

VOLUME I

DRAFT
ENVIRONMENTAL IMPACT REPORT

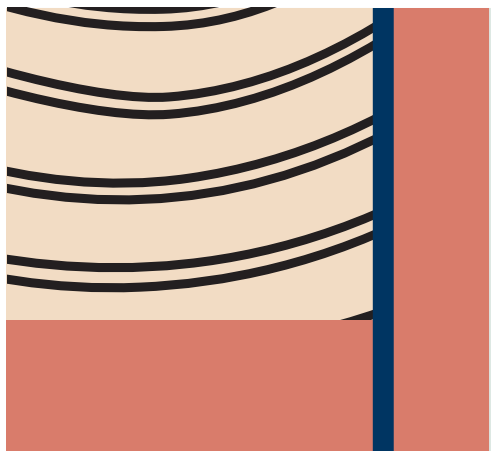
CARSON MARKETPLACE



SCH No. 2005051059

NOVEMBER 2005





VOLUME I

DRAFT
ENVIRONMENTAL IMPACT REPORT

CARSON MARKETPLACE

LEAD AGENCY

CARSON REDEVELOPMENT AGENCY
ONE CIVIC PLAZA DRIVE, #200
CARSON, CALIFORNIA 90745

PREPARED BY

PCR SERVICES CORPORATION
233 WILSHIRE BOULEVARD, SUITE 130
SANTA MONICA, CALIFORNIA 90401
TEL: 310.451.4488
FAX: 310.451.5279

SCH No. 2005051059

NOVEMBER 2005



TABLE OF CONTENTS

VOLUME I

	<u>Page</u>
I. SUMMARY.....	1
II. PROJECT DESCRIPTION.....	66
III. GENERAL DESCRIPTION OF THE ENVIRONMENTAL SETTING	102
A. Overview of Environmental Setting.....	102
B. Cumulative Development.....	116
IV. ENVIRONMENTAL IMPACT ANALYSIS	120
A. Land Use and Planning	120
B. Visual Resources	169
C. Traffic, Circulation and Parking.....	217
D. Hazards and Hazardous Materials.....	269
E. Geology and Soils.....	311
F. Surface Water Quality	334
G. Air Quality	355
H. Noise	415
I. Public Services.....	455
1. Fire Protection.....	455
2. Police.....	467
3. Schools.....	475
4. Parks and Recreation.....	486
5. Libraries	500
J. Utilities	505
1. Water Supply	505
2. Wastewater.....	519
3. Solid Waste	528
V. ALTERNATIVES TO THE PROPOSED PROJECT	538
VI. OTHER ENVIRONMENTAL CONSIDERATIONS.....	599
VII. REFERENCES.....	616

TABLE OF CONTENTS (CONTINUED)

	<u>Page</u>
VIII. LIST OF PREPARERS	624

VOLUME II

APPENDIX A—NOTICE OF PREPARATION (NOP), INITIAL STUDY, AND NOP LETTERS

APPENDIX B—MITIGATION MONITORING AND REPORTING PROGRAM

APPENDIX C—PROJECT EQUIVALENCY

APPENDIX D—TRAFFIC IMPACT STUDY

APPENDIX E—HAZARDS

VOLUME III

APPENDIX F—AIR QUALITY TECHNICAL APPENDIX

APPENDIX G—NOISE TECHNICAL APPENDIX

APPENDIX H—WATER SUPPLY ASSESSMENT LETTER

APPENDIX I— WATER CONSUMPTION, AND WASTEWATER GENERATION WORKSHEETS

APPENDIX J— THE CARSON MARKETPLACE, CITY OF CARSON, RETAIL IMPACT STUDY

LIST OF FIGURES

<u>Figure</u>	<u>Page</u>
1	Regional and Project Vicinity Map68
2	Existing Land Uses69
3	Development Districts75
4	Proposed Conceptual Plan76
5	Vehicular Circulation Plan86
6	Bicycle and Pedestrian Circulation Plan.....87
7	Landscape Plan90
8	Approximate Locations of Related Projects119
9	Existing Land Uses122
10	General Plan Designations.....126
11	Existing Zoning129
12	Photographs of the Project Site.....170
13	Photographs from Del Amo Boulevard Through the Project Site.....171
14	Photographs From Areas South of the Project Site172
15	Photographs From I-405 – East of the Project Site173
16	Photographs from West and North of the Project Site174
17	Conceptual Plan and Isometric Portrayal of Development.....187
18	Section and Elevations – I-405 Freeway188
19	Section and Elevations – South and Southwest Edges189
20	Sections and Elevation – Del Amo Boulevard190
21	Conceptual Signage Plan193
22	Winter Solstice Shadows210
23	Equinox Shadows211
24	Summer Solstice Shadows.....212
25	Street Network and Analyzed Intersections220
26	Landfill Cap Layer.....282
27	Proposed Groundwater and Gas Extraction Well Locations285
28	Proposed Conceptual Gas Extraction Well.....286
29	Conceptual Groundwater Treatment System.....289
30	Schematic Hydrostatigraphic Cross Section.....294
31	Regional Fault Map318
32	Liquefaction Hazard Zone324
33	Cell Areas for Grading.....329
34	Existing Storm Drains.....345
35	Total Cancer Risk for Southern Los Angeles County367
36	Air Quality Sensitive Receptors Locations.....372
37	Typical Levels of Ground-Borne Vibration419

LIST OF FIGURES (CONTINUED)

<u>Figure</u>	<u>Page</u>
38 Noise Sensitive Receptors and Monitoring Locations.....	429
39 Park and Recreational Facilities in Proximity of the Project Site	492
40 Existing Water Mains	510
41 Existing Sanitary Sewer Lines.....	521
42 Location and Setting of the Alternative Site.....	582

LIST OF TABLES

<u>Table</u>	<u>Page</u>
1	Intersection Mitigation Phasing Schedule24
2	Proposed Project Land Use Program.....74
3	Conceptual Development Program.....77
4	Permitted Uses79
5	General Development Standards83
6	Building Height Development Standards85
7	Sign Standards94
8	Equivalency Matrix—Examples of Land Use Conversion Factors.....96
9	List of Related Projects.....117
10	Project Consistency with Applicable Land Use Policies of the City of Carson137
11	Project Consistency with Applicable Land Use Policies—SCAG156
12	Comparison of Proposed Project and SCAG Forecasts.....162
13	Building Height Development Standards185
14	Sign Standards192
15	Project Consistency General Plan—Design-Related Policies202
16	Level of Service Definitions for Signalized Intersections221
17	Level of Service Definitions for Stop-Controlled Intersections221
18	Intersection Level of Service Analysis Summary Existing (Year 2005) Conditions222
19	Carson Marketplace Proposed Project Trip Generation Estimates231
20	Level of Service Definitions for Freeway Mainline Segments234
21	Intersection Level of Service Analysis Summary Future (Year 2010) Conditions243
22	Freeway Mainline Level of Service Analysis.....249
23	Shared Parking Demand Summary - Carson Marketplace Peak Month: December - - Peak Period: 2 P.M., Weekend254
24	City of Carson General Development Standards.....256
25	Intersection Mitigation Phasing Schedule259
26	Intersection Service Levels After Mitigation267
27	Summary of Primary Contaminants In Upper OU277
28	Upset Scenarios During the RA and Construction Phases296
29	Upset Scenarios During the Operation Phase of the Project298
30	Modified Mercalli Intensity Scale321
31	Bracketed Duration of Strong Shaking as a Function of Magnitude.....323
32	Ambient Air Quality Standards357
33	South Coast Air Basin Attainment Status.....359
34	Pollutant Standards and Ambient Air Quality Data369
35	Conservative Estimate of Emissions During Construction Approved RAP Design (Unmitigated) (Lbs/Day)382

LIST OF TABLES (CONTINUED)

<u>Table</u>	<u>Page</u>
36	Conservative Estimate of Emissions During Construction Proposed RAP Design Refinements (Unmitigated) (Lbs/Day).....383
37	Estimate of Unmitigated Local Construction Impacts (Approved RAP).....385
38	Estimate of Unmitigated Local Construction Impacts (Proposed RAP Design Refinements).....386
39	Maximum Project-Related Operational Emissions (Pounds Per Day).....390
40	Local Area Carbon Monoxide Dispersion Analysis.....391
41	Concurrent Operation and Construction Emissions (Pounds Per Day).....395
42	Estimated Cancer Risks (Per Million People)—2010.....401
43	Project Cumulative Air Quality Impacts.....413
44	Sound Levels and Human Response.....416
45	Land Use Compatibility for Community Noise Sources.....422
46	Interior and Exterior Noise Standards.....424
47	Noise Ordinance Standards.....426
48	City Limits for Exterior Noise Exposure.....426
49	Maximum Construction Noise Limits.....427
50	Summary of Ambient Noise Measurement Data (dBA).....430
51	Calculated Traffic Noise Level for Existing Conditions.....431
52	Construction Equipment Maximum Noise Levels.....436
53	Composite Average L_{eq} Noise Levels Per Construction Stage.....438
54	Highest Estimated L_{eq} Construction Noise Levels at Receptor Locations (During Heaviest Periods of Construction Activity for One-Hour Period).....439
55	Vibration Velocities for Construction Equipment.....441
56	Roadway Traffic Noise Impacts at Representative Noise Sensitive Locations.....443
57	Predicted CNEL Contour Distance—Buildout Year with Project.....445
58	Typical Maximum Noise Level from Individual Surface Parking Lot Noise Events447
59	Operations Noise Impact Summary.....448
60	LACoFD Average Response Times, City of Carson.....459
61	LACoFD Fire Equipment and Response Times.....459
62	School Capacity.....479
63	Estimated Student Generation for the Project.....481
64	Impacts of Related Projects On Schools.....485
65	Carson Regional Library Facilities.....501
66	Library Facilities Required by the Proposed Project.....503
67	Library Facilities Required by Related Projects.....504
68	Projected Water Demand.....514
69	Forecast of Cumulative Water Consumption.....517
70	Projected Sewage Generation.....524
71	Forecast of Cumulative Sewage Generation.....527

LIST OF TABLES (CONTINUED)

<u>Table</u>	<u>Page</u>
72	Solid Waste Disposal During Project Operation533
73	Forecast of Cumulative Waste Disposal.....536
74	Alternatives Land Use Comparison.....540
75	Comparison of Alternative 1 Components: No Project.....544
76	Comparison of Alternative 2 Components: Mixed Use Business Park.....554
77	Water Consumption for Alternative 2: Mixed Use Business Park565
78	Wastewater Generation for Alternative 2: Mixed Use Business Park.....566
79	Comparison of Alternative 3 Components: Reduced Intensity568
80	Water Consumption for Alternative 3: Reduced Project Alternative579
81	Wastewater Generation for Alternative 3: Reduced Project Alternative.....580
82	Comparison of Alternative 4 Components: Alternative Location.....583
83	Comparison of Impacts Proposed Project and Project Alternatives596

I. SUMMARY

I. SUMMARY

1. PURPOSE OF THE EIR

This EIR has been prepared pursuant the California Environmental Quality Act (CEQA) to evaluate the impacts of a new development Project that would be constructed in the city of Carson on a site located just southeast of the I-405 Freeway between Main Street and Avalon Boulevard. The Project would provide a mixed-use development with some or all of the following uses: regional commercial, commercial recreation/entertainment, office neighborhood commercial, restaurant, hotel, and residential.

This EIR is a Project EIR, as defined by Section 15161 of the State CEQA Guidelines and, as such, serves as an informational document for the general public and Project decision-makers. The City of Carson Redevelopment Agency (Redevelopment Agency) has the principal responsibility for approving the Project and, as the Lead Agency, is responsible for the preparation and distribution of this Draft EIR pursuant to CEQA Statute Section 21067. The Governing Board of the Redevelopment Agency is the Carson City Council.

The intended use of this EIR is to assist the Carson Redevelopment Agency and the City of Carson in making decisions with regard to the Carson Marketplace Project. This Draft EIR is also intended to cover all State, regional, and local governmental discretionary approvals that may be required to construct or implement the proposed Project. Additional agencies using the document would include, but would not necessarily be limited to, the State Department of Toxic Substances Control (DTSC), the Regional Water Quality Control Board and the State Department of Transportation (CALTRANS).

This Draft EIR evaluates the environmental impacts determined by the Redevelopment Agency to be potentially significant and discusses the manner in which the Project's significant effects can be reduced or avoided through the implementation of mitigation measures. Impacts that cannot be mitigated to a level below significance are considered significant unavoidable adverse impacts. In accordance with Section 15130 of the State CEQA Guidelines, this EIR also includes an examination of the effects of cumulative development in the vicinity of the proposed Project. Cumulative development includes all anticipated future projects that, in conjunction with the proposed Project, may result in a cumulative impact. In addition, this Draft EIR evaluates the extent to which environmental effects could be reduced or avoided through the implementation of feasible alternatives to the proposed Project. Furthermore, the Redevelopment Agency is responsible for certifying the EIR and adopting any mitigation measures needed to address the Project's significant environmental impacts. For projects that

result in any unmitigated or under-mitigated significant environmental effects, the Redevelopment Agency may, after making a series of findings, certify the EIR upon adoption of a Statement of Overriding Considerations pursuant to CEQA Guidelines Section 15093.

2. EIR FOCUS AND EFFECTS FOUND NOT TO BE SIGNIFICANT

In compliance with CEQA Section 21080.4, a Notice of Preparation (NOP) was prepared by the Redevelopment Agency and distributed for public comment to the State Clearinghouse, Office of Planning and Research, responsible agencies, and other interested parties on May 12, 2005. During the NOP review period, a public scoping meeting was held at the Carson Community Center on June 1, 2005. The purpose of the scoping meeting was to obtain input from the public regarding the scope of the issues and the alternatives that would be analyzed in the Draft EIR.

The Project's Initial Study, provided to the Office and of Planning and Research and responsible agencies and made available to the general public, identified those environmental topics for which the proposed Project could have adverse environmental effects and concluded that an EIR would need to be prepared to document these effects. A copy of the NOP and Initial Study, the NOP distribution list, written responses to the NOP that were submitted to the Redevelopment Agency and written comments submitted at the scoping meeting are included in Appendix A of this Draft EIR.

In the Initial Study, the Redevelopment Agency determined that implementation of the proposed Project may, either by itself or in conjunction with past, present, and reasonably foreseeable future development in the vicinity, have significant effects in the following areas:

- Land Use;
- Visual Qualities;
- Traffic and Circulation;
- Hazards and Hazardous Materials;
- Geology and Soils;
- Surface Water Quality;
- Air Quality;
- Noise;
- Public Services (Police and Fire Protection, Schools, Libraries, and Recreational Facilities); and
- Utilities (Water Supply, Wastewater Generation, and Solid Waste).

The Redevelopment Agency determined that the proposed Project would not have the potential to cause significant impacts in the following areas: Agricultural Resources, Biological Resources, Mineral Resources, Cultural Resources, Hydrology (Drainage and Groundwater Quality), and Population and Housing. Therefore, these areas are not examined in this Draft EIR. The rationale for the finding that no significant impacts would occur for these areas is provided in the Project's Initial Study, included in Appendix A of this Draft EIR.

3. EIR ORGANIZATION

This Draft EIR is organized into the following eight chapters:

- I. **Summary.** This chapter describes the purpose of the EIR, EIR focus and effects found not to be significant, EIR organization, Project background, areas of controversy and issues to be resolved, public review process, discretionary actions, and a summary of environmental impacts and mitigation measures.
- II. **Project Description.** This chapter presents the location, characteristics, and objectives of the proposed Project.
- III. **General Description of the Environmental Setting.** This chapter contains a description of the existing setting and a list of known related projects in the Project area that are anticipated for completion by 2010, the expected time for completion and occupancy of the proposed Project.
- IV. **Environmental Impact Analysis.** This chapter contains the environmental setting, Project impacts, mitigation measures, cumulative impacts and conclusions regarding the level of impact significance after mitigation for each of the environmental issues addressed in this EIR.
- V. **Alternatives.** This chapter provides analyses of each of the alternatives to the proposed Project, and the alternatives considered but rejected from further analysis.
- VI. **Other Environmental Considerations.** This chapter presents an analysis of the significant irreversible changes in the environment that would result from the proposed Project, an analysis of the Project's potential for causing growth-inducing impacts, and an analysis of potential secondary impacts; i.e. impacts that would be caused due to implementation of the Project's off-site mitigation measures.

VII. Persons and Organizations Consulted. This chapter lists all of the persons, agencies, and organizations that were consulted or contributed to the preparation of this Draft EIR.

VIII. Bibliography and References. This chapter lists all of the references and sources used in the preparation of this Draft EIR.

This Draft EIR includes the environmental analysis prepared for the proposed Project and the following appendices:

- Appendix A—Notice of Preparation (NOP), Initial Study, and NOP Letters;
- Appendix B—Mitigation Monitoring and Reporting Program;
- Appendix C—Project Equivalency;
- Appendix D—Traffic Analysis;
- Appendix E—Hazards;
- Appendix F—Air Quality Technical Appendix;
- Appendix G—Noise Technical Appendix;
- Appendix H—Water Supply Assessment Letter;
- Appendix I— Water Consumption, and Wastewater Generation Worksheets; and
- Appendix J— The Carson Marketplace, City of Carson, Retail Impact Study.

4. PROPOSED PROJECT

a. Project Location

The Project site is located in the City of Carson in the South Bay area of Los Angeles County and is currently undeveloped. It is located approximately 17 miles south of downtown Los Angeles and approximately 6.5 miles east of the Pacific Ocean. The Project site is comprised of approximately 168 acres located southwest of the San Diego Freeway (I-405) at and north of the Avalon Boulevard interchange. The Project site consists of two components. The majority of the Project site, consisting of 157 acres, is located south of Del Amo Boulevard, while the remaining 11 acres are located north of Del Amo Boulevard.

The San Diego Freeway (I-405), Harbor Freeway (I-110), Artesia Freeway (SR-91), and Long Beach Freeway (I-710) provide regional access to the Project site. The I-405 Freeway is located adjacent to the Project site's eastern boundary, the I-110 Freeway is located directly west of the Project site, and the SR-91 Freeway is located approximately 2.5 miles north of the Project site. The I-710 Freeway, which is located on Carson's eastern boundary, links the City with the Long Beach and Harbor areas. Locally, access to the Project site is available via Main Street (a north-south thoroughfare on the western side of the Project site), Avalon Boulevard (an exit from the I-405 Freeway and a major north-south arterial, and Del Amo Boulevard (an east-west arterial which bisects the northern portion of the Project site).

b. Project Characteristics

Carson Marketplace, LLC (the "Applicant") is proposing the Carson Marketplace (the "Project"), a 168-acre development located southwest of the I-405 Freeway at and north of the Avalon Boulevard interchange, in the City of Carson. The proposed Project would include some or all of the following uses: neighborhood commercial, regional commercial, commercial recreation/entertainment, restaurant, hotel, and residential. Specifically, the Applicant's proposal consists of a total of 1,550 residential units (1,150 for-sale units and 400 rental residential units), a 300-room hotel, and 1,995,125 square feet (sq.ft.) of commercial floor area.¹ The Applicant is proposing a wide range of land uses in order to create a diversity of on-site activity that responds to the future needs and demands of the southern California economy. In order to fully respond to these demands, the proposed Project includes an Equivalency Program that would allow the composition of on-site development to be modified in a manner that does not increase the Project's impacts on the environment. For example, office uses might be developed in place of a portion of the above proposed uses subject to the provisions of the Equivalency Program as set forth in the Carson Marketplace Specific Plan. Project development would be guided by a comprehensive set of development standards and regulations which are set forth in detail in the Carson Marketplace Specific Plan. These regulations identify permitted uses and development and design standards. These regulations, in combination with the development limits, would define the extent and nature of future on-site development.

The Specific Plan divides the Project site into three Development Districts. Each District has a distinct character and identity, and includes regulations appropriate to the mix of uses within its boundaries, as well as the role of the District within the overall Specific Plan. The three Development Districts are as follows:

- **Development District 1;** Located just south of Del Amo Boulevard. It extends between Main Street on the west and the I-405 Freeway to the east and to the Corridor Road on the south (approximately 480 feet south of Del Amo Boulevard). This District consists of 31 acres and is proposed to include commercial and residential uses.

¹ The total amount of commercial floor area includes 200,000 sq. ft. for the development of the 300-room hotel.

- **Development District 2;** Located south of District 1 and along the Project site's freeway frontage. It is the largest of the Development Districts, occupying a majority of the site, and it includes a total of 126 acres. Land uses proposed in Development District 2 include regional and neighborhood retail uses, a commercial recreation/entertainment district, restaurants and a hotel.
- **Development District 3;** Located just north of Del Amo Boulevard. This Development District is 11 acres in size and is proposed to include commercial and residential uses

In addition, the Specific Plan regulations pertaining to Development District 3 are proposed to be implemented by an overlay zone to the existing Commercial Regional (CR) zone. As such, all of the regulations and development standards for the CR zone as set forth in Chapter 1 (Sections 9131.1 through 9138.71) of the Carson Municipal Code also apply to Development District 3. Thus, the property owner of Development District 3 may choose to process a development pursuant to either the regulations and development standards for the CR zone or the regulations and development standards for the Carson Marketplace Specific Plan. If the property owner of District 3 chooses to pursue a development program different than the one analyzed in this Draft EIR, additional CEQA review may be required.

c. Discretionary Actions Requested and Permits Required

Implementation of the proposed Project would require, but would not necessarily be limited to, the permits and approvals listed below. Other actions of local, regional and/or federal agencies may be required.

Carson Redevelopment Agency

- Owner Participation Agreement;
- Improvement or other bonds; and
- Revenue bonds.

City of Carson

- Adoption of the Carson Marketplace Specific Plan;
- General Plan Amendment;
- Zone Change;

- Implementation of an Overlay Zone for Development District 3;
- Development Agreement;
- Building-related permits such as general building, foundation, plumbing, sewer, HVAC, electrical, landscaping, fencing, paving, etc.;
- Construction-related encroachment permits;
- Subdivision Map and/or Tract Map approvals;
- Vacations of existing on-site roadways;
- On-site public improvements; and
- Street improvements as required.

State of California

Environmental Protection Agency (Cal-EPA), Department of Toxic Substances Control

- Approval of refinements to the existing Remedial Action Plan (RAP) in conjunction with the Project.
- Oversight of RAP implementation.

Regional Water Quality Control Board

- Issuance of a Waste Discharge Permit.

California Department of Transportation (Caltrans)

- Improvements to the Avalon Boulevard interchange to the I-405 Freeway; and
- Any required Caltrans approval related to signage.

Additional Discretionary Actions

- Any other discretionary actions or approvals that may be required to implement the proposed Project.

5. BACKGROUND AND CONTEXT FOR THE PROPOSED PROJECT

a. Former On-Site Landfill Operations

The 157-acre portion of the Project site that is located south of Del Amo Boulevard (Development Districts 1 and 2) was used as a Class II landfill under an Industrial Waste Disposal Permit issued to Cal Compact, Inc. by the County of Los Angeles. Landfilling on the 157-acre site began in 1959, shortly after the banning of incinerators in Los Angeles County in 1957. Landfilling occurred from April 1959 to December 1964 with an approximate closing date of February 1965.

During the life of the landfill, less than 7 million cubic yards (cy) of solid municipal waste and 2.6 million barrels of industrial liquid waste were received at the landfill. Waste received included organic wastes, such as solvents, oils, and sludges, as well as heavy metals, paint sludges, and inorganic salts.

As a result of contamination on and adjacent to the landfill, the 157-acre site is listed by the State of California Department of Toxic Substances Control (DTSC) as a hazardous substances site. On March 18, 1988, Remedial Action Order No.*HSA87/88-040 was issued requiring investigation of contamination at the landfill site and preparation of remedial action plans.

Due to the size and complexity of the former landfill site, DTSC divided its remediation into two operable units.² The Upper Operable Unit (Upper OU) consists of the site soils, the waste zone above and within the Bellflower Aquitard, and the Bellflower Aquitard down to but not including, the Gage Aquifer. The Lower Operable Unit (Lower OU) is composed of the Gage, Lynwood, and Silverado Aquifers, and all other areas impacted by the geographic extent of any hazardous substances which may have migrated or may migrate from the aforementioned areas or from the Upper OU. The operable units are also established to prioritize the remedial response to the areas of known impacts (Upper OU) versus potential impacts (Lower OU).

Investigations of the Upper OU documented the presence of landfill gases (methane and carbon dioxide) as well as volatile organic compounds (VOCs) and metals in the landfill's soil and groundwater. A Remedial Action Plan (RAP) was prepared and approved by DTSC for the

² *Federal regulations at 40 CFR 300.5 define an operable unit as "...a discrete action that comprises an incremental step toward comprehensively addressing site problems. This discrete portion of a remedial response manages migration, or eliminates or mitigates a release, threat of release, or pathway of exposure. The cleanup of the site can be divided into a number of operable units, depending on the complexity of the problems associated with the site. Operable units may address geographical portions of a site, specific site problems, or initial phases of an action, or may consist of any set of actions performed over time or any actions that are concurrent but located in different parts of a site."*

Upper OU in 1995. A RAP for the Lower OU was prepared to address the potential impact of groundwater contamination in the Upper OU on the Lower OU. The RAP for the Lower OU was approved by DTSC on January 24, 2005.

Implementation of the Upper OU is required to make the site safe for the proposed Project. Implementation of the Lower OU would be protective of groundwater resources.

b. Previous Development Proposal—Metro 2000

The Project site was the subject of a previous development proposal in the early 1990s. Specifically, in 1993, a project known as Metro 2000 was proposed as a multi-phase development. Phase I of the Metro 2000 project included the development of L.A. MetroMall, a 1.83-million-square feet regional mall consisting exclusively of retail outlet stores. Phase II of the Metro 2000 project included an additional 687,400 square feet of regional commercial retail uses and 600,000 square feet of office floor area. Therefore, buildout of the Metro 2000 project consisted of a total of approximately 3.1 million square feet of gross buildable area. A Draft and Final EIR for Metro 2000 were prepared and certified by the Carson City Council. In addition, the City Council approved Phase I of Metro 2000. Following certification of the Metro 2000 EIR by the Carson City Council in 1995, the State Department of Toxic Substances Control (DTSC) approved the RAP for the remediation of the site. However, the Metro 2000 project never went forward.

6. AREAS OF CONTROVERSY/ISSUES TO BE RESOLVED

Potential areas of controversy and issues to be resolved by the Redevelopment Agency include issues known to be of concern to the community and issues raised in the response to the Project's NOP. Issues known to be of concern to the community include safety of the site for urban development, given the sites brownfield status, traffic, land use compatibility (in particular the relationship and potential impacts on neighborhoods south and southwest of the Project site), visual quality, air quality, noise, vibration, and hazardous materials. Additional issues raised in response to the NOP include impacts on public services, in particular police, fire and library service impacts.

7. PUBLIC REVIEW PROCESS

As previously discussed, the Redevelopment Agency circulated an NOP for the proposed project on May 12, 2005. During the following 30-day comment period, 14 letters were received. Also, a public scoping meeting was held on June 1, 2005. The NOP and letters received during the NOP comment period, and the three written comment cards provided at the scoping meeting are included in Appendix A of this Draft EIR

The Draft EIR will be circulated for a 45-day review period, as required under CEQA.³ Following the public review period, written responses will be prepared on all comments received, and these comments and responses will be incorporated into the Final EIR. No final actions (e.g., approval or denial) will be taken on the Project until the Final EIR has been reviewed, certified as complete, and considered by the appropriate decision-makers. Dates of public hearings will be published and officially noticed in accordance with all legal requirements.

8. SUMMARY OF ALTERNATIVES

The State CEQA Guidelines (Section 15126.6 (a)) require an EIR to describe a range of reasonable alternatives to a proposed project, or to the location of a 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. As required by the CEQA Guidelines, four alternatives to the proposed Project were identified and analyzed. The four alternatives include a “No Project” alternative (i.e., no change in current site condition), an alternative use, a reduced density alternative, and the development of the proposed Project at an alternative site. These alternatives have been developed and analyzed to compare the relative impacts of these alternatives to the proposed Project. Based on comparative evaluations, forecasts are made as to the environmental impacts of each alternative in contrast to those of the Project, and whether each alternative could attain the Applicant’s basic Project objectives. The alternatives that have been selected were done so with the explicit intent of identifying alternatives that might potentially avoid or reduce the Project’s significant adverse impacts.

Alternative 1: No Project

The No Project alternative assumes that the Project would not be developed and that the Project site would remain in its existing physical condition. Although some pressure for, and interest in, reuse of the site exists, no project is anticipated to be brought forward in the foreseeable future. Under Alternative 1, the parcel north of Del Amo Boulevard would remain vacant and existing fill and debris would not be removed. Remediation of the existing brownfield portion of the Project site south of Del Amo Boulevard, including the capping of existing waste materials at the former landfill site, would not occur, since the current property owner does not have the funds to implement the RAPs. While the State has pursued other responsible parties and created a remediation fund from the proceeds of lawsuits against those parties, the fund is not sufficient to complete the remediation.

The evaluation of the No Project alternative addresses the requirements of Section 15126.6 (3)(1) of the CEQA Guidelines. The No Project alternative would avoid the

³ *Public Resources Code Section 21091.*

Project's significant and unavoidable impacts associated with visual resources, traffic, public transportation, air quality, and construction noise. However, the No Project alternative would have less environmental benefit than the Project in relation to site remediation and improvement to groundwater and surface water quality and would, therefore, have a greater impact than the Project in relation to hazards and surface water quality. The No Project alternative would not meet the basic objectives of the Project to achieve productive reuse of a large brownfield site, to promote the economic well being of the Redevelopment Project Area or the City, or to maximize shopping and entertainment opportunities. In addition, the No Project alternative would not meet the Project objectives to provide a diversity of employment opportunities for local residents, to contribute to the City's housing stock or to provide a signature/gateway development that contributes to the creation of a vibrant urban core for the City.

Alternative 2: Reduced Project— Mixed-use Business Park

Alternative 2 would be developed on the same site as the proposed Project, with uses that are in keeping with the City of Carson 2004 General Plan update land use designation of "Mixed-Use - Business Park." This land use category is envisioned to provide for a variety of businesses and professional offices, services and associated business as well as retail activities in an attractive environment. Development under this Alternative would include a mix of light industrial/business park uses and regional and neighborhood-serving commercial uses, including restaurants. In lieu of a Specific Plan, development would be subject to the requirements of the City's Light Industrial/Manufacturing (ML) zone and the site's existing Design Overlay and Organic Refuse Landfill Overlay designations. The total floor area would be equivalent to the commercial floor area proposed by the Project. It is assumed that the floor area that would occur under this Alternative would be equally divided between commercial and light industrial/business park uses. Remediation of the former landfill site, including the capping of waste materials and coverage of the former landfill site by impervious concrete foundation, parking lots, and streets would be the same as under the Project.

Alternative 2 would incrementally reduce unavoidable and significant impacts associated with visual resources, traffic, public transit, and air quality during Project operation. However, with the exception of air toxics, Alternative 2 would not reduce these impacts to less than significant levels. As with the Project, visual resources, construction noise and air quality impacts would continue to be significant. Alternative 2 could meet the basic objective of the Project to achieve a productive reuse of a large brownfield site, although a smaller project may not generate sufficient revenues to implement the RAP, and to promote the economic well being of the Redevelopment Area. Alternative 2 would provide employment opportunities for local residents by generating substantial construction work opportunities and long-term jobs. In providing commercial uses, Alternative 2 would meet the objective to diversify the economic base of the Redevelopment Area and the City, but not to the same extent as the Project. Alternative 2 would not maximize shopping opportunities or provide hotel, entertainment or

recreation uses. Alternative 2 could partially meet the objective of the Project to provide a signature/gateway development that contributes to the creation of a vibrant urban core for the City by locating commercial development and signing along the I-405 Freeway. However, since Alternative 2 would have fewer commercial uses and no hotels or residential uses, it would not provide the same diversity and synergism among the on-site uses, level of pedestrian traffic, or vibrancy as the Project. Alternative 2 would also not meet the Project objective to contribute to the City's stock of rental and for sale housing units and affordable housing.

Alternative 3: Reduced Project

The Reduced Density Alternative, Alternative 3, assumes that the scale of the Project would be reduced through a 25 percent reduction in residential units and commercial floor area. The proportionate mix of commercial and residential uses would be the same as under the Project; however, maximum development would consist of 1,162 residential units and commercial floor area would consist of 1,496,343 square feet. The reduction in development under Alternative 3 could be achieved through fewer structures (smaller building footprint) or reduced building heights. The former landfill site would be capped and completely covered by impermeable foundation pads, parking lots, and streets, as was the case with the Project.

Alternative 3 could meet the Project objective to achieve a productive reuse of a large brownfield site by generating the revenue necessary to pay for and effectuate remediation of the environmental conditions on the Project Site, although a smaller project may not generate sufficient revenues. Alternative 3 would promote the economic well being of the Redevelopment Project Area by diversifying and increasing the area's economic base and would assist in creating both short and long term employment opportunities for the residents of the Redevelopment Project Area and the City. Alternative 3 would meet the Project's objective to maintain a sustainable balance of residential and non-residential uses. Alternative 3 would also meet the objective to generate substantial construction work opportunities and long-term jobs in the commercial and hospitality industries. However, since Alternative 3 would have 25 percent fewer residential units and commercial floor area, it would not meet the objective to maximize work opportunities and shopping and entertainment opportunities to the same extent as the Project. In providing a mix of regional and neighborhood commercial uses, hotel, restaurants, and residential uses, Alternative 3 would meet the objective of the Project to provide a signature/gateway development that contributes to the creation of a vibrant urban core for the City. However, since Alternative 3 would reduce all uses by 25 percent, it would not provide the same level of urban focal point, level of pedestrian traffic, or vibrancy as the Project. Alternative 3 would contribute to the City's stock of rental housing and for sale units, including affordable housing, although not to the same extent as the Project. Alternative 3 would incrementally reduce unavoidable and significant impacts associated with traffic, public transit, and air quality during Project operation, but would not reduce these impacts to less than significant levels. As

with the Project, visual resources, construction noise, and air quality impacts would continue to be significant.

Alternative 4: Alternative Location

Alternative 4 assumes that the Project would be moved to another location and no development would occur at the Project site. The purpose of the evaluation of an Alternative site is to ascertain if changing the location of a project to another site would reduce or eliminate any potentially significant environmental impacts that may be unique to the Project's location, and whether relocation could potentially eliminate Project impacts. For the purposes of this analysis it is assumed that Alternative 4 would be constructed according to the Project's design and intensity under a Specific Plan comparable to that prepared for the Project at its proposed site. Specific criteria in identifying an Alternate Site are location within the same jurisdiction and adequate size to accommodate the scope of the Project. In accordance with these criteria, the Shell refinery site located approximately one mile east of the proposed Project site is selected for the evaluation of an alternative location. The Alternative Site is an approximately 280-acre parcel, located between Del Amo Boulevard and Dominguez Street, just west of Wilmington Avenue.

Alternative 4 would, like the Project, put to productive use a blighted, underutilized site within Redevelopment Project Area No. One. In so doing it would contribute to the economic well being of the Redevelopment area and the City. Alternative 4 would contribute to the creation of a vibrant urban core for the City; however, since this location would not take advantage of the site's proximity to the San Diego Freeway, it would not have the same level of gateway appeal as the Project site. Alternative 4 would also meet the Project objective to contribute to the City's housing stock of rental and for sale units, including affordable housing. In summary, Alternative 4 would not avoid the Project's significant and unavoidable impacts associated with visual quality, traffic, public transit, air quality, and construction noise. Alternative 4 would cause the remediation of soils and groundwater at the Alternate Site, and would have impacts similar to those of the Project in relation to hazards and surface water quality.

Environmentally Superior Alternative

The State CEQA Guidelines require the identification of an environmentally superior alternative to the proposed Project and, if the environmentally superior alternative is the "No Project Alternative," the identification of an environmentally superior alternative from among the remaining alternatives. An environmentally superior alternative is an alternative to the Project that would reduce and/or eliminate the significant, unavoidable environmental impacts associated with the Project without creating other significant impacts and without substantially reducing and/or eliminating the environmental benefits attributable to the Project.

Selection of an environmentally superior alternative is based on an evaluation of the extent to which each alternative reduces or eliminates the significant impacts associated with the Project, and on a comparison of the remaining environmental impacts of each alternative. Through the comparison of the environmental characteristics and potential impacts of each of the alternatives, the Reduced Project Alternative, Alternative 3, is concluded to have a lesser degree of environmental effect than any of the other Project alternatives, exclusive of the No Project Alternative. As Alternative 3 would have incrementally less impact relative to the Project and other evaluated alternatives, CEQA requires that this alternative be deemed the Environmentally Superior Alternative. Although Alternative 3 would not meet all of the basic objectives of the Project, it would, nonetheless, partially achieve most of the Project's basic objectives. It should be noted that, other than the No Project Alternative, no alternative would reduce the Project's significant, unavoidable traffic, public transportation, air quality and construction noise impacts to levels that are less than significant.

9. SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

9.1 Land Use

a. Environmental Impacts

The Project would result in the conversion of vacant lands to developed uses with residential units and a variety of commercial uses (neighborhood commercial, regional commercial, visitor-serving commercial recreation/entertainment, and restaurants). In so-doing, it would provide a large amount of in-fill development within an existing urban/built environment. The development would be implemented via the Carson Marketplace Specific Plan. The Specific Plan would regulate the amount and types of development, the size and arrangement of buildings, on-site circulation and open space, as well as the general appearance of on-site development. The Land Use analysis evaluated the potential impact of the Specific Plan and the development that it would allow with regard to the following three issues: (a) Compatibility with Land Use Plans, Policies, and Regulations, (b) Existing Land Use Patterns, and (c) Sustainability of Existing Uses.

(1) Project Compatibility with Land Use Plans, Policies, and Regulations

The proposed Project would be compatible with the City's General Plan, as well as the Redevelopment Plan for Project Area No. One Merged and Amended, as these documents encourage the development of the Project site, with a project that would accomplish the following: (1) provide for the productive use of a brownfield site; (2) provide a signature project for the City with freeway visibility; (3) provide a mixed-use development with shopping, entertainment, restaurant, hotel and residential uses; and (4) increase housing and employment opportunities within the City. While the Project would require amendments to the General Plan

land use designations, the uses allowed under the Specific Plan would be compatible with these designations as it implements numerous General Plan policies. For example, the Project would allow commercial uses that are otherwise allowed under the existing designations, the Project would not preclude the development of light industrial uses that might have occurred at the Project site to occur at other locations, and the provision of housing would meet numerous City policies regarding the provision of mixed-use development and additional housing opportunities. The Project would also be compatible with the City Zoning ordinance as the Specific Plan would provide regulations for allowed uses, densities, height limits, setbacks and ground coverage, that are equivalent to or more protective of the environment than existing zoning regulations. It would do this in the context of a planned development, addressing an overall design for the Project site. The Project would also be compatible with SCAG policies by accommodating anticipated regional growth, providing housing and employment opportunities, and by providing a clustered development at a regionally accessible location. Thus, Impacts regarding compatibility with land use plans, policies and regulations would be less than significant.

(2) Impacts on Existing Land Use Patterns

The Project would be an in-fill development located within an existing urban setting, and would provide a continuation of existing development patterns within the northwestern portion of Carson. Furthermore, the Project would not disrupt important linkages between existing districts surrounding the Project site, since the surrounding uses vary and are located within distinct areas. The Project uses would not place uses of a nature or proximity that would alter the character of the existing land uses surrounding the Project site, due to buffering and/or a range of land use relationships that are typical of the urban environment. Thus, impacts on existing land use patterns would be less than significant. Potential specific impacts on adjacent uses, particularly the residential uses south and southwest of the Project site are addressed in other sections of the Draft EIR, with numerous mitigation measures recommended to reduce impacts. Sections that particularly focus on these issues include Visual Quality, Noise, and Air Quality.

(3) Impacts on the Sustainability of Existing Uses

The Project proposes to develop 1,995,125 square feet of commercial space with a mix of retail, entertainment and hotel uses. This development would support commercial economic activity that would compete with existing retail uses for meeting the needs of the population. However, any such affect of the Project is forecasted to have only a short-term negative effect upon existing retail uses within the market area served by the Project. It is further forecasted that this impact would be alleviated in the mid-term (i.e. by 2020) as the local market continues to grow. Therefore, it is not anticipated that existing retail uses in the Project's market area would fall into large-scale physical disrepair, unable to recover with natural increases in economic demand in the future. Impacts on the physical environment from Project induced vacancies or effects on sales would thus be less than significant.

b. Mitigation Measures

As no significant land use impacts would occur, no mitigation measures would be necessary.

c. Cumulative Impacts

The Draft EIR has identified 36 related projects that may be developed in the Project area in the same time period as the proposed Project. These projects are diverse, varying in type, size, and location. As such, they would provide further urban in-fill development within the local area, but would not comprise a major change in the land use patterns within the City or region. None of the related Projects is located in the immediate vicinity of the Project site; and none would contribute with the Project to the land use relationships between those at the Project site and those in immediately adjacent areas. The identified related projects within the City of Carson are subject to compliance with City regulations and subject to review by the City for compliance with the General Plan and the Carson Municipal Code. The proposed Project would be compatible with City policies, land use plans, and regulations; and would not contribute to a cumulative effect of multiple projects having adverse effects on the environment due to their incompatibility with regulatory requirements. The cumulative impacts of the Project plus other growth on the sustainability of surrounding retail uses would not be greater than that reported for the Project above, as the analysis of potential Project impacts includes the incorporation of such development. Thus, cumulative impacts would be less than significant with regard to existing land use patterns; compatibility with plans, policies and regulations; and the sustainability of existing retail uses.

d. Level of Significance After Mitigation

Project development would result in less than significant land use impacts.

9.2 Visual Resources**a. Environmental Impacts**

The Project would allow the conversion of a long-standing area of vacant land to developed uses with residential units and commercial development (neighborhood commercial, regional commercial, visitor-serving commercial recreation/entertainment, and restaurants). In so-doing, it would change the appearance of the Project site, would add new building mass that would alter existing view conditions, cause off-site shading, and alter the night-time appearance of the site with artificial lighting. Each of these potential impacts is addressed separately in the analysis of the Project's impacts on visual quality.

(1) Aesthetic Character of the Area

The analysis of the Project's impact on aesthetic character identifies a potentially significant impact on the site's standing as a valued contributor to the aesthetic character of the area. While the site is fenced and contains no unique natural features or valued visual features, it offers visual relief from development due to its lack of buildings and a sense of spaciousness to those surrounding and traveling through the Project area. This open character of the site would be substantially altered with conversion of the site to a developed appearance. This constitutes a significant impact of the Project.

Otherwise, Project impacts on aesthetic character would be limited due to the provisions of the Carson Marketplace Specific Plan that limit the types and location of site uses, limits densities and building heights, and provides design guidelines for landscaping, buildings and ancillary structures, and signs. With these limitations, impacts of development under the Project's Conceptual Plan would be less than significant. Furthermore, the Project would portray a character that is in keeping with similar large-scale developments within the region. Development along the Project edges would be limited and would not substantially contrast with the visual character of the surrounding areas. Further, impacts on aesthetic character during construction would be less than significant since the appearance of the Project site during construction would be typical of that occurring in urban areas, would not adversely affect unique aesthetic resources, and viewing conditions of ground level activity would be limited from most off-site locations (except Del Amo Boulevard) due to the Project's elevation atop a berm that faces many off-site locations.

Impacts of the Project on the aesthetic character of the Project area could vary from that which would occur the Applicant's Conceptual Plan. If such an affect were to occur, the impact of the Project on aesthetic character of the Project area would be substantially the same as with the Conceptual Plan. However, a varied development program could have significant impacts on aesthetic character if taller buildings, i.e. the hotel or the movie theaters, were located too close to existing residential development, or signs along the I-405 Freeway were not placed in an appropriate manner. Mitigation measures are proposed to address such potential impacts.

(2) Views

The proposed Project's impacts on views addresses what would happen when Project buildings are located between visual resources and view locations that surround the Project site. The Project site is not considered a view resource, as it is in a degraded state, and does not include unique or natural qualities. The existing visual environment in the Project area is limited to that of an urbanized area with its array of interspersed developments, open spaces, and infrastructure improvements. The Project area does not contain notable features that would typically fall under the heading of view resources, e.g. unique geologic features, natural areas,

etc. Views of the two notable features that might catch the eye of travelers through the area are the Goodyear Blimp site located on the north side of the I-405 Freeway, and the large fiberglass statue of a man holding a golf club located on the south side of the I-405 Freeway. Views of these two visual resources would not be lost due to Project development. Views over the Project site are limited due to intervening development, the flat terrain in the areas surrounding the Project site, and that the Project site sits atop a berm that slopes down to surrounding areas. Therefore, the proposed Project would not substantially diminish any such views, and impacts on views of unique, and/or valued scenic resources would be less than significant.

(3) Shade and Shadow

The Project would add new buildings to the Project site that would cause shading at off-site locations. The only shadow sensitive uses that could be affected are the residential units south and southwest of the Project site. Project shading of these uses would be limited. The greatest shading on nearby residential development would occur during winter mornings and that shading on the off-site residential properties closest to the Project site, during the hours analyzed, would occur for less than one hour. This is less than the 3-hour significance threshold, and thus, impacts on shading would be less than significant.

(4) Artificial Lighting

The proposed Project would add new lighting to the Project area causing very notable increases to the on-site lighting levels in relation to the existing setting. Project lighting would be typical of lighting generally found in large-scale commercial development. At the same time, Project lighting would be provided pursuant to the Project's lighting guidelines, which include requirements limiting light intensity, light control methods (e.g. shielding of lighting), and pole heights. The intention of these guidelines is to limit the lighting to levels within the needed range of lighting required for the Project uses and site security. In particular, the guidelines focus lighting on-site, and limit the glow that could occur on the Project site. With these limitations, Project lighting would not substantially alter the character of off-site areas surrounding the Project site and would not interfere with off-site activities. Therefore, impacts of Project lighting would be less than significant.

b. Mitigation Measures

The above analysis identified a significant impact regarding the loss of a valued aesthetic resource; i.e., the openness that is provided by the existing undeveloped Project site. This loss of openness occurs as a result of placing development at the Project's location rather than by the particular type or size of development. Any notable development on the Project site would change its currently undeveloped character. Therefore, this significant impact cannot be mitigated.

Two other potentially significant impacts were identified that could occur if development varied from that shown in the proposed Conceptual Plan. Accordingly, the following two mitigation measures address potentially significant impacts that could occur due to the location of taller buildings along the Project's southern and southwestern edges and variations in sign placement that could occur along the Project's I-405 edge. A mitigation measure is also proposed to insure that sign lighting does not adversely affect residential development adjacent to the Project site.

Mitigation Measure B-1: The minimum setback for hotel and theater uses along the Torrance Lateral, adjacent to residential uses, shall be 250 feet.

Mitigation Measure B-2: The distribution, placement and orientation of signs along the I-405 Freeway shall be in substantial compliance with the signage concepts presented in the Conceptual Plan.

Mitigation Measure B-3 The line of sight between lighted signs on the Project site and existing residential development along the Torrance Lateral, opposite to the Project site shall be minimized.

Otherwise, the proposed Project would not generate significant visual resource impacts. This conclusion was based on the assumed implementation of the Specific Plan regulations, guidelines, and standards. The Specific Plan includes a mechanism for site plan review of all development to insure that it does in fact meet the requirements of the Specific Plan. As many of Specific Plan features were relied upon in the above analysis, the following mitigation measure is proposed:

Mitigation Measure B-4: All Project development shall undergo site plan review by the Planning Manager to assure that the following design measures have been implemented:

- **Landscaping.** All Landscaping shall be consistent with a plant palate of native trees, shrubs and groundcovers that shall add uniformity to the Project site. Plants shall be selected to support and complement the themes of the various Project components. Specially themed landscaping treatments shall occur at key locations (e.g. freeway edge, channel slope and lifestyle and entertainment area). Of more detailed note: (1) landscaping themes on Del Amo Boulevard and Main Street shall be coordinated with the landscaping of the Carson Street Conceptual Visualization and the Home Depot Center; (2) continuous shrub and ground cover plantings shall be provided in the medians and edges of internal streets with vertical landscape and/or hardscape elements at a minimum of every 50 feet along the edges; (3) 5% landscape coverage

shall be provided in parking lots, and (4) 50% landscape coverage shall be provided on the sides of parking structures visible to residences.

- **Buildings.** Buildings shall include the following design features: varied and articulated building façades featuring the use of colorful stucco, with a variety of architectural accent materials for exterior treatment at visually accessible locations.
- **Accessory facilities and Walls.** Wall facades shall be varied and articulated. Accessory facilities such as trash bins, storage areas, etc., shall be covered and screened.
- **Lighting.** Lighting shall be limited in intensity, light control methods, and pole heights, so as to be directed on site, and not interfere with off-site activities.

c. Cumulative Impacts

The Draft EIR has identified 36 related projects that may be developed in the Project area. These projects are diverse, varying in function, size, and location. As such, they would provide further urban in-fill development within the local area of each project, but would not comprise a major change in the land use patterns within the City or region. None of the related Projects is located in the immediate vicinity of the Project site; and none would contribute with the Project to the aesthetic conditions occurring along the Project edges. All of the related projects in the City of Carson would be subject to numerous provisions of the Carson Municipal Code, which includes development standards, procedures for Site Plan and Design Review, and, for some sites, design review under the Design Overlay zoning designation. Therefore, other projects in the City of Carson are anticipated to minimize adverse visual impacts. Cumulative impacts of related projects would be less than significant. However, since the proposed Project would have a significant impact, cumulative impacts would also be significant.

d. Level of Significance After Mitigation

The proposed Project would result in the conversion of a large undeveloped vacant site to a developed use, causing a loss of openness that contributes to the aesthetic quality of the Project site and its surroundings. This impact is a significant impact that is inherent in the development of the site, and thus cannot be mitigated or avoided. Two other potentially significant impacts were identified that could occur if development varied from that shown in the proposed Conceptual Plan. Accordingly, mitigation measures were included to address impacts that could occur if buildings taller than those shown in the Conceptual Plan were located along the Project's southern and southwestern edge, or a variation in sign placement were to occur along the Project's I-405 edge. These mitigation measures reduce the impacts to a less than significant level. Otherwise the proposed Project would not have significant impacts on aesthetic character of the surrounding area, views, shading conditions, or nighttime illumination.

9.3 Traffic, Circulation, and Parking

a. Environmental Impacts

(1) Construction Impacts

Project construction would generate traffic from construction worker travel, as well as the arrival and departure of trucks delivering construction materials to the site and the hauling of debris and exported soils generated by on-site demolition and excavation activities. The majority of the trips by construction workers would occur during hours that would avoid the A.M. and P.M. peak traffic periods. As such, impacts attributable to construction worker travel would be less than significant. Haul truck trips would be vastly reduced under the proposed RAP design since the need for the hauling of 2,000,000 cubic yards of clay, requiring approximately 150 truck trips per 10-hour day over a 1.5-year period would be eliminated. Under the proposed RAP refinements, the Project is forecasted to generate one to six truck trips per day, depending on the construction phase. Haul truck traffic on local streets would be limited due to the proximity of the Project site to the I-405 Freeway, and with the implementation of a City-approved Truck Haul Route program, which would prohibit trucks traffic on local residential streets, haul truck activity would have a less than significant traffic impact. Lane and sidewalk closures and utility line construction may affect emergency vehicle access, travel time, and pedestrian access. However, traffic management procedures would be implemented to assist in the movement of traffic that could interfere with emergency vehicles. Furthermore, Project construction activities would not impede access to nearby businesses or residential uses. As a result, construction traffic impacts for these issues would be less than significant. However, pedestrian access would be impeded if closure of both sidewalks on the north and south sides of Del Amo Boulevard were to occur concurrently. This would constitute a significant impact.

(2) Operational Impacts

(a) Study Intersections

The Project would generate an estimated 68,950 daily trips, including approximately 2,510 A.M. and 5,770 P.M. peak hour trips. At Project buildout, the Project would result in significant impacts, prior to mitigation, at 14 of the 27 study intersections. In addition, Project traffic would result in significant impacts along four segments on the San Diego Freeway (I-405) and three segments on the Harbor Freeway (I-110).

(b) Access

Access to the Project site would be provided via several new intersections and/or existing intersections. Intersection access points serving the Project site include Del Amo and Stamps

Drive, Lenardo Drive and Main Street, and Lenardo Drive and the I-405 interchange. Projected service levels at these three new access intersections would be less than significant.

(c) Public Transportation

The Project is forecasted to result in approximately 123 new transit trips during the A.M. peak hour and 282 new transit trips during the P.M. peak hour. It is estimated that the Project could add approximately five person trips on each of the 23 bus lines serving the Project area in the A.M. peak hour and 12 person trips on each of the 24 bus lines serving the Project area in the P.M. peak hour. Twelve persons per bus would represent more than 25 percent of the capacity of a typical 45-passenger bus. Since existing transit services could not readily absorb the Project's forecasted transit riders, the impact of the Project on the regional transit system would be significant.

(d) Parking

The City's General Development Standards would require 10,376 parking spaces for the Project's commercial component and 3,238 spaces for the Project's residential component, for a total of 13,614 parking spaces. In terms of parking demand, the Project's commercial component, based on a shared parking analysis, would have a peak parking demand of approximately 7,578 parking spaces during the weekday peak hour and approximately 8,335 parking spaces during a weekend peak hour; whereas, the residential component would have a separate parking demand of approximately 2,788 spaces, including 233 guest spaces. Thus, the provision of parking per the City's General Development Standards would be more than sufficient to accommodate the Project's estimated peak parking demands. The Specific Plan provides for the implementation of a shared parking program, if it can be demonstrated that the parking that is actually provided would be adequate to meet the Project's peak parking demand. As such, the Applicant may request the approval of a shared parking plan, in lieu of the City's General Development Standards. Since the Project would not provide less parking than is needed to meet the Project's parking demand, impacts relative to parking demand would be less than significant.

b. Mitigation Measures

(1) Construction

Mitigation Measure C-1: The Project shall submit a Construction Traffic Management Plan or Worksite Traffic Control Plan (WTCP) to the City and appropriate police and fire services prior to the start of any construction work phase, which includes Project scheduling and the location of any roadway closures, traffic detours, haul routes, protective devices, and warning signs, for the

purpose of minimizing pedestrian and vehicular impediment and interference of emergency vehicles from Project construction activities.

Mitigation Measure C-2: During construction, at least one sidewalk on either the north or south side of Del Amo Boulevard shall remain open and accessible to pedestrian traffic.

(2) Operation

(a) Intersection Mitigation Measures:

The Project consists of a number of different land uses that may be developed in phases. Since the Project may be implemented over a period of time, its related traffic growth and, thus, the intersection impacts would also occur over a period of time (i.e., some impacts would occur at earlier stages of development, while others would occur at later stages). Thus, an intersection phasing program has been developed to ensure that the necessary improvements are implemented when and where they are needed to achieve the requisite mitigation as development occurs. Table 1 on page 24 lists the impacted study intersections and depicts the point at which significant impacts would occur. As shown in Table 1, the Project's intersection improvement program is organized according to the percentage of P.M. peak hour trip increase at which the next level of intersection improvements is required. The following is a listing of all of the improvements that have been identified to reduce Project impacts to the extent feasible.

Mitigation Measure C-3: Vermont Avenue and Del Amo Boulevard (Intersection No. 5):

- A second left-turn lane shall be added to westbound Del Amo Boulevard. The westbound approach shall be improved to include two left-turn lanes, a through lane, and a right-turn lane. The improvement is feasible within the existing right-of-way.
- This mitigation measure shall be implemented at the point of development in which the Project generates 51 to 60 percent of its total trips, in accordance with Draft EIR Table 24.

Table 1**Intersection Mitigation Phasing Schedule**

Percentage of Total Trips Triggering Significant Impacts^a	Significantly Impacted Intersection
1 to 10 Percent	Intersection No. 6: Hamilton Avenue & Del Amo Boulevard Intersection No. 7: Figueroa Street & Del Amo Boulevard Intersection No. 12: Figueroa Street & I-110 NB Ramps
11 to 20 Percent	No change
21 to 30 Percent	Intersection No. 11: Hamilton Avenue & I-110 NB Ramps Intersection No. 25: Avalon Boulevard & Carson Street
31 to 40 Percent	Intersection No. 22: Vermont Avenue & Carson Street
41 to 50 Percent	No change
51 to 60 Percent	Intersection No. 5: Vermont Avenue & Del Amo Boulevard Intersection No. 8: Main Street & Del Amo Boulevard
61 to 70 Percent	Intersection No. 24: Main Street & Carson Street
71 to 80 Percent	Intersection No. 15: Figueroa Street & Torrance Boulevard Intersection No. 23: Figueroa Street & Carson Street
81 to 90 Percent	Intersection No. 16: Main Street & Torrance Boulevard
91 to 100 Percent	No change

^a Mitigation measures are phased in relation to 10 percent increases in Project trips.

Source: Kaku Associates, October 2005

Mitigation Measure C-4: Hamilton Avenue & Del Amo Boulevard (Intersection No. 6):

- The Applicant shall install a traffic signal at this location.
- A right-turn lane shall be added to northbound Hamilton Avenue. The northbound approach shall be improved to include a left-turn lane, two through lanes, and a right-turn lane. This improvement is feasible within the existing right-of-way.
- This mitigation measure shall be implemented at the point of development in which the Project generates 1 to 10 percent of its total trips, in accordance with Draft EIR Table 24.

Mitigation Measure C-5: Figueroa Street & Del Amo Boulevard (Intersection No. 7):

- A right-turn lane shall be added to southbound Figueroa Street. The southbound approach shall be improved to include one left-turn lane, two through lanes, and a right-turn lane. This improvement is feasible within the existing right-of-way
- A second westbound left-turn lane shall be added to westbound Del Amo Boulevard. The westbound approach shall be improved to include two left-turn lanes, two through lanes, and a right-turn lane. This improvement is feasible within the existing right-of-way.
- An eastbound through lane and a right-turn lane shall be added to eastbound Del Amo Boulevard. The eastbound approach shall be improved to include one left-turn lane, three through lanes, and a right-turn lane. This improvement is feasible within the existing right-of-way.
- This mitigation measure shall be implemented at the point of development in which the Project generates 1 to 10 percent of its total trips, in accordance with Draft EIR Table 24.

Mitigation Measure C-6: Main Street and Del Amo Boulevard (Intersection No. 8):

- Land shall be dedicated, as required, to add a second left-turn lane and a right-turn lane to southbound Main Street. The southbound approach shall be improved to provide two left-turn lanes, two through lanes and a right-turn lane.
- A second left-turn lane shall be added to westbound Del Amo Boulevard. The westbound approach shall be improved to provide two left-turn lanes, two through lanes and an optional through and a right-turn lane.
- Land shall be dedicated, as required, to add a second left-turn lane and a right-turn lane to northbound Main Street. The northbound approach shall be improved to provide two left-turn lanes, two through lanes, and a right-turn lane.
- A second left-turn lane shall be added to eastbound Del Amo Boulevard. The eastbound approach shall be improved to provide two left-turn lanes, two through lanes, and an optional through and a right-turn lane.
- This mitigation measure shall be implemented at the point of development in which the Project generates 51 to 60 percent of its total trips, in accordance with Draft EIR Table 24.

Mitigation Measure C-7: Hamilton Avenue & I-110 Southbound Ramps (Intersection No. 11):

- The Applicant shall install a traffic signal at this location.
- The southbound approach shall be re-striped to provide for one left-turn lane and a shared left-turn/through lane. The improvement is feasible within the existing right-of way.
- This mitigation measure shall be implemented at the point of development in which the Project generates 21 to 30 percent of its total trips, in accordance with Draft EIR Table 24.

Mitigation Measure C-8: Figueroa Street & I-110 Northbound Ramps (Intersection No. 12):

- A second right-turn lane shall be added to the southbound approach. The southbound approach shall be improved to provide two through lanes and two right-turn lanes.
- A right-turn lane shall be added to the eastbound approach. The eastbound approach shall be improved to provide two left-turn lanes and a right-turn lane. The improvements are feasible within the existing right-of-way.
- This mitigation measure shall be implemented at the point of development in which the Project generates 1 to 10 percent of its total trips, in accordance with Draft EIR Table 24.

Mitigation Measure C-9: Figueroa Street & Torrance Boulevard (Intersection No. 15):

- A second southbound left-turn lane shall be added to southbound Figueroa Street. The southbound approach shall be improved to include two left-turn lanes, two through lanes, and a right-turn lane. This improvement is feasible within the existing right-of-way.
- This mitigation measure shall be implemented at the point of development in which the Project generates 71 to 80 percent of its total trips, in accordance with Draft EIR Table 24.

Mitigation Measure C-10: Main Street & Torrance Boulevard (Intersection No. 16):

- The eastbound approach shall be re-striped to provide one left-turn lane and a shared through/right-turn lane.

- This mitigation measure shall be implemented at the point of development in which the Project generates 81 to 90 percent of its total trips, in accordance with Draft EIR Table 24.

Mitigation Measure C-11: Vermont Avenue & Carson Street (Intersection No. 22):

- The westbound right-turn lane shall be re-stripped to provide a shared through/right-turn lane. The westbound approach shall be improved to provide one left-turn lane, two through lanes, and a shared through/right-turn lane.
- The eastbound right-turn lane shall be re-stripped to provide a shared through/right-turn lane. The eastbound approach shall be improved to provide one left-turn lane, two through lanes, and a shared through/ right-turn lane.
- This mitigation measure shall be implemented at the point of development in which the Project generates 31 to 40 percent of its total trips, in accordance with Draft EIR Table 24.

Mitigation Measure C-12: Figueroa Street and Carson Street (Intersection No. 23):

- A right-turn lane shall be added to the southbound approach. The southbound approach shall be improved to provide two left-turn lanes, two through lanes, and a right-turn lane.
- This mitigation measure shall be implemented at the point of development in which the Project generates 71 to 80 percent of its total trips, in accordance with Draft EIR Table 24.

Mitigation Measure C-13: Main Street & Carson Street (Intersection No. 24):

- A second left-turn lane shall be added to the westbound approach. The westbound approach shall be improved to provide two left-turn lanes, two through lanes, and a shared through/right-turn lane
- A second left-turn lane shall be added to the eastbound approach. The eastbound approach shall be improved to provide two left-turn lanes, two through lanes, and a shared through/right-turn lane.
- This mitigation measure shall be implemented at the point of development in which the Project generates 61 to 70 percent of its total trips, in accordance with Draft EIR Table 24.

Mitigation Measure C-14: Avalon Boulevard & Carson Street (Intersection No. 25):⁴

- A right-turn lane shall be added to the southbound approach. The southbound approach shall be improved to include one left-turn lane, three through lanes, and a right-turn lane.
- A right-turn lane shall be added to the westbound approach. The westbound approach shall be improved to provide two left-turn lanes, two through lanes, and a right-turn lane.
- A right-turn lane shall be added to the northbound approach. The northbound approach shall be improved to provide one left-turn lane, three through lanes, and a right-turn lane.
- A right-turn lane shall be added to the eastbound approach. The eastbound approach shall be improved to provide two left-turn lanes, two through lanes, and a right-turn lane.
- This mitigation measure shall be implemented at the point of development in which the Project generates 21 to 30 percent of its total trips, in accordance with Draft EIR Table 24.

Mitigation Measure C-15: No Certificate of Occupancy shall be issued for commercial development in District 2, or for commercial development in Districts 1 and 3 that is greater than the amount of commercial development shown in the Applicant's Conceptual Plan (i.e., 150,000 square feet and 50,000 square feet, respectively), prior to the completion of the I-405 ramp improvements at Avalon Boulevard.

⁴ Any future street widening improvements for the intersection of Avalon Boulevard and Carson Street are not feasible within the existing right-of-way and would require acquisition or dedication of right-of-way from adjacent parcels. The adjacent land uses include the Carson City Hall on the northeast corner of the intersection and commercial uses on the remaining three corners of the intersection. The necessary width can be obtained adjacent to City Hall on the north side of Carson Street through reduction of a portion of the existing landscaped area, allowing construction of the right-turn lane on the westbound Carson Street approach. Information from the City of Carson indicates that the parcels on the southeast and northwest corners may redevelop, at which point it may be possible to obtain the necessary right-of-way on the east side of Avalon Boulevard south of Carson Street and on the west side of Avalon Boulevard north of Carson Street, allowing construction of the right-turn lanes on the northbound and southbound Avalon Boulevard approaches. If the proposed right-turn lanes were provided on these three approaches but not on the eastbound Carson Street approach, it is estimated that the projected afternoon peak hour V/C would be reduced from 0.973 to 0.904. Although this would partially alleviate the Project impact, it would not fully mitigate the impact to a less than significant level.

(b) I-405 and I-110 Freeways

No feasible mitigation measures are available to the Applicant to mitigate the Project's significant impacts on the I-110 and I-405 freeways.

(c) Site Access Mitigation Measures:

Site access impacts were determined to be insignificant as long as the main site access intersections are configured as described in Draft EIR Section IV.C.3.c(1), Project Design Features. No mitigation measures are required.

(d) Public Transportation

Mitigation Measure C-16: In coordination with the City of Carson Transit Authority and the Metropolitan Transit Authority (Metro), the Applicant shall provide additional transit stops, including benches and shelters, in and adjacent to the Project site.

c. Cumulative Impacts**(1) Construction Impacts**

The majority of the related projects' construction workers are anticipated to arrive and depart the individual construction sites during off-peak hours. Excavation and grading phases for the related projects would generate the highest number of haul truck trips. The City's established review process would balance haul routes to minimize the impacts of cumulative hauling on any particular roadway. Although related projects may cause lane closures or detours, no related projects are sufficiently close to the Project site to create a cumulative access impact on the street segments near the Project site. Therefore, construction activities would have a less than significant cumulative effect relative to worker and haul truck traffic as well as emergency access.

(2) Operation Impacts**(a) Intersection Service Levels**

The cumulative traffic impacts of the related projects and ambient growth have been considered for the purpose of assessing the Project's traffic impacts. Under 2010 Cumulative Base conditions, six of the 29 study intersections are projected to operate at LOS E or worse during one or both of the A.M. and P.M. peak hours. Since no guarantee exists that mitigation measures would be implemented with the identified related projects, it is conservatively concluded that cumulative traffic impact on intersection operations would be significant.

(b) Freeway Service Levels

Cumulative impacts would occur on CMP segments of the Harbor and San Diego Freeways. No feasible mitigation measures are available to the any individual project to mitigate the potentially significant impacts on these freeway segments to less than significant levels. Therefore, cumulative impacts on freeway service levels would be significant.

(c) Access

No related projects are adjacent to the Project site or share adjacent access points. Therefore, no significant cumulative impacts relative to access would occur.

(d) Public Transit

The combined Project and related projects would generate a demand for public transportation that would exceed existing transit capacity. Therefore, a significant cumulative impact relative to public transit services would occur.

d. Level of Significance After Mitigation**(1) Construction**

With the implementation of mitigation measures, no significant, unavoidable construction impacts would occur.

(2) Operation**(a) Intersection Service Levels**

Potentially significant impacts would be reduced at all 12 intersections to less than significant levels, with the exception of the intersection of Figueroa Street & I-110 Northbound Ramps (Intersection No. 12) during the P.M. peak hour. Therefore, the Project would generate a significant and unavoidable impact at this one intersection.

(b) Freeway Service Levels

The Project's significant impact on three segments of the Harbor Freeway (I-110) and four segments of the San Diego Freeway (I-405) cannot be reduced to less than significant levels as no feasible mitigation measures are available to the Applicant. Therefore, the Project's impact on freeway service levels would be significant and unavoidable.

(3) Access

Site access impacts were determined to be less than significant as long as the main site access intersections are configured as described in Draft EIR Section IV.C.3.c(1), Project Design Features. Therefore, no significant and unavoidable impacts relative to site access would occur.

(4) Public Transportation

Mitigation Measure C-16 would partially reduce the impact on transit services; however, no feasible mitigation exists that would reduce the potentially significant impact to a less than significant level. Therefore, the impact of the Project on regional transit would be significant and unavoidable.

(5) Parking

Procedures set forth in the Specific Plan provide that shared parking would never be less than the Project's peak demand. With the implementation of all applicable Specific Plan provisions, the Project's peak parking demand would not exceed provided parking. Therefore, no significant and unavoidable parking impacts would occur.

9.4 Hazards and Hazardous Materials

a. Environmental Impacts

The remediation of the 157-acre landfill is being implemented as part of the Project in compliance with the approved Final Remedial Action Plans (RAPs). The RAP for the Upper Operable Unit (OU) was approved by DTSC in 1995 and the RAP for the Lower OU was approved by DTSC in 2005. DTSC conducted its own environmental review as part of the approval process for the RAPs. These analyses concluded that implementation of the RAPs would result in less than significant impacts with regard to all environmental issues of concern. Therefore, the implementation of the RAPs does not require further review under CEQA and, as such, is not subject to analysis in this EIR.

With regard to the implementation of the Upper OU RAP, the Applicant proposes some refinements to the cap and the gas control and groundwater treatment methods. DTSC has conceptually approved the refinements. Changes in the design of the remediation system would only be allowed if DTSC determines that the proposed design accomplishes the same performance objectives as the previously approved design and is protective of human health and the environment. In addition, DTSC provided a letter dated February 9, 2005 indicating the "DTSC believes the concepts presented for the proposed development are appropriate at a conceptual level and could be protective of human health and safety, however, as is common for all projects under DTSC's authority, more detailed plans are necessary before DTSC can make

such a final determination.” As a result, no residential development would occur until DTSC formally concludes that the development would be implemented in a manner that is protective of human health and the environment.

With regard to existing oil and water wells located in Districts 1 and 2, the approved RAP for the Upper OU required additional investigation to locate the three wells and to address issues such as the risk of downward migration of contaminants into the lower aquifers. As a result, DTSC would review and approve additional work in compliance with the RAP relative to the wells.

Based on the Phase I and preliminary Phase II conducted for Development District 3, no specific remediation efforts are required. However, additional Phase II activities are recommended to further evaluate potential vapor intrusion and worker health and safety concerns by completing deeper soil-vapor sampling. In addition, Development Site 3 would be subject to the provisions of California Code of Regulations, Title 27, Section 21190 that govern development activities within 1,000 feet of a closed landfill. These provisions include such measures as the installation of vapor mitigation and monitoring devices. As the construction and operation of the proposed land uses within Development Site 3 would be in compliance with all applicable regulations, potential risks would be reduced to a less than significant level.

b. Mitigation Measures

The certified CEQA documentation for the Upper OU RAP includes mitigation measures to reduce the potential construction impacts associated with the implementation of the clay cap.⁵ The mitigation measures are in the environmental areas of earth, air quality, surface and groundwater, natural resources (use of nonrenewable resources), risk of upset, and energy. Mitigation measures are also discussed in Section 7.4 of the Final RAP for the Upper OU. In addition to these measures, the following mitigation measures are required to ensure that any revisions to the RAP are approved by DTSC and that access to the necessary areas for monitoring programs required in the RAPs would be provided.

Mitigation Measure D-1: To the extent the Applicant desires to refine or modify requirements in the RAP, the Applicant shall provide documentation to the City indicating DTSC approval of such refinements or modifications.

Mitigation Measure D-2: The Applicant shall provide documentation to the City indicating DTSC shall permit the proposed residential uses in Development

⁵ *The Negative Declaration was prepared for the construction, operation and maintenance of the proposed landfill gas collection and treatment system and the groundwater treatment system.*

District 1 prior to issuance of any permits for such residential development in Development District 1.

Mitigation Measure D-3: The Applicant shall provide documentation to the City indicating both on- and off-site risks associated with RAP construction have been evaluated to the satisfaction of the DTSC, and at a minimum, perimeter air monitoring shall be completed for dust, particulates, and constituents determined to be Constituents of Concern (COCs).

Mitigation Measure D-4: The Applicant shall provide to the City, documentation indicating that (1) a post remediation risk assessment has been prepared by the Applicant and approved by DTSC; and (2) DTSC has certified that the remedial systems are properly functioning prior to issuance of a Certificate of Occupancy.

Mitigation Measure D-5: The Applicant shall provide documentation to the City indicating that applicable remedial systems and monitoring plans, including the location of the flare and treatment facility are in accordance with applicable SCAQMD regulations.

c. Cumulative Impacts

The analysis contained in this section focuses on the implementation of the approved RAPs for the Upper OU and the Lower OU. The purpose of the RAPs is to provide protection for human health and the environment. Development within District 3 would occur in compliance with applicable regulations regarding hazardous materials. All new development would occur in compliance with applicable regulations relative to hazardous materials. Therefore, the Project would not result in a significant impact with regard to hazards. All of the related projects would be required to comply with applicable regulations with regard to hazardous materials. Therefore, no significant cumulative hazards or hazardous materials impacts are anticipated.

d. Level of Significance After Mitigation

While the Project would not result in a significant impact with regard to hazards and hazardous materials, mitigation measures are provided to ensure that any revisions to the RAP are approved by DTSC.

9.5 Geology and Soils

a. Environmental Impacts

Site preparation for Development Districts 1 and 2 would require mass grading, deep dynamic compaction (DDC), backfill, capping and pile driving. Approximately 125 acres would be cleared and used for stockpiling during excavation and on-site storage of approximately 1.5 million cubic yards of soil. DDC would be completed on approximately 60 to 75 acres occupied by parking lots and non-pile supported areas. Grading would result in a nearly level site, taking into account the need to allow for drainage. Site preparation would be coordinated with remediation procedures approved by the DTSC. Although Development Districts 1 and 2 are potentially exposed to differential settlement due to the densification of the underlying refuse layers, exposure to settlement would be reduced to less than significant levels through the installation of driven pile foundations. Development in District 3 would require the grading of 11 acres, the removal of unsuitable materials, and the excavation and re-compaction of the existing 1 to 8 feet of disturbed and undocumented topsoil. All graded soils would be approximately “balanced” onsite. With the enforcement of City Building Code requirements, the exposure of people or other structures to settlement or other geologic hazards caused by construction or occupation of the Project site would be less than significant.

b. Mitigation Measures

The proposed Project would not result in a significant geology and soils impact. However, the following mitigation measures are recommended to assure compliance with City and State regulations.

Mitigation Measure E-1: In accordance with City of Carson Municipal Code, the Applicant shall comply with site-specific recommendations set forth in engineering geology and geotechnical reports prepared to the satisfaction of the City of Carson Building Official, as follows:

- The engineering geology report shall be prepared and signed by a California Certified Engineering Geologist and the geotechnical report shall be prepared and signed by a California Registered Civil Engineer experienced in the area of geotechnical engineering. Geology and geotechnical reports shall include site-specific studies and analyses for all potential geologic and/or geotechnical hazards. Geotechnical reports shall address the design of pilings, foundations, walls below grade, retaining walls, shoring, subgrade preparation for floor slab support, paving, earthwork methodologies, and dewatering, where applicable.
- Geology and geotechnical reports may be prepared separately or together.

- Where the studies indicate, compensating siting and design features shall be required.
- Laboratory testing of soils shall demonstrate the suitability of underlying native soils to support driven piles to the satisfaction of the City of Carson Building Official.

Mitigation Measure E-2: Due to the classification of portions of the Project site as a liquefaction zone, the Applicant shall demonstrate that liquefaction either poses a sufficiently low hazard to satisfy the defined acceptable risk criteria, in accordance with CDMG Special Bulletin 117, or (b) implement suitable mitigation measures to effectively reduce the hazard to acceptable levels (CCR Title 14, Section 3721). The analysis of liquefaction risk shall be prepared by a registered civil engineer and shall be submitted to the satisfaction of the City Building Official.

Mitigation Measure E-3: Any roads realigned from the existing configuration, or otherwise, located in areas underlain by waste soils shall comply with site-specific recommendations as set forth in engineering, geology, and geotechnical reports prepared to the satisfaction of City of Carson building officials.

c. Cumulative Impacts

Due to the high seismic activity common to the Southern California region, the potential for ground shaking and other geological hazards would be similar throughout the area that includes the identified related projects. Building permits for the related projects would involve a site-specific evaluation of slope stability, ground rupture, liquefaction, and ground movement for each of the related projects. With the implementation of City Code regulations, cumulative impacts related to geologic risk would be less than significant.

d. Level of Significance After Mitigation

The proposed Project would be in compliance with City and State regulations and is not anticipated to expose people or structures to any unstable geologic conditions or seismically related geologic hazards that would result in substantial damage to structures or infrastructure or exposure of people to risk of loss, injury, or death. Therefore, no unavoidable significant impacts would occur.

9.6 Surface Water Quality

a. Environmental Impacts

Construction would expose soils to precipitation and to water used in dust control and compaction and, as such, would potentially increase mobilization of soils into surface water runoff. A prior analysis of soils in Development District 3 found soil gas contamination in a portion of the site. Although recent testing has concluded that no soil gas is currently present, mitigation is recommended to assure compliance with applicable water quality standards. Prior testing of storm water runoff in Development Districts 1 and 2 indicated that suspended particulates exceeded State of California reporting limits. Runoff is currently controlled by a SWPPP applicable to the former landfill site. Recent testing of retained storm water in Development Districts 1 and 2, detected organic compounds and conductivity in excess of reporting limits. Discharge was conducted in accordance with a Regional Water Quality Control Board (RWQCB) Release of Stormwater Permit. During Project construction, the implementation of a NPDES Construction General Permit, including the preparation of a SWPPP to monitor and control water runoff, would prevent suspended particulates from entering the off-site drainage system or adjacent properties. With development, Districts 1 and 2 would be almost entirely impermeable and Development District 3 would have a combination of permeable and impermeable areas. No uncontrolled sheet flow from any Project location would be directed or allowed to flow onto adjacent properties or directly into the Torrance Lateral Channel. Although new impermeable surfaces would increase water runoff from the site, the impermeability that would result due to the waste cap would eliminate the exposure of surface water runoff to any contaminated soils. With the implementation of a site-specific SUSMP during operation, contaminants in surface water, such as parking lot oil and grease, would comply with state and federal water quality standards. With the implementation of the proposed mitigation measure, the Project would have a less than significant surface water quality impact.

b. Mitigation Measures

Impacts associated with surface water runoff and water quality in Development Districts 1 and 2 would be less than significant and no mitigation measures are required. However, since potential, unremediated soil contamination exists in Development District 3, the following mitigation measure is recommended:

Mitigation Measure F-1: Soils in Development District 3 shall be tested prior to the issuance of a grading permit, in accordance with the recommendation of Blasland, Bouck and Lee, Inc.'s (BBL's) Preliminary Draft Phase I and Initial Phase II Environmental Site Assessment Summary, Del Amo Gardens Site (July 6, 2005). If contaminants are found in excess of State of California maximum contamination levels (MCLs), the soils shall be addressed in accordance with a DTSC-approved program.

c. Cumulative Impacts

Related projects could potentially contribute point and non-point source pollutants to surface waters, resulting in a cumulative water quality impact. However, all new development and redevelopment projects over more than one acre, or meeting the City's SUSMP land use criteria, must comply with NPDES requirements during construction and operation, including the implementation of site-specific SWPPPs and SUSMPs. With the incorporation of these measures, it is anticipated that the related projects would not exceed acceptable regulatory levels. Minor projects would not substantially degrade surface water quality. Therefore, cumulative impacts to surface water quality are concluded to be less than significant based on compliance with existing regulations.

d. Level of Significance After Mitigation

Through the implementation of proposed drainage and erosion control plans required under a SWPPP's Best Management Practices, including water filtering and flood control devices, development of the proposed Project would not increase existing pollution and contamination, create a nuisance as defined in Section 13050 of the California Water Code, cause regulatory standards to be violated, or result in a permanent, adverse change to the movement of surface water sufficient to produce a substantial change in the current or direction of flow. Therefore, impacts associated with surface water quality would be less than significant.

9.7 Air Quality

a. Environmental Impacts

The air quality analysis evaluates air emissions attributable to the Project's construction and post-construction (e.g., operational) activities for criteria air pollutants, air toxics, and odors. In addition, the Project's compatibility with applicable air quality policies as set forth in the City of Carson General Plan and regional plans prepared by SCAG and the SCAQMD are also assessed.

Construction of the proposed Project would generate fugitive dust and combustion emissions from the use of heavy-duty construction equipment on-site and from construction worker trips as well as from delivery and haul truck travel to and from the Project site. Construction related daily regional emissions from both direct and indirect sources exceed the significance thresholds for CO, NO_x, and ROC. Thus, emissions of these pollutants would result in a significant regional air quality impact during the Project's construction phase. An analysis of local air quality impacts from construction operations and their impact on nearby sensitive receptors (e.g., residences, schools, etc.) has also been conducted. This analysis indicates that the Proposed Project would not result in an exceedance of the SCAQMD recommended localized thresholds for NO₂ or CO. However, localized PM₁₀ concentrations would exceed the SCAQMD

recommended localized threshold at the residential uses immediately south and southwest of the Project site. Construction of the proposed Project would result in a maximum off-site individual cancer risk of 1.1 in a million from diesel particulate emissions. As the Project would not exceed the maximum individual cancer risk of ten in one million, air toxic emissions during construction would be less than significant. No construction activities are proposed which would create objectionable odors and, therefore, no significant odor impacts would occur.

Air pollutant emissions associated with occupancy and operation of the proposed Project would be generated by the consumption of electricity and natural gas, by the operation of on-road vehicles and by miscellaneous area sources (among other things, landscaping equipment, consumer/commercial solvent usage, architectural coatings, restaurant charbroilers, and emergency generators). The Project would exceed SCAQMD regional significance thresholds for CO, NO_x, PM₁₀, and ROC. Project traffic would not cause an exceedance of the California 1-hour or 8-hour CO standards of 20 or 9.0 ppm, respectively and no significant impacts to local CO concentrations would occur. Potential sources of air toxic emissions associated with the Project would be limited to sources typical within the urban environment and would contribute small amounts of toxic air pollutants to the Project vicinity, and as a result, would be well below any levels that would result in a significant impact on human health. Development of the proposed Project would be compatible with the air quality policies set forth in the SCAQMD's AQMP, SCAG's RCPG and the Carson General Plan.

In addition to the above analyses, a health risk assessment (HRA) was conducted for the proposed new sensitive receptors for potential sources of toxic emissions within one-quarter mile of the Project site. Based on the analysis, the Project would result in locating sensitive receptors within an area of cancer risk in excess of the SCAQMD significance threshold of 10 in one million and, therefore, the Project would result in a significant impact. This impact is almost exclusively related to diesel exhaust emissions from I-405 Freeway. In addition, an existing composting operation is located near the proposed residential uses northwest of the intersection of Del Amo Boulevard and Main Street. As a result, this source may result in significant odor impacts that could affect proposed residential uses.

b. Mitigation Measures

The following mitigation measures are (1) intended to implement requirements of SCAQMD Rule 403 (Fugitive Dust) and (2) set forth a program of air pollution control strategies designed to reduce the proposed Project's air quality impacts to the extent feasible.

(1) Construction

Mitigation Measure G-1: General contractors shall implement a fugitive dust control program pursuant to the provisions of SCAQMD Rule 403.⁶

Mitigation Measure G-2: All construction equipment shall be properly tuned and maintained in accordance with manufacturer's specifications.

Mitigation Measure G-3: General contractors shall maintain and operate construction equipment so as to minimize exhaust emissions. During construction, trucks and vehicles in loading and unloading queues would turn their engines off, when not in use, to reduce vehicle emissions. Construction emissions should be phased and scheduled to avoid emissions peaks and discontinued during second-stage smog alerts.

Mitigation Measure G-4: Electricity from power poles rather than temporary diesel- or gasoline-powered generators shall be used to the extent feasible.

Mitigation Measure G-5: All construction vehicles shall be prohibited from idling in excess of ten minutes, both on- and off-site.

Mitigation Measure G-6: Project heavy-duty construction equipment shall use alternative clean fuels, such as low sulfur diesel or compressed natural gas with oxidation catalysts or particulate traps, to the extent feasible.

Mitigation Measure G-7: The Applicant shall utilize coatings and solvents that are consistent with applicable SCAQMD rules and regulations.

Mitigation Measure G-8: The Applicant shall comply with SCAQMD Rule 402 to reduce potential nuisance impacts due to odors from construction activities.

Mitigation Measure G-9: All construction vehicle tires shall be washed at the time these vehicles exit the project site.

Mitigation Measure G-10: All fill material carried by haul trucks shall be covered by a tarp or other means.

Mitigation Measure G-11: Any intensive dust generating activity such as grinding concrete for existing roads must be controlled to the greatest extent feasible.

⁶ SCAQMD Rule 403 requirements are detailed in Appendix F.

Mitigation Measure G-12: The Applicant shall provide documentation to the City indicating both on- and off-site air-borne risks associated with RAP construction have been evaluated to the satisfaction of the DTSC, and at a minimum, perimeter air monitoring will be completed for dust, particulates, and constituents determined to be Constituents of Concern (COCs).

(2) Operation

During the Project's operational phase, regional emissions that exceed regional SCAQMD significance thresholds for CO, PM₁₀, NO_x, and ROC would occur. Emission control measures are specified for the following four sources of operational emissions: (1) service and support facilities; (2) natural gas consumption and electricity production; (3) building materials, architectural coatings, and cleaning solvents; and (4) transportation systems management and demand management.

(a) Service and Support Facilities (point sources)

Mitigation Measure G-13: All point source facilities shall obtain all required permits from the SCAQMD. The issuance of these permits by the SCAQMD shall require the operators of these facilities to implement Best Available Control Technology and other required measures that reduce emissions of criteria air pollutants.

Mitigation Measure G-14: Land uses on the Project site shall be limited to those that do not emit high levels of potentially toxic contaminants or odors.

(b) Natural Gas Consumption and Electricity Production

Mitigation Measure G-15: All residential and non-residential buildings shall meet the California Title 24 Energy Efficiency standards for water heating, space heating and cooling, to the extent feasible.

Mitigation Measure G-16: All fixtures used for lighting of exterior common areas shall be regulated by automatic devices to turn off lights when they are not needed, but a minimum level of lighting should be provided for safety.

(c) Building Materials, Architectural Coatings and Cleaning Solvents

Mitigation Measure G-17: Building materials, architectural coatings and cleaning solvents shall comply with all applicable SCAQMD rules and regulations.

(d) Transportation System Management and Demand Management

Mitigation Measure G-18: The Applicant shall, to the extent feasible, schedule deliveries during off-peak traffic periods to encourage the reduction of trips during the most congested periods.

Mitigation Measure G-19: The Applicant shall coordinate with the MTA and the City of Carson and Los Angeles Department of Transportation to provide information with regard to local bus and rail services.

Mitigation Measure G-20: During site plan review, consideration shall be given regarding the provision of safe and convenient access to bus stops and public transportation facilities.

Mitigation Measure G-21: The Applicant shall pay a fair share contribution for a low emission shuttle service between the project site and other major activity centers within the project vicinity (i.e., the MetroRail Blue Line station at Del Amo Boulevard and Santa Fe and the Carson Transfer Station at the South Bay Pavilion).

Mitigation Measure G-22: The Applicant shall provide bicycle racks located at convenient locations throughout Carson Marketplace.

Mitigation Measure G-23: The Applicant shall provide bicycle paths along the main routes through Carson Marketplace.

Mitigation Measure G-24: The Applicant shall provide convenient pedestrian access throughout Carson Marketplace.

As on-site sensitive receptors could be exposed to off-site air toxic emissions in excess of the SCAQMD significance threshold and also potential odiferous emissions (nearby composting operation), the following mitigation measure is recommended.

Mitigation Measure G-25: The Project shall include air filtration systems for residential dwelling units designed to have a minimum efficiency reporting value (MERV) of 12 as indicated by the American Society of Heating Refrigerating and Air Conditioning Engineers (ASHRAE) Standard 52.2. The air handling systems shall be maintained on a regular basis per manufacturer's recommendations by a qualified technician employed or contracted by the Applicant or successor. Operation and maintenance of the system shall ensure that it performs above the minimum reporting value.

c. Cumulative Impacts

Buildout of the identified related projects that would occur within a similar time frame as the Proposed Project would increase short-term emissions for concurrent activities during any day of the Project's construction period. Since emissions of criteria pollutants under peak construction activities are concluded to be significant, any additional construction activities as part of any related project occurring during this time and in the vicinity of the Proposed Project site would be adding additional air pollutant emissions to these significant levels. As emission levels associated with the Proposed Project already are forecasted to have a significant impact, a significant and unavoidable cumulative impact with respect to construction emissions would occur.

The SCAQMD has set forth both a methodological framework as well as significance thresholds for the assessment of a project's cumulative air quality impacts. Based on the SCAQMD's methodology (presented in Chapter 9 of the CEQA Air Quality Handbook), the proposed Project would have a significant cumulative impact on air quality. In addition, implementation of the Project would also result in an increase in emissions which would contribute to region-wide emissions on a cumulative basis and as such, the Project's cumulative air quality impacts are also concluded to be significant. In such cases, the SCAQMD recommends that all projects, to the extent possible, employ feasible mitigation measures which has been done with regard to the proposed Project.

d. Level of Significance After Mitigation

(1) Construction

Regional construction activities would still exceed the SCAQMD daily emission thresholds for regional NO_x, CO and ROC after implementation of all feasible mitigation measures and, as such, the Project would have a significant and unavoidable impact on regional air quality. With regard to localized emissions, construction activities would still exceed the SCAQMD daily emission threshold for PM₁₀ after implementation of all feasible mitigation measures. Therefore, construction of the Project would have a significant and unavoidable impact with regard to localized emissions of PM₁₀.

(2) Operation

Regional operational emissions, after the implementation of all feasible mitigation measures, would still exceed the SCAQMD daily emission thresholds and, as such, operation of the Project would have a significant and unavoidable impact on regional air quality. With respect to potential impacts to on-site residential uses, the recommended air handling systems would substantially reduce carcinogenic exposure, but impacts would remain significant and unavoidable. Via compliance with industry standard odor control practices, SCAQMD Rule 402

(Nuisance), and SCAQMD Best Available Control Technology Guidelines, potential impacts that could result from any potential odor source would be less than significant.

9.8 Noise

a. Environmental Impacts

(1) Construction Impacts

As with most construction projects, construction would require the use of a number of pieces of heavy equipment such as impact soil compactors (for DDC operations), pile drivers, bulldozers, backhoes, cranes, loaders, and concrete mixers. Construction equipment would produce maximum noise levels of 74 dBA to 101 dBA at a reference distance of 50 feet from the noise source. The residences located to the west and south of the Project site immediately across the Torrance Lateral Channel, would occasionally experience construction noise levels of 76.5 dBA and 75.2 dBA (hourly L_{eq}), respectively, during the heaviest periods of construction. Thus, construction of the proposed Project would result in a significant impact to off-site sensitive receptors without the incorporation of mitigation measures.

Construction can generate varying degrees of ground vibration, depending on the construction procedures and the construction equipment used. Within the Project site, the highest vibration from typical construction equipment (i.e., exclusive of DDC activities) would be generated during pile driving operations. Residential sensitive land uses would be located at a sufficient distance (greater than 75 feet) from any potential pile driving activity so that vibration from such activities would be below the peak particle velocity threshold of 0.2 inch/sec. Construction of the proposed Project also includes DDC within those portions of the property that were formerly used as a landfill site (i.e., Districts 1 and 2) that would not be supported by pile foundations. The Applicant is proposing to implement a DDC pilot program, before the start of site-wide DDC operations, for the purpose of assuring that less than significant vibration impacts to off-site uses and/or facilities would occur once DDC operations are initiated on a site-wide basis. The testing procedures established under the Pilot Program would consist of dropping increasing weights at increasing heights with concurrent checking of monitored levels so as to assure that off-site vibration levels do not exceed the 0.2 inches per second PPV significance threshold. Based on this testing program, an optimal set of DDC parameters would be established. Once the pilot program is completed, the off-site vibration monitors would remain in place throughout the DDC process, thereby providing ongoing protections for off-site uses and/or facilities throughout this phase of the Project's construction process. Thus, impacts from this particular construction activity would be less than significant.

(2) Operational Noise

The Project's operational noise analysis addresses potential noise impacts to neighboring noise-sensitive receiver locations, as well as the proposed on-site residential uses within the Project site, related to the long-term operations of the proposed Project. Specific noise sources addressed in the analysis included roadway noise, mechanical equipment/point sources (i.e., loading dock and trash pick-up areas), and parking facilities.

The largest Project-related traffic noise impact is anticipated to occur along the segments of Del Amo Boulevard, between Stamps Drive and Figueroa Street (2.8 to 3.1 dBA increase in CNEL). However, no sensitive uses are located along these segments and impacts would be less than the 5 dBA significance threshold. Furthermore, impacts from Project-related traffic noise along all other local roadway segments, within proximity of the identified sensitive receptors, would be lower than the significance threshold of 3 dBA CNEL for sensitive receptors exposed to or within the "normally unacceptable" or "clearly unacceptable" categories. Thus, the Project's roadway noise impacts would be less than significant.

The proposed on-site residential uses would be located to the south and north of Del Amo Boulevard, within Development Districts 1 and 3, respectively. Due to the proximity of the Project site to the I-405 Freeway, measured noise levels within the Project site reach levels of up to approximately 74 dBA CNEL. As such, I-405 Freeway traffic volumes would result in a significant noise impact to the proposed on-site residential uses without the incorporation of mitigation measures.

Noise levels associated with on-site sources (e.g., loading docks, parking facilities, and mechanical equipment) would include noise control measures to meet City of Carson Municipal Code noise standards. Therefore, impacts are anticipated to be less than significant and no mitigation measures are required. Some of the land uses that are permitted by the Carson Marketplace Specific Plan have noise characteristics that are potentially problematic (i.e., outdoor theater, passenger station (bus station, rail station, taxi stand), or small recycling facility). If these land uses are developed as part of the proposed Project, while they would be required to meet the City's Noise Ordinance standards, there is a potential that they may result in a significant noise impact if the uses were to be located in proximity of the proposed on-site residences or off-site residences to the south and west.

As Project operations would not result in any additional long-term ground-borne vibration sources, operation of the proposed Project would result in less than significant vibration impacts and no mitigation measures are required.

b. Mitigation Measures**(1) Construction**

Mitigation Measure H-1: Prior to the issuance of any grading, excavation, haul route, foundation, or building permits, the Applicant shall provide proof satisfactory to the Building and Safety Division of the Development Services Department that all construction documents require contractors to comply with City of Carson Municipal Code Sections 4101 (i) and (j), which requires all construction and demolition activities including pile driving, to occur between 7:00 A.M. and 8:00 P.M. Monday through Saturday and that a noise management plan for compliance and verification has been prepared by a monitor retained by the Applicant. At a minimum, the plan shall include the following requirements:

1. Noise-generating equipment operated at the Project site shall be equipped with effective noise control devices (i.e., mufflers, intake silencers, lagging, and/or engine enclosures). All equipment shall be properly maintained to assure that no additional noise, due to worn or improperly maintained parts, would be generated.
2. Pile drivers used within 1,500 feet of sensitive receptors shall be equipped with noise control techniques (e.g., use of noise attenuation shields or shrouds) having a minimum quieting factor of 10 dBA.
3. Effective temporary sound barriers shall be used and relocated, as needed, whenever construction activities occur within 150 feet of residential property, to block line-of-site between the construction equipment and the noise-sensitive receptors (i.e., residential uses located on the west and south of the Project site).
4. Loading and staging areas must be located on site and away from the most noise-sensitive uses surrounding the site as determined by the of Building and Safety Division of the Development Services Department.
5. An approved haul route authorization that avoids noise-sensitive land uses to the maximum extent feasible.
6. A construction relations officer shall be designated to serve as a liaison with residents, and a contact telephone number shall be provided to residents.

Mitigation Measure H-2: The Applicant, prior to initiating DDC activities on a site-wide basis, shall conduct a DDC Pilot Program (Pilot Program). The Pilot Program shall be implemented via the following guidelines:

- Prior to the initiation of the Pilot Program, the Applicant shall locate vibration monitors at the following locations: (1) along the Project’s fenceline opposite the off-site residential uses located to the south and southwest of the Project site (i.e., within the Project site), and (2) along the far side of the Torrance Lateral Channel in line with the monitors placed within the Project site itself.
- Continuous monitoring shall be conducted on an ongoing basis during the Pilot Program. All vibration levels measured by the monitors shall be logged with documentation of the measurements provided to the City.
- Initial DDC drops shall be limited in weight, height and/or location dictated by calculations which demonstrate that the potential vibration levels are below the 0.02 inches per second PPV threshold limit.
- Increases in DDC weight, height and/or location shall incur in small increments, with continuous monitoring to assure compliance with the 0.02 inches per second PPV threshold limit.
- If vibration levels at any time during the Pilot Program exceed the 0.02 inches per second PPV threshold level, DDC activity shall immediately stop, until new drop parameters are established that would reduce the vibration levels to less than the 0.02 inches per second PPV threshold level.

Mitigation Measure H-3: The monitors located on the far side of the Torrance Lateral Channel as part of the Pilot Program shall remain in place throughout the DDC phase of Project construction. Continuous monitoring shall be conducted on an ongoing basis. All vibration levels measured by the monitors shall be logged with documentation of the measurements provided to the City. If DDC vibration levels at any time exceed the 0.02 inches per second PPV threshold level, DDC activity shall immediately stop, until new drop parameters are established that would reduce the vibration levels to less than the 0.02 inches per second PPV threshold level.

Mitigation Measure H-4: A construction and construction-related monitor satisfactory to the Department of Development Services General Manager shall be retained by the Applicant to document compliance with the mitigation measures. Said Monitor’s qualifications, identification, address and telephone number shall be listed in the contracts and shall be placed in the pertinent files

of the Department of Development Services Department. The Monitor will be required to monitor all construction and construction-related activities on the site on a periodic basis; keep all written records which shall be open for public inspection; and to file monthly reports with City and appropriate permit granting authorities. In addition:

1. Information shall be provided on a regular basis regarding construction activities and their duration. A Construction Relations Officer shall be established and funded by the Applicant, and approved by the Department of Development Services General Manager, to act as a liaison with neighbors and residents concerning on-site construction activity. As part of this mitigation measure, the Applicant shall establish a 24-hour telephone construction hotline which will be staffed between the hours of 8:00 A.M. and 5:00 P.M. on a daily basis throughout the Project's entire construction period for the purposes of answering questions and resolving disputes with adjacent property owners. The hotline number shall be posted on site.
2. The Applicant shall require in all construction and construction-related contracts and subcontracts, provisions requiring compliance with special environmental conditions included in all relevant entitlement approval actions of the City of Carson. Such provisions shall also include retention of the power to effect prompt corrective action by the applicant, its representative or prime contractor, subcontractor or operator to correct noticed noncompliance.
3. During construction loading and staging areas must be located on-site and away from the most noise-sensitive uses surrounding the site as determined by the Planning Manager.

(b) Operation

Mitigation Measure H-5: All parking lots near residential areas shall be located a minimum of 150 feet from an off-site residential use unless a minimum eight foot wall is provided along the property boundary to limit noise levels associated with parking lot activities.

Mitigation Measure H-6: All parking structures near residential areas shall be located a minimum of 150 feet from an off-site residential use unless the exterior wall of the parking structure that faces the off-site residential use is a solid wall or provides acoustical louvers (or equivalent noise reduction measures).

Mitigation Measure H-7: During operation of a building (following construction), truck delivery should be limited to non-peak traffic periods between 7:00 A.M. and 8:00 P.M., if feasible.

Mitigation Measure H-8: For the residential uses immediately south and north of Del Amo Boulevard, within Development Districts 1 and 3, all exterior walls and floor-ceiling assemblies (unless within a unit) shall be constructed with double-paned glass or an equivalent and in a manner to provide an airborne sound insulation system achieving a Sound Transmission Class of 50 (45 if field tested) as defined in the UBC Standard No. 35-1, 1982 edition. Sign-off by the Department of Development Services General Manager, or his/her designee, is required prior to the issuance of the first building permit. The Applicant, as an alternative, may retain an engineer registered in the State of California with expertise in acoustical engineering, who would submit a signed report for an alternative means of sound insulation satisfactory to the City of Carson which achieves a maximum interior noise of CNEL 45 (residential standard).

Mitigation Measure H-9: The balconies of the first row of residential units facing Del Amo Boulevard or I-405 Freeway, should any such balconies be constructed, shall have a solid fence/wall with an appropriate height to reduce the noise received from traffic traveled on the adjacent Boulevard.

Enforcement Agency: City of Carson Department of Development Services,
Planning and Building and Safety Divisions

Monitoring Agency: City of Carson Department of Development Services,
Planning and Building and Safety Divisions

Monitoring Phase: Pre-Construction

Mitigation Measure H-10: If any noise intensive uses (i.e., outdoor theater, passenger station (bus station, rail station, taxi stand), small recycling facility, or commercial uses (outdoor activities, amplified music, outdoor patios, etc)) are proposed within 300 feet of an on-site or off-site residential use, then as part of the site plan review process, a community noise study shall be completed and the study shall demonstrate that the use would not exceed the City of Carson Municipal Code noise standards and/or the standards established in this EIR.

Enforcement Agency: City of Carson Department of Development Services,
Planning Division

Monitoring Agency: City of Carson Department of Development Services,
Planning Division

Monitoring Phase: Post-Construction

c. Cumulative Impacts**(1) Construction**

Noise impacts during construction of the proposed Project and each related project (that has not already been built) would be short-term, limited to the duration of construction and would be localized. In addition, it is anticipated that each of the related projects would have to comply with the applicable provisions of the City's noise ordinance, as well as mitigation measures that may be prescribed by the City pursuant to CEQA provisions that require significant impacts to be reduced to the extent feasible. However, since noise impacts due to construction of the proposed Project would be significant on its own, noise impacts due to construction of the proposed Project in combination with any of the related projects would also be significant without mitigation.

(2) Operation

Cumulative traffic volumes would result in a maximum increase of 4.5 dBA CNEL along Del Amo Boulevard, between Main Street and Figueroa Street. As this noise level increase would be below the 5 dBA CNEL significance threshold for "normally acceptable" land uses, roadway noise impacts due to cumulative traffic volumes would be less than significant along segments of Del Amo Boulevard. Furthermore, impacts from Project-related traffic noise along all other local roadway segments with sensitive receptors would be lower than the significance threshold of 3 dBA CNEL for sensitive receptors exposed to or within "normally unacceptable" or "clearly unacceptable" categories and, thus, less than significant.

Due to Carson Municipal Code provisions that limit noise from stationary sources such as roof-top mechanical equipment and emergency generators, noise levels would be less than significant at the property line for each related project. For this reason on-site noise produced by any related project would not be additive to Project-related noise levels. As such, stationary-source noise impacts attributable to cumulative development would be less than significant.

d. Level of Significance After Mitigation**(1) Construction**

The mitigation measures recommended above would reduce the noise levels associated with construction activities to some extent. However, these activities would continue to increase the daytime noise levels at nearby noise-sensitive uses by more than the 5-dBA significance threshold. As such, noise impacts during construction would be considered significant and unavoidable. Furthermore, noise impacts during pile driving are concluded to be significant due to the frequency with which this impact is going to occur and the circumstance in which this impact cannot be mitigated given the construction techniques that are required for the Project

site. Vibration impacts associated with DDC operations during Project construction are concluded to be less than significant with the implementation of Mitigation Measures H-2 and H-3.

(2) Operations

With implementation of Mitigation Measures H-4 through H-10 described above, operational noise impacts to the off-site existing residential uses located to the south and west of the Project site, as well as on-site residential development, would be reduced to less than significant levels. In addition, the Project site would provide some noise-attenuation/shielding characteristics from I-405 Freeway traffic noise to the area, particularly for residential uses located south and west of the Project site.

9.9 Fire Protection

a. Environmental Impacts

Construction activities could temporarily increase demand on fire services due to the occasional exposure of combustible building materials to on-site heat sources or vandalism. The existing perimeter fence would remain in place throughout construction to reduce the potential for hazards associated with trespassing and vandalism. The Project would comply with OSHA and City Fire and Building Codes regarding building site and workplace safety. From the nearest fire station, the Project's internal streets would be accessed via the intersections of Main Street and Del Amo Boulevard and Main Street and Lenardo Drive. The Project's access plan would not facilitate optimum response to all areas of the site, since Fire Station 36 is located to the south of the Project Site. The construction and occupancy of the Project would increase the demand for LACoFD staffing, equipment, and facilities and, as such, would be potentially significant. With the incorporation of recommended mitigation measures, impacts on LACoFD facilities would be reduced to a less than significant level.

b. Mitigation Measures

The Project's potentially significant demand on existing fire service facilities would be reduced to a less than significant level through the implementation of all applicable fire code regulations and mandatory fee payments. To ensure that all applicable fire code regulations, mandatory fee payments and recommended fire safety measures are incorporated into the Project, the following mitigation measures are recommended:

Mitigation Measure I.1-1: Prior to construction, the Applicant shall submit buildings plans to the Los Angeles County Fire Department (LACoFD) for review. Based on such plan check, any additional fire safety recommendations shall be implemented to the satisfaction of the LACoFD.

Mitigation Measure I.1-2: The Applicant shall provide adequate ingress/egress access points for emergency response to the satisfaction of the LACoFD.

Mitigation Measure I.1-3: The Applicant shall comply with all applicable fire code and ordinance requirements for construction, access, water mains, fire flows, and fire hydrants as required by the LACoFD.

Mitigation Measure I.1-4: Every building shall be accessible to Fire Department apparatus by way of access roadways, with an all-weather surface of not less than the width prescribed by the LACoFD. The roadway shall extend to within 150 feet of all portions of exterior building walls when measured by an unobstructed route around the exterior of the building.

Mitigation Measure I.1-5: Requirements for access, fire flows, and hydrants, shall be addressed during the City's subdivision tentative map stage.

Mitigation Measure I.1-6: Fire sprinkler systems shall be installed in all residential and commercial occupancies to the satisfaction of the LACoFD.

Mitigation Measure I.1-7: The Applicant shall assure that adequate water pressure is available to meet Code-required fire flow. Based on the size of the buildings, proximity of other structures, and construction type, a maximum fire flow up to 5,000 gallons per minute (gpm) at 20 pounds per square inch (psi) residual pressure for up to a four-hour duration may be required.

Mitigation Measure I.1-8: Fire hydrant spacing shall be 300 feet and shall meet the following requirements:

- No portion of a lot's frontage shall be more than 200 feet via vehicular access from a properly spaced fire hydrant;
- No portion of a building shall exceed 400 feet via vehicular access from a properly spaced fire hydrant;
- Additional hydrants shall be required if spacing exceeds specified distances;
- When a cul-de-sac depth exceeds 200 feet on a commercial street, hydrants shall be required at the corner and mid-block;
- A cul-de-sac shall not be more than 500 feet in length, when serving land zoned for commercial use; and
- Turning radii in a commercial zone shall not be less than 32 feet. The measurement shall be determined at the centerline of the road. A turning area

shall be provided for all driveways exceeding 150 feet in length at the end of all cul-de-sacs, to the satisfaction of the LACoFD.

Mitigation Measure I.1-9: All onsite driveways and roadways shall provide a minimum unobstructed (clear-to-sky) width of 28 feet. The onsite driveways shall be within 150 feet of all portions of the exterior walls of the first story of any building. The centerline of the access driveway shall be located parallel to, and within 30 feet of an exterior wall on one side of the proposed structure.

Mitigation Measure I.1-10: All onsite driveways shall provide a minimum unobstructed, clear-to-sky width of 28 feet. Driveway width shall be increased under the following conditions:

- If parallel parking is allowed on one side of the access roadway/driveway, the roadway width shall be 34 feet; and
- If parallel parking is allowed on both sides of the access roadway/driveway, the roadway width shall be 36 feet in a residential area or 42 feet in a commercial area.

Mitigation Measure I.1-11: The entrance to any street or driveway with parking restrictions shall be posted with LACoFD approved signs stating “NO PARKING – FIRE LANE” in 3-inch-high letters, at intermittent distances of 150 feet. Any access way that is less than 34 feet in width shall be labeled “Fire Lane” on the final tract map and final building plans.

Mitigation Measure I.1-12: The following standards apply to the Project’s residential component only:

- A cul-de-sac shall be a minimum of 34 feet in width and shall not be more than 700 feet in length;
- The length of the cul-de-sac may be increased to 1,000 feet if a minimum 36-foot-wide roadway is provided; and
- A LACoFD approved turning radius shall be provided at the terminus of all residential cul-de-sacs.

Mitigation Measure I.1-13: The Applicant shall pay a fair share contribution for the improvement of fire service facilities that are required to off-set impacts of the Project, subject to approval of the County of Los Angeles Fire Department.

c. Cumulative Impacts

The Project and related projects would increase demand on fire services. As with the Project, most of the related projects would be subject to discretionary review, including an evaluation of the adequacy of fire services and the need for mitigation measures. With the implementation of Fire Department recommendations and existing Fire Code requirements. The Project would mitigate its impacts through a fair share contribution for new facilities and therefore not contribute to a cumulative impact. However, since it is unknown what fees would be paid by other projects, it is conservatively concluded that the impacts of the related projects on fire services would be significant.

d. Level of Significance After Mitigation

The Project's potentially significant demand on existing fire service facilities would be reduced to a less than significant level through the implementation of all applicable fire code regulations and recommended mitigation measures. Thus, no unavoidable significant impacts relative to fire services would occur.

9.10 Police

a. Environmental Impacts

(1) Construction Impacts

The Project's construction activities would constitute a less than significant impact with regard to emergency access, since blockage or a substantial slowing of emergency vehicles is not anticipated. Furthermore, implementation of a Construction Management Plan and coordination between the Project's construction managers and the Sheriff's Department, the potential impact of construction on emergency access would be reduced to a less than significant level. As it is anticipated that the existing chain-link fence that secures the perimeter of the Project site would be maintained throughout construction and that an on-site security force would be on duty at the Project site throughout construction, construction impacts would be less than significant.

(2) Operational Impacts

Implementation of the Project would increase the demand for police services provided by the Sheriff's Department due to the Project's permanent on-site residential population and increased traffic, employees, and patrons. The Project's increase in demand could be met through current authorized sworn personnel. Notwithstanding, based upon currently deployed personnel, Project impacts are concluded to be significant, prior to mitigation. Crimes such as shoplifting and burglaries to vehicles that are generally associated with shopping and entertainment areas are anticipated to occur on-site. However, the proposed Project is

anticipated to provide on-site security personnel in support of the proposed on-site commercial uses. Emergency access during Project operations would be provided via several new intersections and/or existing intersections and would not be impeded. Thus, no significant impacts related to emergency access would occur. As detailed design drawings of the Project are not currently available, impacts due to the Project's design are conservatively concluded to be significant.

b. Mitigation Measures

The following mitigation measures are based on the recommendations provided by Sheriff's Department regarding the proposed Project as well as a requirement regarding the provision of private security service within Districts 1 and 2:

Mitigation Measure I.2-1: The Applicant shall provide private security services within the areas of Districts 1, 2, and 3 that are occupied by commercial development. On-site security services shall maintain an ongoing dialogue with the Sheriff's Department so as to maximize the value of the security service that are provided.

Mitigation Measure I.2-2: The Applicant shall incorporate into the Project design a Community Safety Center for use by the Project's private security force and the Los Angeles County Sheriffs Department. It shall include the following features at a minimum: a front desk/reception area, a community meeting room, work space for law enforcement and public safety personnel, a video monitoring console, and restrooms. The Center shall be staffed by either a Sheriff's Department Community Services Officer or personnel approved by the Sheriff's Department.

Mitigation Measure I.2-3: The Applicant shall install video cameras throughout the commercial development within Districts 1, 2, and 3 with a digitally recorded feed to the Community Safety Center that is also accessible via the internet at the Carson Sheriff's Station.

Mitigation Measure I.2-4: The Applicant shall provide the Project's fair share of a budget for the deployment of a one person patrol unit, which is dedicated to providing preventative patrol on the commercial portions of the Project site.

Mitigation Measure I.2-5: The Applicant shall fund Deputy Sheriffs on an overtime basis to augment security during peak periods, as jointly determined by the Applicant or its successor, and the Sheriff's Department.

Mitigation Measure I.2-6: The management of the entertainment venues located within the Project site shall notify the Sheriff's Station in advance of planned activities (i.e. movie schedules).

Mitigation Measure I.2-7: The Sheriff's Department Crime Prevention Unit shall be contacted for advice on crime prevention programs that could be incorporated into the proposed Project, including Neighborhood Watch.

c. Cumulative Impacts

(1) Construction Impacts

Since no related projects are sufficiently close to the Project site to create a cumulative impact on adjoining street segments, the cumulative effects of construction activities on emergency access would be less than significant. In addition, the related projects are also anticipated to maintain secure sites during the respective construction periods, so that cumulative construction activities would not result in a demand on police services greater than the existing capability of the Sheriff's Department.

(2) Operational Impacts

As with the Project, most of the related projects would be subject to discretionary review, including an evaluation of the adequacy of police services and the need for mitigation measures. As the Project's impacts would be addressed via the identified migration measures, the Project would not contribute to a significant cumulative impact. Furthermore, the Sheriff's Department would have input regarding mitigation for each of the related projects. Thus, cumulative impacts are concluded to be less than significant.

d. Level of Significance After Mitigation

With the implementation of the recommended mitigation measures, impacts to police services and facilities provided by the Sheriff's Department would be less than significant.

9.11 Schools

a. Environmental Impacts

The Project would generate approximately 489 students, consisting of 213 elementary school students, -119 middle school students, and 157 high school students. While Project-generated middle school students could be accommodated by existing facilities at White Middle School, increased enrollment attributable to the proposed Project would exceed existing school capacities at Carson Elementary School and Carson High School. However, the payment of the

requisite school facility development fees would offset the Project's potential impacts to these schools. As a result, Project development would result in an impact that is less than significant to the LAUSD schools that serve the Project site.

b. Mitigation Measures

The Applicant would be required to pay new school facility development fees at the time of building permit issuance. Pursuant to California Government Code Section 65995, payment of the developer fees required by State law provides full and complete mitigation of the Project's impacts on school facilities. Therefore, no other mitigation measures are required.

c. Cumulative Impacts

Cumulative impacts related to schools were considered only for projects within the same attendance boundaries as the schools identified to serve the Project. The related projects identified would generate approximately 197 students: 15 Elementary, 76 Middle, and 106 High School. The generation of students from the related projects in combination with students generated by the proposed Project would result in a potentially significant impact to all of the identified LAUSD schools as existing school capacities would be exceeded. School capacity can be increased by the use of portable or modular classrooms and the implementation of year-round or multi-track school calendar. Portable classrooms are generally used to relieve overcrowded schools and are designed to accommodate 25 students per portable unit for elementary schools and 30 students per portable unit for middle and high schools. Implementing year-round and multi-track calendars also serve to increase school capacity by roughly one-third. However, the school facility development fees that would be paid by all new development, under the provisions of Government Code Section 65995, would constitute full mitigation of the impacts of these new developments, thereby reducing individual and cumulative Project impacts to a level that is less than significant.

d. Level of Significance After Mitigation

Potential impacts to LAUSD middle and high schools associated with the proposed Project, based on available forecasted capacity within existing facilities, would be potentially significant. While the students generated by the proposed Project would increase the forecasted over-capacity conditions at Carson Elementary School and Carson Senior High School, pursuant to the provisions of Government Code Section 65995, the Project's impact on school facilities is fully mitigated through the payment of the requisite school facility development fees current at the time building permits are issued. As the Project applicant is required to pay school facility development fees, potential Project impacts to schools are concluded to be less than significant. Therefore, potential impacts to all LAUSD school facilities attributable to the proposed Project would be less than significant.

9.12 Parks and Recreation

a. Environmental Impacts

Common and private open space would be provided throughout the residential areas of the Project site. Per the requirements of the Specific Plan, a minimum of 60 square feet of private open space would be provided per dwelling unit with a minimum dimension of five feet in any direction. Also pursuant to the Specific Plan, a minimum of 300 square feet of common open space would be provided per dwelling unit in District 3; a minimum of 200 square feet per ownership unit in District 1; and a minimum of 150 square feet minimum per rental unit in District 1. Common open space for each unit would have a minimum dimension of 10 feet in any direction. With 1,550 dwelling units, this would equate to 315,000 sq.ft., or 7.23 acres. In addition, the Project includes approximately 9.0 acres of open space along the southern and southwestern edges of the Project site. Recreational amenities that would also be available for use by the Project's residents would also contribute to the Project's common open space provisions. Specifically, to meet the recreational needs of Project residents, health clubs on the ground floor of the multi-family apartment buildings are proposed as well as bicycle and pedestrian routes throughout the Project site. The Project would meet the Carson Municipal Code requirements for the provision of park space through a combination of land dedication, on-site improvements, and/or, the payment of in-lieu fees, and thus, would have a less than significant impact with regard to the provision of park space. While the Project provides less private open space than that required by the Carson Municipal Code, to assure that the intent of these requirements are met, a mitigation measure is proposed to address this potentially significant impact. While the Applicant has proposed various features to contribute to meeting the City's common open space requirement, the amount of such space has not been determined at this time. Therefore, it is concluded that a significant impact may occur regarding the provision of common open space, and a mitigation measure is recommend below, to require that the common open-space standard be met. Project impacts would be potentially significant. Mitigation measures are proposed to reduce the impact to a less than significant level

b. Mitigation Measures

Two mitigation measures are proposed to address potential impacts on parks and recreation services. The first measure addresses impacts on public recreation facilities. Even though a significant impact on such facilities is not anticipated, the related measure ensures that the Project's contribution to parks and recreation facilities meets the City's Quimby requirements. The second measure addresses a potentially significant impact that could occur regarding the provision of private open space.

Mitigation Measure I.4-1: The Project shall provide park and recreation facilities pursuant to Section 9207.19, equivalent to three acres per 1,000 population,

that would be met through the provision of park space, on-site improvements, and/or, the payment of in-lieu fees.

Mitigation Measure I.4-2: The Project shall meet the intent of Municipal Code Sections 9128.54 and 9128.15 through the provision of private open space as defined therein and/or the provision of additional amenities that meet the recreational needs of Project residents, e.g., health clubs.

Mitigation Measure I.4-3: The Project shall meet the requirements of Municipal Code Section 9126.28 by demonstrating that the Project's common open space area meets the 40% standard established therein.

c. Cumulative Impacts

Of the 36 related projects, 17 are residential in nature or contain a residential component. A total of 609 dwelling units are anticipated to be constructed with implementation of these projects; 163 single-family and 446 multiple-family units. Land dedication requirements for the related projects were calculated base on the land dedication factors set forth in the Carson Municipal Code for each dwelling unit type. As each related project would comply with the requirements established in the Carson Municipal Code, the potential park and open space impacts of the related projects would be reduced to levels that are less than significant.

d. Level of Significance After Mitigation

Potential significant impacts to park and recreational facilities associated with the proposed Project, based on the maximum requirements established via the Carson Municipal Code, would be reduced to a less than significant level via compliance with Mitigation Measure I.4-1. A potentially significant impact with regard to the provision of private open space would be reduced to a less than significant level via Mitigation Measure I.4-2. A potentially significant impact with regard to the provision of common open space would be reduced to a less than significant level via Mitigation Measure I.4-3. Project impacts would result in less than significant impacts with regard to the adopted General Plan goals, policies and implementation measures, nor open space requirements established in the Municipal Code. Thus, the Project would meet the demand for services as addressed through those provisions. Therefore, potential impacts to park and recreational facilities attributable to the proposed Project would be less than significant.

9.13 Libraries

a. Environmental Impacts

Project-generated residents would cause an increase in the Carson Regional Library's service population and create a significant impact on its services and facilities. The Carson

Regional Library is currently underserved in terms of facility size and library material items, providing approximately 0.34 square feet of facility space and 2.6 library items per capita, thereby, not meeting the County Library minimum guidelines of 0.5 square feet of facility space and 2.75 library items per capita. The proposed Project would generate the need for 3,485 square feet of library facility space, 19,165 library collection items, 17 reader seats, 75 meeting room seats, 7 public access computers, and 14 standard size parking spaces. Thus, a significant impact would result.

b. Mitigation Measures

To address the Project's significant impact, the following mitigation measure will apply:

Mitigation Measure I.5-1: The Applicant shall pay a fair share contribution for the improvement of library facilities that are required to off-set impacts of the Project, subject to approval of the County of Los Angeles Public Library.

c. Cumulative Impacts

Approximately half of the 609 dwelling units proposed by related projects are located both within the City of Carson and in the Carson Library service area. The development of the related projects would create additional demand on the Carson Library's facilities and services and cause the Library to further exceed the County guidelines for the provision of library facilities. In sum, the combined residential population would create the need for an additional 4,023 square feet of facility space, 22,127 library material items, 20 reader seats, 16 meeting room seats, 8 computers, and 16 parking spaces. Thus, without mitigation, the development of the identified related projects would result in a significant impact on library services due to lack of available capacity to meet the demand for library services. The Project, via the implementation of the recommended mitigation measure, would not increase the cumulative impact that would be generated by the identified related projects. Notwithstanding, since it is unknown what fees would be paid by other projects, it is conservatively concluded that the impacts of the identified related projects on library services would be significant.

d. Level of Significance After Mitigation

Through the payment of fees Project impacts would be reduced to a less than significant level.

9.14 Water Supply

a. Environmental Impacts

Water would be used for dust suppression and other construction activities. Such demand would be limited and, as such, would be less than significant. New tie-ins to the existing water mains in Main Street and Del Amo Boulevard may be required to serve the existing on-site system. During operation, water demand is estimated to be 795,470 gallons per day, which represents 42.3 percent of the forecasted growth for the Dominguez District through 2010. Based on the Project's Water Supply Assessment (WSA), the City's water supplier, California Water Services Company (CWS), has concluded that the needed quantity of water, and its conveyance to the Project site, are sufficient to meet Project needs. The development of commercial/high-density residential development may require fire flows up to 5,000 gallons per minute at 20 pounds per square inch residual pressure for up to a five-hour duration. The existing water mains are anticipated to be sufficient to meet fire flow requirements, as they were originally sized to meet future development needs in the Project area. Fire flow would be determined at the time a specific development application is submitted and any new lines would be sized to meet the Project's fire flow requirements. Since the Project's demand would not exceed the available water supply or the fire flow capacity of the existing conveyance system, the Project's impact on water supply would be less than significant.

b. Mitigation Measures

Although development of the proposed Project is not anticipated to result in significant impacts to water supply services, the following measures would ensure that water resources would be conserved to the extent feasible:

Mitigation Measure J.1-1: The Building Department and the Planning Division shall review building plans to ensure that water reducing measures are utilized, as required by Title 20 and Title 24 of the California Administrative Code. These measures include, but are not limited to, water conserving dishwashers, low-volume toilet tanks, and flow control devices for faucets.

Mitigation Measure J.1-2: The Project shall comply with the City's landscape ordinance, "A Water Efficient Landscape Ordinance," as required by the State Water Conservation Landscape Act.

Mitigation Measure J.1-3: The Applicant shall provide reclaimed water for the Project's non-potable water needs, if feasible.

Mitigation Measure J.1-4: Landscaping of the Project site shall utilize xeriscape (low-maintenance, drought-resistant) plantings.

Mitigation Measure J.1-5: Automatic irrigation systems shall be set to insure irrigation during early morning or evening hours to minimize water loss due to evaporation. Sprinklers must be reset to water less in cooler months and during rainfall season so that water is not wasted on excessive landscape irrigation.

Mitigation Measure J.1-6: The Project shall be designed to recycle all water used in cooling systems to the maximum extent possible.

Mitigation Measure J.1-7: To the maximum extent feasible, reclaimed water shall be used during the grading and construction phase of the Project for the following activities: (1) dust control, (2) soil compaction, and (3) concrete mixing.

Mitigation Measure J.1-8: Water lines and hydrants shall be sized and located so as to meet the fire flow requirements established by the Los Angeles County Fire Department.

c. Cumulative Impacts

The total consumption of water, inclusive of the Project, and the related projects, would be approximately 1,808,282 gallons of water per day, constituting approximately 96 percent of the forecasted Dominguez District growth to year 2010. Without monitoring and planning pursuant to existing regulations, a significant cumulative impact could occur. The Urban Water Management Plan (UWMP) prepared by CWS accounts for projected growth, and State regulations provide the means to ensure that the water needs of notable development projects are considered relative to the ability of the CWS to adequately meet future demand. The CWS anticipates that it would be able to supply regional growth, including the Project and related projects, through the foreseeable future. With implementation of mitigating State regulatory protections, no significant cumulative impacts related to water demand are anticipated.

d. Level of Significance After Mitigation

The total estimated water demand for the Project is anticipated to exceed available supplies and distribution infrastructure capabilities, or exceed the projected demand assumed in the planning for future water infrastructure needs. No local or regional upgrading of water conveyance systems is anticipated and, as such, no significant construction impacts from the development of additional off-site water lines are anticipated. Therefore, no significant unavoidable impacts relative to water supply would occur.

9.15 Wastewater

a. Environmental Impacts

Construction activities would generate a negligible amount of wastewater. The Project's on-site wastewater system would be developed during the construction of the Project and may require new tie-ins to the existing sewer lines in Main Street and Del Amo Boulevard. The Project's wastewater generation would be approximately 721,113 gallons per day (gpd). Wastewater would be treated at the Joint Water Pollution Control Plant (JWPCP), which has a design capacity of 385 million gallons per day (mgd). Since the JWPCP currently processes an average flow of 324.9 mgd, the Project's additional waste flow would require the use of 1.2 percent of the remaining 60.1 mgd capacity. The District's review of sewer lines serving the Project site indicate that no known limitations exist at this time. However, the District notes that significant impacts on downstream portions of the District's sewerage system can occur and capacities need to be verified. The District reviews sewer connection permits and requires payment of connection fees to construct any needed incremental expansion of the sewer system. Such fees would mitigate the impact of the Project on the conveyance system. Wastewater conveyance and treatment systems are designed to serve SCAG's regional growth forecasts and, since the Project is consistent with SCAG forecasts for the South Bay Cities sub-region, no significant impacts in relation to regional treatment capacity would occur.

b. Mitigation Measures

Although development of the proposed Project is not anticipated to produce significant impacts to sanitary sewers, the following measures would ensure that the increase in sewage generation attributable to the Project would result in a less than significant impact.

Mitigation Measure J.2-1: All required sewer improvements shall be designed and constructed according to the standards of the City of Carson and County of Los Angeles.

Mitigation Measure J.2-2: Fee payment is required prior to the issuance of a permit to connect to district sewer facilities.

Mitigation Measure J.2-3: The Building and Safety and Planning Divisions of the Development Services Department shall review building plans to ensure that water reducing measures are utilized, as required by Title 24 of the California Administrative Code. These measures include, but are not limited to, water conserving dishwashers, low-volume toilet tanks, and flow control devices for faucets.

Mitigation Measure J.2-4: The project shall include a dual plumbing system designed to utilize reclaimed water for non-potable uses.

c. Cumulative Impacts

Wastewater generated by related projects in conjunction with the proposed Project is estimated to be 1,610,491 gallons of wastewater per day. The additional waste flow would constitute 2.7 percent of the JWPCP's remaining 60.1 mgd capacity and, as such, would not exceed existing capacity. As with the Project, the capacity of downstream mains would be determined through the review of connection permits, prior to approval of related projects' building plans. Required connection fees would provide for needed incremental expansion of sewer lines. Therefore, related projects would not exceed the capacity of the treatment and conveyance system and cumulative impacts on the wastewater facilities would be less than significant.

d. Level of Significance After Mitigation

With the implementation of the recommended mitigation measures, any local deficiencies in sewer lines would be identified and remedied. No unavoidable significant impacts on wastewater conveyances or the capacity of the Joint Water Pollution Control Plant would occur.

9.16 Solid Waste

a. Environmental Impacts

Construction and demolition debris would be generated during the construction of the proposed Project. With the implementation of the City's Construction and Demolition Debris Recycling Program, the actual amount of construction debris disposed of at a landfill would be approximately 6,222 tons. However, as Project construction debris would represent approximately .0009 percent of remaining inert landfill capacity, impacts attributable to the Project's construction debris are concluded to be less than significant. Municipal solid waste generated by the residential and commercial uses proposed under the Project would require the disposal of approximately 10,064 tons of solid waste per year. Through a combination of compliance with City recycling requirements, the limited proportion of Countywide solid waste generation attributable to the proposed Project, available capacity within the El Sobrante Landfill, and the ongoing legally required solid waste planning programs, it is concluded that Project operations would have a less than significant impact with regard to landfill disposal capacity. As the Project would comply with City-required recycling programs, Project operations would be consistent with the applicable provisions of the SRRE. As such, a less than significant impact would result.

b. Mitigation Measures

Mitigation Measure J.3-1: All structures constructed or uses established within any part of the proposed Project site shall be designed to be permanently equipped with clearly marked, durable, source sorted recycling bins at all times to facilitate the separation and deposit of recyclable materials.

Mitigation Measure J.3-2: Primary collection bins shall be designed to facilitate mechanized collection of such recyclable wastes for transport to on- or off-site recycling facilities.

Mitigation Measure J.3-3: The Applicant shall coordinate with the City of Carson to continuously maintain in good order for the convenience of patrons, employees, and residents clearly marked, durable and separate recycling bins on the same lot, or parcel to facilitate the deposit of recyclable or commingled waste metal, cardboard, paper, glass, and plastic therein; maintain accessibility to such bins at all times, for collection of such wastes for transport to on- or off-site recycling plants; and require waste haulers to utilize local or regional material recovery facilities as feasible and appropriate.

Mitigation Measure J.3-4: Any existing on-site roads that are torn up shall be ground on site and recycled into the new road base.

Mitigation Measure J.3-5: Compaction facilities for non-recyclable materials shall be provided in every occupied building greater than 20,000 square feet in size to reduce both the total volume of solid waste produced and the number of trips required for collection, to the extent feasible.

Mitigation Measure J.3-6: All construction debris shall be recycled in a practical, available, accessible manner, to the extent feasible, during the construction phase.

c. Cumulative Impacts

Development of the identified related projects would generate 23,052 tons of solid waste during construction. As with the proposed Project, pursuant to the City's Construction and Demolition Debris Recycling Program, at least 50 percent of the construction debris generated by the related projects would be required to be recycled. In comparison to a remaining inert landfill disposal capacity of 69.94 million tons, cumulative construction debris, incorporating the conservative assumption that there is no recycling of construction wastes, constitutes 0.03 percent of the remaining inert landfill capacity. Based on this small percentage, cumulative impacts on inert landfill capacity are concluded to be less than significant.

During operations, cumulative solid waste disposal for the related projects is forecasted to be approximately 36,630 tons on an annual basis. It is anticipated that the proposed Project and other related projects would not conflict with solid waste policies and objectives in the City's SRRE or Construction and Demolition Debris Recycling Program. Impacts to solid waste policies and objectives intended to help achieve the requirements of AB 939 from implementation of the proposed Project and related projects would not be cumulatively significant. Cumulative annual solid waste generation represents 0.15 percent of the total solid waste generated in Los Angeles County in 2003. Based on this small percentage as well as the City's recycling programs and ongoing planning efforts at a Countywide level assuring 15 years of landfill capacity on an ongoing basis, cumulative impacts on municipal landfill capacity are concluded to be less than significant.

d. Level of Significance After Mitigation

Impacts associated with the Project's solid waste generation are concluded to be less than significant. Furthermore, the County via its established planning programs, has concluded that landfill disposal capacity would be available for the next 15 years, and in the long-term. The proposed Project would not conflict with the solid waste policies and objectives in the SRRE or the City's Construction and Demolition Debris Recycling Program and impacts relative to adopted solid waste diversion programs and policies would be less than significant.