spaces. Lots FF and OT, both on the west side of the Marina, are under utilized throughout most of the year. They are being contemplated for development as residential uses." "Lot OT is fully used only during peak events. Alternative peripheral parking lots could be used on those occasions to compensate for the loss of this lot." With the proposed project, Parcel OT would provide senior residential uses as well as retain public spaces and transfer parking to Parcel 21, which is adjacent to the waterfront. Further, this transfer of public parking spaces to Parcel 21 responds to the Los Angeles County Department of Beaches and Harbors' Draft Right-Sizing Parking for the Public Parking Lots in Marina del Rey, California (prepared by Raju Associates, Inc., March 2009), which found that for most of year (more than 300 days any year), the public parking lots located in the Mother's Beach Activity Area (including Parcel OT) are

[7] The Marina LUP MUZ (LUP pages 8-12 and 8-13) is intended to provide additional flexibility for development of creatively designed mixed-use projects on selected non-waterfront parcels. Parcels with this overlay zone are permitted to combine land use categories on an individual parcel, and are allowed to mix primary uses within a structure. Development potential available to each applicant is subject to the limitations of the zone in which the parcel resides.

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	underutilized. Parking lot 8 on Parcel OT, lot 9 on Parcel NR, lot 10 on Parcel IR and lot 11 on Parcel GR serve this activity area with a total of 843 spaces. However, the study determined that the recommended minimum public parking supply for this activity area is only 400 spaces. The Los Angeles County Department of Beaches and Harbors' currently proposed Parking Plan would meet this minimum amount, as well as provide for an additional 117 spaces in this activity area. The transfer proposed with development of the Oceana Retirement Facility and Holiday Harbor Courts project acts in accordance to these findings, by moving underutilized public parking spaces from Parcel OT to Parcel 21, where covered parking would be adjacent to the Marina and closer in proximity to Mother's Beach. Thus, the amendments/modifications proposed by the project would meet the above stated goal of the County. The FantaSea Yachts and Yacht Club retains a Coastal Development Permit (CDP) for the non-exclusive right to use up to 92 public parking spaces on Parcel OT after 6:00 pm and on weekends and holidays. The CDP is inconsistent with this policy as it allows for a private use to satisfy its parking on another site; however, the 92 public parking spaces would be retained on Parcel OT. In addition, the proposed project requires modifications to LCP Amendment No. 1-01 for the enlargement of Parcel GR by 207 feet (31,050 s.f.) with a corresponding reduction in size of Parcel 21. This would provide additional area on Parcel GR that the Los Angeles County of Beaches and Harbors intends to develop into additional public parking under separate proposal.
Private Use Areas. Office and commercial development, where feasible shall provide multi-use parking facilities. The Department of Beaches and Harbors shall review development applications and determine when and where support facilities should be required as a permit condition. All new development shall provide visitor, public access and guest parking on site. Park and access areas shall be served by convenient and appropriate public parking.	Both the OT Parcel and Parcel 21 would provide multi-use parking facilities to accommodate the private mix of uses proposed, and provide public and guest parking. Public access to park areas would be adequately served by the proposed parking. The Department of Beaches and Harbors would continue to be incorporated in review of all development plans.
<u>Recreational Boating</u> **Recreational Boating a Top Priority.** Recreational boating shall be emphasized as a priority use throughout the planning and operation of the Marina. To help achieve this goal, the Plan shall strive to ensure that adequate support facilities and services are provided including, but not limited to, the following: boat slips, fueling stations, boat repair yards, boat dry storage yards, launch ramps, boat charters, day-use rentals, equipment rentals and on-going maintenance of the	**<u>Recreational Boating</u>** The proposed project does not involve direct changes to any of the existing boating facilities. Each lot would continue to provide access to the marina and all boating facilities.

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marina harbor and entrance channel, bulkhead repair, pollution control, safety and rescue operations, and sufficient parking for boaters. Emphasis shall be given to providing water access for the small boat owner through provision of public ramp facilities.	
Boating-Related Support Facilities At a minimum, the existing level of boating-related support facilities and services shall be maintained for the boating public. These facilities shall include, but are not limited to, the fuel docks on parcels 1 and 55, boat repair yards on parcels 53 and 54, the mast up storage and hoist on parcel 77, the county launch ramp and support parking on parcel 49, and small launch ramps and rental facilities on other parcels. With the exception of the facilities located on parcels 1, 54, 55, and 56, which shall not be displaced, boating facilities may be relocated in conjunction with development so long as the same or larger boating facility is replaced within the Marina. Any project which relocates an existing coastal dependent boating use, including but not limited to boat launching, boat storage, boater parking and access, shall be phased so that said use is replaced within the Marina before the development which displaces it may commence.	**Boating-Related Support Facilities** The proposed project does not involve direct changes to any of the existing boating facilities. Each lot would continue to provide access to the marina and all boating facilities.
Marine Resources-Harbor Water Quality The existing wetlands, including the flood control basin in parcel PP, the Marina waters, and the Ballona Creek flood control channel are the marine resources which shall be maintained and, where feasible, enhanced and restored. Uses permitted in or adjacent to these areas shall be carried out in a manner to protect the biological productivity of these marine resources and maintain healthy populations of marine organisms. All development shall include measures consistent with the Santa Monica Bay Restoration Plan and the programs of the Department of Public Works to reduce contaminated runoff into bay and Ballona Creek waters, including filtration of low flows, control and filtration of runoff from parking lots and roofs, reduction of impervious surfaces, and provision of pump out facilities, and other necessary measures to reduce harmful pollutants from storm drain waters prior to these waters entering the marina. Discharge of storm runoff to the Marina shall be limited to overflows during flood stage levels in Ballona Creek.	**Marine Resources-Harbor Water Quality** As provided in Section IV.C. Water Quality, the proposed project would be required to implement Best Management Practices (BMPs) in accordance with the County Standard Stormwater Mitigation Plan to avoid and/or minimize the runoff and filtration of urban pollutants that may be increased as a result of paving or landscaping treatments. In preparation of the project SUSMP, the measures listed here would be incorporated into the project specific BMPs.

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<u>Cultural Heritage Resources</u> Proposed projects shall be reviewed for potential cultural resource impacts through the County environmental review process. Appropriate environmental documentation and reasonable mitigation measures shall be required as determined by the Department of Regional Planning and the State Historic Preservation Office. These mitigation measures shall be incorporated into any development approved pursuant to the certified local coastal program. As defined by 0 30116(d) of the Coastal Act, any cultural resource found in the portion of the LCP study area planned for development shall be collected and maintained at the Los Angeles County Museum of Natural History, or other appropriate location as otherwise provided by state law. To ensure proper surface and site recordation, the State Historic Preservation Office shall be notified, along with Regional Planning, if any resource is discovered during any phase of development construction. A professional archaeologist shall be retained to monitor any earth-moving operations in the study area. A halt-work condition shall be in place in the event of cultural resource discovery during construction. As part of the application for any coastal development permit involving disturbance of native soils or vegetation, including but not limited to excavation, pile driving or grading, the applicant shall provide evidence that they have notified the Office of State Historic Preservation and the Native American Heritage Commission of the location of the proposed grading, the proposed extent of the grading and the dates on which the work is expected to take place.	**<u>Cultural Heritage Resources</u>** A cultural resource investigation was conducted by Jeanette McKenna, a professional archaeologist. As provided in reports dated May 3, 2006 and May 4, 2006 for Parcel OT and Parcel 21, respectively, the project sites are not known to contain cultural resources. However, given historical findings within Ballona Creek and the Venice landfill a potential exists that grading activities could uncover cultural resources. Mitigation measures have been incorporated in accordance with the policy to ensure that impacts would be less than significant.
As part of an application for a coastal development permit involving disturbance of native soils or vegetation, the County shall notify applicants that, in the event of discovery of Native American remains or of grave goods, 6 7050.5 of the Health and Safety Code, and 0 5097.94, $5097.98 and 0 5097.99 of the Public Resources Code apply, and shall govern the applicant's development activities. Copies of these code sections shall be provided to applicants and to appropriate local officials. Archaeological recovery programs shall require coastal development permits consistent with the provisions of the certified local coastal program.	As provided above, mitigation measures, including notification requirements, have been incorporated to ensure impacts to cultural resources would be less than significant. The County Department of Regional Planning and Department of Beaches and Harbors would incorporate these provisions into the project's conditions of approval for the required permits.

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<u>Land Use Plan-Priority Uses</u> Unlike other chapters in this LCP document, the Land Use Policy Map is more complex than other policy maps. It is, therefore, set off as a separate policy section in Part 2 below**.**	**<u>Land Use Plan-Priority Uses</u>** The proposed developments on both the OT Parcel and Parcel 21 would not interfere with existing or planned boat facilities or ancillary uses. Access to nearby boating facilities would be maintained; thereby preserving the small craft harbor uses and visitor serving facilities.
Preservation of the Small Craft Harbor facility a Priority. • The primary purpose of the Land Use Plan shall be to maintain Marina de1 Rey as a Small Craft harbor for recreational purposes. A secondary purpose shall be to promote and provide visitor-serving facilities. • Development shall not detract from, nor interfere with the use of existing or planned boating facilities, nor the ancillary uses, which support these facilities.	The proposed project would replace existing marine commercial uses (Parcel 21) as well as provide a yacht club (Parcel 21) and retail uses (Parcel OT). Boat slips associated with Parcel 21 shall remain.
Maintenance of the physical and economic viability of the marina a priority. Lessees shall be encouraged to replace structures and facilities which are physically or economically obsolete.	The proposed project would update parking and marine commercial facilities, as well as construct new retail and active seniors accommodations. These structures would be consistent with the massing and architectural type of recent Marina Phase II redevelopment projects.
Design Guidelines. The Department of Beaches and Harbors shall maintain and, when deemed appropriate, modify guidelines for the design and architectural treatment of all structures in the Marina. • These guidelines shall be known as the Manual for the Specifications and Minimum Standards of Architectural Treatment and Construction. • These guidelines are supplemental to, and not overriding of any standards or conditions of development set forth in this LUP, Title 22 (Planning & Zoning) of the Los Angeles County Code. • Conflicts of Interpretation. Should any situation arise where a conflict of interpretation exists between these guidelines, and standards set forth in this LCP, the certified LCP shall control. Enforcement. The Dept. of Beaches and Harbors shall have primary responsibility for the enforcement of these guidelines. The most recently approved version of the guidelines shall be applicable at the time an applicant files a development proposal.	The architectural design and treatment of structures would be conducted in accordance with the design guidelines established by the Department of Beaches and Harbors and the certified LCP, and would be subject to review by the Design Control Board. The proposed site plan and elevation renderings are provided in Section III, Project Description.

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Design Control Board. The Design Control Board, appointed by the Board of Supervisors, shall review all new development proposals, including renovations, for consistency with the Manual for Specifications and Minimum Standards of Architectural Treatment and Construction and the certified LCP, including the identity and accessibility of the Marina as a public boating and recreational facility, and shall recommend such modifications to the design as they deem appropriate. Such review shall be completed prior to any application for development being submitted to the Department of Regional Planning for case processing.	The proposed project has received conceptual approval from the Marina Design Control Board.
Entitlement Process. All applications for development on a specific parcel shall provide evidence of consistency with all of the following: 1) the access and recreation policies of the Coastal Act and this LCP, and 2) all policies and development standards in the certified LCP, including the amount of development potential allocated to the Development Zone in which the parcel is located, and the principle permitted land use assigned to that parcel, permitted in the Waterfront Overlay Zone, or identified in the LCP as compatible uses that may be allowed, subject to a grant of a Conditional Use Permit. Actual entitlement to develop a new use, or to change or expand an existing use on a given parcel shall be determined by the coastal development permit process as contained in Part 17 of Chapter 56 of Title 22, (Planning & Zoning) of the Los Angeles County Code which may culminate in either granting, denying or conditional approval of a Coastal Development Permit. This process shall analyze all applicable policies of this LUP, the County-wide General Plan, and Title 22 (Planning & Zoning) of the Los Angeles County Code, in determining the design, location, and intensity of development on a specific parcel. This process also shall determine the extent of off-setting mitigation measures that shall be required of an applicant	The proposed project is consistent with the Marina del Rey Land Use Plan, which is in effect the LCP, which is consistent with the Coastal Act. The proposed project includes recreational opportunities and access in accordance with the recreational and access policies. For Parcel OT, the project proposes to add an "Active Seniors Accommodations" Land Use Category to the LCP and change the land use designation of Parcel OT from "Parking" to "Active Seniors Accommodations" with a MUZ that would allow for active seniors accommodations with a retail component. The LCP and Specific Plan provide the development standards for the Residential V Land Use Category (used here as a basis of comparison in lieu of an Active Seniors Accommodations Land Use Category based on the density not to exceed 75 units per acre), which include density, height, setbacks and square footages. The proposed project would not exceed the Residential V standards of the Specific Plan. Although the proposed project on Parcel OT would re-designate the land use category of the Parcel, the associated development potential throughout the LCP area would not increase. The required Conditional Use Permit, Coastal Development Permit and the Parking Permit would be issued in accordance with Title 22. For Parcel 21, the project would develop the yacht club and marine commercial offices from Parcel 20. Parcel 20 has a land use designation of Marine Commercial, and the Specific Plan provides the development standards relative to height, setbacks, and square footages for uses. The required Conditional Use Permit, Coastal Development Permit and Parking Permit would be issued in accordance with Title 22.
<u>Land Use Plan-Non-Priority Uses</u> **Coastal Housing not a Priority.** Although construction of housing is not a priority use in the Coastal Zone, additional opportunities for coastal housing may be provided, where appropriate. All development of coastal housing shall be contingent upon meeting all applicable policies and	**<u>Land Use Plan-Non-Priority Uses</u>** The proposed project would not include the development of non-priority coastal housing, nor would it provide affordable housing. It would provide senior citizen housing on Parcel OT, which is encouraged as part of Marina del Rey Phase II development (see below), and

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development standards of the certified LCP, including but not limited to adequate parking, view corridors, public access to the shoreline, provision of new usable public recreation and open space and visitor serving recreational uses in the plan segment, provision of adequate traffic capacity, and any provisions for low- and moderate-income and senior citizen housing subsequently certified by the California Coastal Commission.	would include parking, an outdoor plaza and terraces, improved site vehicle and pedestrian access, and a visitor-serving retail component, which meet the contingency in this policy to provide this type of housing and ancillary features.
Land Use Plan-Affordable Housing Affordable and senior citizen housing projects shall be encouraged as part of Phase II development consistent with the policies and development standards of the certified LCP. The following General Plan policies shall be applicable to the review and approval of housing projects within the existing Marina: • Encourage private sector participation in the development of low and moderate-income housing. • Support and facilitate the development of housing affordable to lower-income households, and encourage the dispersal of new lower-income housing throughout the unincorporated areas of the County. • Support the design and construction of rental housing to meet the needs of lower income households, particularly large families, senior citizens, and people with disabilities. To the extent feasible, new housing developments shall comply with Government Code § 65590 relating to the provision of low- and moderate-income housing within the Coastal Zone. The conversion or demolition of existing residential dwelling units occupied by persons of low and moderate income shall be replaced consistent with the provisions of Government Code § 65590.	**Land Use Plan-Affordable Housing** The proposed project does not include an affordable housing component. However, the Parcel OT Oceana Retirement Facility would include active seniors accommodations. This facility would not represent a typical residential land use, as individual units would not have kitchens, trips generated by the proposed land uses would be reduced as compared to a multi-family residential project of the same size, and the facility would provide on-site dining services and other amenities for the residents. Further, the proposed project would not result in the demolition or conversion of existing residential dwelling units.
Coastal Visual Resources **Views of the Harbor a Priority.** Maintaining and enhancing views of the Marina shall be a priority goal of this Plan. Enhancing the ability of the public to experience and view the Marina waters shall be a prime consideration in the design of all new, modified or expanded development. This goal shall be achieved by placing conditions on permits for new development to enhance public viewing, to allow for greater public access, and to create new view corridors of the waterfront. No billboards or off-premise commercial signs shall be permitted in the LCP study area. On-premise signs shall be	**Coastal Visual Resources** As provided in Section IV.G, Visual Qualities, views of the marina or shoreline are not possible from the immediate project vicinity; therefore, the development on Parcel OT would not obstruct views. On Parcel OT, the proposed project would include an improved landscaped pedestrian path along the eastern boundary. This open space would allow for improved public viewing access to the Oxford Basin. In order to accomplish this, the proposed project would add 19,755 s.f. of Parcel P, which is designated open space in the LCP, to Parcel OT and re-designate it Active Senior

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restrained in size and color and subordinate to the setting.	Accommodations. The proposed building would encroach approximately 30 to 35 feet into Parcel P, leaving approximately 20 to 25 feet for a pathway. However, according to the Burton W. Chace Park Master Plan (Los Angeles County Department of Beaches and Harbors, June 11, 2009), the existing Burton W. Chace Park on Mindanao Way is 7.8 acres in size, but the Master Plan project would increase its size to 15 acres. Therefore, notwithstanding the Parcel OT project's encroachment into Parcel P, open space in the Marina del Rey community would cumulatively increase under Phase II development. The proposed development on Parcel 21 would maintain frontage widths along Panay Way and would include a 28-foot wide promenade that would offer views to the marina. In addition, The proposed development on Parcel 21 would include two-view corridors between the proposed structures that would maintain view corridors from Panay Way. With these corridors, Parcel 21 would provide a view corridor of 28.5 percent (of the Parcel's frontage), which exceeds the standard of 27.33 percent as required for a building height of 56 feet. No billboards or off-premise commercial signs are proposed for either Parcel OT or Parcel 21.
Design Control Board Authority. Signing, building design, site planning and facade design in the existing Marina shall continue to be controlled by the Marina del Rey Design Control Board. The Design Control Board shall review all new development proposals, including renovations, for consistency with the policies and objectives of this LCP and shall recommend such modifications to the design as they deem necessary. Such review and a report of the Board's deliberations shall be completed prior to any application for development being submitted to the Department of Regional Planning for case processing. In reviewing signs, the Design Control Board may refer to the Permanent Sign Controls and Regulations of September 16, 1971, as amended on Ju**ly** 19, 1973, and the Specifications and Minimum Standards of Architectural Treatment and Construction of this certified LCP. (Note: The relevant parts of these two documents are found on pages 1 through 15 and 27 through 70 of Appendix C of the LIP. It should be noted that pages 16 through 26 of Appendix C, referring to land use and height standards, shall not govern redevelopment in Marina de1 Rey.)	All proposed designs would be subject to review and approval of the Design Control Board Authority. The Design Review Board would ensure that the project meets the specifications and minimum standards for architectural treatment and construction.
All approvable development shall include modifications to ensure consistency with all policies and development standards of the certified LCP.	

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View Protection. The following existing views within the existing Marina shall not be significantly disturbed: • All views from north jetty and south jetty (west of UCLA boathouse): • Harbor views from Burton Chace Park and Fisherman's Village; • Cross-beach view from Panay Way parking lot (parcel GG); and • Main channel view from Admiralty Park.	The proposed development on Parcel OT would not involve the obstruction of views, as the view of the marina or shoreline are not possible from the immediate vicinity of the Parcel. The proposed development on Parcel 21 would include two-view corridors between the proposed structures that would maintain view corridors from Panay Way. With these corridors, Parcel 21 would provide a view corridor of 28.5 percent, which exceeds the standard of 27.33 percent as required for a building height of 56 feet.
All development shall incorporate harbor views from streets and pedestrian access ways consistent with security and safety considerations. All development, redevelopment or intensification on waterfront parcels shall provide an unobstructed view corridor of no less than 20 percent of the parcel's water front providing public views of the Marina boat basins and/or channels.	
Height Design Concept. Existing Marina. The height of new structures within the existing Marina shall be governed by height standards established by the applicable Land Use Category (see Chapter 8, Land Use), and by the following general height standards as applied to various similarly-situated parcels in the existing Marina: 25 Foot Standard - Applies to accessory structures on the Marina Beach area, public open space, some public parking lots, the fueling docks, the public boat ramp site, and ancillary commercial structures in the Boat Storage land use category. 45 Foot Standard - Applies to moles, including all parcels adjacent to mole roads and mole ends, and to office uses seaward of the loop roads, public parking lots, and public facilities (with the exception of theme towers on public facilities). 140 Foot Standard - Except as noted above, applies to parcels adjacent to and seaward of Via Marina, and Admiralty Way (excluding the Marina City Towers and parcels 112 and 113, which are allowed a 225 foot standard), the Marina shopping center and frontage along Washington Blvd. 225 Foot Standard - Except as noted above, applies to parcels landward of Via Marina and Admiralty Way, and includes parcel 112 and 113, and the westerly portion of parcel 125. The Height Design Concept may be modified where a valid public benefit is achieved, such as increased views of the waterfront. For parcels adjacent to mole roads, and seaward of Admiralty Way and Via Marina, flexible height standards may apply in exchange for increased view corridors, as provided for in the Height Design Flexibility Policy below.	According to the LCP, the allowable height on Parcel OT is 90 feet, for its parking land use designation. While the existing condition of the site is a surface parking lot, under Phase II development and its current designation, the site may be redeveloped into a 90 foot parking structure, as compared to the proposed project's 67 foot and seven inch to 75 foot retirement facility (as measured from Admiralty Way and Washington Boulevard, respectively, to the top of the roof). In addition, the proposed development on Parcel OT would not exceed the proposed 75-foot height limit for the Active Seniors Accommodations land use category, as provided in the Specific Plan (refer to Table IV.K-3, below). The site adjacent to Parcel OT to the west includes the Marina International Hotel, which is 40 feet in height. While the proposed project would be greater in height than the neighboring hotel, existing LCP policies for Phase II development on Parcel OT would allow for a taller structure than that represented by the proposed Oceana Retirement Facility. The allowable height on Parcel P is 25 feet, for its open space land use designation. Through an adjustment to the lease parcel boundary between Parcels OT and P, Parcel OT would be enlarged by 19,755 s.f., with a corresponding reduction in size of Parcel P. (Currently, the Parcel OT parking encroaches approximately 21 feet into Parcel P, and the proposed building on Parcel OT would encroach into Parcel P by an additional nine to 14 feet. Through the LCP amendment, the portion of Parcel P to be included within Parcel OT would be re-designated active senior accommodations with a 75-foot height limit. Therefore, the proposed project's maximum height of 75 feet would be consistent with the LCP allowable height.

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	The proposed structures on Parcel 21 would be 56 feet high, which exceeds the 45-foot height limit provided for mole roads. LCP policies allow for an increase in height based on the amount of view corridor provided. A height of 56 feet would require 146 feet or greater for the view corridor, which would be incorporated into the design (refer to Section III, Figure III-6a).
Height Design Flexibility for Waterfront Parcels. Any project design for any parcel on the seaward side of a public access road may apply for flexible height standards above the maximum allowable height in exchange for providing increased view corridors in excess of the minimum requirement of 20 percent, as provided for below:	Parcel 21 would provide a view corridor of 28.5 percent, which exceeds the minimum 20 percent view corridor as required by the policy. Per subsection "a," the maximum height allowed would be approximately 58 feet. The proposed height of 56 feet fits within the design flexibility criteria allowed under this policy.
a) Mole Roads Optional Height Areas. Structures proposed on parcels where a 45-foot standard applies and located between a mole road and the bulkhead may be allowed up to a maximum height of 75 feet when a 40 percent view corridor is provided. Height above 45 feet shall be permitted at the ratio of 1.5 feet of additional height for every additional 1 percent of view corridor provided in excess of the 20 percent minimum standard. This policy is applicable on the following mole roads: Panay Way, Marquesas Way, Tahiti Way, Bali Way, Mindanao Way, Fiji Way, and the mole portion of parcel 132. This policy shall not apply to that portion of the mole seaward of the cul-de-sac where a 45 foot maximum height standard applies.	The proposed project would include landscaping and plant materials to screen and soften the building areas for Parcel OT and Parcel 21. Parcel OT does not occur along a bulkhead and would not result in any construction to, creating, or maintaining bulkheads in the marina. Parcel 21 does occur along a bulkhead and would require a minimum eight-foot wide corridor. The proposed project would not infringe on the existing corridor and would include a 28 foot wide promenade that would enhance the pedestrian viewing areas on the bulkhead frontage.
b) Via Marina and Admiralty Way Optional Height Areas. Except as noted in Policy No. 7 above, structures proposed on parcels where a 140 foot standard applies and located adjacent to and seaward of Via Marina and Admiralty Way may be allowed up to a maximum height of 225 feet when a 40 percent view corridor is provided. Height above 140 feet shall be permitted at the ratio of 4.25 feet of additional height for every additional 1 percent of view corridor provided in excess of the 20 percent minimum standard.	
c) The open area may allow public amenities such as benches and landscaping, and parking lots provided the parking area is at least two feet below grade to allow views of the harbor from the mole road. Projects not meeting the minimum "open viewing area" requirement shall be restricted to 45 feet in height. Such projects shall be required to meet the mandatory 20 percent "open viewing area" requirement for all projects on the seaward side of any roadway within the LCP study area. Mole Roads Optional Height Areas.	

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Structures proposed on parcels where a 45 foot standard applies and located between a mole road and the bulkhead may be allowed up to a maximum height of 75 feet when a 40 percent view corridor is provided. Height above 45 feet shall be permitted at the ratio of 1.5 feet of additional height for every additional 1 percent of view corridor provided in excess of the 20 percent minimum standard. This policy is applicable on the following mole roads: Panay Way, Marquesas Way, Tahiti Way, Bali Way, Mindanao Way, Fiji Way, and the mole portion of parcel 132. This policy shall not apply to that portion of the mole seaward of the cul-de-sac where a 45 foot maximum height standard applies.	
Wind Factor. Development shall not significantly increase infringements of wind access for boats in their berths, in the fairways, or in the Main Channel. Wind studies shall be required to determine the significant adverse impact of taller buildings on wind currents and sailing by small boats within the Marina. All structures proposed at heights greater than 45 feet shall determine the cumulative impact of taller buildings on wind currents within the Marina. Development shall only be approved if all identified significant adverse impacts, including cumulative impacts of a pattern of higher buildings, are fully mitigated.	Wind Impact Assessments were conducted for the proposed developments on Parcels OT and 21 by RWDI (Reports dated August 17 and 31 2006, respectively, and are included in **Volume II, Appendix J**). The studies concluded that the proposed project would have a minimal effect on the wind conditions within the adjacent basins, the winds used by birds, or the general air circulation patterns within the Marina.
Landscaping and plant materials may be used to screen and soften visually obtrusive elements in the study area (e.g., utilities, service areas, bulkheads, fencing, etc.). A landscaped pedestrian viewing area shall be provided along the bulkhead in conjunction with all new development. Such area shall include benches, shade structures and other amenities, and shall be the equivalent of a eight-foot wide corridor seaward of the fire access road.	The proposed project plans for Parcels OT and 21 include landscaping, and the plans for Parcel 21 also include a public plaza and pedestrian promenade along the north side of the Panay Way mole.
Hazard Areas As a prerequisite to all development, approval of a flood control, runoff and storm drain plan by the Department of Public Works consistent with the Santa Monica Bay Recovery Plan shall be required.	**Hazard Areas** All improvement plans affecting the surface water runoff and control of flooding would be submitted to the Department of Public Works for a review for consistency with the Santa Monica Bay Recovery Plan. In addition, Section IV.C, Water Quality provides for mitigation measures that would ensure water quality impacts of the project are reduced to a less than significant level.
Future development shall be based on thorough site specific geologic and soils studies, including specific geotechnical studies related to mitigation of liquefaction and lateral spreading.	An analysis of geologic impacts and geological analysis performed in consideration of the proposed project, is provided in Section IV.A, Geotechnical Hazards and includes a discussion of soil conditions, liquefaction and lateral spreading.

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All development shall utilize earthquake resistant construction and engineering practices particularly those intended for high density of human occupancy. All development shall be designed to withstand a seismic event. All earthquake studies shall comply with the latest recommendations of the California Division of Mines and Geology and the Seismic Safety Board for seismic safety, especially for projects on unconsolidated sediments with high groundwater. Preliminary engineering mitigation and structural setbacks shall be designed for a bedrock acceleration of no less than 0.5g. and high potential for liquefaction.	Seismic-related impacts are also discussed in Section IV.A. Project engineered improvement plans would be reviewed by the County Public Works and Building and Safety Departments to ensure the proper setbacks for a bedrock acceleration of no less than .5g and high liquefaction potential.
Avoidance and Mitigation of Geologic Geotechnical Hazards. Applicants and their engineers are responsible for following all current requirements and recommendations of the Los Angeles County Department of Public Works, the California Division of Mines and Geology and the California Seismic Safety Board. Accordingly, all development applications shall include a detailed geotechnical report completed by a certified engineering geologist and a registered civil engineer experienced in the field of soil mechanics, and approved by Public Works. A copy of the report, and its approval, shall be submitted. The report must include, but not be limited to: • A comprehensive geologic/soils analysis showing underlying geology, soil type and structure: • Delineation and evaluation of areas prone to fault rupture, secondary effects of seismic shaking, such as lateral spreading, settlement, liquefaction, etc. and excessive ground motion, due to seismic wave amplification; • Delineation of low-lying areas which may be inundated by tsunamis, floods or unusually high tides or may be damaged by excessive wave action: • Recommendations for development in geologically stable areas, and restriction of development in unstable or unmitigated areas: Channels constructed in areas of liquefiable soils shall be engineered to preclude or mitigate the impacts of liquefaction; and No development in which the hazard to life and property cannot be fully mitigated shall be approved. Require that marina and harbor facilities continue to be designed and constructed so as to reduce the potential impacts of tsunamis.	As provided in Section IV.A, Geotechnical Hazards, Preliminary Geotechnical Reports were prepared for the proposed project and relied upon to determine geotechnical impacts and associated mitigation measures. Compliance with mitigation measures and recommendations of the local and state governing agencies would ensure appropriate engineering designs are incorporated to minimize and/or avoid impacts relative to underlying soil, seismic events and flooding (including tsunamis to the extent feasible).

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<u>Circulation</u> **Internal Marina Circulation Improvements.** Development shall not be approved that will exceed the capacity of the internal Marina de1 Rey street system. The total potential for additional units and amount of commercial and residential development allocated under this Local Coastal Program will generate a traffic impact within Marina del Rey that can be mitigated within the Marina by the improvements listed in Policy 2 below. Pursuant to this policy, the improvements listed in Policy 2 below shall be allocated proportionately among the development approved within the LCP area such that each approvable development constructs or contributes its fair share of the improvements, which are expected to fully mitigate the direct impact the development is expected to have on traffic within Marina de1 Rey. **Transportation System Management.** Transportation System Management (TSM), and Transportation Demand Management (TDM) programs shall be required as a condition of approval for all development, which has a significant adverse effect on traffic. TSM improvements enhance the system capacity and improve traffic flow. TDM measures encourage people to use alternative modes of transportation to eliminate automobile trips during the peak demand periods.	**<u>Circulation</u>** The Marina del Rey LCP considered buildout of the Marina in accordance with the Plan and has developed the internal circulation improvements accordingly. The proposed project would include the transfer of development rights, which would result in an off-set of the number for vehicles planned for, as well as a net increase of approximately 30 peak hour trips. Therefore, the proposed project would be required to provide it's "fair share" in fees to incorporate improvements to the circulation system that will ensure an acceptable level of service in accordance with the Transportation Improvement Program of the Specific Plan.
Category 3 Sub-regional Transportation and Circulation Improvements. Cumulative Impacts Development shall not be approved that will significantly exceed the capacity of the sub-regional street system. Traffic impacts, generated by development in the LCP study area, upon the circulation system outside the unincorporated area of Marina de1 Rey, shall be mitigated by the developer prior to receiving final discretionary permits. Category 3 consists of improvements which may be employed to mitigate the cumulative impacts of development in the LCP study area on the regional transportation system serving the Marina del Rey. Ninety-three percent of all trips originate or end outside Marina del Rey. All development shall contribute a calculated fair share toward construction of improvements necessary to mitigate all of the development's significant adverse cumulative traffic impacts. The traffic studies prepared as part of each project's environmental documentation, shall address the project's impacts on adjacent State Highways and other regional collector streets and shall be the basis for determining the amount of cumulative impacts which the project has on regional traffic due to the increase in the number of trips that the project generates that begin or end outside the Plan area. Studies prepared in compliance with this requirement shall show:	

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1) the number of daily and peak hour trips generated by the development, 2) the number and percentage of those trips originating and terminating outside Marina del Rey, 3) the direction of the trips upon departing the existing Marina. Based on this documentation, all development shall contribute its proportionate fair share of the Category 3 improvements that will fully mitigate the level of impact such development will have on the regional system serving the plan area. The study shall be provided at the time of the permit application.	
Public Works **Water and Sewer Services.** Permission to build new and/or intensified development in the LCP area shall be contingent upon the ability to provide proof of availability of adequate water and sewerage facilities. In cases where existing unused capacity cannot meet increased demand, developer-financed improvement of existing water and/or sewerage facilities shall be required before new development and/or intensification can proceed. Installation of new sewer and water lines shall be accomplished via the least environmentally damaging method. Water conservation technology shall be employed in all development, including landscaping and irrigation that increases water use of the parcel. Design of new development requiring the installation and operation of additional water service shall be reviewed for water conservation.	**Public Works** As provided in Section IV.I, the project applicant has obtained will-serve letters from the Los Angeles County Waterworks District and adequate water supplies exist to serve the project demand. The conflicts between 1) the location of the proposed building on Parcel OT and the on-site water main and 2) upgrading the inadequate off-site water main in Panay Way would result in potentially significant impacts to local water infrastructure, which are mitigable to less than significant. As provided in the Initial Study previously prepared, the project parcels would be serviced by the City of Los Angeles Hyperion Treatment Plant, and the plant and sewer line infrastructure have adequate capacity to service the project. The will-serve letters described above include sewer service from the District. Further, the City of Los Angeles Department of Public Works Bureau of Engineering Venice Pumping Plant Dual Force Main Sewer Project would further improve sewer service in the area. As provided in Section IV.I, the proposed project would include mitigation measures that would ensure water conservation technology is incorporated into the project plans for landscaping and potable water uses where feasible in accordance with Titles 24 and 26 of the Los Angeles County Code, State of California Health and Safety Code, and Government Code Section 7800.
Fire access requirements. On property fronting on mole roads the developers shall provide fire clear zones on the water side of the buildings. These fire access roads shall be reached by vertical fire access roads no less than 28 feet in width and shall be a minimum of 20 feet wide. All fire access routes shall be constructed and maintained clear to the sky, with no benches, planters or fixed objects. The Fire Dept. access roads shall be dedicated for public pedestrian access and shall make up the greater part of the required pedestrian promenade. The Fire Dept. access roads shall maintain unimpeded access to both pedestrians and emergency	The proposed project includes setbacks adequate to allow for access of emergency personnel and equipment. All development improvement plans would be reviewed by the Fire Department to ensure adequate access. The proposed project at Parcel 21 would include a 28 foot wide promenade that would remain clear to the sky. The turning radii would also be subject to review and approval by the Fire Department. The proposed structures would require plan check by the Fire Department to ensure all applicable Fire Codes have

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vehicles on no less than twenty feet of all promenades at all times. **Pedestrian Promenades.** All projects located on shoreline parcels shall provide public pedestrian promenades adjacent to bulkheads no less than 20 foot wide that also provide benches, trash containers, shade structures and other pedestrian amenities along the seaward edge of the bulkhead. If these promenades are combined with a 20 foot wide fire access road, they may be constructed in one of two configurations, that allow for both unimpeded fire access and pedestrian amenities: a) A 20 foot wide accessible fire road in addition to an eight foot wide landscaped strip, resulting in a total dedicated access area no less than 28 feet wide. The eight foot wide landscaped strip adjacent to the bulkhead shall be landscaped and provided with benches and shade structures. The eight foot wide landscaped strip shall be provided in addition to required fire access roads and shall be located, seaward of the fire access road, or b) A series of 10 by 10 foot-wide improved view points no less than 150 feet apart, also adjacent to the bulkhead and integrated with vertical access ways. In either configuration, turn radii shall be approved by the Fire Department. **Sprinklers.** All new development shall be required to provide fire sprinklers consistent with the specifications of the Fire Dept. Remodeling or expansion projects involving 50 percent or more of the existing floor area of the structure shall be subject to review by the Fire Dept. for sprinkler requirements. **Multi-Story Buildings.** Where a new building exceeds three stories or 35 feet in height, the following standards shall apply: a) The maximum height of a proposed multi-story building shall be subject for review of the Fire Department. b) All multi-story buildings shall have an emergency evacuation plan and, on mole roads, a safe refuge area shall be designated for multi-story occupants on the dock area; c) Emergency access (or clear zones) along the sides of all multi-story buildings shall be required to be a width of 28 feet. A lesser width may be granted where the Fire Dept. finds such width provides sufficient emergency access; a greater width may be	been complied with, including provision for sprinkler systems. As the proposed buildings would exceed 35 feet in height and be multi-story, they would require an emergency evacuation plan. In addition as required by the Specific Plan, the project would be required to prepare a Fire Safety Plan for approval by the Fire Department, which would ensure proposed setbacks, sprinklers, fire flow, emergency access and evacuation plans are adequate. Since Parcel 21 is located on a mole road, this aspect of the project would require a safe refuge area on the dock area. Such a refuge area would be identified in the Specific Plan required Fire Safety Plan. Additionally, the proposed development on Parcel 21 includes a pedestrian promenade that will also serve as an access road for emergency service vehicles.

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mandated where the Fire Dept. finds such width to be necessary for the provision of adequate emergency access. This requirement may apply to the adjacent pedestrian promenades except for the viewing areas described in policy 9 above. Where a building is not more than 10 feet from the edge of a road, the roadway may serve as the required access area for that side of the building. Clear zones provided on the sides of a building may count toward any linear view corridor requirements for buildings located between the first public road and the sea: and d) Applicants for multi-story buildings shall submit documentation in the form of a Fire Safety Plan, verifying that Fire Dept. requirements relative to access, fire flow, sprinklers, and evacuation plans have been satisfied.	

Parcel OT

The proposed project would include an amendment to the LCP to 1) create an Active Seniors Accommodations Land Use Category, 2) re-designate Parcel OT from a Parking to Active Seniors Accommodations parcel with a Mixed Use Overlay Zone (MUZ) allowing for the mixed-use senior citizen retirement facility with a retail component, 3) transfer development potential (114 hotel units from the Admiralty DZ #7 and 5,000 s.f. of retail space from the Palawan/Beach DZ #5) to Parcel OT in the Oxford DZ #6, and 4) adjust the lease parcel boundary between Parcel OT and Parcel P by 55 feet 19,755 s.f.) into Parcel P to the existing fence line to accommodate a portion of the building and landscaped pathway buffer between the Oxford Retention Basin and the Parcel OT project. (This would necessitate adjustments to the corresponding LCP maps.)

Creation of a New Land Use Category in the Marina Del Rey LCP

The project proposes to add an Active Seniors Accommodations Land Use Category to the LCP and to then re-designate Parcel OT from Parking and the subject portion of Parcel P from Open Space to Active Seniors Accommodations. No other parcels in the Marina del Rey LCP are proposed to be re-designated to the Active Seniors Accommodations Land Use Category as part of the proposed project. The inclusion of an Active Seniors Accommodations designation is consistent with the goals of the Marina del Rey LCP, as the LCP specifically states that senior citizen housing projects shall be encouraged as part of Phase II development (Page 8-9).

The addition of an Active Seniors Accommodations Land Use Category to the Marina del Rey LCP may potentially result in the re-designation of other parcels to the new Land Use Category. However, the number and location of parcels that may be re-designated cannot be determined. In addition, given the overall developmental constraints imposed by the land use plan (e.g., trip limits), it is assumed that the re-designation of parcels would not increase the total development or population level but rather could cause an increase in the relative proportion of senior citizens. Future development applications within the Marina del Rey LCP area including re-designation of a parcel to the Active Seniors Accommodations Land Use Category would undergo similar environmental review as the proposed project. However, the following provides a brief discussion on the potential impacts of this shift in population, should it occur.

Traffic effects are expected to be reduced with active seniors accommodations when compared to other residential developments, as the trip generation rate for active seniors accommodations is less than the trip generation rate for other comparable housing types.[8] With regard to noise, air quality, and global climate change, the potential effects of active seniors accommodations are considered similar to or less than other residential development. While construction noise and air quality effects would be similar, operational noise and air quality effects would be reduced with active seniors accommodations, as vehicle miles traveled are anticipated to be less. Further, global climate change effects are anticipated to be reduced with active seniors accommodations as compared to other residential development, due to less vehicle miles traveled. With regard to visual quality, active seniors accommodations projects would undergo the same type of design and height review as other residential projects to assure consistency with the LCP. Active seniors accommodations would result in no impacts to education services, as they are not a student-generating land use, whereas other residential types would likely increase the demand for education services. Also, where active seniors accommodations generally provide recreational opportunities for their residents (reducing the demand on public recreation amenities), other residential types utilize these amenities to a greater degree. On a per person basis, active seniors accommodations are expected to have similar effects on utilities (gas, propane, electricity, solid waste, and water supply) as other residential developments. Where the effects of active seniors accommodations would be expected to be greater than other residential development types would be on fire, sheriff, and/or emergency services, since such services may experience more calls for service from this land use. However, such effects would be mitigated through compliance with fire and sheriff department requirements for access and security measures.

For physical environmental issues, such as Geotechnical Hazards, Flood Hazards, Fire Hazards, Water Quality, Environmental Safety (hazardous materials), Biota, Cultural Resources, Mineral Resources, and Agricultural Resources, the effects of an increase in the senior citizen population on these environmental issues would not differ from those of other age groups.

Land Use Category Re-designation of Parcel OT

The LCP currently designates Parcel OT for Parking, which allows surface public parking lots as the primary permitted use and bicycle and pedestrian path rights-of-way; information directories; parking lots and parking buildings up to 90 feet in height; parking for boating-related uses; and public parks and picnic areas as other allowed primary uses. The portion of Parcel P to be added to Parcel OT is currently zoned Open Space, which permits recreational uses including open viewing areas, promenades, bikeways, beaches, parks, picnic facilities, nature/interpretive centers, associated surface parking and landscaping, with a height limit of 25 feet. The proposed project would re-designate Parcel OT and the subject portion of Parcel P to the Active Seniors Accommodations Land Use Category with a MUZ. According to the LUP, the Marina LCP MUZ (LUP page 8-12) is intended to provide additional flexibility for development of creatively designed mixed-use projects on selected non-waterfront parcels. Parcels within this overlay zone are permitted to combine land use categories on an individual parcel, and are allowed to mix primary uses within a structure. Development potential available to each applicant is subject to the limitations of the zone in which the parcel resides. This Overlay Zone would allow enough flexibility for the uses on-site to include active seniors accommodations and retail uses.

[8] As described in Trip Generation, 7th Edition, Institute of Transportation Engineers: the daily rate for a congregate care facility (similar to the senior retirement facility) is approximately two trips per unit, and for an apartment or single-family detached home, the daily trip generation rate is approximately seven and ten trips per unit, respectively.

The Specific Plan provides the Development Standards for the Residential V land use designation, which the proposed active seniors accommodations is proposed to follow with the exception of the height limitation which would be reduced from 225 feet to 75 feet. The compatibility of the proposed project with the proposed Specific Plan Development Standards is provided in **Table IV.K-3** below.

Table IV.K-3
Project Compatibility with Proposed Active Seniors Accommodations Development Standards

Proposed Development Standard	Proposed Project
Height is limited to 75 feet.	The proposed building would reach maximum heights of 67 feet and seven inches as measured from Admiralty Way to the top of the roof and 75 feet as measured from Washington Boulevard to the top of the roof.
Front and rear yard setbacks shall be a minimum of 10 feet, in addition to the required highway and promenade setback; side yard setbacks shall be a minimum of five feet.	According to the Site Plan, the proposed structure would maintain a front setback of 20 feet, setbacks along the south side of five to ten feet, setbacks along the north side of 20 to 25 feet, and a rear setback on Washington Boulevard of ten feet. A canopy would project approximately three to four feet into the ten-foot rear setback.
Dwelling unit density shall not exceed 75 units per net acre.	Development on Parcel OT proposes approximately 54.3 units per acre.
Residential and mixed use shall not reduce the amount of land area devoted to existing visitor-serving, boating, or marine commercial uses: Visitor serving uses shown on LCP Map 5, Existing/Proposed Visitor-Serving Facilities, shall be preserved or replaced on-site, as part of redevelopment.	Parcel OT currently provides 183 parking spaces.[9] The proposed project is seeking approval to transfer 94 of the 186 public parking spaces on Parcel OT to Parcel 21, which would provide parking that is adjacent to the Marina, closer in proximity to Mother's Beach, would not require street crossing to access Mother's Beach, and would provide covered parking. 92 public parking spaces would be located on Parcel OT in a parking structure.

Transfer of Development Potential

The proposed active seniors accommodations would provide overnight accommodations and attendant visitor-serving services, including dining and entertainment areas. There is development potential as well as associated trip allowances available in the Admiralty DZ #7 and Palawan/Beach DZ #5 (114 hotel rooms and 5,000 square feet of retail space, respectively) that can be transferred to the Oxford DZ #6 for the proposed project. Therefore, the proposed amendment would relocate, but not add, development potential and trips between Marina del Rey Parcels. Additionally, operation of active seniors accommodations would also reduce the amount of daily trips planned for in Marina del Rey, as the 114-

[9] According to the Draft Right-Sizing Parking Study for the Public Parking Lots in Marina del Rey, California, prepared by Raju Associates, Inc. (March 2009), based on the field inventory surveys performed by the Los Angeles County Department of Beaches and Harbors, the number of public parking spaces available on Parcel OT is 183. This is different from the number of spaces noted in the Marina del Rey Land Use Plan (LUP), which is 186 spaces, due to restriping of the lot after publication of the LUP to accommodate handicapped spaces. This EIR analysis conservatively uses the 186 space estimate in order to provide for a greater number of replacement parking spaces under the proposed project.

room hotel land use (development potential in the Admiralty DZ #7) would be expected to generate 931 daily trips, 64 AM peak hour trips, and 40 PM peak hour trips, as compared to the proposed active seniors accommodations (transferred hotel land use to Parcel OT in the Oxford DZ #6 with the MUZ overlay to operate as active seniors accommodations) that would generate 387 daily trips, 10 AM peak hour trips, and 41 PM peak hour trips.[10]

The project would include a landscaped pedestrian (ADA compliant) access way between Admiralty Way and Washington Boulevard, along the eastern boundary of the Parcel OT, just west of the existing lagoon. This linear passageway would be accomplished by extending the eastern boundary of Parcel OT through an adjustment to the lease parcel boundary to include a 55-foot strip of Parcel P (the Parcel of the LCP containing the Oxford Retention Basin), along the shared boundary between Parcels OT and P (shown in Figure III-3a). The adjustment would be effectuated by the Department of Beaches and Harbors through revised legal descriptions for each of the two Parcels. The proposed project would add 19,755 s.f. of Parcel P, which is designated open space in the LCP, to Parcel OT. The proposed building would encroach approximately 30 to 35 feet into Parcel P, leaving approximately 20 to 25 feet for a pathway. Currently, a portion of the Parcel OT surface parking lot and the Oxford Basin maintenance road encroach approximately 21 feet into Parcel P (an area of 6,665 s.f.). As proposed, the building on Parcel OT would encroach into Parcel P by an additional nine to 14 feet (9,397 s.f.). The Department of Beaches and Harbors would offset the reduction of open space on Parcel P via the planned expansion of Burton W. Chace Park. According to the Burton W. Chace Park Master Plan (Los Angeles County Department of Beaches and Harbors, June 11, 2009), the existing Burton W. Chace Park on Mindanao Way is 7.8 acres in size, but the Master Plan project would increase its size to 15 acres. Therefore, notwithstanding the Parcel OT project's encroachment into Parcel P, open space in the Marina del Rey community would cumulatively increase under Phase II development. The proposed passageway would provide improved access for those currently traversing the limited access-way now, as well as the residents at the proposed facility. These features would provide an improved open space and recreational buffer, which would also allow for improved public viewing access to the lagoon.

Summary of Parcel OT Land Use Impacts

The proposed development on Parcel OT and amendments to the LCP would require issuance of a Conditional Use Permit (CUP), Coastal Development Permit (CDP), and Parking Permit for the creation of a new land use category in the LCP; re-designation of the Parcel OT land use category; adjustment to the lease parcel boundary between Parcels OT and P; and transfer of development potential, parking, and trip generations between Parcels OT and 21.

As provided in the policy consistency analysis, certain aspects of the project would require implementation of mitigation measures to ensure consistency (refer to Sections IV.A through IV.J and IV.L). Without the LCP Amendments, CUP, CDP, and Parking Permit, the proposed Parcel OT development would not be consistent with the current LCP. However, as the proposed project includes these approval requests, which would assure that the land uses on Parcel OT are consistent with the proposed land use designation, proposed Mixed Use Overlay Zone, and LCP and Specific Plan policies, the proposed development on Parcel OT would result in less than significant impacts relative to land use policies and zoning consistency. Further, mitigation measures have been provided in Sections IV.A through IV.J and IV.L for potential impacts related to geotechnical hazards, noise, water quality, air quality, biota, cultural resources, visual qualities, traffic/access, utilities (water supply), environmental

[10] Based on the Marina del Rey Local Coastal Program, ITE Trip Generation manual, 7th Edition, and San Diego Traffic Generators, San Diego Association of Governments (SANDAG), 2002.

safety, and global climate change. Thus, no further mitigation measures are warranted to render potential land use impacts less than significant.

Parcel 21

Transfer of Development Potential

The LCP currently designates Parcel 21 as marine commercial. As provided above, the marine commercial designation allows for coastal-related or coastal-dependent uses associated with operation, sales, storage and repair of boats and marine support facilities. Uses include public boat launching (and associated launching ramp hoists), boat rentals, boating schools, dry boat storage, yacht club facilities (with associated dry storage and launch hoists), marine chandleries, boat repair yards, yacht brokerages, charter boat operations, and associated ancillary retail and office uses.

Under the proposed project, the marine commercial designation would be maintained for the proposed development on Parcel 21. However, the project proposes to amend LCP Amendment No. 1-01 for two aspects of the project: 1) to allow for the transfer of 94 required parking spaces from Parcel OT to Parcel 21 and 2) to transfer the yacht club and marine commercial uses from Parcel 20, Phase II, to Parcel 21.

A comparison of the proposed development on Parcel 21 with the applicable Marina del Rey /LCP policies is provided in Table IV.K-2, as described previously. Also, the Marina del Rey Specific Plan is designed to implement the policies of the LCP. The Specific Plan provides development standards for the "marine commercial" land use designation, provided in **Table IV.K-4** below.

Table IV.K-4
Specific Plan Development Standards – Marine Commercial

Marine Commercial Development Standards	Proposed Parcel 21 Project
Building Height is limited to 45 feet.	The proposed structure would be 56 feet in height (measured from grade to the rooftop), with a maximum height of approximately 59 feet to the top of the parapet. LCP policies allow for an increase in height based on the amount of view corridor provided. A height of 56 feet would require 146 feet or greater for the view corridor, which would be incorporated into the design.
Front, side and rear setbacks shall be a minimum of five feet in addition to the required highway and promenade setbacks.	Setbacks would include 5 feet from the south parcel boundary, 5 feet from the 50-foot access way to the east boundary, 5 feet from the access way at the west boundary and 5 feet from the proposed promenade along the north boundary.
View corridors, public open spaces, and/or access ways required in the Specific Plan may be designed and integrated into the required setbacks or be located elsewhere on the property.	Two view corridors are proposed along the east boundary and at the Plaza along the west boundary. In addition, the promenade along the water frontage would enhance views. Views have been included within the setbacks provided.
Marine commercial uses shall not reduce the amount of land area devoted to existing visitor-serving, boating or coastal dependent marine commercial uses.	The proposed facilities would not reduce the land area devoted to visitor serving, boating or coastal dependent marine uses.
Marine commercial uses shall not reduce the amount of land area devoted to existing visitor-serving, boating, or coastal dependent marine commercial uses.	The proposed development on Parcel 21 would replace existing on-site uses and some uses approved for Parcel 20 (Phase II) but not built. The net square footage of visitor-serving, boating, or coastal dependent marine commercial uses would not be reduced from the existing condition.

Partial Lease Termination

This project also requires modifications to LCP Amendment No. 1-01 for the enlargement of Parcel GR by 207 feet (31,050 s.f.) with a corresponding reduction in the size of Parcel 21. Parcel GR is designated for parking under the LCP and is currently utilized as such. The area to be included in the Parcel GR lease is currently occupied by a health club on Parcel 21. Once the health club use is transferred into the Holiday Harbor Courts project, the existing building would be demolished and the partial lease termination would take effect. The Los Angeles County Department of Beaches and Harbors is considering the development of additional parking spaces on Parcel GR under separate proposal. The details regarding the schedule of that project are not available at this time. As stated previously, the proposed development on Parcel 21 would result in zero s.f. of net new leasable area within the Panay DZ #4 of the Marina del Rey LUP, and sufficient parking would be included for both project and public use. Therefore, it is not expected that the partial lease termination would result in significant adverse land use impacts.

Summary of Parcel 21 Land Use Impacts

As described above, certain aspects of the proposed development on Parcel 21 would require implementation of mitigation measures to ensure consistency (refer to Sections IV.A through IV.J) with LCP and Specific Plan policies. Without the modifications to LCP Amendment No. 1-01, CDP, CUP, and Parking Permit, the proposed Parcel 21 development would not be consistent with the current LCP. However, as the proposed project includes these approval requests, assuring that the proposed land uses on Parcel 21 are consistent with the LCP and Specific Plan policies, and it largely represents a replacement of existing on-site land uses, the proposed development on Parcel 21 would result in less than significant impacts relative to land use policies and zoning consistency. As with Parcel OT, mitigation measures have been provided in Sections IV.A through IV.J and IV.L for potential impacts related to geotechnical hazards, noise, water quality, air quality, biota, cultural resources, visual qualities, traffic/access, utilities (water supply), environmental safety, and global climate change. Thus, no further mitigation measures are warranted to render potential land use impacts less than significant.

5. Cumulative Impacts

Cumulative impacts as they relate to each of the environmental issue areas analyzed in this EIR are discussed in Sections IV.A through IV.L. Potential cumulative land use impacts arise from increasing development intensity throughout Marina del Rey under Phase II of the LCP and the associated traffic (average daily trips). As previously discussed, development potential in the LCP is based on trip generation. The traffic analysis for the proposed project discussed in Section IV.H, Traffic/Access determined that the project level traffic impacts are all mitigable to less than significant, as are cumulative traffic impacts expected to occur during the construction periods of the proposed project in combination with related projects and public infrastructure projects. However, following build-out of the proposed project and related projects, the proposed project's incremental contribution to the cumulative impacts at the intersections of Lincoln Boulevard at Washington Boulevard, Lincoln Boulevard at SR-90, Lincoln Boulevard at Bali Way, Lincoln Boulevard at Mindanao Way, and Lincoln Boulevard at Fiji Way remain significant and unmitigable. As this has already been identified as a cumulative traffic impact, it is not also considered to be a cumulative land use impact.

With regard to the transfer of development potential and parking spaces, the proposed project would be consistent with the proposed LCP, LCP Amendment 1-01, CUP, CDP and Parking Permit. The project also requires an adjustment to the lease parcel boundary between Parcels OT and P. As discussed above, additional open space would be provided elsewhere in the LCP area at Chace Park, thereby resulting in a net increase in open space and less than significant cumulative impacts associated with the provision of

open space. Related projects that may request similar approvals would be reviewed for compliance with County land use plans and ordinances, as is the proposed project. Should development occur that is largely inconsistent with those plans and require substantial amendments, such developments would need to undergo CEQA review for potential environmental and land use/planning impacts. The proposed project is therefore not considered to contribute a significant impact that is cumulatively significant with regard to land use and planning impacts.

It should be noted that the County has recently announced its intention, in cooperation with the Coastal Commission, to pursue a "Pipeline Project LCP Amendment". This amendment would address all of the projects requiring LCPAs in the Marina in one LUP/IP amendment. The drafting of this amendment is underway at the time of this writing and is anticipated to be field with the Coastal Commission sometime in the first half of 2010. Since the County's effort would include these parcels, this LCPA would consider the aggregate effect of all amendments that the County is considering.

6. Mitigation Measures

The proposed project would not result in significant land use/planning impacts, and therefore would not require mitigation. Refer to Sections IV.A through IV.J and IV.L for mitigation measures that address the proposed project's potential impacts related to geotechnical hazards, noise, water quality, air quality, biota, cultural resources, visual qualities, traffic/access, utilities (water supply), environmental safety, and global climate change.

7. Significant Project Impacts After Mitigation

The proposed project would not result in significant impacts related to consistency with land use plans and policy.

L. GLOBAL CLIMATE CHANGE

1. Existing Conditions

Introduction

Climate change refers to any significant change in measures of climate (such as temperature, precipitation, or wind) lasting for an extended period (decades or longer). The Earth's climate has changed many times during the planet's history, with events ranging from ice ages to long periods of warmth. Historically, natural factors such as volcanic eruptions, changes in the Earth's orbit, and the amount of energy released from the Sun have affected the Earth's climate. Beginning late in the 18th century, human activities associated with the Industrial Revolution have also changed the composition of the atmosphere and therefore very likely are influencing the Earth's climate.[1]

Global Climate Change Background

The Earth's Climate

Climate has changed throughout the Earth's history. Scientists have been able to piece together a picture of the Earth's climate dating back to millions of years ago by analyzing a number of measures of climate from ice cores, boreholes, tree rings, glaciers, pollen residues, and ocean sediments, and by studying changes in the Earth's orbit around the Sun. From these analyses, it is clear that the Earth has undergone intervals of both warming and cooling.

Causes of past climate change prior to the Industrial Era (pre-1780) include:

- Changes in the Earth's orbit;
- Changes in the sun's intensity; and
- Volcanoes eruptions (releasing aerosols and carbon dioxide into the atmosphere).

These climate change "drivers" often trigger additional changes within the climate system that can amplify or dampen the climate's initial response to them (whether the response is warming or cooling). Examples of this include:

- Changes in greenhouse gas concentrations; and
- Changes in ocean currents.

The heating or cooling of the Earth's surface can cause changes in greenhouse gas concentrations. Specifically, when global temperatures warm, the oceans release carbon dioxide. When changes in the Earth's orbit trigger a warm period, increasing concentrations of carbon dioxide may amplify the warming by enhancing the greenhouse effect. When temperatures become cooler, carbon dioxide (CO_2) enters the ocean and contributes to additional cooling. During at least the last 650,000 years, CO_2 levels tended to track the glacial cycles. Therefore, during warm interglacial periods, CO_2 levels have been high and during cool glacial periods, CO_2 levels have been low. The heating or cooling of the Earth's surface can cause changes in ocean currents as well. As ocean currents play a significant role in distributing heat around the Earth, changes in these currents can bring about substantial changes in climate from region to region.

[1] Environmental Protection Agency. http://www.epa.gov/climatechange/fq/science.html#2 and http://www.epa.gov/climatechange/basicinfo.html, accessed May 6, 2008.

The climate of the Earth during the last 2,000 years has been relatively stable. Three departures from this stability have been identified by scientists and include:

- The Medieval Climate Anomaly (between roughly 900 and 1300 AD, evidence suggests that Europe, Greenland and Asia experienced relative warmth and the American West experienced very dry conditions around this time);
- The Little Ice Age (average temperatures were possibly up to two degrees Fahrenheit (°F) colder than today, but varied by region); and
- The Industrial Era (an additional warm period has emerged in the last 100 years, coinciding with substantially increasing emissions of greenhouse gases).

According to the National Research Council (2006), there is a high level of confidence that the global average temperature during the last few decades was warmer than any comparable period during the last 400 years.[2]

Greenhouse Gas Emissions

The temperature on Earth is regulated by a system commonly known as the "greenhouse effect." Naturally occurring climate change pollutants, primarily water vapor, CO_2, methane (CH_4), and nitrous oxide (N_2O) absorb heat radiated from the Earth's surface. As the atmosphere warms, it in turn radiates heat back to the surface to create the greenhouse effect. The Earth's surface temperature would be about 34 degrees Celsius (°C) (or 61°F) colder than it is now if it were not for the natural heat trapping effect of climate change pollutants like CO_2, CH_4, N_2O, and water vapor.[3] "Greenhouse gases" emitted by human activity are implicated in global climate change, commonly referred to as "global warming." However, according to the National Academy of Sciences, the phrase 'climate change' is growing in preferred use to 'global warming' because it helps convey that there are other changes in addition to rising temperatures.[4] These greenhouse gases contribute to an increase in the temperature of the earth's atmosphere by transparency to incoming short wavelength visible sunlight, but near opacity to outgoing terrestrial long wavelength heat radiation. Fossil fuel consumption in the transportation sector (on-road motor vehicles, off-highway mobile sources, and aircraft) is the single largest source of GHG emissions, accounting for approximately half of GHG emissions globally. Industrial and commercial sources are the second largest contributors of GHG emissions with about one-fourth of total emissions.

Human Activity and Global Climate Change

The current warming trend is of particular importance, because most of it is very likely human-induced and is likely proceeding at a rate that is unprecedented in the past 1,300 years.[5] Human activities are exerting a major and growing influence on some of the key factors that govern climate by changing the composition of the atmosphere and by modifying the land surface. This increase has resulted from the burning of coal, oil, and natural gas (which generate greenhouse gases, including carbon dioxide), and the depletion of forests (which absorb carbon dioxide) around the world to provide wood products and space for agriculture and other human activities.[6]

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[2] Environmental Protection Agency. http://www.epa.gov/climatechange/science/pastcc.html, accessed May 6, 2008.
[3] California Climate Action Team. Climate Action Team Report to Governor Schwarzenegger and the Legislature, March 2006.
[4] Environmental Protection Agency. http://www.epa.gov/climatechange/fq/science.html#2 and http://www.epa.gov/climatechange/basicinfo.html, accessed May 6, 2008.
[5] Ibid.
[6] California Climate Action Team. Climate Action Team Report to Governor Schwarzenegger and the Legislature, March 2006.

According to the Intergovernmental Panel on Climate Change (IPCC), global greenhouse gas emissions due to human activities have grown since pre-industrial times, with an increase of 70 percent between 1970 and 2004. Human activities result in emissions of four long-lived greenhouse gas emissions: carbon dioxide, methane, nitrous oxide, and halocarbons (a group of gases containing fluorine, chlorine or bromine). The global atmospheric concentrations of carbon dioxide, methane, and nitrous oxide have increased markedly as a result of human activities since 1750 and now far exceed pre-industrial values, which has been determined from ice cores spanning many thousands of years.

The IPCC asserts that most of the observed increase in global average temperatures since the mid-20th century is very likely due to the observed increase in anthropogenic greenhouse gas concentrations. The observed widespread warming of the atmosphere and ocean, together with ice mass loss, support the conclusion that it is extremely unlikely that global climate change of the past 50 years can be explained without external forcing and very likely that it is not due to known natural causes alone. During this period, the sum of solar and volcanic forcings would likely have produced cooling, not warming. Warming of the climate system has been detected in changes in surface and atmospheric temperatures and in temperatures of the upper several hundred meters of the ocean. The observed pattern of tropospheric warming and stratospheric cooling is very likely due to the combined influences of greenhouse gas increases and stratospheric ozone depletion. It is likely that increases in greenhouse gas concentrations alone would have caused more warming than observed because volcanic and anthropogenic aerosols have offset some warming that would otherwise have taken place.[7]

The California Climate Action Team (CAT)/California Environmental Protection Agency (Cal EPA) March 2006 Report to Governor Arnold Schwarzenegger and the Legislature states that end-of-century projected climate change impacts may include Sierra snow pack loss, a rise in sea level, a rise in the number of critically dry years, increased large fire risk, increased electricity demand, a rise in the amount of urban area heat waves and heat related deaths, decreased forest yields, and an increase in days meteorologically conducive to ozone formation.[8]

Regulatory Framework

Federal Policies

The United States Federal government has established a comprehensive policy to address climate change. This policy has three basic objectives, which are to:

- Slow the growth of emissions;
- Strengthen science, technology and institutions; and
- Enhance international cooperation.

The Federal government is implementing this policy through voluntary and incentive-based programs, which include the following:

<u>National Goal to Reduce Emissions Intensity:</u> In February 2002, the United States government announced a comprehensive strategy to reduce the greenhouse gas intensity of the American economy by 18 percent over the 10-year period from 2002 to 2012. Meeting this commitment will prevent the release of more than 100 million metric tons of carbon-equivalent emissions to the atmosphere (annually) by 2012 and more than 500 million metric tons (cumulatively) between 2002 and 2012.

[7] Intergovernmental Panel on Climate Change. Climate Change 2007: Synthesis Report.
[8] California Climate Action Team. Climate Action Team Report to Governor Schwarzenegger and the Legislature, March 2006.

Current and Near-Term Greenhouse Gas Reduction Initiatives: The Federal government administers a wide array of public-private partnerships to reduce U.S. greenhouse gas intensity. These programs focus on energy efficiency, renewable energy, methane and other non-carbon dioxide gases, agricultural practices, and implementation of technologies to achieve greenhouse gas reductions. The EPA implements several voluntary programs that substantially contribute to the reduction of greenhouse gas emissions.

Climate Change Technology Program: New and refined technologies offer great promise to reduce greenhouse gas emissions significantly. The Federal government established the multi-agency Climate Change Technology Program (CCTP) in February of 2002 to accelerate the development and deployment of key technologies.

Climate Change Science Program: In February of 2002, the United States government announced a climate change research initiative to focus on key remaining gaps in climate change science. To meet this goal, the Federal, multi-agency Climate Change Science Program (CCSP) was established to investigate natural and human-induced changes in the Earth's global environmental system; to monitor, understand and predict global change; and to provide a sound scientific basis for national and international decision-making. The EPA's primary role in CCSP is evaluating the potential consequences of climate variability and the effects on air quality, water quality, ecosystems and human health in the United States.[9]

In addition, in April 2007, the U.S. Supreme Court ruled that in the *Massachusetts et al. v. Environmental Protection Agency et al.*, the USEPA is authorized by the Clean Air Act to regulate carbon dioxide emissions from new motor vehicles. In response to this decision, in May 2007, the Bush Administration issued an EO directing the USEPA and Departments of Transportation and Energy to work together to establish regulations to reduce greenhouse gas emissions from motor vehicles, non-road vehicles, and non-road engines by 2008.

State Policies

Assembly Bill 1493

In 2002, Assembly Bill (AB) 1493 passed and set forth a proactive approach in addressing greenhouse gas emissions and climate change. AB 1493 requires the Air Resources Board (ARB) to:

- Set emission standards for greenhouse gases;
- Consider economic impacts, including impacts on jobs, businesses (including agriculture), and California business competitiveness with other states;
- Provide "maximum flexibility" and be economical to consumers; and
- Consider cost-effectiveness, technological feasibility, economic impacts and mandate maximum flexibility to manufacturers.

California has passed several additional bills since AB 1493, and the Governor has signed at least three executive orders (EO) regarding greenhouse gases. The Governor's Office of Planning and Research is in the process of developing CEQA significance thresholds for greenhouse gas emissions but thresholds have yet to be formally adopted. Greenhouse gas statues and executive orders include AB 32, Senate (SB) 1368, EO S-03-05, EO S-20-06 and EO S-01-07.

[9] Environmental Protection Agency. http://www.epa.gov/climatechange/policy/index.html, accessed May 6, 2008.

Assembly Bill 32

AB 32 of 2006 is one of the most significant pieces of environmental legislation that California has adopted. Among other things, it is designed to maintain California's reputation as a "national and international leader on energy conservation and environmental stewardship." It will have wide-ranging effects on California businesses and lifestyles as well as far reaching effects on other states and countries. A unique aspect of AB 32, beyond its broad and wide-ranging mandatory provisions and dramatic greenhouse gas reductions are the short time frames within which it must be implemented. Major components of the AB 32 include:

- Require the monitoring and reporting of GHG emissions beginning with sources or categories of sources that contribute the most to statewide emissions;
- Require immediate "early action" control programs on the most readily controlled GHG sources;
- Mandate that by 2020, California's GHG emissions be reduced to 1990 levels;
- Forces an overall reduction of GHG gases in California by 25-40 percent; and
- Must complement efforts to achieve and maintain Federal and State ambient air quality standards and to reduce toxic air contaminants.

Statewide, the framework for developing the implementing regulations for AB 32 is under way. Additionally, through the California Climate Action Registry (CCAR), general and industry-specific protocols for assessing and reporting GHG emissions have been developed. Greenhouse gas sources are categorized into direct sources (i.e. company owned) and indirect sources (i.e. not company owned). Direct sources include combustion emissions from on-and off-road mobile sources, and fugitive emissions. Indirect sources include off-site electricity generation and non-company owned mobile sources.

Senate Bill 97

The California legislature passed Senate Bill 97 in 2007, which would ultimately amend the CEQA statute in order to establish that impacts associated with greenhouse gas emissions be a subject for CEQA analysis. The Bill directs the State's Office of Planning and Research (OPR) to develop draft CEQA guidelines for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions by July 2009. It also directs the State Resources Agency to certify and adopt the CEQA guidelines by January 2010.

Senate Bill 375

In September of 2008, Senate Bill 375 passed and requires the California Air Resources Board (CARB) to develop regional greenhouse gas emission reduction targets to be achieved from the automobile and light truck sectors for 2020 and 2035. Since the single-largest source of greenhouse gas emissions in California is from passenger vehicles, the State's goal is to work on reducing Californians' vehicle-miles traveled (VMTs). SB 375 enhances the CARB's ability to reach AB 32 goals. SB 375 aligns three critical policy areas of importance to local government, including 1) regional long-range transportation plans and investments; 2) regional allocation of the obligation for cities and counties to zone for housing; and 3) a process to achieve greenhouse gas emissions reductions targets for the transportation sector.

SB 375 provides for the creation of the Regional Targets Advisory Committee (RTAC), which will be charged with recommending factors to be considered and methodologies to be used for setting GHG emissions reductions targets for affected regions. Their report to the CARB is due by September 30, 2009. The CARB, via a Scoping Plan, will assign emissions reductions targets for a 2020 goal on a

sector-by-sector basis and lay the framework for achieving that goal. Once the Statewide target is set, the CARB will set regional targets. SB 375 requires that the CARB set these regional targets by September 30, 2010. The targets may be expressed in gross tons, tons per capita, tons per household, or in any other metric deemed appropriate by CARB. When each Metropolitan Planning Organization (MPO) receives the 2010 regional targets, they are required to create a sustainable communities strategy (SCS). The SCS sets forth the blueprint for growth in the region, taking into account the transportation, housing, environmental, and economic needs of the area. The SCS is the means by which the region will meet its GHG emissions reductions target. The SCS of an MPO will not directly affect local land use decisions. The SCS does not supersede a local general plan, local specific plan, or local zoning. SB 375 does not require that a local general plan, local specific plan, or local zoning be consistent with the SCS. The ARB would determine if each region is on track to meet their targets. Builders would also be exempt from certain environmental reviews under CEQA if they build projects consistent with the new SCS. In addition, cities would be granted extra time (eight years rather than five) to update housing plans required by the State.[10]

The Southern California Association of Governments (SCAG) is the MPO for Los Angeles County and will be responsible developing the region's SCS.[11] SCAG staff is working to identify and seek input from local stakeholders on implementation of SB 375.[12] The SCAG's SCS for Los Angeles County is not yet available.

Local Policies

On October 7, 2008, the Los Angeles County Board of Supervisors directed the Office of the County Counsel to prepare three final ordinances: the Green Building Ordinance, the Low Impact Development Ordinance, and the Drought-Tolerant Landscaping Ordinance. The approved ordinances were posted on November 18, 2008 on the County of Los Angeles Department of Regional Planning website.[13] The following is information provided in the ordinances, made available by the County of Los Angeles Department of Regional Planning Green Building Program.[14]

The purpose of the Green Building Ordinance is to conserve water, energy, and natural resources; divert waste from landfills; minimize impacts to existing infrastructure; and promote a healthier environment. Some of the mandatory requirements for all new projects would include consuming at least 15 percent less energy than permitted by the 2005 California Energy Efficiency Standards, covering 75 percent of landscaped areas with drought-tolerant species, and recycling and/or salvaging for reuse a minimum of 50 percent of non-hazardous construction and demolition debris by weight. For building permit applications submitted on or after January 1, 2009 and before December 31, 2009, the County of L.A. Green Building Standards would apply. For building permit applications submitted on or after January 1, 2010, County of L.A. Green Building Standards would apply, as well as GreenPoint Rated™ (GPR), California Green Builder (CGB), and/or Leadership in Energy and Environmental Design Green Building Rating System (LEED ™) standards. GPR is a green building system for residential construction, developed and

[10] Office of the Governor website, http://www.gov.ca.gov/index.php?/fact-sheet/10707/, accessed December 2, 2008.
[11] California State Association of Counties. "SB 375 (Steinberg) - Addressing Greenhouse Gas Emissions from the Transportation Sector via Regional Transportation Plans – CSAC Analysis," accessed December 2, 2008 at http://www.counties.org/images/users/1/SB%20375%20CSAC%20Fact%20Sheet%20-%20FINAL_10.17.08.pdf.
[12] Southern California Association of Governments website, http://www.scag.ca.gov/eVision/detail.cfm?id=491, accessed December 2, 2008.
[13] http://planning.lacounty.gov/doc/green/green-building_final-ordinances.pdf
[14] County of Los Angeles Department of Regional Planning Green Building Program website, http://planning.lacounty.gov/spGreenBuildingProgram.htm, accessed October 15, 2008, as well as http://planning.lacounty.gov/doc/green/gb_071408.pdf, http://planning.lacounty.gov/doc/green/dtlo_071408.pdf, and http://planning.lacounty.gov/doc/green/lid_071408.pdf.

administered by Build It Green™. CGB is a green building rating system for residential construction, developed by the California Building Industry Association. LEED ™ is a system established by the United States Green Building Council as an independent means to verify the sustainable qualities of different building types.

The purpose of the Low Impact Development (LID) Ordinance is to require the use of LID principles in development projects, which encourage site sustainability and smart growth in a manner that respects and preserves the characteristics of the L.A. County's watersheds, drainage paths, water supplies and natural resources. LID builds on conventional design strategies by utilizing every softscape and hardscape surface in the development to perform beneficial hydrologic functions. This is achieved by retaining, detaining, storing, changing the timing of, or filtering stormwater and urban runoff. LID reduces the impact from development and provides for the replenishment of groundwater supplies; improvement of the quality of surface water runoff; stabilization of natural stream characteristics; preservation of natural site characteristics; and minimization of downstream impacts. The objectives of LID are to 1) mimic undeveloped stormwater and urban runoff rates and volumes in any storm event up to and including the 50-year capital design storm event, 2) prevent pollutants of concern from leaving the site in stormwater as the result of storms up to and including the water quality design storm event, and 3) minimize hydromodification impacts to a natural drainage system. This Ordinance will become effective on January 1, 2009.

Last, the purpose of the Drought-Tolerant Landscaping Ordinance is to establish minimum standards for the design and installation of landscaping using drought-tolerant plants and native plants that require minimal use of water. These requirements will ensure that the County continues to realize the benefits of landscaping that is appropriate to the region's climate and nature of the use, while also conserving water resources. Some of the general landscaping development standards will include that a minimum of 75 percent of the total landscaped area shall be plants as specified within the Drought-Tolerant Approved Plant List; turf shall be limited to a maximum of 25 percent of the total landscaped area; and plants will be grouped in hydrozones in accordance with their respective water, cultural (soil, climate, sun and light) and maintenance needs. This Ordinance will also become effective on January 2, 2009.

2. Thresholds of Significance

In January of 2009, and in accordance with its charge (Senate bill 97) under Public Resources Code section 21083.05, the OPR developed and released preliminary draft regulatory guidance with respect to the analysis and mitigation of the potential effects of greenhouse gas emissions. However, at this time, State and local agencies (namely the California Air Resources Board and South Coast Air Quality Management District) have not yet approved established significance thresholds under CEQA that address greenhouse gas emissions or global climate change. The main challenge for a Lead Agency in the interim is to produce a meaningful CEQA analysis of global climate change in the absence of such adopted thresholds. The approach taken here is to provide an analysis that discloses the global climate change issue, describes the current state of information regarding this issue, identifies the project's relationship and/or contribution to the issue, and provides measures to mitigate the project's contribution to the extent feasible.

3. Global Climate Change Impacts

According to the Association of Environmental Professionals, most individual projects would not generate enough greenhouse gas emissions to influence global climate change significantly on their

own.[15] Rather, as its name indicates, global climate change is a cumulative environmental concern. The following therefore provides a discussion on activities associated with the proposed project that may contribute to this cumulative issue.

Project Contribution to Cumulative Global Climate Change Impacts

Implementation of the proposed project would contribute to both short and long-term increases in greenhouse gases. During grading and construction, greenhouse gas emissions would result mainly from trip generation (mobile sources) and the use of heavy equipment and trucks. The proposed project would also result in operational increases in greenhouse gas emissions as a result of trip generation, area sources (mainly natural gas combustion), and from generating electricity to meet project-related increases in energy demand. While mobile sources, area sources, and construction diesel trucks and equipment are considered direct sources of greenhouse gas emissions, the emissions resulting from the electrical demands of the project are considered indirect and also include emissions resulting from generating electricity used to provide water to the project, to process solid waste generated by the project, and to process wastewater treatment generated by the project. The proposed project's estimated greenhouse gas emissions from all these sources are described below by phase (construction and operation of the project).

Construction Period Emissions

The proposed project would result in greenhouse gas emissions during construction of the project, which would be associated with mobile sources and the operation of construction diesel trucks and equipment, as follows in **Table IV.L-1**:

Table IV.L-1
Greenhouse Gas Emissions from Project Construction

Construction Year	Annual Emissions		
	CO_2 (tons/year) [1]	Carbon Dioxide Equivalent Emissions (CO_2e) (tons/yr)	Metric Tons of CO_2e (metric tons/yr) [2]
Year 2009			
Off-Road Diesel	91.22	91.22	82.78
On-Road Diesel	61.80	61.80	56.08
Worker Trips	5.35	5.63[3]	5.11
Total Construction Emissions (2009)	***158.37***	***158.65***	***143.97***
Year 2010			
Off-Road Diesel	207.55	207.55	188.34
On-Road Diesel	1.40	1.40	1.27
Vendor Trips	65.0	68.42[3]	62.09
Worker Trips	405.16	426.48[3]	387.01
Total Construction Emissions (2010)	***679.11***	***703.85***	***638.71***

[1] Estimated emissions are from the URBEMIS2007 model output.
[2] 1 metric ton = 1.102 tons.
[3] CO_2 emissions are assumed to be 95% of greenhouse gas emissions on a carbon dioxide equivalent (CO_2e) basis. Therefore, it is assumed that all other greenhouse gas emissions (including CH_4 and N_2O) account for the other 5%. From the U.S. Environmental Protection Agency, Emission Facts, Greenhouse Gas Emissions from a Typical Passenger Vehicle, February 2005, Page 4.

[15] Association of Environmental Professionals. Alternative Approaches to Analyzing Greenhouse Gas Emissions and Global Climate Change in CEQA Documents, June 2007.

Operational Phase Emissions

Mobile Source and Area Source Emissions

The proposed project's estimated daily operational CO_2 emissions from project-related trip generation and area source emissions are shown below in Tables **Table IV.L-2** and **3**:

Table IV.L-2
Net Greenhouse Gas Emissions from Motor Vehicles

Greenhouse Gas	Annual CO_2 Emissions (tons/year)[1]	Annual Carbon Dioxide Equivalent Emissions (metric tons CO_2e)[2]
CO_2	2,836.78	2,574.21
CH_4	-	135.48[3]
N_2O	-	
Total Net Emissions from Motor Vehicles		***2,709.69***

[1] Estimated emissions are from the URBEMIS2007 model output.
[2] 1 metric ton = 1.102 tons.
[3] O_2 emissions are assumed to be 95% of greenhouse gas emissions on a carbon dioxide equivalent (CO_2e) basis. Therefore, it is assumed that all other greenhouse gas emissions (including CH_4 and N_2O) account for the other 5%. From the US Environmental Protection Agency, Emission Facts, Greenhouse Gas Emissions from a Typical Passenger Vehicle, February 2005, Page 4.

Table IV.L-3
Net Greenhouse Gas Emissions from Area Sources

Source	Greenhouse Gas	Energy Consumption (MMBtu)[1]	Emission Factor (kg/MMBtu)[2]	Greenhouse Gas Emissions (metric tons)[3]	Annual Carbon Dioxide Equivalent Emissions (metric tons CO_2e)[4]
Natural Gas	CO_2	25,393.52	53.06	1,347.38	1,347.38
	CH_4	25,393.52	0.0059	0.15	3.15
	N_2O	25,393.52	0.0001	0.0025	0.78
				Subtotal	***1351.3***
Landscape[5]	CO_2	-	-	4.99	4.99
				Subtotal	**4.99**
				Total Net Emissions from Area Sources	***1,356.29***

[1] Energy Consumption was estimated by utilizing the emissions from URBEMIS2007, converted to metric tons (1 metric ton = 1.102 tons), and using the California Climate Action Registry Protocol. (mmbtu=a thousand thousand British thermal units.)
[2] California Climate Action Registry, General Reporting Protocol: Reporting Entity-Wide Greenhouse Gas Emissions Version 3.0, April 2008, Pg 57. (kg/mmbtu=kilograms per mmbtu.)
[3] The following formula was utilized in determining greenhouse gas emissions in metric tons: Energy Consumption (MMBtu) X Emission Factor (kg/MMBtu) X 0.001 metric tons/kg.
[4] Non-CO_2 greenhouse gas emissions were converted to the carbon dioxide equivalent (CO_2e) by multiplying them by the greenhouse gas global warming potential (GWP). Global warming potentials were developed by the Intergovernmental Panel on Climate Change (IPCC). Annual CO_2e emissions were determined by multiplying greenhouse gas emissions (metric tons) by the GWPs listed in the IPCC's Second Assessment Report (SAR, 2001). The GWP for CO_2 is 1, while the GWP for CH_4 and N_2O is 21 and 310, respectively. California Climate Action Registry, General Reporting Protocol: Reporting Entity-Wide Greenhouse Gas Emissions Version 3.0, April 2008, Page 90.
[5] Only CO_2 emissions were factored for the CO_2e calculation for landscape maintenance. Due to the incremental amount of CO_2 generated, CH_4 and N_2O emissions are considered minimal.

Electricity Related Emissions

The generation of electricity through combustion of fossil fuels typically yields carbon dioxide, as well as smaller amounts of nitrous oxide and methane. Although the proposed project would be located in an urbanized area, it would constitute an intensification of land use regarding electricity consumption (for example, replacement of a surface parking lot with a retirement facility). As such, the proposed project would result in an increased demand for electricity and subsequent increased yield in carbon dioxide, nitrous oxide, and methane. Greenhouse gas emissions associated with the electrical demand of existing and proposed land uses are shown in **Table IV.L-4** and **5**. For Parcel OT, it is assumed that the electrical demand is negligible for the parking lot, which provides a worst-case scenario for the net emissions associated with electricity at this Parcel.

Table IV.L-4
Greenhouse Gas Emissions from the Electrical Demand of Existing Uses on Parcel 21

Existing Land Use	Area (s.f.)	Electrical Demand Factor (kWh/ 1,000 ft/yr)[1]	Annual Electricity Demand (lbs/mWh)[2]	Greenhouse Gas	Electricity Emission Factor (lbs/mWh)[3]	Greenhouse Gas Emissions (metric tons)[4]	Annual Carbon Dioxide Equivalent Emissions (metric tons CO_2e)[5]
Health Club	16,000	16,750	268 mWh	CO_2	878.71	106.82	106.82
				CH_4	0.0067	0.00081	0.17
				N_2O	0.0037	0.00160	0.50
						Subtotal	***107.49***
Retail (Ship Store)	2,916	16,750	48.8 mWh	CO_2	878.71	19.50	19.50
				CH_4	0.0067	.00015	0.0032
				N_2O	0.0037	.000081	0.025
						Subtotal	***19.53***
Marine Commercial	3,132	16,750	52.5 mWh	CO_2	878.71	20.93	20.93
				CH_4	0.0067	0.00016	0.0034
				N_2O	0.0037	0.000088	0.027
						Subtotal	***20.96***
						Total Emissions from Existing Electrical Demand	**147.98**

[1] CAPCOA. CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act, January 2008, Page 61. (kWh/1,000 ft/yr=kilowatt hour per 1,000 feet per year.)

[2] In order to determine annual electricity demand in megawatt hours (mWh), the electrical demand factor in kWh was divided by 1,000. (lbs/mWh=pounds per megawatt hour.)

[3] California Climate Action Registry, General Reporting Protocol: Reporting Entity-Wide Greenhouse Gas Emissions Version 3.0, April 2008, Pgs 91-93.

[4] The following formula was utilized to determine greenhouse gas emissions in metric tons: Annual Electricity Demand (lbs/mWh) X Electricity Emission Factor (lbs/mWh) ÷ 2,204.62 lbs.

[5] Non-CO_2 greenhouse gas emissions were converted to the carbon dioxide equivalent (CO_2e) by multiplying them by the greenhouse gas global warming potential (GWP). Global warming potentials were developed by the Intergovernmental Panel on Climate Change (IPCC). Annual CO_2e emissions were determined by multiplying greenhouse gas emissions (metric tons) by the GWPs listed in the IPCC's Second Assessment Report (SAR, 2001). The GWP for CO_2 is 1, while the GWP for CH_4 and N_2O is 21 and 310, respectively. California Climate Action Registry, General Reporting Protocol: Reporting Entity-Wide Greenhouse Gas Emissions Version 3.0, April 2008, Page 90.

Table IV.L-5
Greenhouse Gas Emissions from the Electrical Demand of Proposed Uses on Parcels OT and 21

Proposed Land Use	Area (s.f.) or Number of Units)	Electrical Demand Factor (kWh/ 1,000 ft or Unit/yr)[1]	Annual Electricity Demand (lbs/mWh)[2]	Greenhouse Gas	Electricity Emission Factor (lbs/mWh)[3]	Greenhouse Gas Emissions (metric tons)[4]	Annual Carbon Dioxide Equivalent Emissions (metric tons CO_2e)[5]
Parcel 21							
Health Club	10,000	16,750	168	CO_2	878.71	66.96	66.96
				CH_4	0.0067	0.000062	0.0013
				N_2O	0.0037	0.00028	0.087
						Subtotal	***67.05***
Retail (Ship Store)	2,916	16,750	48.8	CO_2	878.71	19.50	19.50
				CH_4	0.0067	0.00015	0.0032
				N_2O	0.0037	0.000081	0.025
						Subtotal	***19.53***
Marine Commercial	11,432	16,750	191.5	CO_2	878.71	76.33	76.33
				CH_4	0.0067	0.00058	0.012
				N_2O	0.0037	0.00032	0.099
						Subtotal	***76.44***
Yacht Club	5,000	16,750	83.8	CO_2	878.71	33.40	33.40
				CH_4	0.0067	0.00025	0.0055
				N_2O	0.0037	0.00014	0.0434
						Subtotal	***33.45***
Parcel OT							
Residential	114	7,000	798	CO_2	878.71	318.06	318.06
				CH_4	0.0067	0.0024	0.050
				N_2O	0.0037	0.0013	0.403
						Subtotal	***318.51***
Retail	5,000	16,750	83.8	CO_2	878.71	33.40	33.40
				CH_4	0.0067	0.00025	0.0053
				N_2O	0.0037	0.00014	0.043
						Subtotal	***33.49***
						Total Emissions from Project Electrical Demand	***548.47***
						Total Net Emissions from Project Related Electrical Demand	***400.49***

[1] CAPCOA. CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act, January 2008, Page 61.
[2] In order to determine annual electricity demand in mWh, the electrical demand factor in kWh was divided by 1,000.
[3] California Climate Action Registry, General Reporting Protocol: Reporting Entity-Wide Greenhouse Gas Emissions Version 3.0, April 2008, Pages 91-93.
[4] The following formula was utilized to determine greenhouse emissions in metric tons: Annual Electricity Demand (lbs/mWh) X Electricity Emission Factor (lbs/mWh) ÷ 2,204.62 lbs.
[5] Non-CO_2 greenhouse gas emissions were converted to the carbon dioxide equivalent (CO_2e) by multiplying them by the greenhouse gas global warming potential (GWP). Global warming potentials were developed by the Intergovernmental Panel on Climate Change (IPCC). Annual CO_2e emissions were determined by multiplying greenhouse gas emissions (metric tons) by the GWPs listed in the IPCC's Second Assessment Report (SAR, 2001). The GWP for CO_2 is 1, while the GWP for CH_4 and N_2O is 21 and 310, respectively. California Climate Action Registry, General Reporting Protocol: Reporting Entity-Wide Greenhouse Gas Emissions Version 3.0, April 2008, Page 90.

Other Sources of Emissions Associated with Electrical Demand

Indirect greenhouse gas emissions that are associated with the consumption of electricity due to providing water to the project site, processing solid waste generated by the project, and processing wastewater treatment generated by the project have also been quantified and are described below.

Water Supply Related Emissions

Greenhouse gas emissions may result from the conveyance, treatment, and distribution of potable water as shown for existing and proposed land uses in **Table IV.L-6.** As stated, for Parcel OT, it is assumed that the water supply demand is negligible for the existing parking lot, which provides a worst-case scenario for the net emissions associated with water supply at this Parcel.

Table IV.L-6
Greenhouse Gas Emissions from Potable Water Supply - Conveyance, Treatment, and Distribution Existing Sources (Parcel 21) and Proposed (Parcels OT and 21) Sources

Land Use	Activity	Potable Water Needs Estimate (Mgal/yr)[1]	Electrical Demand Factor (kWh/Mgal)[2]	Greenhouse Gas	Electricity Emission Factor (lbs/mWh) [3]	Greenhouse Gas Emissions (metric tons)[4]	Annual Carbon Dioxide Equivalent Emissions (metric tons CO2e)[5]
Existing Sources (Parcel 21)							
Health Club, Retail, and Marine Commercial	Supply and Conveyance	2.50	9,727	CO_2	878.71	9.69	9.69
				CH_4	0.0067	0.000074	0.0016
				N_2O	0.0037	0.000041	0.013
						Subtotal	***9.70***
	Treatment	2.50	111	CO_2	878.71	0.11	0.11
				CH_4	0.0067	0.0000008	0.000017
				N_2O	0.0037	0.0000004	0.00012
						Subtotal	***0.11***
	Distribution	2.50	1,272	CO_2	878.71	1.27	1.27
				CH_4	0.0067	0.0000096	0.00020
				N_2O	0.0037	0.000005	0.00155
						Subtotal	***1.27***
						Total Existing Emissions from Potable Water	***11.08***
Proposed Sources							
Residential Units, Health Club, Retail, Yacht Club, and Marine Commercial	Supply and Conveyance	10.62	9,727	CO_2	878.71	41.56	41.56
				CH_4	0.0067	0.00031	0.0065
				N_2O	0.0037	0.00017	0.053
						Subtotal	***41.62***
	Treatment	10.62	111	CO_2	878.71	0.47	0.47
				CH_4	0.0067	0.0000035	0.000074
				N_2O	0.0037	0.0000019	0.00059
						Subtotal	***0.47***
	Distribution	10.62	1,272	CO_2	878.71	5.38	5.38
				CH_4	0.0067	0.000041	0.00086
				N_2O	0.0037	0.000023	0.0071
						Subtotal	***5.39***
						Total Proposed Emissions from Potable Water	***47.48***
						Total Net Emissions from Potable Water	***36.40***

[1] See Section I, Utilities (Water Supply). (Mgal/yr=millions of gallons per year.)
[2] Navigant Consulting, Inc., Refining Estimates of Water-Related Energy Use in California (CEC-700-2006-118), December 2006, Page 22. Prepared for the California Energy Commission. (kWh/Mgal=kilowatt hours per Mgal.)
[3] California Climate Action Registry, General Reporting Protocol: Reporting Entity-Wide Greenhouse Gas Emissions Version 3.0, April 2008, Pgs 91-93.
[4] In order to determine the annual electricity demand in mWh, the electrical demand factor in kWh was divided by 1,000. The following formula was utilized in determine greenhouse gas emissions in metric tons: Annual Electricity Demand (lbs/kWh) X Electricity Emission Factor (lbs/mWh) ÷ 2,204.62 lbs.
[5] Non-CO_2 GHG emissions were converted to the carbon dioxide equivalent (CO_2e) by multiplying them by the greenhouse gas global warming potential (GWP). Global warming potentials were developed by the Intergovernmental Panel on Climate Change (IPCC). Annual CO_2e emissions were determined by multiplying GHG emissions (metric tons) by the GWPs listed in the IPCC's Second Assessment Report (SAR, 2001). The GWP for CO_2 is 1, while the GWP for CH_4 and N_2O is 21 and 310, respectively. California Climate Action Registry, General Reporting Protocol: Reporting Entity-Wide Greenhouse Gas Emissions Version 3.0, April 2008, Page 90.

Solid Waste Related Emissions

Greenhouse gas emissions may also result from processing the solid waste generated by existing and proposed land uses, as shown in **Table IV.L-7.** The solid waste generated by existing uses at Parcel OT is considered to be negligible.

Table IV.L-7
Greenhouse Gas Emissions Associated with Solid Waste
Existing (Parcel 21) and Proposed (Parcels OT and 21) Uses

Land Use	Area (s.f.)	Solid Waste Generation Rates	Total Solid Waste\ (metric tons/year)[4]	CO_2e Emission Factor (metric tons CO_2e /metric tons waste)[5]	Annual Carbon Dioxide Equivalent Emissions (metric tons CO_2e)
Existing Sources (Parcel 21)					
Health Club	16,000	3.12 lbs/100 s.f./day[1]	82.65	0.10	8.27
Retail (Ship Store)	2,916	2.5 lbs/1,000 s.f./day[2]	1.21	0.10	0.12
Marine Commercial	3,132	2.5 lbs/1,000 s.f./day[2]	1.30	0.10	0.13
				Total Existing Emissions from Solid Waste	***8.52 metric tons CO_2e***
Proposed Sources (Parcel 21)					
Health Club	10,000	3.12 lbs/100 s.f. /day[1]	51.66	0.10	5.17
Retail (Ship Store)	2,916	2.5 lbs/1,000 s.f./day[2]	1.21	0.10	0.12
Marine Commercial	11,432	2.5 lbs/1,000 s.f./day[2]	1.30	0.10	0.13
Yacht Club	5,000	3.12 lbs/100 s.f. /day[1]	4.73	0.10	0.47
Proposed Sources (Parcel OT)					
Residential	114	12.23 lbs/household/day[3]	230.83	0.10	23.08
Retail	5,000	2.5 lbs/1,000 s.f./day[2]	2.07	0.10	.21
				Total Proposed Emissions from Solid Waste	***29.18***
				Net Emissions From Solid Waste	***20.66***

[1] Source: Guide to Solid Waste and Recycling Plans for Development Projects (Santa Barbara County Public Works Department, May 1997. Accessed from the California Integrated Waste Management Board. Accessed on April 15, 2009 from: http://www.ciwmb.ca.gov/wastechar/wastegenrates/Service.htm.
[2] Source: Stevenson Ranch Draft EIR (Phase IV), LA County, April 1992. Accessed from the California Integrated Waste Management Board. Accessed on April 15, 2009 from: http://www.ciwmb.ca.gov/wastechar/wastegenrates/Commercial.htm.
[3] City of Los Angeles CEQA Thresholds Guide, 2006.
[4] The amount of pounds of solid waste generated per year for each land used was divided by 2,204.62 lbs.
[5] United States Environmental Protection Agency, Greenhouse Gas Emissions from Management of Selected Materials in Municipal Solid Waste, September 1998, Page 82. Value represents 0.10 Metric tons Carbon Equivalent (MTCE) per ton of mixed Municipal Solid Waste (MSW) combusted.

Wastewater Related Emissions

Lastly, greenhouse gas emissions may result from the conveyance, treatment, and distribution of the wastewater generated by existing and proposed land uses, as shown in **Table IV.L-8.** Again, it is assumed that the wastewater generation at Parcel OT is negligible for the parking lot.

Table IV.L-8
Greenhouse Gas Emissions from Wastewater Treatment
Existing Sources (Parcel 21) and Proposed Sources

Land Use	Activity	Existing Wastewater Generation Estimate (Mgal/yr)[1]	Electrical Demand Factor (kWh/Mgal)[2]	Greenhouse Gas	Electricity Emission Factor (lbs/mWh)[3]	Greenhouse Gas Emissions (metric tons)[4]	Annual Carbon Dioxide Equivalent Emissions (metric tonsCO_2e)[5]
Existing Sources (Parcel 21)							
Health Club, Retail, and Marine Commercial	Wastewater Treatment	4.85	1,911	CO_2	878.71	3.69	3.69
				CH_4	0.0067	0.000028	0.00059
				N_2O	0.0037	0.000016	0.0050
	Total Existing Emissions from Wastewater Treatment						***3.70***
Proposed Sources							
Residential Units, Health Club, Retail, Yacht Club, and Marine Commercial	Wastewater Treatment	10.62	1,911	CO_2	878.71	8.09	8.09
				CH_4	0.0067	0.000062	0.0013
				N_2O	0.0037	0.000034	0.011
Total Proposed Emissions from Wastewater Treatment							***8.10***
Net Emissions From Wastewater Treatment							***4.40***

[1] Existing and future wastewater was estimated using generation rates found in the City of Los Angeles CEQA Thresholds Guide (2006). (Mgal/yr=millions of gallons/year.)
[2] Navigant Consulting, Inc, Refining Estimates of Water-Related Energy Use in California (CEC-700-2006-118), December 2006, Page 22. Prepared for the California Energy Commission. (kWh/Mgal=kilowatt hours per mega gallon.)
[3] California Climate Action Registry, General Reporting Protocol: Reporting Entity-Wide Greenhouse Gas Emissions Version 3.0, April 2008, Pages 91-93. (lbs/mWh=pounds per megawatt hours.)
[4] In order to determine the annual electricity demand in mWh, the electrical demand factor in kWh was divided by 1,000. The following formula was utilized in determine GHG emissions in metric tons: Annual Electricity Demand (lbs/kWh) X Electricity Emission Factor (lbs/mWh) ÷ 2,204.62 lbs.
[5] Non-CO_2 GHG emissions were converted to carbon dioxide equivalent (CO_2e) by multiplying them by the greenhouse gas global warming potential (GWP). Global warming potentials were developed by the Intergovernmental Panel on Climate Change (IPCC). Annual CO_2e emissions were determined by multiplying greenhouse gas emissions (metric tons) by the GWPs listed in the IPCC's Second Assessment Report (SAR, 2001). The GWP for CO_2 is 1, while the GWP for CH_4 and N_2O is 21 and 310, respectively. California Climate Action Registry, General Reporting Protocol: Reporting Entity-Wide Greenhouse Gas Emissions Version 3.0, April 2008, Page 90.

Summary of Operational Phase Greenhouse Gas Emissions

Based on the preceding analysis, the proposed project would result in the CO_2 equivalent of nearly 4,500 metric tons of greenhouse emissions per year, as shown in **Table IV.L-9**. However, as greenhouse gas emissions from several sources were not considered for existing land uses at Parcel OT, this is considered to be a conservative estimate. Given the grand scope of global climate change, it is not anticipated that a development project with the scale of the proposed project would have an individually discernable effect on global climate change.

Table IV.L-9
Estimated Operational Greenhouse Gas Emissions of the Proposed Project

Emissions Source	Net Emissions in Metric CO_2e Per Year
Mobile Sources/Trip Generation	2,709.69
Area Sources	1,356.29
Electricity	400.49
Water Supply	25.98
Solid Waste	20.66
Wastewater	4.46
Total Net Project GHG Emissions	***4,517.57***

4. Conclusion Regarding Global Climate Change Impacts and Recommended Mitigation Measures

While not likely to be an individually substantial source of greenhouse gas emissions, the emissions from the proposed project would combine with emissions from throughout the Earth to cumulatively contribute to global climate change. As no threshold of significance exists for this issue, a determination of significance cannot be made at this time.

It should be noted that the project, in mitigating for traffic and air quality impacts, has been designed to incorporate many of the mitigation measures to reduce greenhouse gas emissions recommended by the scientific community, and therefore, the project is considered to be consistent with the goals of AB 32 and other policies and plans associated with this global climate change. Additionally, the applicant has incorporated several measures into the project design that exceed minimum Title 24 energy conservation requirements. Among these measures are:

- Installation of low NOx (nitrogen oxide) residential water heaters and space heaters;
- Installation of Energy Star labeled furnaces, equipment, and appliances;
- Use of water-based paint on exterior surfaces;
- Use solar-assisted water heating and/or tankless hot water on demand systems if their energy efficiency is demonstrated to exceed that of a central storage tank water heating system;
- Use of improved insulation and ducting;
- Use of natural lighting;
- Installation of energy efficient lighting and/or maximize use of low pressure sodium and/or fluorescent lighting;
- Use of drought-tolerant landscaping subject to County review;
- Encouragement of the use of transit, bicycling and walking by providing infrastructure to promote their use (bike paths and sidewalks);
- Prohibition against the installation and use of wood burning fireplaces; and
- Use of low volatile organic compound (VOC) coatings for painted surfaces.

The project is also required to and will comply with the Drought-Tolerant Landscaping and Green Building Ordinances. The proposed developments on both Parcel OT and Parcel 21 will be built to Los Angeles County Green Building Standards, which include guidelines for energy conservation, outdoor water conservation, indoor water conservation, resource conservation, and tree planting. Should the

applicant file the building permit application on or after January 1, 2010, the proposed project would also be required to and would incorporate building design and materials so as to earn the LEED Silver Certification.[16]

In addition, Marina del Rey is a developed urban community that is well served by public transportation, including the Metropolitan Transit Authority (MTA or Metro), the Santa Monica Blue Bus, and the Culver City Bus. These three bus lines pass through major corridors in the project area that offer recreational, cultural, dining, and business services for residents. The Culver City Bus connects to the MTA Green Line and the Santa Monica Blue Bus, while the Santa Monica Blue Bus connects to Los Angeles International Airport (LAX), the Santa Monica Airport, Greyhound Bus Line, Union Station in Los Angeles, and all MTA Rail Lines. Further, the proposed Parcel OT project would include shuttle services for its senior residents. Such services reduce the project's contribution to vehicle trips in the region as compared to a proposed development sited on the fringe of suburban development (the County of Los Angeles General Plan Housing Element recognizes the transportation and infrastructure constraints of more remote locations[17]).

As the SCAG's SCS for the Los Angeles region has not yet been formulated per SB 375 requirements, it cannot be concluded with certainty whether the proposed project would be consistent with SB 375. However, based on the above actions to be taken by the project applicant and the fact that the proposed project would be located in a developed urban community that is well served by public transportation and established amenities and services, it appears that the proposed project would be consistent with the goals of SB 375.

[16] Projects that file building permit applications on or after January 1, 2010 and consist of mixed-use or non-residential land uses with a gross floor area equal to or greater than 25,000 square feet must attain LEED Silver Certification.

[17] The County of Los Angeles General Plan Housing Element was adopted in August 2008 and is available at http://planning.lacounty.gov/doc/gp/gpHousing/housing_0708178_Housing_Element_080508.pdf, accessed December 3, 2008.

M. EFFECTS NOT FOUND TO BE SIGNIFICANT

This section describes the environmental determination of issues not included in the Environmental Impact Report (EIR) analyses in Sections IV.A through IV.L. For each issue, the determinations are based on information provided by the Los Angeles County Department of Regional Planning (LA DRP)/Environmental Review Committee (ERC), as well as from subsequent correspondences with other governmental agencies identified below.

1. Flood Hazards

According to the Preliminary Geotechnical Engineering Report prepared for the project sites by Earth Systems Southern California, flooding hazards at the sites would be directly related to tides, due to their location in the Marina. As the ground surface at the sites is located above the highest recorded tide for the vicinity (approximately five feet above mean sea level), the proposed project sites are not considered at significant risk of flooding from normal rainfall or tidal activity. Additionally, a drainage concept for each Parcel is required as part of project approvals and is subject to the review and approval of the Los Angeles Department of Public Works (LADPW). Therefore, flooding hazards related to rainfall are not an issue that warrants further analysis in the EIR. However, the County did determine that the proposed project sites may be subject to the effects of flooding from seiche or tsunamis. These potential impacts are addressed in Section IV.A, Geotechnical Hazards.

2. Fire Hazards

The proposed project is not located in a Very High Fire Hazard Severity Zone (Fire Zone 4) and is not located in close proximity to potentially dangerous fire hazard conditions/uses. Additionally, as discussed in Section IV.I, Utilities (Water Supply), Parcel OT (including a portion of Parcel P)[1] has sufficient water infrastructure from both the City of Los Angeles and County of Los Angeles to provide sufficient water and pressure to meet the fire flow demands of the project, and the project on Parcel 21 includes installation of improved water main infrastructure to meet fire flow demands. In addition, the projects on Parcels OT and 21 would provide adequate access for fire department vehicles, and the Parcel 21 project also includes a 28-foot wide promenade, which would serve as an emergency access road for fire protection (as well as police) vehicles. Both Parcel OT and Parcel 21 would be developed in full accordance with the specifications/requirements of the Los Angeles County Fire Department. Impacts of the proposed project associated with improving water infrastructure are discussed in Section IV.E, Biota; Section IV.H, Traffic/Access; and Section IV.I, Utilities (Water Supply).

3. Mineral Resources

The developments proposed for Parcels OT and 21 would not result in the loss of availability of a known mineral resource that would be of value to the region, nor would they result in the loss if availability of a locally important mineral resource discovery site that is delineated on a local general plan, specific plan, or other land use plan. Parcel OT is zoned for public parking and Parcel 21 is zoned for marine commercial uses. Both existing site uses reflect such zoning. Neither site has been used in the past or is currently used for mineral extraction. This issue does not warrant further analysis in the EIR.

4. Agricultural Resources

The developments proposed for Parcels OT and 21 would not convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance, land zoned for agricultural use, or land under a Williamson Act contract to non-agricultural use. As stated above, Parcel OT is zoned for public parking and Parcel 21 is

[1] Hereafter, unless otherwise noted, the Oceana Retirement Facility project site is simply referred to as Parcel OT.

zoned for marine commercial uses, and current site uses reflect this zoning. Neither site has been used in the past or is currently used for agricultural uses. This issue does not warrant further analysis in the EIR.

5. Sewage Disposal

The LADPW Sewer Maintenance District maintains the sanitary sewers within unincorporated Marina del Rey. Within the Marina del Rey network, the sewage becomes part of the Coastal Interceptor Sewer (CIS) System, which runs from the City's northwest boundary to the Hyperion Wastewater Treatment Plant (Hyperion). The existing sanitary sewer system for Marina del Rey consists of approximately 11 miles of eight, 10, 12, and 15-inch sewer lines extending around Via Marina, Admiralty Way, and Fiji Way. From these locations, eight-inch lines reach into each of the moles to collect sewage from the parcels located there. A pump station with a capacity of 970 gallons per minute is located near the intersection of Bali Way and Admiralty Way to serve the eastern portion of the Marina. This system discharges into the City of Los Angeles system through metering stations at Washington Street near Palawan Way and at 30th Street near Pacific Avenue, the site of the Venice Pump Station (however, Parcels 95 and 97 connect directly into the City's system). From the City's network, the sewage becomes part of the CIS System and is ultimately treated at Hyperion.

The Marina del Rey area holds contractual flow rights, purchased from the City, for use of the pipe and pumping system (CIS), as well as for treatment at Hyperion. Payment for the rights is based on the proportionate share of capital costs and annual costs for the system used, based on the relation of its contractual capacity to the design capacity of the system. The Marina Sewer Maintenance District has a 0.97 mgd (million gallons per day) purchased capacity right into Hyperion, but a remaining 2.13 mgd must be purchased at their current rate (Marina del Rey LUP Page 12-1).

Several working sewer lines exist in the vicinities of Parcels OT and 21, and the projects can access these lines. There is an eight-inch Los Angeles County sewer line on Parcel OT, approximately 14 feet below ground. The applicant would be responsible for re-routing and expanding this line to a ten-inch line, which would tie into an existing 15-inch County line located in Admiralty Way. This work would be performed adjacent to the project boundary in a portion of the Admiralty Way roadway. Adverse environmental impacts associated with this work would include construction period traffic impacts, which would be temporary in nature and mitigable through implementation of Traffic Control Plans, subject to the review and approval of the County of Los Angeles Department of Beaches and Harbors and the County of Los Angeles Department of Public Works Traffic and Lighting Division (refer to Section IV.H, Traffic/Access, Mitigation Measure TA-1). In addition, an existing City of Los Angeles 27-inch functioning sewer line, approximately 17 feet below ground, traverses the subject property in a diagonal fashion. The project would be built around this line, and the applicant would relocate an existing manhole to this line (that is located in the parking lot) to the alley along the south side of the project site. An existing eight-inch sewer line that runs parallel to Panay Way would serve Parcel 21. Sewer construction/connection plans associated with development of the proposed project are subject to review and approval by the County and City DPW and are required to comply with applicable sewer design standards.

The proposed project would not be of substantial size as to significantly impact the treatment capacity at Hyperion. Additionally, the Oceana Retirement Facility proposed for Parcel OT represents the transfer of development potential from Development Zone #7 to Development Zone #6 in the Marina, and the development proposed for Parcel 21 is largely a replacement of existing uses, which also partially offsets any potential project impact associated with sewage generation. Infrastructure is available to provide sewer service to both Parcels. In addition, the project civil engineering firm, S.E.C Civil Engineers, Inc., has consulted with the LADPW Land Development Division, who determined that 1) the proposed

project conforms with the planned build-out of the Marina del Rey community, 2) no sewer area study is required for the proposed project, 3) the proposed project would not negatively impact the existing sewer system, and 4) no further analysis of the sewer system would be required.[2]

Based on growth in the Marina del Rey community and nearby City of Los Angeles projects, the CIS system is reaching capacity, and the City of Los Angeles is therefore planning to upgrade the pump station (the Venice Pumping Plant Dual Force Main Project). The City of Los Angeles is proposing to construct a new force main sewer that would be 54 inches in diameter and extend approximately two miles from the existing Venice Pumping Plant at 140 Hurricane Street in the Venice community to a junction structure on the CIS in the community of Playa Del Rey, on Vista Del Mar. The new force main sewer would be used in conjunction with the existing force main sewer. The City of Los Angeles Bureau of Engineering is recommending a Via Marina/Pacific Avenue alignment, as described in the EIR for the project, which is currently pending certification.[3] Regardless of the final alignment, as the LADPW does not anticipate the proposed project to negatively impact the existing sewer system, it is unlikely that it would adversely impact capacity or treatment with an upgraded sewer system.

6. Education

The project does not propose land uses that would generate school-age children. Therefore, further analysis of this issue is not warranted in the EIR.

7. Fire/Sheriff Services

Fire Protection Services

Marina del Rey's own Los Angeles County-supported Fire Department provides fire protection services to the project area, and the nearest station to the project sites is located at 4433 Admiralty Way. Additionally, as discussed in Section IV.E, Biota; Section IV.H, Traffic/Access; IV.I, Utilities (Water Supply); and Section IV.M.2, Fire Hazards, Parcel OT has adequate water infrastructure to meet the fire flow demands of the project, and the Parcel 21 project includes applicant funded water main infrastructure improvements to meet the fire flow demands of that project. Parcel 21 also proposes a 28-foot wide promenade, which would also serve as an emergency access road for fire protection (as well as police) vehicles. Both Parcel OT and Parcel 21 would be developed in full accordance with the specifications/requirements of the Los Angeles County Fire Department. Further, as provided in Section IV.H-A, Geotechnical Hazards, the applicant will prepare evacuation plans to mitigate the potential hazards associated with seiche and tsunamis. These plans would be applicable to other emergency situations as well, which would further assist the Fire Department. Therefore, the proposed project is not expected to result in significant adverse impacts to fire protection services.

Police Protection Services

In response to public circulation of the Notice of Preparation (NOP) for this EIR in March 2007, the County of Los Angeles Sheriff's Department submitted a comment letter specifically addressing potential impacts to their services resulting from project implementation in association with cumulative development (refer to **Volume II, Appendix A**). Police protection services are provided to Marina del Rey by the L.A. County Sheriff's station, which is located at 13851 Fiji Way. The Sheriff's Department

[2] Chong, Suk and Khalkhali, Tony. County of Los Angeles Department of Public Works, Land Development Division. Correspondences via electronic mail on March 10, 2009; April 14, 2009; and April 15, 2009.

[3] City of Los Angeles, Projects in Review. Accessed from http://eng.lacity.org/techdocs/emg/Environmental_Review_Documents.htm, on April 13, 2009. Website last updated April 1, 2009.

anticipates that the retirement facility units, and redevelopment and modernization of land uses, would increase the daily and permanent population in Marina del Rey, with a corresponding increase in calls for service, but that the project on its own would not require permanent assignment of additional patrol cars in Marina del Rey. Further, the Sheriff's Department stated that the proposed project provides ample access and sufficient parking. While the Sheriff's Department did express concern regarding increased traffic due to proposed project trip generation, as discussed in Section IV.H, Traffic/Access, the applicant would contribute "fair share" funding toward traffic improvement measures. As such, the proposed project is not expected to result in project-level impacts to police protection services.

However, the Sheriff's Department noted that the aggregate of ongoing redevelopment in Marina del Rey, as well as Countywide development, with the associated increases in population and traffic congestion, would increase the demand for police protection services and degrade response times. Eventually, an increase in Sheriff's Department personnel, equipment, and/or facilities would be required. Following subsequent correspondence with the Sheriff's Department,[4] it was found that there is no available standard that can be applied to developments for providing mitigation for potential police protection service impacts (for example, to reduce traffic impacts, developments must pay their "fair share" to fund improvements in Marina del Rey). Although the Sheriff's Department cites a Contraflow Traffic System, use of wireless or reverse 911 technologies (for situations such as advanced tsunamis warnings), or traffic flow surveillance (webcams/global positioning systems) to alert evacuees of the most effective exit routes, these are not actions for which individual applicants of redevelopment in Marina del Rey would be responsible. Rather, these measures would have to be agreed to by several governmental agencies and be incorporated into updates of the Marina del Rey LCP or the Los Angeles County General Plan.

As such, the proposed project has addressed the Sheriff's Department concerns regarding cumulative impacts by providing adequate access and parking, paying its "fair share" funding for traffic improvements, and by preparing evacuation plans for both Parcel OT and Parcel 21. Further, the proposed project would add to the tax base of the community, contributing to the general fund from which the County draws to provide public services and capital improvements. As such, the proposed project is not expected to result in significant cumulative adverse impacts to police protection services, and further analysis is not warranted in the EIR.

8. Utilities

The Los Angeles County Department of Regional Planning (LACDRP) determined in the Initial Study prepared for the project that the proposed developments would not create problems with providing utility services, such as electricity, gas, or propane. Improvements to the electrical infrastructure on Parcel OT are included as a part of the proposed project. These improvements would occur within the Washington Boulevard roadway, and temporary construction traffic impacts associated with this work are discussed in Section IV.H, Traffic/Access.

With regard to solid waste services, the County of Los Angeles has contracts with multiple landfills in the surrounding area. The proposed project does not represent a large enough development to significantly impact the capacity of the landfills used, as it would represent a very small portion of the total amount of waste disposed at these landfills. Also, the Oceana Retirement Facility represents the transfer of development potential from Development Zone #7 to Development Zone #6 in the Marina, and the development proposed for Parcel 21 is largely a replacement of existing uses, which partially offset any potential project impacts associated with solid waste generation. Additionally, the California Integrated

[4] Personal Communication with Tom Bellizia, County of Los Angeles Sheriff's Department Facilities Planning Bureau, April 25, 2007.

Waste Management Act (AB 939) of 1989 requires each California city and county to prepare, adopt, and submit to the California Integrated Waste Management Board (CIWMB) a source reduction and recycling element (SRRE) that demonstrates how the jurisdiction will meet AB 939's mandated diversion goals of 25 percent by January 1, 1995, and 50 percent on and after January 1, 2000. Further, the California Solid Waste Reuse and Recycling Access Act of 1991, which is part of the California Integrated Waste Management Act of 1989, requires the CIWMB to prepare a model ordinance for adoption by a local agency, relating to adequate areas for collecting and loading recyclable materials in development projects, on or before March 1, 1993.

According to the CIWMB, unincorporated areas of Los Angeles County diverted 53 percent of the solid waste generated in 2004. Disposal of solid waste from the proposed project would be consistent with the policies and programs contained within the County of Los Angeles SRRE in addition to the County of Los Angeles Green Building Ordinance. Methods for achieving solid waste reduction include measures such as locating recycling bins in proximity to other trashcans and dumpsters used by future on-site residents and staff, as well as providing receptacles for green waste materials. The Conditional Use Permits for development on each Parcel shall include a condition that requires adequate storage areas for the collection and removal of recyclable materials. Due to these factors, solid waste generated by the proposed project would not have an adverse significant impact on landfill capacity. Thus, further analysis of solid waste, electricity, gas, and propane services for the project site are not warranted in the EIR. However, for a discussion on solid waste generated by proposed project demolition/construction activities, refer to Section III, Project Description. Additionally, refer to Section IV.I, Utilities (Water Supply) for a discussion on the proposed project's estimated water demand, as well as an assessment of the regional water supply and water infrastructure.

9. Other Factors (General)

A portion of the LACDRP Initial Study form addresses "Other Factors" that may be affected by proposed projects but that cannot be assigned to other Initial Study topic areas. These three factors include whether the proposed project would: result in an inefficient use of energy resources; result in a major change in the patterns, scale, or character of the general area or community; or result in a significant reduction in the amount of agricultural land. The LACDRP determined in the Initial Study prepared for the project that the proposed development would have a "less than significant/no impact" on these factors. Therefore, further analysis of energy resources is not warranted in the EIR. However, for a discussion on agricultural lands with relation to the proposed project, refer to Part 4, Agricultural Resources, above, and for the analysis of the proposed project's potential effects on visual resources and community character, refer to Section IV.G, Visual Qualities (the proposed project's potential impacts to visual resources and compatibility with surrounding land uses were found to be less than significant).

10. Environmental Safety

Analyses of impacts associated with development of the proposed project in light of soil toxicity and methane gas are provided in Section IV.J, Environmental Safety. However, there are other environmental safety factors that did not warrant further analysis, which address: the use, transport, production, handling, and/or storage of hazardous materials on-site; storage of pressurized tanks on-site; residential units, schools, or hospitals located within 500 feet that may be adversely affected by project activities; accidental release of hazardous materials; emissions of hazardous materials/waste within one-quarter of a mile of an existing or proposed school; location of the project site within a hazardous materials site, compiled pursuant to Government Code §65962.5; hazards associated with airports; and conflicts with emergency response plans or emergency evacuation plans. These factors in relation to the proposed project and why they did not warrant further EIR analysis are discussed below.

The proposed project consists mainly of active senior accommodations, retail and commercial uses, and parking facilities and is therefore not likely to routinely transport, use, emit/release, or dispose of hazardous materials in substantial quantities, nor would it store pressurized tanks on-site. Therefore, the proposed project would not adversely affect residential units, school, or hospitals located within 500 feet (further, no schools are located within one-quarter of a mile of either Parcel OT or Parcel 21). The proposed project would utilize ordinary household or general commercial cleansers, paints, solvents and other substances necessary for cleaning and maintenance; however, the use and disposal of such substances is subject to the regulations on the labels and as such would not result in adverse significant impacts. The Conditional Use Permits for development on each Parcel shall include a condition that requires the distribution of educational materials to tenants on the proper management and disposal of such hazardous substances. In addition, the Sanitation Districts of Los Angeles County offers residents of Los Angeles a legal and cost free manner by which to dispose of household hazardous waste through their Household Hazardous Waste (and Electronic Waste) Round Ups (information available at http://www.lacsd.org/info/hhw_e_waste/default.asp). One such event occurred in Marina del Rey at Dock 52 in February of 2009.

Additionally, Parcels OT and 21 are not included in the list of hazardous material sites, compiled pursuant to Government Code §65962.5, as referenced on the State Department of Toxic Substances Control (DTSC) website.[5]

The airports in the region include the Santa Monica Municipal Airport, the Los Angeles International Airport (LAX) in Los Angeles, the Burbank-Glendale-Pasadena Airport in Burbank, and the John Wayne Airport in Santa Ana. The closest airport to the project site is the Santa Monica Municipal airport, located on 18601 Airport Way in Santa Monica. It is approximately four miles from the project site. The proposed project is not located within the vicinity of a private airstrip either. Additionally, the airplane flight paths of this airport (arrivals and departures) do not cross directly over the site[6]. Therefore, the proposed project is not expected to result in a significant adverse safety hazard for people residing or working in the area associated with airport uses.

Last, the proposed project would not interfere with an adopted emergency response plan or evacuation plan. In addition, the proposed site plan would require review and approval for emergency accessibility (fire and police services) prior to approval by the Department of Building and Safety. Therefore, the proposed project would not result in a significant adverse impact on this factor.

11. Population/Housing/Employment/Recreation

Population/Housing/Employment

According to the Initial Study prepared for the proposed project by the LA DRP, the proposed project would not cumulatively exceed official regional or local population projections, nor would it induce substantial direct or indirect growth in the area. Additionally, the proposed project would not displace existing housing or substantial numbers of people, necessitating the construction of replacement housing elsewhere. Finally, the proposed project is not expected to result in a substantial job/housing imbalance or substantial increase in vehicle miles traveled (VMT) (refer to Section IV.H, Traffic/Access). Therefore, these issues do not warrant further analysis in the EIR.

[5] http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm

[6] Information from Runway 3 and 21 Flight Path Maps from the Santa Monica Airport website, http://www.santa-monica.org/airport/n_flight_paths.aspx, accessed on October 10, 2006.

Recreation

Several parks and recreation opportunities exist in the vicinity of the project, including Burton Chace Park, Admiralty Park, Edgington Park, Glen Alla Park, and the Culver West Park. Other recreational activities in the area also include the Aubrey E. Austin View Piers, Venice Pier, North Jetty Beach and Promenade, the Oakwood Recreation Center on California Street and the Penmar Golf Course on Rose Ave. The Marina itself, as well as promenades throughout the area and Mother's Beach, are recreational amenities providing water recreation to both residents and the public.

The proposed Oceana Retirement Facility is a senior facility and is not a residential development in the traditional sense. For example, no children will reside at the facility, and this would reduce the need for active park space. In addition, the project site plan incorporates various recreational activities suitable for seniors on its premises. These consist of indoor recreational opportunities (e.g., two card rooms, a private library, a computer room, an arts and crafts room, a screening room, a beauty salon, an outdoor spa and a gym) as well as outdoor benches and walkways, terraces, and inner courtyards. In addition, each unit offers its resident their own private balcony. The site also offers a view of the Oxford Retention Basin (Lagoon) on Parcel P on the east side of the property from some of the terraces. The proposed project includes a passageway that traverses the property from Admiralty Way to Washington Boulevard near the Oxford Retention Basin. Residents and the general public would be given the opportunity for walking, biking and passive recreation (such as bird watching) in the landscaped passageway area, and benches would also be provided. In order to accomplish this, the proposed project seeks an adjustment to the lease parcel boundary in order to encroach into 19,755 s.f. of Parcel P (30 to 35 feet for the building and 20 to 25 feet for a landscape public passageway), which is designated open space in the LCP. Currently, a portion of the public parking spaces on Parcel OT and the Oxford Basin maintenance road encroach 6,665 s.f. into Parcel P. The proposed building would be located on 9,397 s.f. of the Parcel P for a net increase in the disturbance on Parcel P of 2,732 s.f. However, according to the Burton W. Chace Park Master Plan (Los Angeles County Department of Beaches and Harbors, June 11, 2009), the existing Burton W. Chace Park on Mindanao Way is 7.8 acres in size, but the Master Plan project would increase its size to 15 acres. Therefore, notwithstanding the Parcel OT project's encroachment into Parcel P, open space in the Marina del Rey community would cumulatively increase under Phase II development, and the proposed project would not adversely impact the supply of open space in the LCP area.

As Parcel 21 does not have a residential component, it does not represent a land use that would generate a substantial population using recreational facilities. In addition, development on Parcel 21 would incorporate a park plaza with a direct view of the Marina adjacent to the proposed structure on Parcel 21 and would extend the existing promenade located on Parcel 20 (the existing apartment complex adjacent to Parcel 21). The park would include an open lawn area, terraced seating, trees and a pedestrian path between the street and the promenade. The 28-foot wide promenade would serve a recreational function by allowing the public direct access to the waterfront. The promenade would be incorporated with benches for pedestrian use.

Given the size of the project and the amenities to be provided on-site, the proposed project would have a less than significant impact on area of parks and recreational facilities. This issue does not warrant further analysis in the EIR.

V. ALTERNATIVES

The following alternatives were selected for analysis in this EIR:

Alternative 1: No Project Alternative – Buildout Under Existing Marina del Rey LCP

Alternative 2: No Change in the Type of Land Use Development Potential in the Marina del Rey LCP

Alternative 3: Alternative Land Use – Public Park on Parcel OT (including a portion of Parcel P)[1] and Boat Storage on Parcel 21

Alternative 4: Reduced Height Alternative

Alternative 5: No Lease Parcel Boundary Adjustment Alternative

Alternative 6: No Retail Use on Parcel OT Alternative

The selection of these alternatives was based on CEQA Guidelines and the project's significant impacts as identified in Section IV of this EIR. These considerations are discussed below, followed by analyses of each of the alternatives and the identification of the environmentally superior alternative.

1. OVERVIEW OF CEQA REQUIREMENTS AND GUIDELINES FOR ALTERNATIVES ANALYSIS

CEQA Guidelines Section 15126.6 provides a framework for the formulation and analysis of alternatives in an EIR. This Section states, "An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." Objectives for the proposed project are listed in Section III, Project Description. Key concepts pertaining to the discussion of alternatives are further specified in the CEQA Guidelines as follows below.

Reasonable Range of Alternatives

The range of alternatives required within an EIR is governed by the "rule of reason," which requires an EIR to set forth only those alternatives necessary to permit a reasoned choice. While there is no rule for the number of alternatives that must be discussed, the EIR must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation, but need not consider every conceivable alternative to a project. Furthermore, an EIR need not consider an alternative with an unlikely or speculative potential for implementation or an alternative that would result in effects that cannot be reasonably ascertained.

Feasibility

An EIR is not required to include alternatives that are not feasible. The term "feasible" is defined in the CEQA Guidelines (Section 15364), as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors." (See Public Resources Code, Section 21061.1; CEQA Guidelines, Section 15364.) Section 15126.6(f)(1) provides additional factors that may be taken into account when addressing the feasibility of alternatives. These factors include site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control or otherwise have access to potential alternative sites.

[1] Hereafter, unless otherwise noted, the Oceana Retirement Facility project site is simply referred to as Parcel OT.

Level of Analysis

The analysis of environmental effects of project alternatives need not be as thorough or detailed as the analysis of the project itself. Rather, the CEQA Guidelines state that the EIR shall include "sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project."

2. SIGNIFICANT ENVIRONMENTAL IMPACTS IDENTIFIED IN THIS EIR

As described above, the primary purpose of the alternatives analysis is to identify changes to the proposed project that would reduce or avoid significant impacts of the project as proposed. As described in Section IV, the proposed project would result in the following significant impacts:

Geotechnical Hazards – Significant but mitigable impacts due to 1) development in areas lower than the highest recorded groundwater table, 2) development in areas with unsuitable soils, 3) development in areas subject to the secondary seismic effects of liquefaction, ground subsidence, and lateral spreading, and 4) development in areas subject to the effects of seiche and tsunamis.

Noise – Significant but mitigable impacts due to 1) pile driving noise during construction of both Parcels OT and 21, 2) noise from heavy equipment operations (non-pile driving) during construction of both Parcels OT and 21, 3) interior noise at the proposed Parcel OT retirement facility from roadway conditions, and 4) off-site noise exposure related to HVAC equipment on Parcel 21. A significant and unavoidable impact related to individual balconies facing Washington Blvd. or Admiralty Way on Parcel OT that would have outside noise levels exceeding the 65 dB CNEL goal for usable outdoor space.

Water Quality – Significant but mitigable impacts associated with surface water quality and groundwater quality.

Air Quality – Significant but mitigable Local Significance Threshold impact associated with PM-2.5 and PM-10. Significant but mitigable cumulative impact, because as the South Coast Air Basin (SCAB) is in non-attainment for smog and PM-10, impacts from all Basin-wide construction activities are cumulatively considerable, including the proposed project.

Biota – Significant but mitigable impact associated with the potential for nesting of resident and summer resident bird species in the trees on both Parcel OT and Parcel 21, which would be removed during site clearing.

Cultural Resources – Significant but mitigable impact, because the potential exists for prehistoric and historic archaeological resources to be uncovered during grading and excavation activities for the proposed developments on Parcel OT and Parcel 21.

Visual Qualities – Significant and unavoidable impact related to an increase in height and massing from the current condition on the Panay Way mole road associated with redevelopment of Parcel 21, and significant and unavoidable impact related to the projects' (Parcel OT and Parcel 21) incremental contribution to the cumulative impact associated with the intensification of development in Marina del Rey).

Traffic/Access – Significant but mitigable impact resulting from construction period traffic. Significant but mitigable cumulative impact associated with traffic congestion at 6 of the 14 study intersections. Significant and unmitigable cumulative impact associated with traffic congestion at 5 of the 14 study intersections. Significant and mitigable impact associated with cumulative construction traffic.

Utilities (Water Supply) – Significant but mitigable impacts associated with the relocation of a water line that traverses Parcel OT and the upgrading of a water line in Panay Way that would serve Parcel 21.

Environmental Safety – Significant but mitigable impact associated with soil toxicity and methane gas at Parcel OT.

Land Use – As identified above, the proposed project would result in some significant impacts, all of which are mitigable except for 1) the noise impact on Parcel OT related to outside noise levels exceeding the 65 dB CNEL goal for usable outdoor space on the balconies of the retirement facility facing Admiralty Way and Washington Boulevard, 2) the cumulative traffic impacts at 5 of the 14 study intersection, and 3) the visual qualities project level impact associated with development of Parcel 21 and the cumulative level impact related to Marina del Rey Phase II development. As a result, this land use aspect of the proposed project is incompatible with the noise standards of Los Angeles County/Marina del Rey. As these impacts are identified in Sections IV.B, Noise; IV.G, Visual Qualities; and IV.H, Traffic/Access, they are not identified as impacts again in Section IV.K, Land Use.

Global Climate Change – A discussion of global climate change is included in this EIR. However, as significance thresholds under CEQA that address greenhouse gas emissions or global climate change have not yet been formally adopted, a significance determination regarding the proposed project as it relates to this issue cannot be made at this time. Regardless, the alternatives include a brief discussion of this topic as compared to the proposed project.

The alternatives assessed in this section include various approaches to reducing or avoiding one or more of these impacts.

3. ALTERNATIVES CONSIDERED BUT REJECTED FOR DETAILED ANALYSIS

Alternative Sites

Alternative locations should be discussed where any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. CEQA Guidelines Section 15126.6(f)(2)(A) states that only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR. Significant impacts associated with the proposed project are geotechnical hazards, noise, water quality, air quality, biota, cultural resources, traffic/access, environmental safety, and land use. The project applicant is limited in selecting alternatives sites based on the lack of availability of vacant land, as well as the current ownership and leases that are held on properties in Marina del Rey. As described in Section III, Project Description, the County of Los Angeles is the landowner in Marina del Rey, and individual developers hold leases to the properties.[2] The parcels readily available to the applicant are Parcels OT and 21. Therefore, alternative sites were not further explored in this analysis.

Reduced Scale Alternatives

The proposed project's impacts are primarily related to ground disturbance and construction activities and/or the location of the proposed uses in proximity to adjacent land uses. These impacts would not be

[2] Of the Marina's 807 acres, 260 acres of land and 146 acres of water are leased to the private sector under long-term land leases. These 56 leases were awarded by open competitive bids in the early and mid 1960's. The developers were required to construct improvements on unimproved parcels in conformance with authorized uses designated in their leases and pursuant to a master plan for Marina de1 Rey. Most leases run for 60 years. In entering into these contracts, the County retained certain controls over the private developer to ensure the facilities were constructed in a timely manner and thereafter operated in a manner consistent with the County's goal of encouraging public use of the project.

substantially reduced with a reduced scale alternative. Although the project's traffic-related impacts would be reduced with a reduced scale alternative, the trips generated by the proposed project are within the trip limits set fort in the Marina del Rey LCP. In addition, the project's contribution to cumulative traffic impacts is low (three percent); reducing the scale of the project is not expected to substantially reduce this impact.

Transfer of Alternative Development Potential

This alternative would involve the transfer of dwelling unit development potential to the Oxford DZ#6 from another DZ in the Marina del Rey LCP in order to allow for the development of active seniors accommodations on Parcel OT, rather than achieving this through the transfer of hotel unit development potential as proposed. However, according to the Los Angeles County Department of Beaches and Harbors, no dwelling unit development potential is available within the LCP for transfer to the Oxford DZ #6 for development of the proposed project. Moreover, as the proposed project on Parcel OT would develop a retirement facility wherein residents are age-restricted, units do not include kitchens, and average daily trips would be less as compared to a multi-family development, the transfer of hotel units is considered to be a more appropriate land use to transfer to the Oxford DZ #6 than dwelling units.

4. ALTERNATIVES ANALYSIS

Alternative 1: No Project Alternative

Under CEQA, the "no project" analysis shall discuss the existing conditions at the time the notice of preparation is published, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. The "no project" alternative is the circumstance under which the project does not proceed, and the analysis would compare the environmental effects of the property remaining in its existing state against environmental effects that would occur if the project is approved. However, if disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this "no project" consequence should be discussed as well.

Within the existing Marina, development of some kind has occurred on all leasehold parcels. This development cycle is generally referred to as Phase I development. Recycling, intensification, or conversion of these initial uses on leased parcels is referred to as Phase II development. Phase II development is encouraged and permitted, subject to the individual leaseholders demonstrating consistency with the policies of the Marina del Rey LCP, which includes priority consideration for development of boating and visitor-serving facilities. Neither Parcel OT nor Parcel 21 has undergone development under Phase II of the Marina del Rey LCP. As described further below for each parcel, the No Project Alternative assumes the continuation of existing conditions at these sites, although renovation/redevelopment of existing facilities may occur.

Parcel OT

This alternative assumes that the Active Seniors Accommodations Land Use Category would not be added to the LCP; the lease parcel boundary between Parcel OT and Parcel P would not be adjusted; Parcel OT and the portion of Parcel P to be included within Parcel OT would not be re-designated as an Active Seniors Accommodations parcel; and the requested transfer of development potential to Parcel OT, including 114 hotel rooms and 5,000 square feet (s.f.) of retail space, from the Admiralty Development Zone (DZ) #7 and Palawan/Beach DZ #5, respectively, to the Oxford DZ #6 does not occur. As Parcel OT currently exists as a surface parking lot (183 spaces) and is designated for parking in the Marina del Rey LCP, it would likely remain as such a use, albeit redeveloped pursuant to the conditions

of Phase II development of the Marina del Rey LCP. As specified in the Marina del Rey LCP, parcels in the LCP area designated for parking carry a height limitation of 90 feet. Therefore, should development of the proposed project not occur, Parcel OT could be redeveloped into a parking structure that is 90 feet in height (taller than the proposed retirement facility).

Parcel 21

Without the transfer of development potential from Parcel 20, Phase II (also referred to as Parcel 19), or the transfer of parking from Parcel OT, it is also reasonable to assume that the existing uses on Parcel 21 would remain although they may be renovated or redeveloped. It is also assumed that expansion of existing development levels at the site would not occur under this alternative. The site would contain the same amount of square footage of marine commercial (3,132 s.f.), retail (2,916 s.f.), and health club (16,000 s.f.) uses, as well as the same amount of parking (226 spaces) as it does currently. However, if the development potential from Parcel 20, Phase II, is not transferred to Parcel 21, this leaves 2,300 s.f. of marine commercial and 5,000 s.f. of yacht club uses originally approved for Parcel 20 Phase II/Parcel 19 in the Panay DZ #4 to be developed. As one of the current Marina del Rey redevelopment projects includes the development of an administrative building on Parcel 20 Phase II/Parcel 19 for the L.A. County Department of Beaches and Harbors (DCB Project Table, March 8, 2007), this remaining development potential would be transferred elsewhere (to another parcel in the Panay DZ #4 or to another DZ), if an alternate site is not selected for the County's administrative building. Under the no project alternative, the 31,050 s.f. of Parcel 21 that is to be transferred to Parcel GR would remain part of Parcel 21, prohibiting the expansion of the existing public parking lot currently on Parcel GR.

Environmental Evaluation

In the case that the proposed project is disapproved and both Parcels OT and 21 remain in their existing condition and are not proposed for redevelopment under Phase II of the Marina del Rey LCP, then the No Project Alternative would avoid all potential impacts of the proposed project related to geotechnical hazards, noise, water quality, air quality, biota, cultural resources, visual qualities, traffic/access, environmental safety, land use, utilities, and global climate change. If the parcels are redeveloped, construction-related impacts in each of these issue areas may occur. With denial of the proposed project, development permitted under the /LCP may occur elsewhere in the LCP area, resulting in similar impacts elsewhere. However, the specific location and type of development that would occur cannot be known at this time and therefore the impacts of this development cannot be assessed.

Alternative 2: No Change in Type of Land Use Development Potential in the Marina del Rey LCP

This alternative would re-designate Parcel OT and the portion of Parcel P to be included within Parcel OT as a Hotel parcel in the LCP and allows for the requested transfer of permitted land uses (development potential) within the Marina del Rey LCP area. It does not allow for changes in the types of the land uses to be developed. Specifically, the development potential (in the form of 114 hotel rooms) would still be transferred to Parcel OT in the Oxford DZ #6 from the Admiralty DZ #7, as proposed with the project. No retail development potential would be transferred from the Palawan/Beach DZ #5 to the Admiralty DZ #7; therefore, a Mixed Use Overlay Zone (MUZ) would not be necessary, as the land use would not be comprised of mixed uses.

Parcel OT

With this alternative, Parcel OT would be re-designated as a Hotel parcel in the LCP, and development potential (114 hotel rooms) would be transferred to Parcel OT in the Oxford DZ #6 from the Admiralty DZ #7. A 114-room hotel (57 guest rooms and 57 guestroom suites) would be constructed on Parcel OT,

as well as parking for the hotel (86 spaces).[3] The design of this structure is anticipated to be similar to that of the active seniors accommodations; however, the hotel units would not be equipped with balconies. The proposed structure would consist of five levels that extend from Washington Boulevard to Admiralty Way, as well as a partial level that fronts only Washington Boulevard, due to the slope of the property. Parking spaces would be available on the partial level (ground floor level) as well as the lower ground level above it. As with the proposed project, 92 of the existing 186 on-site parking spaces would be replaced on site and 94 would be transferred to Parcel 21.

Parcel 21

The proposed development on Parcel 21 under this alternative would remain the same as that proposed with the project. The proposed four-level Holiday Harbor Courts development would replace existing uses with new marine uses, a public park plaza and promenade, and a six-level parking structure, which would be partially subterranean. The development on Parcel 21 would replace the existing 16,000 s.f. of health club, 2,916 s.f. of retail, and 3,132 s.f. of marine commercial on Parcel 21. An additional 2,300 s.f. of marine commercial and 5,000 s.f. of yacht club uses would be transferred to Parcel 21 from Parcel 20 Phase II/Parcel 19. Replacement parking for the existing 226 parking spaces on Parcel 21 and parking for the additional marine commercial and yacht club uses (127 spaces), as well as 94 spaces from Parcel OT, would be located on-site (447 total spaces).

Environmental Evaluation

As the hotel proposed for Parcel OT under this alternative is expected to be structurally and aesthetically similar to the active seniors accommodations proposed with the project, and no changes would occur to the development on Parcel 21 with this alternative, it can be assumed that Alternative 2 would result in similar impacts associated with geotechnical hazards, water quality, air quality, biota, cultural resources, utilities, and environmental safety as the proposed project. The demolition, grading, and construction and operational activities necessary for development of the proposed project would also be required with Alternative 2. However, the environmental effects of Alternative 2 that would vary from the proposed project involve land use, noise, and traffic impacts associated with development of Parcel OT as a hotel rather than an active seniors accommodations facility.

Geotechnical Hazards

The proposed project's significant but mitigable geotechnical impacts are related to development in areas lower than the highest recorded groundwater table, areas with unsuitable soils, areas subject to the secondary seismic effects of liquefaction, ground subsidence, and lateral spreading, and areas subject to the effects of seiche and tsunamis. As this alternative would also involve construction in these areas, this alternative project would likely be subject to similar geotechnical effects as are expected to result under the proposed project.

Noise

The proposed project's significant but mitigable noise impacts are associated with pile driving noise during construction of both Parcels OT and 21, noise from heavy equipment operations (non-pile driving) during construction of both Parcels OT and 21, interior noise at the proposed Parcel OT retirement facility from roadway conditions, and off-site noise exposure related to HVAC equipment on Parcel 21. A significant and unavoidable impact related to individual balconies facing Washington Blvd. or Admiralty Way on Parcel OT having outside noise levels exceeding the 65 dB CNEL goal for usable outdoor space

[3] Hotel uses require one parking space for each two guestrooms, and one parking space for each suite of guestrooms, based on the Los Angeles County Code.

would also occur under the proposed project. The majority of these noise impacts would result from implementation of this alternative as well, since it would involve similar construction activities and would be developed at the same location near residences and/or near major roadways. However, the hotel would not include balconies, nor permanent residential units; therefore, the proposed project's significant and unavoidable noise impact would be avoided under this alternative.

Water Quality

The proposed project's significant but mitigable surface and ground water quality impacts are associated with the introduction of pollutants during construction and operation of the project. As this alternative would involve similar construction activities and similar urban uses that generate storm water pollutants (e.g., oil and grease from driveways and parking areas), this alternative would likely result in similar water quality impacts as are expected to result under the proposed project.

Air Quality

The proposed project's significant but mitigable Local Significance Threshold impact and construction-related cumulative impact related to the location of the project in the South Coast Air Basin (SCAB), which is in non-attainment for smog and PM-10, would not be avoided under this alternative as the location and construction activities of the alternative are similar to those of the proposed project.

Biota

The proposed project's significant but mitigable impact is associated with the potential for nesting of resident and summer resident bird species in the trees on both Parcel OT and Parcel 21, which would be removed during site clearing. This alternative would not avoid this significant impact of the proposed project, as the Parcels would still be cleared of trees during site preparation.

Cultural Resources

The proposed project's significant but mitigable impact results from the potential to uncover prehistoric and historic archaeological resources during grading and excavation activities for the developments on Parcels OT and 21. As this alternative would involve similar construction activities at these sites, it would not avoid significant impacts to cultural resources.

Visual Qualities

The proposed project's significant and unavoidable impact associated with redevelopment of Parcel 21 would be the same under this alternative as with the proposed project, as would the projects' cumulative visual quality impact associated with Marina del Rey Phase II development. Further, the proposed hotel on Parcel OT with this alternative would have a similar visual quality as the active seniors accommodations facility proposed with the project.

Traffic/Access

The potential additional traffic resulting from area-wide development in Marina del Rey would significantly impact 11 of the 14 study intersections that were analyzed in the Traffic Study prepared for the proposed project, and this would result in some locations operating near or above capacity. The proposed project would contribute incrementally to these cumulative impacts, although its contributions are three percent or less of the cumulative impact at all locations.

Under this alternative, no net change in vehicle trips is anticipated from the alternative development on Parcel 21, as the uses are either being replaced on Parcel 21 or transferred from Parcel 20, which is also

located in the Panay DZ #4 and adjacent to Parcel 21 to the east. Parcel 21 would generate -109 daily trips, two AM peak hour trips, and -11 PM peak hour trips (refer to Section IV.H, Traffic/Access). Parcel OT, developed as a hotel with 114 units (57 guest rooms and 57 guestroom suites), would generate 931 daily trips, 64 AM peak hour trips, and 40 PM peak hour trips.[4] This alternative (Parcel 21 and Parcel OT) would therefore generate 822 daily trips, 66 AM peak hour trips, and 29 PM Peak hour trips, as compared to the proposed project, which would generate 278 daily trips, 12 AM peak hour trips, and 30 PM peak hour trips (where the development proposed for Parcel OT would generate 387 daily trips, 10 AM peak hour trips, and 41 PM peak hour trips). Therefore, this alternative would contribute to a greater portion of the cumulative traffic congestion impact than the proposed project.

With regard to the need for construction traffic management, the impact associated with development of the proposed project would be similar to that of this alternative.

Utilities (Water Supply)

As the hotel proposed for Parcel OT under this alternative is expected to be structurally similar to the active seniors accommodations facility proposed with the project, and no changes would occur to the development on Parcel 21 with this alternative, it can be assumed that Alternative 2 would result in similar impacts associated with utilities as the proposed project. It is expected that the proposed hotel on Parcel OT would have a similar footprint to the proposed retirement facility, thereby necessitating relocation of the County's waterline to accommodate the building. The Panay Way water line would still be upgraded to meet the water flow and pressure requirements of the Fire Department for Parcel 21.

Environmental Safety

The proposed project's significant but mitigable impact associated with soil toxicity and methane gas at Parcel OT would not be avoided under this alternative. The alternative would still be located on a site with soils that are a part of the closed Venice Landfill and is located within a Methane Gas Buffer Zone. Regarding Parcel 21, the analytical results for all soil samples collected on-site were not high enough for rendering the materials hazardous waste during excavation. Development of Parcel 21 under this alternative is therefore expected to result in a less than significant impact associated with soil toxicity, as with the proposed project.

Land Use

This alternative would require re-designation of the Land Use Category on Parcel OT and the portion of Parcel P to be added to Parcel OT, as would the proposed project. Under this alternative, the Parcels would be re-designated from Parking and Open Space to Hotel, rather than to Active Seniors Accommodations as under the proposed project. However, this alternative would not necessitate the creation of a new Land Use Category in the LCP, as the Hotel category already exists. This in concert with the fact that this alternative does not require a MUZ for Parcel OT results in this alternative being generally more consistent with the planned uses set for in Marina del Rey LCP than the proposed project. Additionally, this alternative would avoid the significant and unmitigable noise impact of the proposed project involving the exposure of residents to outdoor noise levels in excess of the noise standards for outdoor usable space, which also avoids the associated land use compatibility issue. The land use impacts that would be associated with Parcel 21 under this alternative would be the same as under the proposed project, as no modifications are proposed for this component of the project that differ from the original proposal. Parcel 21 would still require an amendment to the existing LCP Amendment No. 1-01 to allow

[4] Based on the Marina del Rey Local Coastal Program, ITE Trip Generation manual, 7th Edition, and San Diego Traffic Generators, San Diego Association of Governments (SANDAG), 2002.

for the transfer of 94 required parking spaces from Parcel OT to Parcel 21 and to transfer the yacht club and marine commercial uses from Parcel 20, Phase II, to Parcel 21.

Global Climate Change

As previously stated, due to the fact that significance thresholds under CEQA that address greenhouse gas emissions or global climate change have not yet been formally adopted, a significance determination regarding the alternatives to the project as they relate to this issue cannot be made at this time. It is far too speculative to assert whether the alternatives to the project would have a greater or lesser impact regarding global climate change than the proposed development; however, as this alternative would generate 822 daily trips, as compared to the proposed project's 278 daily trips, it would be expected to result in greater carbon emissions and therefore a more substantial contribution to global climate change than the proposed project.

Alternative 3: Alternative Land Use – Public Park on Parcel OT and Boat Storage on Parcel 21

This alternative would result in development of a public park on Parcel OT and a boat storage facility on Parcel 21.

Parcel OT

With this alternative, the transfer of development potential from the Admiralty DZ #7 and Palawan/Beach DZ #5 to the Oxford DZ #6 would not be necessary. Under the Marina del Rey Specific Plan (Part 3 of Chapter 22.46.1550 of Title 22 of the Los Angeles County Code), public parks are permitted where a site is zoned for parking, as is the case with Parcel OT. The portion of Parcel P to be added to Parcel OT is already designated open space. As such, the existing surface parking lot would be demolished and replaced with an approximately two-acre park, including landscaping, and parking spaces to accommodate park users.

Parcel 21

With this alternative, the existing 16,000 s.f. of health club, 2,916 s.f. of retail, and 3,132 s.f. of marine commercial uses on Parcel 21 would be demolished. The additional 2,300 s.f. of marine commercial and 5,000 s.f. of yacht club uses proposed to be transferred to Parcel 21 from Parcel 20 Phase II/Parcel 19 under the proposed project would remain at their existing location under this alternative. Existing Parcel 21 land uses would be replaced with dry boat storage spaces. It is anticipated that Parcel 21 could accommodate 200 vessels. This alternative would also provide parking for individuals utilizing the facility. Under the Marina del Rey Specific Plan (Part 3 of Chapter 22.46.1430 of Title 22 of the Los Angeles County Code), boat storage is permitted where a site is zoned for marine commercial uses, such as Parcel 21. This alternative would not include the lease parcel termination for the 31,050 s.f. of Parcel 21 to be added to Parcel GR as included in the proposed project.

Environmental Evaluation

Given the nature of the land uses proposed with this alternative, the operational phase of this alternative would be expected to result in fewer impacts as compared to the proposed project associated with air quality, traffic/access, and global climate change (fewer average daily trips than the proposed project), biota (by providing a park with landscaping adjacent to the Marina Lagoon rather than the active seniors accommodations), utilities (it is expected that the relocation of the County water line on Parcel OT would not be necessary), noise (this alternative would expose park visitors to outdoor noise, but not permanent residents), and environmental safety (not developing active seniors accommodations within a methane

buffer zone). Visually, the park on Parcel OT would allow the site to retain its current "openness." Dry boat storage on Parcel 21 may include construction of a building to house dry boat storage of unknown height. Therefore, the visual impacts associated with the proposed project for Parcel 21 may also apply to this alternative. However, the demolition, grading, and construction activities necessary for development of Alternative 3 would result in similar impacts as the proposed project to biota (disturbance of birds nesting in trees on-site) and cultural resources (disturbance of resources during grading or excavation). Further, this alternative would place development in a seismically active region of Southern California and expose people to the associated geotechnical hazard; albeit fewer people due to the types of land uses proposed with this alternative as compared to the project, and it would still necessitate grading for subterranean parking. Additional environmental effects of Alternative 3 that would vary from the proposed project namely involve land use and the transfer of development potential in Marina del Rey. While the proposed land uses of this alternative are consistent with the Parcel zoning, the proposed park would replace a parking lot on Parcel OT that is utilized for visitors of Mother's Beach as well as return several land uses from Parcel 21 to the Marina del Rey "bank" of development potential. It is expected that all such uses would be replaced elsewhere in Marina del Rey.

Geotechnical Hazards

The proposed project's significant but mitigable geotechnical impacts are related to development in areas lower than the highest recorded groundwater table, areas with unsuitable soils, areas subject to the secondary seismic effects of liquefaction, ground subsidence, and lateral spreading, and areas subject to the effects of seiche and tsunamis. As this alternative would also involve construction in these areas, this alternative project would likely be subject to similar geotechnical effects as are expected to result under the proposed project.

Noise

The proposed project's significant but mitigable noise impacts are associated with pile driving noise during construction of both Parcels OT and 21, noise from heavy equipment operations (non-pile driving) during construction of both Parcels OT and 21, interior noise at the proposed Parcel OT retirement facility from roadway conditions, and off-site noise exposure related to HVAC equipment on Parcel 21. A significant and unavoidable impact related to individual balconies facing Washington Blvd. or Admiralty Way on Parcel OT having outside noise levels exceeding the 65 dB CNEL goal for usable outdoor space would also occur under the proposed project. The majority of these noise impacts would not occur under this alternative or would be less extensive, given the nature of the land uses proposed for the Parcels. Further, the proposed project's significant and unavoidable noise impact would be avoided under this alternative.

Water Quality

The proposed project's significant but mitigable surface and ground water quality impacts are associated with the introduction of pollutants during construction and operation of the project. As this alternative would involve similar demolition and construction activities and similar urban uses that generate storm water pollutants (e.g., oil and grease from driveways and parking areas), this alternative would likely result in similar water quality impacts as are expected to result under the proposed project. As required for the project by the Los Angeles County Department of Public Works, Storm Water Pollution Prevention Plans and Standard Urban Storm Water Mitigation Plans would be required for the alternatives to treat collect and treat pollutants during the construction/demolition and operation phases of the project. Therefore, this alternative would be expected to result in significant but mitigable surface and ground water impacts similar to the proposed project.

Air Quality

The proposed project's significant but mitigable Local Significance Threshold impact associated with PM-2.5 and PM-2.10 may be reduced to below significance before mitigation under this alternative, as construction activities on Parcel OT for park development would not be expected to result in as much fugitive dust as with the proposed project. The proposed project's significant but mitigable construction-related cumulative impact related to the location of the project in the South Coast Air Basin (SCAB), which is in non-attainment for smog and PM-10, would not be avoided under this alternative as the location of the alternative remains in the SCAB and the proposed construction activities would still be expected to contribute to this cumulative impact.

Biota

The proposed project's significant but mitigable impact is associated with the potential for nesting of resident and summer resident bird species in the trees on both Parcel OT and Parcel 21, which would be removed during site clearing. This alternative would not avoid this significant impact of the proposed project, as the Parcels would still be cleared of trees during site preparation. However, the park proposed for Parcel OT may potentially provide wildlife habitat, which would be a beneficial result of this alternative.

Cultural Resources

The proposed project's significant but mitigable impact results from the potential to uncover prehistoric and historic archaeological resources during grading and excavation activities for the developments on Parcels OT and 21. As this alternative would involve construction activities at these sites, it would not completely avoid significant impacts to cultural resources; however, the potential to uncover resources is expected to be less with this alternative, as it would not entail grading for subterranean parking on Parcel OT.

Visual Qualities

The proposed project would be considered to result in a significant and unavoidable impact associated with the redevelopment of Parcel 21 due to the massing and height of the proposed building, as well as a significant and unavoidable impact related to the projects' (Parcel OT and Parcel 21) incremental contribution to the cumulative impact associated with the intensification of development in Marina del Rey). Visually, under Alternative 3, the public park on Parcel OT would allow the site to retain its current "openness;" meaning it would retain a flat, street level land use, rather than include a multi-story structure. Dry boat storage on Parcel 21, however, may include construction of a building to house dry boat storage of unknown height. Therefore, the visual impacts associated with the proposed project for Parcel 21 may also apply to this alternative. It cannot be definitively stated that this alternative would avoid the proposed project's significant and unavoidable visual qualities impacts.

Traffic/Access

The proposed project would generate 278 daily trips, 12 AM peak hour trips, and 30 PM peak hour trips. The potential additional traffic resulting from area-wide development in Marina del Rey would significantly impact 11 of the 14 study intersections that were analyzed in the Traffic Study prepared for the proposed project, and this would result in some locations operating near or above capacity. The proposed project would contribute incrementally to these cumulative impacts, although its contributions are 3.8 percent or less of the cumulative impact at all locations.

No trip rates are provided in Appendix G (Transportation Improvement Program) of the Marina del Rey Local Implementation Program for the public park use. It was assumed that this alternative would

generate only nominal amounts of peak hour traffic. The ITE trip generation rates indicate that only five vehicle trips would be made to and from the park on an average weekday, which would be substantially fewer than that generated by the proposed project's active seniors accommodations.

For Parcel 21, there are currently no trip generation rates for boat storage in Marina del Rey. However, given the nature of the land use (storage) in Alternative 3 as compared to the proposed project (office and commercial uses), it is reasonable to assume that the this alternative would generate fewer average daily trips than the proposed project. Additionally, this alternative would not include the partial lease termination on Parcel 21 to add 31,050 s.f. to Parcel GR that would be used for future public parking. The number of spaces to be provided on Parcel GR has not been quantified as plan for this site has not been defined. However, the alternative would not facilitate the addition of public parking spaces in the Marina in comparison to the proposed project.

In light of the above, it is expected that while Alternative 3 would also incrementally contribute to cumulative traffic impacts in Marina del Rey, its contribution would be less than that of the proposed project. However, the need for construction traffic management would still exist for this alternative, albeit likely for a shorter duration, as 1) conversion of the Parcel OT parking lot into a park would be expected to occur over a shorter period than into a retirement facility, and 2) it is not expected that the County water line on Parcel OT would be relocated under this alternative.

Utilities (Water Supply)

It is assumed that redevelopment of Parcel OT from a parking lot into a public park would not require relocation of the County water line on this site. Therefore, infrastructure impacts associated with this relocation for the proposed project would not occur under this alternative. As Parcel 21 would involve development of a boat storage facility with this alternative, new data on the required water flow and pressure from the Fire Department for this land use would have to be ascertained. A determination on whether the water line in Panay Way would be upgraded as part of this alternative cannot be known at this time.

Environmental Safety

The proposed project's significant but mitigable impact associated with soil toxicity and methane gas at Parcel OT is expected to be avoided under this alternative, as no structure is proposed wherein methane gas could be trapped and become a hazard. However, as this alternative would still be located on a site with soils that are a part of the closed Venice Landfill and is located within a Methane Gas Buffer Zone, the appropriate measure would need to be taken to ensure that park visitors would not be subject to the effects of methane gas. Regarding Parcel 21, the analytical results for all soil samples collected on-site were not high enough for rendering the materials hazardous waste during excavation. Development of Parcel 21 under this alternative is therefore expected to result in a less than significant impact associated with soil toxicity, as with the proposed project.

Land Use

As this alternative does not require the transfer of development potential among DZs and Parcels, or a MUZ for Parcel OT, it is generally more consistent with the planned uses set forth in the Marina del Rey LCP than the proposed project. The proposed land uses of this alternative are also consistent with the Parcel zoning, as discussed above. Additionally, this alternative would avoid the significant and unmitigable noise impact of the proposed project involving the exposure of residents to outdoor noise levels in excess of the noise standards for outdoor usable space, which also avoids the associated land use compatibility issue. However, the proposed public park would replace a parking lot on Parcel OT that is utilized for visitors of Mother's Beach. As a design for such a park is unavailable at this time, it is

unknown whether this land use could accommodate a public park, parking for that park, as well as replacement parking for the current parking spaces located on Parcel OT. Further, as existing uses on Parcel 21, including a 16,000 s.f. health club, 2,916 s.f. of retail uses, and 3,132 s.f. of marine commercial uses, would not be redeveloped on Parcel 21 as they would under the proposed project, these uses would be returned to the Marina del Rey "bank" of development potential. It is expected that all such uses would therefore be replaced elsewhere in Marina del Rey.

Global Climate Change

As previously stated, due to the fact that significance thresholds under CEQA that address greenhouse gas emissions or global climate change have not yet been formally adopted, a significance determination regarding the alternatives to the project as they relate to this issue cannot be made at this time. It is far too speculative to assert whether the alternatives to the project would have a greater or lesser impact regarding global climate change than the proposed development; however, as Alternative 3 would likely generate fewer trips than the proposed project, it is reasonable to expect that this alternative would have fewer carbon emissions than the proposed project and therefore an incrementally less substantial contribution to global climate change.

Alternative 4: Reduced Height Alternative

This alternative would include development of a 50-unit retirement facility, retail uses, and parking on Parcel OT and a portion of Parcel P, and marine commercial uses and parking on Parcel 21.

Parcel OT

With this alternative, the transfer of development potential from the Admiralty DZ #7 and Palawan/Beach DZ #5 to the Oxford DZ #6 would still be necessary, and the site would be developed with a retirement facility of 50 units, 5,000 s.f. of retail space, and parking. The height of the retirement facility would reach a maximum of 47 feet and seven inches on Admiralty Way and 55 feet on Washington Boulevard (as measured from the streets to the highest point of the rooftop).

Parcel 21

The proposed development on Parcel 21 under this alternative would remain the same as that proposed with the project. The proposed four-level Holiday Harbor Courts development would replace existing uses with new marine uses, a public park plaza and promenade, and a six-level parking structure, which would be partially subterranean. The development on Parcel 21 would replace the existing 16,000 s.f. of health club, 2,916 s.f. of retail, and 3,132 s.f. of marine commercial on Parcel 21. An additional 2,300 s.f. of marine commercial and 5,000 s.f. of yacht club uses would be transferred to Parcel 21 from Parcel 20 Phase II/Parcel 19. Replacement parking for the existing 226 parking spaces on Parcel 21 and parking for the additional marine commercial and yacht club uses (127 spaces), as well as 94 spaces from Parcel OT, would be located on-site (447 total spaces).

Environmental Evaluation

The retirement facility proposed for Parcel OT under this alternative is expected to be approximately 20 feet shorter in height than the structure of the proposed project, but structurally and aesthetically similar, and no changes would occur to the development on Parcel 21 with this alternative. Therefore, it can be assumed that Alternative 4 would result in similar impacts associated with geotechnical hazards, water quality, air quality, biota, cultural resources, utilities, and environmental safety as the proposed project. The demolition, grading, and operational activities necessary for development of the proposed project would also be required with Alternative 4, but the construction period may occur over a shorter duration

due to the reduced height of the Parcel OT project. However, the environmental effects of Alternative 4 that would vary from the proposed project involve visual, traffic, and global climate change impacts associated with development of Parcel OT as a smaller retirement facility than that of the proposed project.

Geotechnical Hazards

The proposed project's significant but mitigable geotechnical impacts are related to development in areas lower than the highest recorded groundwater table, areas with unsuitable soils, areas subject to the secondary seismic effects of liquefaction, ground subsidence, and lateral spreading, and areas subject to the effects of seiche and tsunamis. As this alternative would also involve construction in these areas, this alternative project would likely be subject to similar geotechnical effects as are expected to result under the proposed project.

Noise

The proposed project's significant but mitigable noise impacts are associated with pile driving noise during construction of both Parcels OT and 21, noise from heavy equipment operations (non-pile driving) during construction of both Parcels OT and 21, interior noise at the proposed Parcel OT retirement facility from roadway conditions, and off-site noise exposure related to HVAC equipment on Parcel 21. A significant and unavoidable impact related to individual balconies facing Washington Blvd. or Admiralty Way on Parcel OT having outside noise levels exceeding the 65 dB CNEL goal for usable outdoor space would also occur under the proposed project. These noise impacts would also occur under this alternative; however, the proposed project's significant and unavoidable noise impact would be affecting a smaller population, as the units would be reduced by 64 with this alternative.

Water Quality

The proposed project's significant but mitigable surface and ground water quality impacts are associated with the introduction of pollutants during construction and operation of the project. As this alternative would involve similar construction activities and similar urban uses that generate storm water pollutants (e.g., oil and grease from driveways and parking areas), this alternative would likely result in similar water quality impacts as are expected to result under the proposed project.

Air Quality

The proposed project's significant but mitigable Local Significance Threshold impact and construction-related cumulative impact related to the location of the project in the South Coast Air Basin (SCAB), which is in non-attainment for smog and PM-10, would not be avoided under this alternative as the location and construction activities of the alternative are similar to those of the proposed project.

Biota

The proposed project's significant but mitigable impact is associated with the potential for nesting of resident and summer resident bird species in the trees on both Parcel OT and Parcel 21, which would be removed during site clearing. This alternative would not avoid this significant impact of the proposed project, as the Parcels would still be cleared of trees during site preparation.

Cultural Resources

The proposed project's significant but mitigable impact results from the potential to uncover prehistoric and historic archaeological resources during grading and excavation activities for the developments on

Parcels OT and 21. As this alternative would involve construction activities at these sites, it would not avoid significant impacts to cultural resources.

Visual Qualities

The proposed project would be considered to result in a significant and unavoidable impact associated with the redevelopment of Parcel 21 due to the massing and height of the proposed building, in addition to a significant and unavoidable impact related to the projects' (Parcel OT and Parcel 21) incremental contribution to the cumulative impact associated with the intensification of development in Marina del Rey). Visually, under Alternative 4, the height of the retirement facility (approximately 47 to 55 feet) on Parcel OT would be closer to the height of the adjacent Marina International Hotel (40 feet). Although the Parcel OT has been found to have a less than significant impact associated with casting shadows on shade-sensitive land uses, the reduced height of this alternative would further reduce shading. The height of Parcel 21 would remain the same as under the proposed project (56 feet). Therefore, the visual impacts associated with the proposed project for Parcel 21 would apply to this alternative. Although the Parcel OT structure included in this alternative would be 20 feet less in height than that of the proposed project and therefore represent slightly reduced massing, the alternative would still represent an intensification over the existing land use. Therefore, the alternative would represent a similar cumulative visual qualities impact as the proposed project.

Traffic/Access

The potential additional traffic resulting from area-wide development in Marina del Rey would significantly impact 11 of the 14 study intersections that were analyzed in the Traffic Study prepared for the proposed project, and this would result in some locations operating near or above capacity. The proposed project would contribute incrementally to these cumulative impacts, although its contributions are three percent or less of the cumulative impact at all locations.

Under this alternative, no net change in vehicle trips is anticipated from the development on Parcel 21, which would generate -109 daily trips (refer to Section IV.H, Traffic/Access). Parcel OT, developed with 50 retirement facility units, would result in 129 fewer daily trips than the proposed project (2.02 trips per unit, as shown in Section IV.H, Traffic/Access, for a daily total of 101).

However, by transferring 64 fewer hotel units to the Oxford DZ #6 than the proposed project, these units would be returned to the "bank" of development potential in the LCP area and likely developed as hotel units, rather than retirement facility units. This would result in increased daily trips at build-out of Phase II of the Marina del Rey LCP, as the hotel land use generates approximately 8.17 daily trips per unit, as compared to 2.02 daily trips with retirement units. The 64 hotel units would generate 523 daily trips, as compared to 64 retirement units that would generate 101 daily trips. Therefore, this alternative would be expected to indirectly contribute to a greater portion of the cumulative traffic congestion impact than the proposed project.

With regard to the need for construction traffic management, the impact associated with development of this alternative would be similar to that of the proposed project.

Utilities (Water Supply)

As the retirement facility proposed for Parcel OT under this alternative is expected to be structurally similar to the active seniors accommodations facility proposed with the project, and no changes would occur to the development on Parcel 21 with this alternative, it can be assumed that Alternative 4 would result in similar impacts associated with utilities as the proposed project. However, the Parcel OT alternative would demand less water than the proposed project, as it would contain 64 fewer units. It is

expected that the proposed retirement facility on Parcel OT would have a similar footprint to the proposed project, thereby necessitating relocation of the County's waterline to accommodate the building. The Panay Way water line would still be upgraded to meet the water flow and pressure requirements of the Fire Department for Parcel 21.

Environmental Safety

The proposed project's significant but mitigable impact associated with soil toxicity and methane gas at Parcel OT is expected to be similar under this alternative, as the site would still be developed with a retirement facility. Regarding Parcel 21, the analytical results for all soil samples collected on-site were not high enough for rendering the materials hazardous waste during excavation. Development of Parcel 21 under this alternative is therefore expected to result in a less than significant impact associated with soil toxicity, as with the proposed project.

Land Use

Alternative 4 would require the same approvals as the proposed project, including an adjustment to the lease parcel boundary between Parcels OT and P, creation of a new Land Use Category in the LCP and re-designation of Parcel OT from Parking and the portion of Parcel P from Open Space to Active Seniors Accommodations, as well as require an amendment to the existing LCP Amendment No. 1-01 to allow for the transfer of 94 required parking spaces from Parcel OT to Parcel 21 and to transfer the yacht club and marine commercial uses from Parcel 20, Phase II, to Parcel 21.

Global Climate Change

As previously stated, due to the fact that significance thresholds under CEQA that address greenhouse gas emissions or global climate change have not yet been formally adopted, a significance determination regarding the alternatives to the project as they relate to this issue cannot be made at this time. It is far too speculative to assert whether the alternatives to the project would have a greater or lesser impact regarding global climate change than the proposed development. However, Parcel OT, developed with 50 retirement facility units, would result in 101 fewer daily trips than the proposed project, thereby incrementally reducing carbon emissions and the project-level global climate change impact. Cumulatively, however, as this alternative would likely generate increased daily trips at build-out of Phase II of the Marina del Rey LCP, it would be expected to result in greater carbon emissions and therefore a more substantial contribution to global climate change than the proposed project over the long term.

Alternative 5: No Lease Parcel Boundary Adjustment Alternative

This alternative would include development of a 114-unit retirement facility, retail uses, and parking within the existing limits of Parcel OT, and marine commercial uses and parking on Parcel 21.

Parcel OT

With this alternative, the transfer of development potential from the Admiralty DZ #7 and Palawan/Beach DZ #5 to the Oxford DZ #6 would still be necessary, and the site would be developed with a retirement facility of 114 units, 5,000 s.f. of retail space, and parking. However, as compared to the proposed project, the footprint of the project would be located within the existing limits of Parcel OT, and the height of the retirement facility would reach a maximum of approximately 88 feet on Admiralty Way and 95 feet on Washington Boulevard (as measured from the streets to the highest point of the rooftop).

Parcel 21

The proposed development on Parcel 21 under this alternative would remain the same as that proposed with the project. The proposed four-level Holiday Harbor Courts development would replace existing uses with new marine uses, a public park plaza and promenade, and a six-level parking structure, which would be partially subterranean. The development on Parcel 21 would replace the existing 16,000 s.f. of health club, 2,916 s.f. of retail, and 3,132 s.f. of marine commercial on Parcel 21. An additional 2,300 s.f. of marine commercial and 5,000 s.f. of yacht club uses would be transferred to Parcel 21 from Parcel 20 Phase II/Parcel 19. Replacement parking for the existing 226 parking spaces on Parcel 21 and parking for the additional marine commercial and yacht club uses (127 spaces), as well as 94 spaces from Parcel OT, would be located on-site (447 total spaces).

Environmental Evaluation

The retirement facility proposed for Parcel OT under this alternative is expected to be approximately 20 feet taller in height than the structure of the proposed project, but structurally and aesthetically similar, and no changes would occur to the development on Parcel 21 with this alternative. Therefore, it can be assumed that Alternative 5 would result in similar impacts associated with geotechnical hazards, water quality, air quality, cultural resources, utilities, and environmental safety as the proposed project. The demolition, grading, and operational activities necessary for development of the proposed project would also be required with Alternative 5; however, construction may occur over a longer duration due to the increased height of the structure. However, the environmental effects of Alternative 5 that would vary from the proposed project involve utilities, biota, visual and land use impacts associated with development of Parcel OT as a taller retirement facility than that of the proposed project, with no encroachment into Parcel P.

Geotechnical Hazards

The proposed project's significant but mitigable geotechnical impacts are related to development in areas lower than the highest recorded groundwater table, areas with unsuitable soils, areas subject to the secondary seismic effects of liquefaction, ground subsidence, and lateral spreading, and areas subject to the effects of seiche and tsunamis. As this alternative would also involve construction in these areas, it would likely be subject to similar geotechnical effects as are expected to result under the proposed project.

Noise

The proposed project's significant but mitigable noise impacts are associated with pile driving noise during construction of both Parcels OT and 21, noise from heavy equipment operations (non-pile driving) during construction of both Parcels OT and 21, interior noise at the proposed Parcel OT retirement facility from roadway conditions, and off-site noise exposure related to HVAC equipment on Parcel 21. A significant and unavoidable impact related to individual balconies facing Washington Blvd. or Admiralty Way on Parcel OT having outside noise levels exceeding the 65 dB CNEL goal for usable outdoor space would also occur under the proposed project.

Water Quality

The proposed project's significant but mitigable surface and ground water quality impacts are associated with the introduction of pollutants during construction and operation of the project. As this alternative would involve similar construction activities and similar urban uses that generate storm water pollutants (e.g., oil and grease from driveways and parking areas), it would likely result in similar water quality impacts as are expected to result under the proposed project.

Air Quality

The proposed project's significant but mitigable Local Significance Threshold impact and construction-related cumulative impact related to the location of the project in the South Coast Air Basin (SCAB), which is in non-attainment for smog and PM-10, would not be avoided under Alternative 5, as the location and construction activities of the alternative are similar to those of the proposed project.

Biota

The proposed project's significant but mitigable impact is associated with the potential for nesting of resident and summer resident bird species in the trees on both Parcel OT and Parcel 21, which would be removed during site clearing. This alternative would not avoid this significant impact of the proposed project, as the Parcels would still be cleared of trees during site preparation. Under this alternative the building on Parcel OT would be setback an additional 35 feet away from Parcel P and the Oxford Basin as compared to the proposed project. The increased setback would result in 35 feet of additional buffer between the building and the Oxford Basin. However, the affect of the increase setback is anticipated to be incrementally beneficial, but would likely not result in a significant change in the impacts to wildlife within the Oxford Basin. Additionally, the landscape trees located between the existing limits of the Parcel OT parking lot and the Parcel OT/Parcel P boundary would be retained.

Cultural Resources

The proposed project's significant but mitigable impact results from the potential to uncover prehistoric and historic archaeological resources during grading and excavation activities for the developments on Parcels OT and 21. Alternative 5 would involve construction activities at these sites as well, therefore it would not avoid significant impacts to cultural resources.

Visual Qualities

The proposed project would be considered to result in a significant and unavoidable impact associated with the redevelopment of Parcel 21 due to the massing and height of the proposed building, in addition to a significant and unavoidable impact related to the projects' (Parcel OT and Parcel 21) incremental contribution to the cumulative impact associated with the intensification of development in Marina del Rey). Visually, under Alternative 5, the increased height of the retirement facility (approximately 88 to 95 feet) on Parcel OT would contribute to this cumulative visual qualities impact to a greater degree. In addition, the increased height may create shadows for a longer duration on shade-sensitive land uses in the Parcel OT vicinity than with the proposed project. The height of Parcel 21 would remain the same as under the proposed project (56 feet). Therefore, the visual impacts associated with the proposed project for Parcel 21 would apply to this alternative.

Traffic/Access

The potential additional traffic resulting from area-wide development in Marina del Rey would significantly impact 11 of the 14 study intersections that were analyzed in the Traffic Study prepared for the proposed project, and this would result in some locations operating near or above capacity. The proposed project would contribute incrementally to these cumulative impacts, although its contributions are three percent or less of the cumulative impact at all locations. Alternative 5 would develop the same land uses in a differently designed structure on Parcel OT, and there would be no change to the Parcel 21 design. Therefore, this alternative is expected to result in the same operational traffic impacts as the proposed project. Further, with regard to the need for construction traffic management, the impact associated with development of this alternative would be similar to that anticipated for Parcel 21. However, as this alternative would not require the relocation of the 14-inch water line that currently traverses under the proposed building within the portion of Parcel P to be added to Parcel OT, the

Applicant would not be required to extend the water line through Admiralty Way. Therefore, construction related traffic management for this portion of the proposed project would not be required for Alternative 5.

Utilities (Water Supply)

As the retirement facility proposed for Parcel OT under this alternative is expected to be similar to the active seniors accommodations facility proposed with the project, and no changes would occur to the development on Parcel 21 with this alternative, it can be assumed that Alternative 5 would result in similar water demand impacts as the proposed project. However, the reduced footprint of Parcel OT under Alternative 5 would eliminate the need to relocate water line that traverses the site. The Panay Way water line would still be upgraded to meet the water flow and pressure requirements of the Fire Department for Parcel 21.

Environmental Safety

The proposed project's significant but mitigable impact associated with soil toxicity and methane gas at Parcel OT is expected to be similar under this alternative, as the site would still be developed with a retirement facility. Regarding Parcel 21, the analytical results for all soil samples collected on-site were not high enough for rendering the materials hazardous waste during excavation. Development of Parcel 21 under this alternative is therefore expected to result in a less than significant impact associated with soil toxicity, as with the proposed project.

Land Use

Alternative 5 would require the same approvals as the proposed project, including the creation of a new Land Use Category in the LCP and re-designation of Parcel OT from Parking to Active Seniors Accommodations, as well as require an amendment to the existing LCP Amendment No. 1-01 to allow for the transfer of 94 required parking spaces from Parcel OT to Parcel 21 and to transfer the yacht club and marine commercial uses from Parcel 20, Phase II, to Parcel 21. However, this alternative would not require an adjustment to the lease parcel boundary between Parcels OT and P, and would not require a re-designation of the portion of Parcel P to be added to Parcel OT, from Open Space to Active Senior Accommodations. Therefore, this alternative would result be incrementally more consistent with the LCP and result in slightly fewer impacts to land use.

Global Climate Change

A significance determination regarding the alternatives to the project as they relate to this issue cannot be made at this time. It is far too speculative to assert whether the alternatives to the project would have a greater or lesser impact regarding global climate change than the proposed development. As Alternative 5 would develop a similar amount of retirement facility units, retail space, and marine commercial space, and generate similar daily trips, it is expected to have similar global climate change impacts as the proposed project.

Alternative 6: No Retail Use on Parcel OT Alternative

This alternative would include development of a 114-unit retirement facility and parking on Parcel OT (and a portion of Parcel P to be added to Parcel OT) and marine commercial uses and parking on Parcel 21. No retail spaces would be provided on Parcel OT.

Parcel OT

With this alternative, the transfer of development potential from the Admiralty DZ #7 to the Oxford DZ #6 would still be necessary, and the site would be developed with a retirement facility and parking. No transfer of retail development potential from the Palawan/Beach DZ #5 to the Oxford DZ #6 would occur with this alternative.

Parcel 21

The proposed development on Parcel 21 under this alternative would remain the same as that proposed with the project. The proposed four-level Holiday Harbor Courts development would replace existing uses with new marine uses, a public park plaza and promenade, and a six-level parking structure, which would be partially subterranean. The development on Parcel 21 would replace the existing 16,000 s.f. of health club, 2,916 s.f. of retail, and 3,132 s.f. of marine commercial on Parcel 21. An additional 2,300 s.f. of marine commercial and 5,000 s.f. of yacht club uses would be transferred to Parcel 21 from Parcel 20 Phase II/Parcel 19. Replacement parking for the existing 226 parking spaces on Parcel 21 and parking for the additional marine commercial and yacht club uses (127 spaces), as well as 94 spaces from Parcel OT, would be located on-site (447 total spaces).

Environmental Evaluation

The developments included in this alternative on Parcel OT and Parcel 21 would be similar to the proposed project; however, the Parcel OT project would not include 5,000 s.f. of retail space. Therefore, it can be assumed that Alternative 6 would result in similar impacts associated with geotechnical hazards, water quality, air quality, biota, cultural resources, utilities, and environmental safety as the proposed project. The demolition, grading, and construction and operational activities necessary for development of the proposed project would also be required with Alternative 6. However, the environmental effects of Alternative 6 that would vary from the proposed project involve land use, traffic, and global climate change impacts associated with development of Parcel OT as a retirement facility with no retail component.

Geotechnical Hazards

The proposed project's significant but mitigable geotechnical impacts are related to development in areas lower than the highest recorded groundwater table, areas with unsuitable soils, areas subject to the secondary seismic effects of liquefaction, ground subsidence, and lateral spreading, and areas subject to the effects of seiche and tsunamis. As this alternative would also involve construction in these areas, this alternative project would likely be subject to similar geotechnical effects as are expected to result under the proposed project.

Noise

The proposed project's significant but mitigable noise impacts are associated with pile driving noise during construction of both Parcels OT and 21, noise from heavy equipment operations (non-pile driving) during construction of both Parcels OT and 21, interior noise at the proposed Parcel OT retirement facility from roadway conditions, and off-site noise exposure related to HVAC equipment on Parcel 21. A significant and unavoidable impact related to individual balconies facing Washington Blvd. or Admiralty Way on Parcel OT having outside noise levels exceeding the 65 dB CNEL goal for usable outdoor space would also occur under the proposed project. These noise impacts would also occur under this alternative.

Water Quality

The proposed project's significant but mitigable surface and ground water quality impacts are associated with the introduction of pollutants during construction and operation of the project. As this alternative would involve similar construction activities and similar urban uses that generate storm water pollutants (e.g., oil and grease from driveways and parking areas), this alternative would likely result in similar water quality impacts as are expected to result under the proposed project.

Air Quality

The proposed project's significant but mitigable Local Significance Threshold impact and construction-related cumulative impact related to the location of the project in the South Coast Air Basin (SCAB), which is in non-attainment for smog and PM-10, would not be avoided under this alternative as the location and construction activities of the alternative are similar to those of the proposed project.

Biota

The proposed project's significant but mitigable impact is associated with the potential for nesting of resident and summer resident bird species in the trees on both Parcel OT and Parcel 21, which would be removed during site clearing. This alternative would not avoid this significant impact of the proposed project, as the Parcels would still be cleared of trees during site preparation.

Cultural Resources

The proposed project's significant but mitigable impact results from the potential to uncover prehistoric and historic archaeological resources during grading and excavation activities for the developments on Parcels OT and 21. As this alternative would involve construction activities at these sites, it would not avoid significant impacts to cultural resources.

Visual Qualities

The proposed project's significant and unavoidable impact associated with redevelopment of Parcel 21 would be the same under this alternative as with the proposed project, as would the projects' cumulative visual quality impact associated with Marina del Rey Phase II development.

Traffic/Access

The potential additional traffic resulting from area-wide development in Marina del Rey would significantly impact 11 of the 14 study intersections that were analyzed in the Traffic Study prepared for the proposed project, and this would result in some locations operating near or above capacity. The proposed project would contribute incrementally to these cumulative impacts, although its contributions are three percent or less of the cumulative impact at all locations.

Under this alternative, no net change in vehicle trips is anticipated from the development on Parcel 21, which would generate -109 daily trips (refer to Section IV.H, Traffic/Access). Parcel OT, developed with 114 retirement facility units and parking, would result in 109 fewer daily trips than the proposed project (2.02 trips per unit, as shown in Section IV.H, Traffic/Access, for a daily total of 121). However, by excluding the transfer of 5,000 s.f. of retail space from the Palawan/Beach DZ #5 to Parcel OT in the Oxford DZ #6, this alternative would generate 222 fewer daily trips than the proposed project. Alternative 6 would still contribute to the same cumulative traffic impacts as the proposed project. Ultimately, the development potential of 5,000 s.f. would be developed elsewhere in the LCP area and the associated daily trips would result in conjunction with another project. Therefore, the cumulative traffic congestion impact would still occur upon build-out of Phase II of the Marina del Rey LCP.

With regard to the need for construction traffic management, the impact associated with development of the proposed project would be similar to that of this alternative.

Utilities (Water Supply)

Alternative 6 would result in similar impacts associated with utilities as the proposed project, with the exception of incrementally less water demand resulting from the exclusion of retail space. It is expected that the Alternative 6 retirement facility on Parcel OT would have a similar footprint to the proposed project, thereby necessitating relocation of the County's waterline to accommodate the building. The Panay Way water line would still be upgraded to meet the water flow and pressure requirements of the Fire Department for Parcel 21.

Environmental Safety

The proposed project's significant but mitigable impact associated with soil toxicity and methane gas at Parcel OT is expected to be similar under this alternative, as the site would still be developed with a retirement facility. Regarding Parcel 21, the analytical results for all soil samples collected on-site were not high enough for rendering the materials hazardous waste during excavation. Development of Parcel 21 under this alternative is therefore expected to result in a less than significant impact associated with soil toxicity, as with the proposed project.

Land Use

With the exception of not transferring development potential in the form of 5,000 s.f. of retail space from the Palawan/Beach DZ #5 to the Oxford DZ #6 for the Parcel OT project, Alternative 6 would require similar approvals as the proposed project, including an adjustment to the lease parcel boundary between Parcels OT and P, creation of a new Land Use Category in the LCP and re-designation of Parcel OT from Parking to Active Seniors Accommodations, as well as require an amendment to the existing LCP Amendment No. 1-01 to allow for the transfer of 94 required parking spaces from Parcel OT to Parcel 21 and to transfer the yacht club and marine commercial uses from Parcel 20, Phase II, to Parcel 21.

Global Climate Change

As previously stated, due to the fact that significance thresholds under CEQA that address greenhouse gas emissions or global climate change have not yet been formally adopted, a significance determination regarding the alternatives to the project as they relate to this issue cannot be made at this time. It is far too speculative to assert whether the alternatives to the project would have a greater or lesser impact regarding global climate change than the proposed development. The proposed project may have an incrementally reduced project-level impact associated with generating carbon emissions, as it would generate 222 fewer daily trips than the proposed project. As discussed, however, the development potential of 5,000 s.f. would be developed elsewhere in the LCP area and the associated daily trips would result in conjunction with another project. Therefore, the cumulative traffic congestion impact would occur upon build-out of Phase II of the Marina del Rey LCP.

5. ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Based on the alternatives analysis, an environmentally superior alternative must be designated among the alternatives. According to CEQA Guidelines Section 15126.6(e)(2), if the environmentally superior alternative is the No Project Alternative, then the EIR shall identify an environmentally superior alternative among the other alternatives.

The No Project Alternative is the Environmentally Superior Alternative since it would avoid the project's significant impacts. Other than the No Project Alternative, the Environmentally Superior Alternative is Alternative 3 (Alternative Land Use – Public Park on Parcel OT and Boat Storage on Parcel 21). As shown in the above analysis of this alternative, implementation of this alternative would 1) result in similar significant impacts as the proposed project associated with construction period biota and cultural resources impacts, 2) result in fewer air quality, traffic/access, global climate change, and utilities impacts, 3) avoid the significant and unavoidable noise impact of the proposed project, and 4) be more consistent with the planned uses set forth in the Marina del Rey LCP than the proposed project in the short-term. However, this alternative may also result in a similar visual qualities impact as the proposed project on Parcel 21, and it would also potentially defer a range of environmental effects to other future developments by returning development potential to the available "bank" of development potential in the Marina del Rey LCP area.

VI. SIGNIFICANT ENVIRONMENTAL EFFECTS AND IRREVERSIBLE ENVIRONMENTAL CHANGES

A. Significant Environmental Effects Which Cannot be Avoided if the Proposed Project is Implemented

The CEQA Guidelines Section 15126.2(b) requires that an EIR discuss the significant impacts of a proposed project that cannot be reduced to a level of insignificance, even with the application of mitigation measures. The proposed project would result in significant and unavoidable impacts associated with Noise, Visual Qualities, and Traffic, which are discussed in greater detail below. The project is being proposed, notwithstanding these effects, because it would provide senior citizen housing and revitalized marine commercial uses in proximity to major transportation corridors and other residential and visitor-serving land uses.

Noise

Outdoor recreational uses at the proposed Oceana retirement facility would be sited in the interior of the complex, allowing the buildings to shelter recreational users from street traffic noise. The noise level within the interior courtyard would be 15-20 dB less than at any exterior balconies or similar exposures. Exterior façade levels of 70-75 dB CNEL would be reduced to 50-60 dB within interior courtyards. Interior courtyards would meet County standards for usable outdoor space. However, individual balconies facing Washington Blvd. or Admiralty Way would have outside noise levels exceeding the 65 dB CNEL goal for usable outdoor space. Although the interior terrace, rear spa, and terraces would provide substantial outdoor recreational space with noise levels well within the 65 dB CNEL goal, noise in excess of this standard on individual balconies on the proposed project would be *conservatively considered* a significant and unavoidable impact. No feasible mitigation exists to reduce this impact to less than significant, as a six-foot wall composed of a combination of a solid base and 3/8-inch glass would be required to reduce the noise exposure to below 65 dB CNEL. This would essentially enclose the balconies.

The significance conclusion made in this case is presented as a conservative depiction of the potential noise impact regarding outdoor noise at balconies proposed on Parcel OT (including a portion of Parcel P)[1]. As stated, the proposed development on Parcel OT would offer other outdoor, as well as indoor, recreational opportunities that do meet or exceed noise standards.

Visual Qualities

Implementation of the proposed project has been identified as resulting in a significant and unavoidable impact related to 1) an increase in height and massing from the current condition on the Panay Way mole road associated with redevelopment of Parcel 21, and 2) the projects' (Parcel OT and Parcel 21) incremental contribution to the cumulative impact associated with the intensification of development in Marina del Rey).

The project site plan for Parcel 21 has been developed in accordance with applicable guidelines and standards established by the Marina del Rey LCP and are intended to preserve and enhance the visual character of Marina del Rey. The architectural design of the proposed structure would complement several of the residential structures recently completed along Panay Way. The site plan includes provisions for two view corridors between the proposed structures that would have frontage widths along Panay Way of 105 feet and 50 feet, respectively (as arrayed from west to east). The effective building

[1] Hereafter, unless otherwise noted, the Oceana Retirement Facility project site is simply referred to as Parcel OT.

height of the development proposed for Parcel 21 (56 feet) corresponds to that of a recently completed adjacent project (to the east). A structure height of 56 feet requires mandated view corridors that total to at least 27.33 percent of the parcel's frontage along Panay Way. The project's two view corridors combine to a width of 155 feet, or 28.5 percent of the parcel's frontage (543 feet), thereby meeting the above mandated requirement. Additionally, the site plan calls for an improved pedestrian promenade along the entire waterfront side of the project that, with its width expanded to 28 feet, would enhance opportunities for scenic waterfront views for pedestrians. Despite the above provisions and design features of the proposed project, the building to be developed on Parcel 21 would represent an increase in height and massing from the current condition on this segment of the Panay Way mole road. Although views to the north of Parcel 21 are limited to motorists along Panay Way (there are no sidewalks south of Parcel 21) and mainly include brief views of the masts of boats and not the water or shoreline, the proposed development would occupy a greater portion of Parcel 21 at a greater height, as compared to scattered, smaller structures that currently exist on the site. Panay Way is not a designated scenic highway or vista and the design of the proposed project would allow for corridors that create views to the north of Parcel 21; therefore, the proposed project is considered to have a less than significant impact associated with impacts to visual resources and scenic vistas. However, the proposed increase in building mass and height on Parcel 21, located on a relatively narrow mole road with limited area, is conservatively considered to be a potentially significant and unavoidable visual quality impact of the proposed project related to incompatibility with the scale of structures in Marina del Rey that are shorter in height and represent less massing.

Further, implementation of Phase II Marina del Rey development would gradually result in the alteration of the existing visual character of the Marina del Rey, as larger and taller structures (greater massing) are becoming more common in the community. As such, when Phase II development is complete and viewed cumulatively, impacts to visual quality within the Marina del Rey community could be considered significant, given the intensification of development that is occurring. However, regulations are in place to assure that proposed projects in Marina del Rey do not adversely affect visual resources in the area.

As is the case with the noise impact discussed above, the proposed project is conservatively considered to have a significant and unavoidable cumulative visual quality impact, as it has received conceptual approval from the Marina del Rey Design Control Board and would be constructed so as to comply with the Marina del Rey LCP height, density, and view corridor requirements. In addition, related projects must also comply with the Marina del Rey LCP policies and be approved by the Marina del Rey Design Control Board.

Traffic/Access

The potential additional traffic resulting from area-wide development would significantly impact 11 of the 14 study intersections, resulting in some locations operating near or above capacity. The proposed project would contribute incrementally to these cumulative impacts, although its contributions are 3.8 percent or less of the cumulative impact at all locations. Nevertheless, the proposed project would result in a significant cumulative impact related to traffic congestion. The implementation of Mitigation Measure would reduce the significant cumulative impact to less than significant at the intersections of Admiralty Way at Via Marina, Admiralty Way at Palawan Way, Admiralty Way at Bali Way, Washington Boulevard at Palawan Way, Washington Boulevard at Ocean Avenue/Via Marina, and Admiralty Way at Mindanao Way. While no physical improvements are feasible at the intersection of Washington Boulevard at Ocean Avenue/Via Marina, the improvements proposed for the intersection of Washington Boulevard at Palawan Way would provide adequate mitigation for this impact.

The project would also contribute incrementally to the cumulative impacts expected to occur at five other intersections, including Lincoln Boulevard at Washington Boulevard, Lincoln Boulevard at SR-90,

Lincoln Boulevard at Bali Way, Lincoln Boulevard at Mindanao Way, and Lincoln Boulevard at Fiji Way. For these intersections, there is currently no feasible physical improvement available to mitigate the potential cumulative impact of the proposed project. The Marina del Rey Local Implementation Program (LIP) list of Category 3 improvements includes several regional transportation circulation improvements, one of which is the proposed extension of SR-90 (the Marina Expressway) to connect to Admiralty Way. According to the County of Los Angeles Department of Public Works Traffic and Lighting Division, the five intersections listed above will be subject to cumulative impacts until the SR-90 extension or another project of equal effectiveness is built. At this point, the SR-90 extension is not a programmed project. Therefore, this cumulative analysis conservatively assumes that 1) the SR-90 extension will not be constructed before the proposed project is operational and 2) all 43 of the proposed project's related projects described in Table IV.H-10 are constructed. As such, the proposed project's incremental contribution to the cumulative impacts at the intersections of Lincoln Boulevard at Washington Boulevard, Lincoln Boulevard at SR-90, Lincoln Boulevard at Bali Way, Lincoln Boulevard at Mindanao Way, and Lincoln Boulevard at Fiji Way remain significant and unmitigable.

B. Significant Irreversible Environmental Changes that would be Caused by the Proposed Project Should it be Implemented.

The CEQA Guidelines Section 15126.2(c) requires that an EIR discuss irreversible environmental changes that may result from implementation of the proposed project. On Parcel OT, the proposed project would modify the existing developed surface parking lot by building active seniors accommodations and retail uses with associated parking and landscaped areas. On Parcel 21, the proposed project would modify the existing surface parking lot and two structures housing health club and marine commercial uses by building a structure that houses marine commercial, health club, yacht club, and retail uses, as well as an associated plaza and promenade, parking, and landscaped areas (refer to Sections III, Project Description and IV.G, Visual Resources).

As stated in the Marina del Rey LCP, within the Marina, most structural improvements have been made by private entrepreneurs operating under long-term land leases, with termination dates for most parcels to occur after the year 2020. Leases typically specify a range of primary and related uses appropriate for a parcel, the minimum cost of improvements, and the allowable maximum height. Development in some form has occurred on all leasehold parcels in the Marina, such as that on Parcels OT and 21, and this development cycle is generally referred to as Phase I development. The recycling, intensification, or conversion of these initial uses on leased parcels is referred to as Phase II development, which is encouraged and permitted, subject to the individual leaseholders demonstrating consistency with the Marina del Rey LCP policies. Therefore, although the lands involved in the proposed project have already been developed for Marina Phase I development, the commitment of the Parcels to Marina Phase II development is considered long-term, because Phase II development represents the end of the planning horizon forecasted in the Marina del Rey LCP. As a result, for purposes of this analysis, these changes are considered significant irreversible changes.

Construction of the project will require the consumption of natural resources and renewable and non-renewable materials, including building materials (e.g., wood and metal) and fossil fuels (e.g., gasoline, diesel fuel, and natural gas). Once operational, the project uses will require consumption of natural resources and renewable and non-renewable materials such as electricity, natural gas, potable water, and fossil fuels for project-generated vehicle trips. However, the proposed project is designed to comply with the Los Angeles County Green Building Ordinance, with the purpose of conserving water, energy, and natural resources; diverting waste from landfills; minimizing impacts to existing infrastructure; and promoting a healthier environment. Some of the mandatory requirements for all new projects include consuming at least 15 percent less energy than permitted by the 2005 California Energy Efficiency

Standards, covering 75 percent of landscaped areas with drought-tolerant species, and recycling and/or salvaging for reuse a minimum of 50 percent of non-hazardous construction and demolition debris by weight. Refer to Section IV.L, Global Climate Change, for additional details.

VII. GROWTH INDUCING IMPACTS

Section 15126.2(d) of the CEQA Guidelines requires that an EIR discuss the growth inducing impact of the proposed project, including "ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment." The proposed project represents Phase II development in Marina del Rey, described as the recycling, intensification, or conversion of the initial uses developed on leased parcels in the Marina del Rey LCP. The development proposed on Parcel 21 includes the replacement of existing onsite health club, retail, and marine commercial uses, as well as 1) the transfer of 94 required parking spaces from Parcel OT to Parcel 21 and 2) the transfer of yacht club and marine commercial uses that were approved for Parcel 20, Phase II, but were not built. As such, this portion of the proposed project falls within the expected buildout conditions of the Marina del Rey LCP, because although uses are being transferred between parcels, there is no change to the type of land use or development potential. The development proposed on Parcel OT and a portion of Parcel P[1], however, requires an LCP Amendment 1) Create a new land use category in the LCP of Active Seniors Accommodations, 2) re-designate Parcel OT from a Parking to Active Seniors Accommodations parcel with a Mixed Use Overlay Zone (MUZ)[2] allowing for the mixed-use senior citizen retirement facility with a retail component, 3) transfer development potential (114 hotel units from the Admiralty DZ #7 and 5,000 s.f. of retail space from the Palawan/Beach DZ #5) to Parcel OT in the Oxford DZ #6, 4) Adjust the lease parcel boundary between Parcel OT and Parcel P to the existing fence line, which would add 55 feet (19,755 s.f.) to Parcel OT, and 5) re-designate the portion of Parcel P to be added to Parcel OT from Open Space to Active Seniors Accommodations. This would necessitate adjustments to the corresponding LCP and LUP maps. Therefore, rather than the addition of 114 hotel rooms to the Admiralty DZ #7 and 5,000 square feet (s.f.) of retail to the Palawan/Beach DZ #5 in the Marina del Rey community, a 114 unit retirement facility and 5,000 s.f. of retail space would be constructed with project implementation in the Oxford DZ #6. Hotel use represents a "non-permanent" population, while a retirement facility represents a "permanent" resident population. At 100 percent occupancy, the retirement facility would add a population of 161 individuals to the community. Even with this increase in population, however, the proposed project is not expected to tax existing community service facilities, requiring the construction of new facilities, because the retirement facility would provide several dining and recreation amenities for its residents. Other public infrastructure improvements planned for the Marina del Rey area, including the County of Los Angeles Department of Public Works Oxford Retention Basin Flood Protection Multiuse Enhancement Project, the City of Los Angeles Department of Public Works Bureau of Engineering Venice Pumping Plant Dual Force Main Sewer Project in 2010, and the City of Los Angeles Department of Public Works Waterworks District plans to upsize the water main on Parcel OT from 14 inches to 24 inches, are not a direct result of the proposed project and would occur in its absence, in response to general cumulative growth.

The proposed project is not considered to facilitate an increase in construction of additional housing, due to the constraints placed on development by the Marina del Rey LCP. Although it is possible that the construction of new structures on Parcel OT and Parcel 21 would increase interest in the development of residences or commercial uses in the area, any development not consistent with the Marina del Rey LCP policies and land use designations would undergo County review (such as the amendment to the Marina del Rey LCP required for the proposed project). Impacts to the environment could occur that were not previously anticipated by the County, but through the CEQA process, any adverse impacts of the new projects would be examined, and mitigated, where possible. It would be too speculative to make

[1] Hereafter, unless otherwise noted, the Oceana Retirement Facility project site is simply referred to as Parcel OT.

[2] The Marina LUP MUZ (LUP pages 8-12 and 8-13) is intended to provide additional flexibility for development of creatively designed mixed-use projects on selected non-waterfront parcels. Parcels with this overlay zone are permitted to combine land use categories on an individual parcel, and are allowed to mix primary uses within a structure. Development potential available to each applicant is subject to the limitations of the zone in which the parcel resides.

assumptions about such projects, but they would be subject to County review. Further, land use and environmental impacts expected to occur as a result of creating an Active Seniors Accommodations Land Use Category in the LCP and re-designating Parcel OT from a Parking to Active Seniors Accommodations parcel are discussed in detail in Section IV.K, Land Use.

The project units will add to the tax base of the community, contributing to the general fund from which the County draws to provide public services and capital improvements necessary to serve residents. Residents and employees of local businesses would also be expected to patronize other local businesses, fostering the local economy.

VIII. PREPARERS OF THE EIR, CONTACTS AND REFERENCES

A. PREPARERS OF THE EIR

1. Lead Agency

This document was prepared under the direction and approval of the County of Los Angeles Department of Regional Planning. A team of private consultants, led by Envicom Corporation, prepared the document for the County, and the County, by its approval, accepts the document as its own.

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B. AGENCIES CONTACTED FOR PREPARATION OF THE EIR

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- United States Environmental Protection Agency
- Federal Emergency Management Agency (FEMA) National Flood Insurance Program, Flood Insurance Rate Map (FIRM)
- United States Fish and Wildlife Service
- Army Corps of Engineers

2. State

- California Environmental Protection Agency
- California State Water Resources Control Board
- California Department of Fish and Game
- California Coastal Commission
- Regional Water Quality Control Board
- Native American Heritage Commission

3. Local

- City of Culver City
- City of Los Angeles
- City of Los Angeles Department of Public Works
- Los Angeles County Sheriff's Department
- Los Angeles County Fire Department
- Los Angeles County Department of Public Works
- Los Angeles County Waterworks Districts
- County of Los Angeles Department of Regional Planning
- County of Los Angeles Department of Beaches and Harbors

C. ORGANIZATIONS, PERSONS, AND PUBLICATIONS CONSULTED IN PREPARATION OF THE EIR

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