
I. SUMMARY

A. PROPOSED PROJECT

This Draft Environmental Impact Report (Draft EIR) examines the potential environmental impacts of constructing and operating the proposed Los Angeles Sports and Entertainment District (also referred to in this document as the “Project”), a multi-use development, the conceptual plan of which includes: a major convention hotel with a capacity of 1,200 rooms; a second 600-room hotel; up to 1,115,000 gross square feet (GSF) of retail/entertainment/restaurant uses, including a 7,000-seat live theater; up to 870,000 GSF of residential uses (800 dwelling units); up to 300,000 GSF of office space, including medical offices and a sports medicine center; a health/sports club of up to 125,000 GSF; an open-air plaza to feature year-round venues; and, combined support parking of up to 5,305 spaces located throughout the Project site.¹

The Project would be located in downtown Los Angeles, on a set of sites located adjacent to STAPLES Center and the Los Angeles Convention and Exhibition Center. Generally, the development areas that make up the site are located east and west of Figueroa Street, at Olympic Boulevard on the north and almost to Pico Boulevard on the south. The Project would create an entertainment district that complements STAPLES Center and the Los Angeles Convention and Exhibition Center by providing compatible and synergistic uses including convention hotel rooms, retail/entertainment/restaurant/office and residential uses. An urban design that emphasizes the street frontage and pedestrians would create strong pedestrian linkages to downtown and the surrounding community. Parking, vehicular and pedestrian circulation is comprehensively planned to distribute vehicles over multiple approaches to the parking facilities, including shared use parking facilities. Additional project design features would support safe, comfortable and convenient pedestrian flow throughout the Project site and encourage the use of public transit.

¹ *The Project includes a regulatory mechanism (i.e., equivalency program) that would provide flexibility in the proposed land uses that will be developed at the Project site in order to respond to the future needs of the southern California economy. The equivalency program defines a framework within which land uses can be exchanged for certain other land uses so long as no additional environmental impacts would occur. For example, there may be increases in the square footage of certain land uses (i.e., entertainment) in exchange for decreases in the square footage of other land uses (i.e., restaurant). However, at no time would the total of on-site development exceed the proposed four million square feet of development. See Section II.C.d., Project Characteristics, for additional discussion regarding the proposed equivalency program.*

B. AUTHORIZATION AND FOCUS

This EIR has been prepared at the direction and under the supervision of the City of Los Angeles Planning Department (Planning Department) in accordance with the California Environmental Quality Act (CEQA)² and the *Guidelines for Implementation of CEQA (State CEQA Guidelines)*³, as amended. As discussed below, the Planning Department is the Lead Agency pursuant to CEQA.

The purpose of this EIR is to inform decision-makers, as well as the general public, of the potential environmental effects of the proposed Project. The EIR, by itself, does not determine whether the Project will be approved. In accordance with Section 15121 of the *State CEQA Guidelines*, its purpose is to identify all potentially significant effects of the Project on the physical environment, to determine the extent to which those effects could be reduced or avoided, and to identify and evaluate feasible alternatives to the Project.

In accordance with Section 15130 of the *State CEQA Guidelines*, the EIR includes an examination of the effects of cumulative development in the downtown Los Angeles area. Cumulative development is analyzed for the year 2008 which includes new development expected to be present when the Project build-out occurs. The EIR also evaluates the effects of five alternatives to the proposed Project (including the No Project Alternative, three on-site alternatives, and one off-site alternative) and identifies the Environmentally Superior Alternative, as required by Section 15126(d) of the *State CEQA Guidelines*.

C. LEAD AGENCY

In accordance with Section 15367 of the *State CEQA Guidelines*, the Lead Agency is defined as "the public agency which has the principal responsibility for carrying out or approving the project." The City of Los Angeles Planning Department is acting as Lead Agency and is responsible for certifying the EIR and adopting any mitigation measures needed to address any identified significant environmental impacts. The Community Redevelopment Agency (CRA) is a Responsible Agency under State CEQA Guidelines Sections 15096 and 15381 and, as such, will certify that it has reviewed and considered the information in the EIR and made environmental findings as appropriate when decisions and/or approvals are made by the CRA with respect to the Project.

² *Public Resources Code Section 21000 et seq.*

³ *Administrative Code, Title 14, Chapter 3, Section 15000 et seq.*

D. NOTICE OF PREPARATION

In compliance with CEQA Section 21080.4, a Notice of Preparation (NOP) was prepared by the Planning Department and was received by the State Clearinghouse, Office of Planning and Research, responsible agencies, and other interested parties on September 14, 2000. The 30-day response period for the NOP ended on October 14, 2000. The NOP identified specific areas where the proposed Project could have adverse environmental effects and indicated that an EIR would need to be prepared to document these effects. A copy of the NOP, Initial Study and checklist, NOP comments received by the Lead Agency, and responses to those comments are included in Appendix A of this EIR.

E. AREAS OF CONTROVERSY

Potential areas of controversy and issues to be resolved by the Lead Agency include those areas where a significant unavoidable impact has been projected. For the Project, the areas of unavoidable significant impact include short-term noise and air quality impacts associated with construction activities, peak hour traffic impacts, regional air quality impacts primarily associated with an increase in average daily traffic volumes, visual quality, shade/shadow, light and glare, and parks. Issues raised during the NOP comment period generally regarded traffic and noise impacts as they may affect neighborhood quality.

F. ALTERNATIVES

The EIR describes a range of reasonable alternatives to the project, and evaluates the environmental impacts associated with each alternative, as required by Section 15126.6 of the *State CEQA Guidelines*. The analysis of alternatives focuses on the alternatives capable of reducing or eliminating the significant, unavoidable adverse impacts of the Project. Specifically, this EIR analyzes the following five alternatives: Alternative A, No Project; Alternative B, Reduced Density Alternative; Alternative C, Design Alternative; Alternative D, Land Use Alternative; Alternative E, Alternative Site. The five identified alternatives, as well as the identified environmentally superior alternative, are summarized below.

Alternative A, the No Project Alternative assumes that no project is approved and the existing 40,000 square foot warehouse/mechanical facility remains within the Project area. Thus, under this alternative, the physical conditions of the Project site would remain as they exist today. The No Project Alternative would have better or much better impacts compared to the Project with regard to land use (off-site uses), visual quality, light and glare, shade/shadow, drainage and surface water quality, air quality, traffic, pedestrian safety, noise, public services, utilities, geologic and

seismic hazards, and historic resources. The Alternative would have greater impacts with regard to land use (land use policies), shade/shadow, visual quality, population, housing, and employment, and hazardous materials. The No Project Alternative would not achieve the Project's or the City's objectives.

Alternative B, the Reduced Density Alternative includes the types of uses as set forth with the proposed Project, but reduces the amount of development, which would occur at the Project site. On an overall basis, the amount of development is reduced by 30 percent, to a total of approximately 2.8 million square feet of development. The Reduced Density Alternative would have better impacts than the Project with regard to land use (off-site uses), visual quality, light and glare, shade/shadow, surface water quality, air quality, traffic, pedestrian safety, noise, public services, utilities, and geologic and seismic hazards. The Alternative would have worse impacts with regard to land use (land use policies) and employment. The Reduced Density Alternative would achieve the Project's and City's objectives, but to a reduced degree.

Alternative C, the Design Alternative, includes the same amount of development as the proposed Project; however changes to the design of the Project have been incorporated into this alternative to reflect a project which is oriented more towards Figueroa Street (i.e., convention hotel and central plaza), and includes reductions in building height and signage within current regulations in order to address the principal environmental effects of the Project from a physical design perspective. The Alternative Design would have a worse impact than the Project with regard to visual quality (visual access) and light and glare by orienting Project buildings more along a north-south axis, thus increasing the potential for reflective glare in morning and afternoon hours. The Alternative Design would have worse impacts with regard to pedestrian safety and noise. The Alternative Design would have equivalent impacts with regard to shade and shadow effects on surrounding sensitive land uses, except that it would increase the expected summer afternoon shading of the rear patio/pool of the Hotel Figueroa. This Alternative would have better impacts to visual quality (signage). The Alternative Design would achieve some, but not all of the Project's and the City's objectives.

Alternative D, the Land Use Alternative, calls for a substantial reorientation of the Project from one that seeks to create a sports and entertainment district to one that is predominately residential in character. Alternative D consists of 2,400 residential units, as well as support retail development (i.e., supermarket, dry cleaners, etc.) in addition to a 1,400-room convention hotel. The Land Use Alternative would have better impacts compared to the Project with regard to land use (off-site uses), light and glare, shade/shadow, noise, public services (fire and police), and utilities. The Alternative would have worse impacts with regard to land use (land use policies), pedestrian safety, and public services (parks and schools). The Alternative Land Use would achieve some, but not all, of the Project's and the City's objectives.

Alternative E, the Alternative Site Alternative, proposes to locate the Project at a different site as a means of understanding the environmental effects of the Project in a different geographical context. The alternative site selected for analysis is the Cornfields Site, also located in the City of Los Angeles, northeast of Chinatown. The Cornfields Alternative would result in better impacts compared to the Project with regard to shade/shadow, pedestrian safety, and noise (construction). The Alternative would have worse impacts with regard to land use, visual quality, light and glare, drainage, air quality (operational), traffic, noise (operational), utilities (infrastructure), and historic resources. This Alternative would require the extension of new drainage, sewer, and water infrastructure to serve a previously underserved area. The Cornfields Alternative would not achieve many of the Project's or the City's objectives.

Environmentally Superior Alternative: Of the Alternatives analyzed in the Draft EIR, the No Project Alternative (Alternative A) is considered the overall environmentally superior alternative, as it would reduce nearly all of the significant impacts occurring under the Project (i.e., regional construction air emissions, regional operational air emissions, construction noise, and traffic) to less than significant levels. Thus, no significant impacts would occur under this Alternative. However, this Alternative would not meet any of the programmatic, physical, economic, or operational objectives established for the Project, would not include many of the beneficial effects associated with the proposed Project, nor would it fulfill the objectives of the City of Los Angeles' existing plans for the Project area. In accordance with the State *CEQA Guidelines* requirement to identify an environmentally superior alternative other than the No Project Alternative, a comparative evaluation of the remaining alternatives indicates that the Reduced Density Alternative (Alternative B) would be environmentally superior. Although the Reduced Density Alternative would generally reduce the significant impacts occurring under the Project, it would not reduce such impacts to less than significant levels. Under the Reduced Density Alternative, other environmental impacts would be either generally reduced or substantially equivalent to those associated with the proposed Project and would remain less than significant. Additionally, the Reduced Density Alternative would achieve many, but not all, of the programmatic, physical, economic, and operational objectives established for the proposed Project.

G. SUMMARY OF ENVIRONMENTAL IMPACTS

LAND USE

Impacts: This analysis discusses the Project's consistency with the provisions and requirements of the various policy plans and regulations which govern planning and development in the portion of downtown Los Angeles nearest to the Project. The relocation of portions of the existing surface parking for STAPLES Center may temporarily disrupt existing activities and scheduled events at STAPLES Center and the Convention Center during construction. These

impacts would be reduced by the construction of a parking structure to serve existing STAPLES Center parking. The Project would also reserve a “holding area” for future Convention Center expansion. Therefore, the Project is compatible with the plans to accommodate the proposed Convention Center expansion. Overall, the Project would combine with existing adjacent land uses to create a well-designed, modern, efficient, and balanced urban environment; including a full range of day and nighttime activities and uses that are desired and encouraged in order to achieve the long term realization of development strategies for this area of downtown. Therefore, the Project would be compatible with the majority of surrounding land uses.

Mitigation and Adverse Effects: The Project would not result in any significant environmental impacts upon known land use plans or surrounding land uses, and therefore no mitigation measures are required.

AESTHETICS (VISUAL QUALITIES)

Impacts: Construction activity typically involves disturbance of existing natural and man-made features and development of structures that are temporarily devoid of external treatments designed to promote a pleasant visual appearance. The proposed temporary covered walkway along 11th Street, along with other temporary construction barriers, could potentially serve as targets for graffiti and other unattractive visual features, if not properly monitored, and a significant visual impact at an important gateway to STAPLES Center and the Convention Center would result from project construction.

Unifying design elements would be employed for consistency among STAPLES Center, the Convention Center and the Project further defining the area as a special downtown sports and entertainment district. The height and bulk of the Project would be compatible with the height and bulk of buildings allowed under existing zoning and *CBD Redevelopment Plan* and *Downtown Strategic Plan* standards for proposed development. The Project would be consistent with planned development characteristics expected of the area and would provide pedestrian-oriented transitions between the Project and existing adjacent land uses. Design of the Project would not result in buildings that are visually incompatible with the Variety Arts Center. Therefore, the Project would not introduce elements that would substantially detract from the existing visual character or primary visual resources of the area and would not remove or demolish elements that contribute positively to the visual character of an area. No significant impacts to visual resources would occur. The project would not remove a valued visual feature, or largely obstruct a valued existing view; no significant impact on views from these buildings is expected. Proposed development is consistent with applicable *General Plan Framework* policies regarding the Downtown Center associated visual amenities and pedestrian accommodations. The Project Design Guidelines would be consistent with recommendations for private and public signage standards expressed in the *South Park Development Strategies and Design Guidelines*.

Mitigation Measures: During construction the following mitigation measure would be implemented:

1. The Applicant shall ensure, through appropriate postings and daily visual inspections, that no unauthorized materials (such as graffiti or posters) would be posted on temporary construction barriers or temporary pedestrian walkways and that any such temporary barriers and walkways are maintained in a visually attractive manner throughout the construction period.

Although no significant impacts have been identified for visual quality during operations, urban design standards, defined in the Project's Specific Plan Design Guidelines (See Section II.C., Project Characteristics), have been incorporated into the proposed Project to ensure an appropriate aesthetic appearance. Project development plans will include specific siting of structures and facilities, structural design, signage design and landscaping measures. In addition, implementation of the design guidelines in the Project's Specific Plan would ensure consistency with the *General Plan Framework, Downtown Strategic Plan, CBD Redevelopment Plan, and the South Park Development Strategies and Design Guidelines*.

Adverse Effects: After the incorporation of the measures listed above, no adverse impacts to visual qualities would result from implementation of the proposed Project.

AESTHETICS (LIGHT AND GLARE)

Impacts: Any Project construction activities involving nighttime activities would require lighting of work areas. This lighting would be necessarily focused downward or shielded, oriented toward Project property, and away from adjacent sensitive residential receptors. Furthermore, construction hours within the project areas would be restricted in accordance with municipal code requirements. Therefore, no significant lighting impacts are anticipated during project construction. Construction heavy equipment and building materials would not generate glare that would cause a hazard or clear visual nuisance. In addition, construction activity would be screened from view by temporary barriers. No significant glare impacts are anticipated during project construction.

The Project would substantially increase ambient light levels on the project site and in the vicinity. City permit review would insure that proposed lighting would not pose hazards to motorists. Nighttime illumination, particularly special-event related lighting, associated with the convention hotel, entertainment facilities and the Plaza could be visible from the neighboring motels, apartment buildings, and Holiday Inn and Figueroa Hotel, although this additional nighttime illumination would replace existing ambient nighttime illumination associated with existing parking lots. Project structures would also block some of the presently visible lighting associated with STAPLES Center and the Convention Center. In addition, Project lighting design dictates that

Project lighting would be shielded to minimize lighting impacts upon adjacent sensitive uses and roadways. However, although Project illumination would be consistent with applicable regulations and guidelines, the increase in illumination from the proposed Project would result in a significant impact to adjacent sensitive receptors. The Project would not generate glare, caused by light reflected off expanses of undifferentiated expanses of glass or polished surfaces, that would cause a hazard or clear visual nuisance by serving as a distraction or interference to vision or concentration.

Mitigation Measures: Project development plans will include detailed specifications regarding light fixture types and locations, as well as glare-reducing or screening elements. In addition to the following mitigation measures, urban design standards will be incorporated into the proposed Project's Specific Plan to ensure an appropriate Project illumination.

1. The Applicant shall prepare a Lighting Plan in coordination with the Department of City Planning to establish lighting standards and guidelines.
2. To the extent feasible and consistent with the functions and uses of the Project, the following mitigation measures shall be addressed in the design of the Project's facilities:
 - a. Pedestrian-level lighting shall be used adjacent to Olympic Boulevard and Figueroa, 11th, 12th, and Flower Streets.
 - b. Floodlights shall be located so as to minimize impacts onto sensitive receptors.
 - c. The Applicant shall coordinate with the Bureau of Street Lighting as to whether the streetlights shall be refurbished and/or reinstalled to preserve the character of the community, in addition to providing adequate lighting to motorists and pedestrians.
 - d. All new lighting shall be designed to minimize glare and to prevent light impacts upon adjacent sensitive receptors.
 - e. The use of highly reflective building materials for the exterior walls of the Project structures shall be minimized.
 - f. Use high performance glass with high shading coefficient and low reflectivity, such as Heat Mirror or Low E type glass.
 - g. Architectural and/or landscape screening elements shall be incorporated into project design so as to minimize glare impacts on adjacent sensitive receptors.
 - h. Parking facilities exits shall be located and designed so as to minimize glare impacts from vehicle headlights on adjacent sensitive receptors.

Adverse Effects: Even with implementation of the mitigation measures listed above, light sources associated with the Project, including building and signage lighting, would contribute to

increased ambient nighttime illumination levels that would spill over onto and illuminate adjacent sensitive receptors, producing significant impacts that could not be mitigated. Impacts related to glare would be less than significant.

AESTHETICS (SHADE/SHADOW)

Impacts: The Project would result in significant shading impacts to five off-site shadow-sensitive uses during the winter, including two multi-family residential structures (adjacent to Francisco Street) shaded by the Olympic East Properties; two multi-family residential structures (adjacent to Georgia Street) shaded by Olympic North Properties; and the Gilbert Lindsay Plaza shaded by the Figueroa South Properties.

Mitigation Measures: The following mitigation measure is required to reduce significant shade-shadow impacts:

1. To reduce shading from the Project structures on the Olympic East, Olympic North and Figueroa South Properties, design elements, including roof form, setback, building height and massing, shall be implemented (to the extent feasible and consistent with the functions and uses of the Project) to avoid shading currently unshaded off-site shadow-sensitive uses for more than three hours between the hours of 9:00 A.M. and 3:00 P.M. between late October and early April, or for more than four hours between the hours of 9:00 A.M. and 5:00 P.M. between early April and late October.

Adverse Effects: The Project would result in significant shading impacts to five off-site shadow-sensitive uses during the winter. No off-site shadow-sensitive uses would be impacted during the summer. These impacts would be reduced with implementation of the Project design guidelines and the recommended mitigation measure. However, it may not be feasible to reduce all shading impacts to less than significant and still be consistent with the functions and uses of the Project. In this case, a significant shading impact would remain.

POPULATION, HOUSING AND EMPLOYMENT

Impacts: It is estimated that approximately 4,296 construction workers would be employed during the construction of the Project, although these employees do not typically relocate closer to a construction site and, therefore, impacts to housing and population related to construction workers would be less than significant.

The Project's 800 new residential units and its estimated population increase of 2,272 new residents would be well within growth parameters established by SCAG for the Central City

Community Plan Area. The Project is anticipated to add 5,343 jobs to the Central City Community Plan Area, a ratio of 2.35 jobs added for every resident added. This ratio is below historical levels for the area, and supports the trend of reducing the jobs-to-residents ratio.

Mitigation Measures and Adverse Effects: The Project would not result in any significant environmental impacts upon housing, population and employment and therefore no mitigation measures are required.

DRAINAGE AND SURFACE WATER QUALITY

Impacts: Construction of the proposed Project will not result in a significant change to existing hydrologic conditions. The existing downstream storm drain system, as designed by BOE, is flowing at or above capacity. Adding additional storm drain capacity is not recommended because while it may improve the flooding situation locally, it would transfer the flooding to other downstream locations. No increase in runoff over existing conditions would occur.

During construction, compliance with the County's NPDES permit and all relevant storm water quality management programs of federal, State, County and City agencies would reduce any potential surface water quality impacts on receiving waters to less than significant levels. Implementation of BMPs in compliance with the SUSMP would reduce Project impacts during operation to below a level of significance.

Mitigation Measures: Although the proposed Project is not expected to result in significant impacts with respect to drainage, the following measures shall further ensure that neither the Project site nor surrounding properties are subject to increased flood hazard:

1. Prior to construction activities on any development area, the Applicant shall prepare a master erosion control plan for that developed area, which includes detailed flood control plans, for the City of Los Angeles Department of Public Works, Bureau of Engineering. The plans shall include hydrology/hydraulic calculations and drainage improvement plans, showing quantitatively how projected storm water runoff would not exceed existing design conditions. Such plans shall be reviewed and approved by the City prior to the issuance of building permits.

In addition, the following mitigation measure is recommended to ensure that the Project would not result in significant impacts to surface water quality:

2. The Applicant shall construct catch basins, roof drains, surface parking drains connecting directly to the existing storm drain system, and any other drainage improvements, as may be required by the Bureau of Engineering.

Adverse Effects: With adherence to all applicable regulations and implementation of the measures outlined above, Project impacts on drainage and surface water quality would be less than significant.

AIR QUALITY

Impacts: Construction-related daily emissions would exceed SCAQMD significance thresholds for NO_x, CO, ROC, and PM₁₀. Construction-related quarterly emissions would exceed SCAQMD significance thresholds for NO_x, CO, and ROC. Thus, emissions of these pollutants would result in a significant short-term regional air quality impact. Local air quality impacts relative to PM₁₀ concentrations would be less than significant. Regional emissions resulting from the proposed Project are expected to exceed the SCAQMD thresholds for CO, NO_x, PM₁₀, and ROC. Sensitive receptors in the area would not be significantly affected by CO emissions generated by Project-related traffic, and localized air quality impacts related to mobile source emissions would therefore be less than significant. The Project would be consistent with applicable SCAQMD and SCAG policies.

Mitigation Measures: The following mitigation measures set forth a program of air pollution control strategies designed to reduce the Project's air quality impacts.

1. The Applicant shall secure any necessary permits from the SCAQMD.
2. Non-toxic soil stabilizers shall be applied according to manufacturers' specifications or vegetation shall be planted on all inactive construction areas (i.e., previously graded areas inactive for 10 days or more and not scheduled for additional construction activities within 12 months) to the extent feasible.
3. Exposed pits (i.e., gravel, soil, dirt) with 5 percent or greater silt content shall be watered twice daily, enclosed, covered or treated with non-toxic soil stabilizers according to manufacturers' specifications.
4. All other active sites shall be watered at least twice daily.
5. All grading activities shall cease during second stage smog alerts and periods of high winds (i.e., greater than 25 mph) if soil is being transported to off-site locations and cannot be controlled by watering.
6. All trucks hauling dirt, sand, soil, or other loose materials off-site shall be covered or wetted or shall maintain at least two feet of freeboard (i.e., minimum vertical distance between the top of the load and the top of the trailer).

7. A construction relations officer shall be appointed by the Applicant to act as a community liaison concerning onsite construction activity, including resolution of issues related to fugitive dust generation.
8. Diesel fueled onsite generators may not be used during construction of the proposed Project.
9. All construction roads internal to the construction site that have a traffic volume of more than 50 daily trips by construction equipment, or 150 total daily trips for all vehicles, shall be surfaced with base material or decomposed granite, or shall be paved.
10. Streets shall be swept if visible soil material has been carried onto adjacent public paved roads.
11. Construction equipment shall be visually inspected prior to leaving the site and loose dirt shall be washed off with wheel washers as necessary.
12. Water or non-toxic soil stabilizers shall be applied, according to manufacturers' specifications, as needed to reduce offsite transport of fugitive dust from all unpaved staging areas and unpaved road surfaces.
13. Traffic speeds on all unpaved roads shall not exceed 15 mph.
14. In order to reduce the long-term mobile source emissions associated with the proposed Project, the Applicant shall continue to implement transportation systems management and demand management measures and comply with SCAQMD Rule 2202, which applies to all employers who employ 250 or more persons on a full or part-time basis at a single worksite. This rule, which aims to reduce volatile organic compounds (VOCs), NO_x, and CO, provides employers a menu of options that they can choose from to reduce emissions related to employee commutes.

Adverse Effects: With implementation of the mitigation measures described above, Project construction would continue to generate NO_x, CO, ROC, and PM₁₀ emissions that exceed SCAQMD regional significance thresholds for construction activities. Therefore, construction of the proposed Project would have a significant and unavoidable impact on regional air quality. This impact, however, would be short-term in nature. Local air quality impacts associated with construction emissions would remain less than significant. During the operational phase, the proposed Project would result in regional emissions that exceed SCAQMD significance thresholds for CO, NO_x, PM₁₀, and ROC. The mitigation measures identified above would reduce these air quality impacts to the degree technically feasible, but emissions would remain above SCAQMD significance thresholds. Therefore, operation of the proposed Project would have a significant and

unavoidable impact on regional air quality. No significant impacts to local air quality would result from Project operations.

TRANSPORTATION/CIRCULATION (TRAFFIC)

Impacts: The realignment of 12th Street between Figueroa and Flower Streets may require the partial or full closure of 12th Street, which could cause a temporary significant impact during construction. The Project would result in a significant traffic impact at 16 intersections during the weekday P.M. peak hour and 10 intersections during the Saturday evening peak hour. The Project would also cause a significant impact to the 9th Street (James Wood Boulevard) northbound off-ramp. Potential residential street impacts could occur on 11th Street east of Burlington Avenue, and on 12th Street east of Burlington Avenue and between Valencia and Albany Streets, although the actual occurrence of such impacts is considered unlikely due to the fact that the arterial streets provide the most direct and convenient access to the Project site and experience with STAPLES Center has shown no significant traffic intrusion into the neighborhood. The Project would cause significant impacts at two *CMP* freeway-monitoring locations, even though these freeway segments would operate at LOS F without the Project.

Mitigation Measures:

1. Prior to construction, the Applicant shall, in consultation and cooperation with the South Park Event Coordinating Committee, develop and implement a Construction Management Plan for construction of the Project. The goals of the Construction Management Plan shall be to minimize conflicts with STAPLES Center and Convention Center operations and conflicts and delays in construction of the Project.

The Construction Management Plan shall provide for the coordination of construction staging areas and traffic controls, in order to assist in the orderly flow of pedestrian and vehicular traffic in the Project area, and to/from STAPLES Center and the Convention Center events; and of labor, materials and construction vehicles to the construction site, including the staging of delivery trucks on public streets surrounding the Project site. The Construction Management Plan shall also address measures to ensure adequate access to STAPLES Center and to the Convention Center, if temporary lane closures on adjacent roadways are required.

Prior to full implementation of mitigation measures in this section, the Construction Management Plan should consider the use of temporary operational techniques (e.g., coning, temporary/changeable signs, etc.), as appropriate to the circulation needs of particular events.

In order to address significant traffic impacts the feasibility of physical improvements was investigated. Specific street mitigation measures are proposed at the following intersections.

2. Blaine Street/11th Street/SR-110 Southbound On-Ramp
3. Cherry Street & Pico Boulevard
4. Georgia Street & Olympic Boulevard
5. Francisco Street & Olympic Boulevard
6. Figueroa Street & Olympic Boulevard
7. Grand Avenue & 11th Street

The following mitigation measures are recommended to ensure that the residential neighborhood to the west of the Harbor Freeway is protected from significant traffic and parking impacts:

8. The Applicant shall fund up to \$100,000 for studies, evaluations, and implementation of a Neighborhood Traffic Management Plan, if necessary. Such actions would be carried out under the direction of the LADOT, with the participation of the Applicant. The Applicant would post a bond for the \$100,000 and monies would be released as a plan or individual measures are agreed upon and implemented. After a period of three years from the opening of the Project, the bond would be terminated and/or any unused monies returned to the Applicant. This program would include both traffic management measures, as well as the implementation of any residential permit parking district programs requested by the neighborhoods and approved by LADOT.

In addition to the measures identified above that would directly mitigate and/or avoid significant impacts, the following general mitigation measures shall be implemented, which would help traffic flow in the area and lessen the magnitude of unmitigated impacts:

9. The Applicant shall enhance connections and linkages to transit, particularly including physical linkages to the Metro Blue Line Station at Flower Street/Pico Boulevard, as well as directional signage to bus and rail lines, and the provision of landscaped bus stops with passenger amenities such as benches, shaded areas, and electronic real-time transit information.

10. The Applicant will install six new bus shelters throughout the project area, at locations to be agreed between the Applicant, LADOT, and LACMTA. These will be City standard bus shelters at a minimum, although the Applicant may modify the design to fit in with the overall urban design/streetscape of the Project with the approval of the City.
11. The Applicant will provide up to two transit information kiosks on-site (one on the Olympic properties and one on the Figueroa properties) for the purpose of providing information about the available transit in the area, and of dispensing tickets/passes, if feasible.
12. The Applicant will install 30-foot wide crosswalks at Figueroa Street/Olympic Boulevard, Figueroa Street/Pico Boulevard, 12th Street/Flower Street, and Pico Boulevard/Flower Street, where and as feasible.
13. The Applicant shall initiate and maintain a transportation demand management program that will actively promote the use of transit and rideshare, including providing project employees and visitors with transit and rideshare information.
14. The Applicant shall provide off-site parking for employees (to the north, east and south of the Project) along with shuttle bus service from parking locations to the Project site.
15. The Applicant shall provide fixed signage on access/egress corridors to the project to help direct inbound traffic to parking facilities, and outbound traffic to arterials and freeway ramps, up to a total of \$25,000.
16. The Applicant shall participate in providing up to three additional changeable message signs (CMS), if necessary, on the surface street system in the Project area, that will be linked into the existing Traffic Operations Center (TOC), that will help direct traffic and ensure smooth traffic flows during Convention Center and STAPLES Center events and during closures of 11th Street.
17. The Applicant will participate with Caltrans to provide one additional changeable message sign (CMS) on the freeway mainline system, if Caltrans determines it to be necessary or desirable.
18. The Applicant will coordinate with Caltrans and LADOT to develop fixed and changeable signage programs to direct traffic to utilize the various different freeway off-ramps in the Project area, where necessary.

19. The Applicant shall participate in the existing South Park Event Parking & Circulation Management Plan, and the ongoing traffic management activities coordinated by the South Park Event Coordinating Committee.

In order to facilitate the closure of 11th Street between Georgia Street and Figueroa Street, on a regular basis outside the morning and evening peak periods, the Applicant shall implement the following improvements:

20. Develop a Traffic Control Plan, requiring LADOT approval, prior to completion and public use of the plaza to the north of 11th Street. Among the potential measures that could be included in the plan are the following (subject to the approval of LADOT):
 - Implement temporary traffic barriers and pop-up bollards on 11th Street west of Figueroa Street and east of Georgia Street to prevent traffic entering 11th Street between Georgia and Figueroa during closure periods.
 - Add electronic signs to signal poles and signal mast arms at the intersections of 11th Street/Figueroa Street and 11th Street/Georgia Street, to indicate “No Entry,” “Turn Left,” and “Turn Right” during street closures.
 - Add changeable message signs at locations to be determined by LADOT, advising motorists of alternate routes to 11th Street during street closures. Such signs would be located in the immediate vicinity of the block of 11th Street to be closed, at the following intersections: 11th Street and Figueroa Street; Olympic Boulevard and Figueroa Street; Olympic Boulevard and Georgia Street; and 11th Street and Georgia Street.
 - Add similar signs on the street approaches to the block of 11th Street to be closed to give motorists advance warning and information of alternate routes, such as at the following locations: 11th Street, east of Flower Street; 11th Street, east of Olive Street; and Cherry Street, south of 12th Street.
 - If necessary, provide additional temporary measures such as coning temporary traffic lanes, at the following locations: Olympic Boulevard and Figueroa Street; Olympic Boulevard and Georgia Street; 11th Street and Georgia Street; and 11th Street and Figueroa Street.

Adverse Effects: The temporary full closure of 12th Street during street and utility realignment would cause a significant, unavoidable traffic impact. Significant impacts would remain at 16 locations in the weekday P.M. peak hour, although only one location would operate at an unacceptable level of service (i.e., LOS E). The remaining 15 locations would continue to

operate at satisfactory conditions, with eight locations operating at LOS C and seven locations operating at LOS D. During the Saturday evening peak hour, the impact analysis identified significant traffic impacts at 10 locations. The physical mitigation measures identified would eliminate five of these significant impacts and would reduce the impact at two additional locations. Significant impacts would remain at five locations, which would all operate at satisfactory conditions (four locations at LOS C and one location at LOS D). No physical capacity improvements have been identified to directly mitigate identified impacts on the two CMP freeway analysis locations, which are considered to be feasible within the confines of a Project-specific analysis.

TRANSPORTATION/CIRCULATION (PARKING)

Impacts: The overall Project parking supply of 6,260 spaces, including on-site and off-site spaces, would meet the overall *Zoning Code* requirement of 6,257 spaces. For a peak day, the total peak parking demand of 8,138 spaces on a Saturday would exceed the total Project parking supply of 6,260 spaces, a shortfall of 1,878 spaces. The on-site visitor need of 7,363 spaces would exceed the on-site supply of 5,310 spaces, a shortfall of 2,053 spaces. This excess demand would be met through off-site parking in the adjacent areas to the north and to the east, and through the existing abundance of off-site parking supply in both public and private lots. This parking demand would most likely be met in leased or public spaces to the north and east of the Project site. Since the peak parking demand occurs at night, the office spaces to the north of the Project site are prime candidates for shared parking opportunities. The Project would, therefore, conform to the requirements of the *Zoning Code* and parking impacts would be less than significant.

Mitigation Measures:

a. Construction

1. The Applicant shall develop a Construction Management Plan, which shall provide for the coordination of construction areas and the replacement of STAPLES Center parking prior to commencing construction. During Project utility relocation, existing street parking shall be retained wherever possible.
2. As part of the Construction Management Plan, measures to minimize parking impacts to STAPLES Center and other land uses in the area shall be developed (for example, the provision of permanent or temporary replacement parking). Delays in construction of the Project shall be avoided to the fullest possible extent.

b. Operation

3. The Applicant shall provide employee parking off-site to the northeast or south of the Project site in leased and/or owned spaces. The employees would be transported to the Project site by a shuttle bus system similar to that currently used for STAPLES Center employees. The off-site employee parking program would accommodate approximately 550 daytime employee spaces and 775 nighttime employee spaces.
4. The Project shall participate in the South Park Event Coordinating Committee, to coordinate parking management issues.

Adverse Effects: After the incorporation of recommended mitigation measures, no adverse effects to parking would occur.

TRANSPORTATION/CIRCULATION (PEDESTRIAN SAFETY)

Impacts: Construction of the Project could have the potential to impact pedestrian movement in the immediate vicinity of the construction sites. Project-related construction could require temporary lane closures on surrounding streets, particularly during utility relocation activity, although no complete closure of any major streets is anticipated. These temporary lane closures could temporarily reroute pedestrian access to STAPLES Center and the Convention Center from the parking facilities, constituting a temporary, but significant, impact to pedestrian circulation. During peak day conditions with a sold-out event at STAPLES Center (or a major consumer show at the Los Angeles Convention and Exhibition Center) and substantial off-site parking occurring for Project visitors, all segments of the sidewalk system would operate at acceptable levels of service and impacts would be less than significant.

Mitigation Measures:

1. The Applicant shall develop a Construction Management Plan, which shall provide for the coordination of construction areas and safe pedestrian movement throughout the Project area such that adequate and safe pedestrian access is maintained to STAPLES Center, the Convention Center and surrounding land uses during construction.

Adverse Effects: With the application of the above mitigation measures, impacts relative to pedestrian safety during construction would be less than significant.

HAZARDOUS MATERIALS

Impacts: Additional excavation and ground clearing on any of the potential properties of concern may have the potential to disturb soil and/or groundwater contaminants, which could pose potential health risks and thus a significant impact to construction workers and employees, residents and visitors adjacent to the Project site. The demolition of the two remaining structures in the Figueroa Central area with asbestos containing materials or lead-based paint would have the potential to release these substances into the atmosphere if these substances are not properly stabilized or removed prior to demolition activity, which could result in a significant impact.

Operation of the Project and ancillary facilities would involve the use of small quantities of such potentially hazardous materials as solvents, detergents, and petroleum products. All potentially hazardous materials would be stored, handled, and disposed of in accordance with all applicable federal, state, and local regulations. Consequently, the Project operation would not be expected to pose any significant risks related to the accidental release of hazardous materials. Operational impacts would be less than significant.

Mitigation Measures: The following mitigation measures shall be employed during construction of the proposed Project:

1. Further investigation by a registered environmental professional of the potential soil and/or groundwater contamination on 1240 South Figueroa Street (APN 5138-025-004), 844 West Olympic Boulevard (APN 5138-009-002), and 931 West Olympic Boulevard (APN 5138-005-008) shall be conducted in accordance with the RWQCB, where applicable. Any required remedial action recommended by the registered environmental professional and approved by the RWQCB for any contamination discovered during these investigations shall be fully implemented and documented.
2. Coordination of ongoing remediation activities with proposed Project construction shall be performed to ensure that soil cleanup is not stopped or impeded.
3. Removal of any asbestos-containing materials found in the only two onsite structures (Figueroa Central Properties) shall be conducted in accordance with the requirements of South Coast Air Quality Management District Rule 1403. Specific requirements of Rule 1403 include:
 - a. Implementation of a thorough survey of the affected facility prior to issuance of permits for any demolition or renovation activity, including inspection, identification, and quantification of all friable and certain non-friable asbestos-containing materials.

- b. Surveys which include collection and analyses of representative asbestos building material samples, and quantification of these materials for asbestos abatement purposes prior to or during demolition.
 - c. Notification of the SCAQMD of the intent to demolish or renovate any facility at least ten days prior to commencing with the activity.
 - d. Removal of all asbestos-containing materials prior to any demolition or renovation activity that would break up, dislodge, or similarly disturb the material.
 - e. Use of prescribed procedures when removing asbestos-containing materials.
 - f. Placement of all collected asbestos-containing materials in leak-tight containers or wrapping.
 - g. Transportation and disposal of asbestos-containing materials as required by applicable regulations.
4. Lead-based paint assessments of the only two remaining structures on the Project Site (Figueroa Central Properties) shall be conducted prior to issuance of permits for any demolition activity involving a particular structure. These assessments will include use of x-ray fluorescent technology to identify buildings with lead-based paint. Lead-based paint found in any buildings shall be removed and disposed of as a hazardous waste in accordance with all applicable regulations.
 5. In the event that previously undiscovered contaminated soil or hazardous materials are encountered at the Project site during construction, identification and remediation procedures would be developed in accordance with applicable federal, State and City regulations which would ensure that the potential for the risk of upset would be below a level of significance.

Adverse Effects: After the incorporation of mitigation measures, no significant impacts from hazardous materials would occur.

NOISE

Impacts: During the heaviest periods of construction activity, the construction noise could potentially be as high as 89 dBA during short instances. At the Project construction site, noise would range from 74 to 85 dBA. The construction noise would range from 68 to 79 dBA at the apartment hotel located south of Pico Boulevard and West of Flower Street. During periods of less intensive activity, the construction noise would be lower. Construction on portions of the Olympic and Figueroa Properties would have the potential to exceed 75 dBA within 500 feet of the existing residential areas. Impacts to residential receptors (i.e., apartment building located north of Olympic Boulevard and east of Flower Street) associated with construction on the Olympic and Figueroa

Properties would be significant. During operation, sensitive land uses located along portions of 9th Street (James Wood Boulevard), 11th Street, Figueroa Street, Flower Street, Olympic Boulevard, and Pico Boulevard would experience future traffic noise levels that exceed the City's CNEL guideline of 70 dBA.

Mitigation Measures:

The following mitigation measures are recommended for proposed development on the Project site.

a. Construction

Because noise associated with on-site construction activity would have the potential to exceed the level normally allowed under the City Noise Ordinance, the following mitigation measures are recommended to minimize construction-related noise impacts:

1. On-site construction activity that generates noise in excess of 75 dBA at a distance of 50 feet shall be limited to between 7:00 A.M. and 9:00 P.M. Monday through Friday and 8:00 A.M. and 6:00 P.M. on Saturdays, unless the City extends such hours.
2. The Los Angeles Unified School District shall be provided with a construction schedule.
3. All construction equipment shall be in proper operating condition and fitted with standard factory silencing features.
4. Sound blankets shall be used on all construction equipment for which use of sound blankets is technically feasible.
5. If noise levels from construction activity are found to exceed 75 dBA at the property line of an adjacent property and construction equipment is left stationary and continuously operating for more than one day, a temporary noise barrier shall be erected between the noise source and receptor.
6. All construction truck traffic shall be restricted to truck routes approved by the City of Los Angeles Department of Building and Safety, which shall avoid residential areas and other sensitive receptors to the extent feasible.

b. Operation

The following mitigation measures are recommended to address significant traffic noise impacts occurring during the event and during the post-event hour and from the bus staging area.

7. Entrances and exits from parking lots in the Olympic and Figueroa Properties parking areas shall be located to minimize impact on residential, motel, or hotel units.
8. As part of the *South Park Area Parking and Circulation Management Plan (PCMP)*, an operational traffic plan shall be implemented which minimizes the amount of Project generated traffic passing by sensitive receptors by providing traffic control personnel to direct departing vehicles along corridors that will have the least impact on sensitive receptors in the area.
9. All events in the Central Plaza that would involve the use of public address systems shall be required to obtain a permit from the City for operating amplified sound and speech equipment.

Adverse Effects: With the recommended mitigation measures, noise associated with construction activity would be reduced to the degree technically feasible. Nevertheless, impacts are likely to occur on the sensitive receptors located nearest to the Project site. Apartments located north, east, and south of the Project Site would occasionally experience high construction noise levels. This construction-related noise would constitute a significant unavoidable adverse impact of the Project.

Noise increases on Francisco Street north of Olympic Boulevard would be significant because of the increased vehicle traffic associated with the Project. Because of the source of the impact (i.e., moving vehicles), the only available measure to mitigate the impact would be to route traffic onto Olympic Boulevard away from Francisco Street. No other feasible mitigation measures are available to reduce this impact to less than significant. This impact is also expected to occur during weekend operations. This would be a significant and unavoidable adverse impact.

PUBLIC SERVICES (FIRE)

Impacts: Construction of the proposed Project may result in temporary lane closures. However, due to the temporary and limited nature of the closures along roadways and the wide selection of alternate routes to and through the Project site, emergency access and response times would not be significantly affected. Implementation of the proposed Project would increase the need for LAFD fire protection and emergency medical services at the Project site. However, the

Project site is within the required response distance of the nearest fire station and no significant impacts to LAFD staff and equipment capabilities are anticipated. Water service for fire fighting purposes would continue to be provided by the City of Los Angeles Department of Water and Power (DWP). In order to determine if the existing water system is adequate to meet fire flow demand, the Water Operations Division of DWP will conduct a flow study prior to issuance of any building permits.

Mitigation Measures: The following mitigation measures for fire protection and emergency medical service shall be employed during the construction and operation of the proposed Project:

1. The Applicant shall ensure that during construction, LAFD access will remain clear and unobstructed.
2. Proposed roadway modifications shall be reviewed by the LAFD to assure adequate access to the Project site and adjacent uses.
3. The DWP shall conduct a flow test prior to the issuance of certificates of occupancy to determine whether the existing water system meets fire flow requirements imposed by the Fire Department for the Project. The Applicant shall undertake and complete those required improvements identified by the DWP as a result of findings of the flow test.
4. The proposed Project shall comply with all applicable State and local codes and ordinances, and the guidelines found in the *Fire Protection and Fire Prevention Plan Element*, as well as the *Safety Element*, both of which are elements of the General Plan of the City of Los Angeles.
5. The Applicant shall submit definitive plans and specifications to the LAFD and requirements for necessary permits shall be satisfied prior to commencement of any portion of the proposed Project.
6. The Project shall provide access for LAFD apparatus and personnel to and into all structures shall be required. At least two different ingress/egress roads for each area, which will accommodate major fire apparatus and provide for major evacuation during emergency situations, shall be required. Additional vehicular access may be required by the LAFD where buildings exceed 28 feet in height.
7. The Applicant shall submit plans that show proposed access road(s) and turning area(s) for LAFD approval.

8. Project development shall conform to the standard street dimensions shown on Department of Public Works Standard Plan D-22549.
9. Project design shall use standard cut-corners on all street corners to permit easy turning access for LAFD vehicles.
10. Fire lane width shall not be less than 20 feet. When a fire lane must accommodate the operation of an LAFD aerial ladder apparatus or where fire hydrants are installed, those portions shall not be less than 28 feet in width.
11. Fire lanes, where required, and dead ending streets shall terminate in a cul-de-sac or other approved turning area. No fire lane or dead ending street shall be greater than 700 feet in length or secondary access shall be required.
12. All access roads, including fire lanes, shall be maintained in an unobstructed manner, and removal of obstructions shall be at the owner's expense. The entrance to all required fire lanes or required private driveways shall be posted with a sign no less than three square feet in area, in accordance with Section 57.09.05 of the *Los Angeles Municipal Code*.
13. Where above ground floors are used for residential purposes, the access requirement shall be interpreted as being the horizontal travel distance from the street, driveway, alley, or designated fire lane to the main entrance, or exit of individual units.
14. To accommodate an LAFD apparatus, if necessary, the minimum outside radius of paved surface shall be 35 feet. An additional six feet of clear space must be maintained beyond the outside radius to a vertical point 13 feet 6 inches above the paved surface of the roadway.
15. Where access for a given development requires accommodation of Fire Department apparatus, overhead clearance shall not be less than 14 feet.
16. No building shall be constructed more than 150 feet from the edge of a roadway of an improved street, access road, or designated fire lane.
17. Adequate off-site public and on-site private fire hydrants may be required. Their number and location are to be determined after the LAFD's review of the Project's plot plan. The maximum distance between fire hydrants on roads and fire lanes in a regional commercial area is 300 feet.
18. A new or modified Parking and Circulation Management Plan, which addresses vehicle and pedestrian flows for Project-related events (see Section

Transportation/Circulation (Traffic)), shall also identify measures for ensuring LAFD access to the Project site, parking lots, and the immediate vicinity during the post-event period.

Adverse Effects: After the incorporation of mitigation measures, no adverse effects to fire and emergency medical services, response times or fire flow would occur.

PUBLIC SERVICES (POLICE)

Impacts: Event-related population increases would generate demand for additional security officers during events at the Project site and at STAPLES Center, especially for crowd and traffic control. The extent of additional protection needed would vary in accordance with the type of event and expected number of spectators. Reporting Districts for portions of the Project site currently have a higher than average crime rate (in comparison with the average for all 52 Reporting Districts in the Central Area) for breaking and entering into automobiles and theft. The Project would generate off-site parking during peak-usage, which could increase these kinds of crimes and place an increased demand on police protection services. During events at the STAPLES Center and the Los Angeles Convention and Exhibition Center, and during the post-event period, traffic could result in considerable congestion at many area streets and intersections in the vicinity of the project site, which could potentially cause significant delays in LAPD emergency response times for responses within or through the project site, thereby creating delays for other occupants and residents in the area.

Mitigation Measures: The following mitigation measures would be employed to provide adequate on-site security and minimize on-site demand for police protection service during the construction and operation of the proposed Project:

1. The Applicant shall ensure that during construction, LAPD access will remain clear and unobstructed.
2. Proposed roadway modifications shall be reviewed by the LAPD to assure adequate access to the proposed Project and adjacent uses.
3. The Applicant shall provide security features on the construction site(s), such as guards, fencing, and locked entrances.
4. The Applicant shall submit plot plans for all proposed development to the Los Angeles Police Department's Crime Prevention Section for review and comment. Security features subsequently recommended by the LAPD shall be implemented to the extent feasible.

5. The Applicant shall file building plans with the LAPD Central Area Commanding Officer. Plans shall include access routes, floor plans, and any additional information that might facilitate prompt and efficient police response.
6. Alarms and/or locked gates shall be installed on doorways providing public access to commercial facilities.
7. Landscaping shall not be planted in a way that could provide cover for persons tampering with doors or windows of commercial facilities, or for persons lying in wait for pedestrians or parking garage users.
8. Additional lighting shall be installed where appropriate, including on the Project site and in parking garages, as determined in consultation with the LAPD.
9. Safety features shall be incorporated into project design to assure pedestrian safety, assist in controlling pedestrian traffic flows, and avoid pedestrian/vehicular conflicts on-site. Safety measures may include provision of security and traffic control personnel; approved street closures for special events or peak pedestrian activity; clearly designated, well-lighted pedestrian walkways on-site; special street and pedestrian-level lighting; physical barriers (e.g., low walls, landscaping), particularly around the perimeter of the parking garages, to direct pedestrians to specific exit locations that correspond to designated crosswalk locations on adjacent streets; guide signs for Project site-bound pedestrians approaching the site from the Pico Blue Line Metro station; and provision of an on-site bus passenger drop-off facility.
10. The Applicant shall develop and implement a new or modified Security Plan to minimize the potential for on-site crime and the need for LAPD services. The plan would outline the security services and features to be implemented, as determined in consultation with the LAPD. The following shall be included in the plan:
 - a. Provision of an on-site security force that would monitor and patrol the Project site. During operational hours, security officers shall perform pedestrian, vehicular, and/or bicycle patrols.
 - b. Implementation of a video camera surveillance system and/or a closed-circuit television system;
 - c. Additional security features shall be incorporated into the design of proposed parking facilities, including “spotters” for parking areas, and ensuring the availability of sufficient parking either on- or off-site for all building employees and anticipated patrons and visitors;
 - d. Security lighting incorporating good illumination and minimum dead space in the design of entryways, seating areas, lobbies, elevators, service areas, and parking areas to eliminate areas of concealment. Security

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- lighting shall incorporate full cutoff fixtures which minimize glare from the light source and provide light downward and inward to structures to maximize visibility;
- e. Provision of lockable doors at appropriate Project entryways, offices, retail stores, and restaurants;
 - f. Installation of alarms at appropriate Project entryways and ancillary commercial structures;
 - g. The City shall approve of all businesses desiring to sell or allow consumption of alcoholic beverages through specific plan regulation or issuance of one or more Conditional Use Permits;
 - h. Accessibility for emergency service personnel and vehicles into each structure, and provision to the Central Area Commanding Officer of detailed diagram(s) of the Project site, including access routes, unit numbers, and any information that would facilitate police response.
 - i. In addition, security procedures regarding initial response, investigation, detainment of crime suspects, LAPD notification, crowd and traffic control, and general public assistance shall be outlined in the Security Plan. The plan would be subject to review by the LAPD, and any provisions pertaining to access would be subject to approval by the City of Los Angeles Department of Transportation.
11. The Applicant shall develop and implement an Emergency Procedures Plan to address emergency concerns and practices. The plan shall be subject to review by the LAPD, and any provisions pertaining to access would be subject to approval by the City of Los Angeles Department of Transportation.
12. A new or modified Parking and Circulation Management Plan which addresses vehicle and pedestrian flows for Project-related events (see Section IV.F.1, Traffic) shall also identify measures for ensuring Police Department access to the Project site, parking lots, and the immediate vicinity during the post-event period. Traffic control personnel may be provided on adjacent roadways and in parking areas during Project-related events and immediately preceding and following events to help prevent vehicles and pedestrians from obstructing emergency access.
13. The Applicant shall complete an annual assessment of off-site Project related crime, in coordination with the LAPD, subject to the approval of the City Planning Department, and in response develop and implement additional security measures.

Adverse Effects: After the incorporation of mitigation measures, no adverse effects to police protection services or response times would occur.

PUBLIC SERVICES (SCHOOLS)

Impacts: The development of 800 new residential uses would result in the increased demand for school facilities by generating an estimated total of 302 new students. This total would be made up of 134 elementary, 76 middle, and 92 high school students. The Project does not contain any school construction, so there is no impact on the supply of school facilities available to students generated by the Project development. This student generation would exceed the forecasted future available capacities of the local schools.

Mitigation Measures: Any significant impacts on the demand for schools within LAUSD attributable to residential construction are considered mitigated by the Applicant's payment of development fees to LAUSD prior to issuance of building permits. Development fees payable to LAUSD are calculated by applying the maximum construction fees specified by the State Allocation Board, \$2.05 per square foot of residential construction and \$0.33 per square foot of commercial construction. State law (SB 50) states that the maximum fee amounts allowed by the bill are "deemed to provide full and complete school facilities mitigation" for purposes of CEQA.

Adverse Effects: After the incorporation of the recommended mitigation measure, no adverse effects to schools or school facilities would occur.

PUBLIC SERVICES (PARKS AND RECREATION)

Impacts: Implementation of the proposed Project is not anticipated to result in construction-related impacts to parks and recreational facilities because construction workers are highly transient in their work locations and would not likely utilize off-site facilities in proximity to a job site. The development of 800 new dwelling units within the proposed Project would add an estimated 2,272 residents to the South Park Area, resulting in the increased use of existing neighborhood, community and regional parks in the Central City Community Plan Area, where parkland deficiencies have been identified. Therefore, the proposed Project would result in a potentially significant impact to the delivery of parks and recreation services.

Mitigation Measures: In order to mitigate the proposed Project's impacts on the Central City area's existing and future deficiency of parkland and open space, the following mitigation measures are recommended:

1. The Project shall incorporate project design features such as plazas, terraces and paseos that encourage access to a variety of open space uses for residents and visitors to the Project site.

2. The Applicant shall pay required fees to the City of Los Angeles Recreation and Parks Department for the purpose of providing future parks and open space in the Central City area, subject to a credit for publicly available open space uses provided by the Project.

Adverse Effects: The Project would satisfy the open space requirements of the City's Municipal Code for multi-family housing. However, the Project would not meet the Department of Recreation Parks and planning standard of four acres per 1,000 residents. Therefore, the Project would have a significant impact on parks and recreational facilities.

UTILITIES (WATER)

Impacts: The Project is estimated to have a buildout water demand of approximately 1,660,000 gallons per day. The Project's increases in water demand with respect to existing and anticipated supplies would not be significant. The local water infrastructure would be adequate to provide for the increase in domestic water demand.

Mitigation Measures: The proposed Project shall comply with all applicable sections of the City of Los Angeles Water Conservation Ordinances (Ordinance Nos. 163,532; 164,093; 165,004; 166,080; and subsequent amendments). Specifically, no hose washing of roadways, paved parking areas, plaza areas, or walkways shall be allowed. Low flow toilets and plumbing fixtures that prevent water loss shall be installed, decorative fountains shall use recycled water, water leaks shall be repaired in a timely manner, and drinking water shall be served only upon request. In adherence to the City's Landscape Ordinance No. 170,978, plants selected for landscaping shall comply with xeriscape (drought-resistant, low maintenance) requirements. Finally, the Project shall comply with any additional mandatory City-imposed water use restrictions required as a result of drought conditions.

Although development of the Project is not expected to produce significant impacts to water supply services, the following measures will ensure that water resources will be conserved to the extent feasible:

1. The Project and occupants shall adhere to all applicable DWP rules and regulations. The DWP shall be consulted regarding feasible water conservation features, including xeriscape practices (e.g., use of drought-tolerant landscaping and drip irrigation systems), which can be incorporated into the design of the project. All necessary infrastructure improvements shall be constructed to meet the requirements of the DWP.
2. Automatic sprinkler systems shall be set to irrigate landscaping during morning or evening hours to reduce water losses from evaporation. Sprinklers shall be reset to

water less often in cooler months and during the rainfall season so that water is not wasted by excessive landscape irrigation.

3. The DWP shall conduct a flow test prior to the issuance of certificates of occupancy to determine whether the existing water system meets fire flow requirements imposed by the Fire Department for the Project. The Applicant shall undertake and complete those required improvements identified by the DWP as a result of findings of the flow test.
4. The Applicant shall obtain a DWP Letter of Service prior to issuance of building permits.

Adverse Effects: With adherence to all applicable regulations and implementation of the measures outlined above, the Project impacts to domestic water service, fire flows, and the water infrastructure system would be less than significant.

UTILITIES (SEWER)

Impacts: The existing sewer infrastructure surrounding the Project site would be adequate to provide for the Project. The proposed Project is estimated to have a buildout sewage generation estimated at 1,383,450 gallons per day, which represents a substantial increase over existing conditions but would not impact the existing sewer system.

Mitigation Measures: The Project is not expected to produce significant impacts to sewer service; however, compliance with City and State codes, ordinances, and permit requirements will ensure that wastewater generation will be reduced to the maximum extent feasible. Specifically, the Project shall comply with the following:

1. The Applicant shall comply with procedural requirements of City ordinances regulating connections to the City sewer system (e.g., Ordinance No. 166,060).
2. All necessary infrastructure improvements shall be constructed to meet the requirements of the Department of Public Works.
3. The Applicant shall comply with all provisions of Ordinance No. 162,532, which reduces water consumption levels, thereby restricting wastewater flows. Water saving devices to be installed shall include low flow toilets and plumbing fixtures that prevent water loss.
4. The Applicant shall develop and implement a construction management plan for any temporary lane closures that may be necessary (including temporary coning, signing,

road striping, signalization, etc.), to assist in the orderly flow of vehicular and pedestrian traffic in the project area, and to ensure the maintenance of adequate access to STAPLES Center and the Convention Center.

Adverse Effects: With adherence to all applicable regulations and implementation of the measures outlined above, the Project impacts to sanitary sewer service and the sewage infrastructure system would be less than significant.

UTILITIES (SOLID WASTE)

Impacts: Operation of the Project is estimated to generate approximately 31,170 pounds of solid waste per day. The Project would implement source reduction, recycling, and diversion measures, which would serve to reduce the amount of waste disposed of at area landfills. The most likely destinations for solid waste generated by the proposed Project would be the Sunshine Canyon Landfill and the Chiquita Canyon Landfill. The Project would not result in significant impacts to the remaining disposal capacity of these facilities or their anticipated closure dates.

Mitigation Measures: The Project shall comply with all applicable City, County, and State requirements regulating solid waste disposal, including the California Solid Waste Reuse and Recycling Access Act of 1991 (AB 939), which requires that adequate waste storage facilities be provided for the collection and storage of recyclable and green waste materials. The Project is not expected to produce significant impacts to landfill capacity. Waste management practices shall be implemented during both construction and operation in order to reduce the quantity of solid waste generated. The following measures have been established to achieve waste reduction goals:

1. Prior to the issuance of building permits, a Recycling and Resource Recovery Plan shall be prepared to coordinate resource conservation and recycling for the Project. Prior to implementing this plan, it shall be reviewed and approved by the City of Los Angeles Department of Public Works, Solid Resources Citywide Recycling Division. The plan shall include the following:
 - a. A recycling program shall be designed to reduce the amount of solid waste going to landfills, in line with the City's goals and continued efforts towards a Citywide 50 percent waste reduction rate over 1990 waste diversion levels.
 - b. Measures for maximizing the recycling of demolition and construction debris, including a proposed layout for source separation of materials and recycling bins at the Project site and utilization of prospective contractor(s) specializing in demolition and construction waste management shall be implemented, to the extent feasible.

- c. Recycling bins and chutes shall be provided at appropriate locations to promote the recycling of paper, metal, glass, and other recyclable materials.
 - d. An education/outreach program for all Project employees shall be instituted to reduce the output of solid waste through recycling and reduction of waste at the source.
 - e. Promote recycling to patrons.
2. Trash compaction facilities shall be provided in all occupied structures, where deemed feasible.
 3. Yard waste management techniques shall be incorporated into the maintenance of the Project, including use of drought tolerant plants and mulching or composting of regular landscape maintenance waste where appropriate.

Adverse Effects: No significant adverse effects with respect to solid waste would result from development of the proposed Project.

GEOLOGIC AND SEISMIC HAZARDS

Impacts: No significant impacts to geology and soils are anticipated during construction of the proposed project. The Elysian Park-Wilshire Thrust Zone is potentially located below the entire Central City Subregion. As ground shaking has the potential to affect all structures within the City of Los Angeles, this hazard would pose a potentially significant, but mitigable, impact associated with the Project site. Although not well-defined, the portion of the Project site located north of Pico Boulevard and east of South Figueroa Street (Figueroa South/Figueroa Central development areas) is located within what was the major oil drilling area for this former oil field and this area would be considered a potential hazard for subsidence.

Mitigation Measures: The proposed Project must comply with all applicable City of Los Angeles Building Code regulations with regard to seismic safety requirements and shall be approved by the City Department of Building and Safety prior to the issuance of building permits. Geotechnical investigations shall be performed by a registered geotechnical engineer. In addition, the following mitigation measures have been established for potential seismic and subsidence hazards potentially impacting future development on the Project site:

1. A State-certified geologist shall review all excavations for evidence indicative of faulting, or seismically-induced ground deformation. If during grading, an active fault is determined to extend through the area, appropriate building setbacks from the fault line shall be established.

2. An assessment of the potential for subsidence at the Project site shall be conducted as part of the geotechnical evaluation.
3. To assist in response to a seismic event, an emergency response and building-specific evacuation plan for Project structures shall be developed in coordination with the Los Angeles Fire Department prior to the Certificate of Occupancy being granted by the City of Los Angeles. Such information shall be disseminated to employees to reduce the potential for human injury.
4. To assist in response to a seismic event, an emergency response and building-specific evacuation diagram for Project structures shall be posted in each on-site building. Such signage shall be posted in appropriate locations to reduce the potential for injury to visitors and employees.

Adverse Effects: The proposed Project would potentially expose both employees and visitors to on-site seismic hazards. However, the proposed Project would be designed so that there would be no increased threat of exposing people, property, or infrastructure to geotechnical or seismic hazards. In addition, the Project is not subject to any greater seismic risk than any other site within the Central City subregion of the City of Los Angeles. Therefore, with implementation of the recommended mitigation measures, any potential geologic or seismic impacts would be reduced to less than significant levels.

ARCHITECTURAL/HISTORIC RESOURCES

Impacts: The proposed Project would not result in any adverse effects to historic resources. There are no historic resources located on the Project site. Those properties adjacent to the Project site, evaluated as 5S3 (i.e., 1037, 1100 and 1140 South Flower Street) are not eligible for federal, State, or local designation. In addition, they are not considered historic resources under CEQA. Therefore, the impact of the project on properties identified as 5S3 would be considered less than significant. In addition, the proposed Project would not result in significant impacts to the Petroleum Building or Hotel Figueroa. The proposed Project would not impact the Variety Arts Center, adjacent to the Project site, as Project structures will be set back from the Variety Arts Center, thus minimizing any impact upon this historic five-story building. In addition, the front façade of the Variety Arts Center will not be blocked by the Project development or operation.

Mitigation Measures: No significant impacts upon historical resources have been identified, however, the following mitigation measure would apply to protect against destruction of paleontological resources that may be encountered during construction:

1. If unknown paleontological, archaeological and/or cultural materials are discovered during any grading or construction activity, work will stop in the immediate area.

Upon such discoveries the contractor shall immediately notify the client and the City of Los Angeles. A paleontologist and/or archaeologist shall be consulted to determine the discovery's significance and, if necessary, formulate a mitigation plan, including avoidance alternatives, to mitigate impacts. Work can only resume in that area with the approval of the City of Los Angeles and paleontologist and/or archaeologist.

2. New construction adjacent to the Variety Arts Center shall respect its historic character through conformance with the Secretary of the Interior's Standards for Treatment of Historic Properties.

Adverse Effects: No significant impacts to historical resources would occur.

IV. ENVIRONMENTAL IMPACT ANALYSIS

A. LAND USE

1. ENVIRONMENTAL SETTING

a. Existing Land Use

Existing land uses within and in the vicinity of the Project site include STAPLES Center; the Los Angeles Convention and Exhibition Center; and a mixture of commercial, office, small hotel, medical, wholesale/retail, light industrial, residential uses and surface parking. The Project site will be developed over two areas: the Olympic Properties and the Figueroa Properties, which are further described in Section II.B, Project Location.

(1) Existing Uses on the Project Site

As discussed in Section II.B., Project Location, the Project site is generally located east and west of South Figueroa Street, between Olympic Boulevard on the north and Pico Boulevard on the south. The Olympic Properties encompass a roughly three-block area and the Figueroa Properties encompass a roughly four-block area.

Table 5 on page 89 and the corresponding Figure 15 on page 90 describe the existing land uses within the Olympic Properties and Figueroa Properties. The Olympic Properties are currently occupied exclusively with surface parking lots associated with STAPLES Center (Land Use Nos. 1, 2 and 3 on Figure 15 on page 90 and Table 5). Existing uses on the Figueroa Properties are predominately surface parking lots associated with STAPLES Center; however, several small service/mechanical buildings and a 40,000-square-foot subterranean warehouse occupy a portion of the Figueroa Central development area between 11th and 12th Streets. The Figueroa Properties are summarized as Land Use Nos. 4, 5, 6, and 7 on Figure 15 and Table 5. There are no other permanent buildings, no commercial businesses (other than parking operations), and no residences located on the Project site.

(2) Adjacent Land Uses

Immediately north of the Olympic Properties is a mixture of retail and commercial facilities and residential buildings, including a retail tire store, an automobile service and repair center, medical offices, apartment buildings, other offices (i.e., Salvation Army and the California PTA),

Table 5

EXISTING LAND USES ON PROJECT

Map No.	Address (approx.)	Land Use	Building Description	Parking Spaces
Olympic Properties				
1	940-1112 Olympic	surface parking	STAPLES Parking Lot (#2)	884
2	800-930 Olympic	surface parking	STAPLES Parking Lot (#3)	1,190
3	901-931 Olympic	surface parking	STAPLES Parking Lot (#4)	185
Figueroa Properties				
4	700-790 Olympic	surface parking	STAPLES Parking Lot (#9)	148
5	1143 Flower	commercial/warehouse	service/mechanical buildings	
6	1100-1130 Figueroa	surface parking	STAPLES parking (Lot #6 and 7)	367 (plus 22 bus)
7	1200-1220 Figueroa	surface parking	STAPLES Parking (Lot #5)	475

Source: PCR Services Corporation, December 2000

hotels (i.e., Hotel Figueroa and the Inn Towne Hotel), service/assembly facilities (Salvation Army), and a car wash. This type of mixed land use continues to the north until the downtown high-rise office towers, approximately one-quarter mile to the north, become the prominent land use. Adjacent uses to the Figueroa Properties are the Downtown Holiday Inn Hotel, located on the southeast corner of Olympic Boulevard and Figueroa Street (north of the Figueroa Central development area); the former Family Ford Dealership (now vacant), on the northeast corner of Pico Boulevard and Figueroa Street (south of the Figueroa South Properties), and the Variety Arts Center of Los Angeles, at 940 S. Figueroa Street (north of the Figueroa North development area).

Immediately east of the Figueroa Properties are various wholesale, retail, office, and commercial facilities, along with vacant buildings and surface parking lots, including several clothing stores, a stationery store, and an electronics store. The First Methodist Church, which includes a "Children's Learning Center," is located at the southeast corner of Flower Street and Olympic Boulevard. A mixture of commercial uses, apartment buildings, and medical facilities, including the California Hospital Medical Center, are found further south and east. The Metro Blue Line Pico Station is located on Flower Street, north of Pico Boulevard. Mixed commercial, retail and residential uses are located to the south of the Convention Center, and extend south of the Santa Monica Freeway (I-10).

West of the Harbor Freeway (I-110), is the Pico Union neighborhood, a dense mixed use area characterized by wholesale, retail, light industrial, and residential uses. The 10th Street Elementary School is located on the southwest corner of Valencia Street and Olympic Boulevard, across the Harbor Freeway and approximately 1,100 feet west of the Project's westernmost

Figure 15 Existing Land Uses

boundary (i.e., Olympic West Properties). Mid-rise apartment buildings are found along Olympic Boulevard between the 10th Street Elementary School and the Harbor Freeway, west of the Project site.

(3) Adjacent STAPLES Center and Los Angeles Convention and Exhibition Center

To the south and west of the Project site are STAPLES Center and the Los Angeles Convention and Exhibition Center facilities (the “Convention Center”). STAPLES Center, a 950,000 square foot sports and entertainment complex, which opened in October 1999, is located at the southwest corner of 11th Street and Figueroa Street. STAPLES Center is the home of the National Hockey League’s *Los Angeles Kings* professional hockey franchise, the National Basketball Association’s *Los Angeles Lakers* and *Los Angeles Clippers* professional basketball franchises, and the Arena Football League’s professional indoor football franchise, the *Los Angeles Avengers*. Besides these major league sporting venues, STAPLES Center hosts a wide range of other events, including family shows, collegiate athletics, premier boxing matches, all-star games, award shows, concerts, entertainment shows, and special events, such as the Democratic National Convention held in August 2000.

The Convention Center initially opened in 1971 with the completion of what is now known as the West Hall. A major expansion of the Convention Center was completed in 1993 with construction of the 347,000 square-foot South Hall. The South Hall is connected to the West Hall by a two-story conference/meeting room area that bridges over Pico Boulevard. The West and South Halls, combined with the smaller Petree, Concourse, and Kentia Halls, provides a total of approximately 870,000 square feet of exhibit hall and meeting room space. The entire facility is located east of the Harbor Freeway on approximately 35-acres bounded by Figueroa Street, Pico Boulevard, Venice Boulevard, and Cherry Street.

Gilbert Lindsay Plaza, a five-acre landscaped pedestrian plaza, is located along South Figueroa Street, immediately east of the Convention Center-West Hall and immediately south of STAPLES Center. This Plaza serves as a gathering place and as a pedestrian entry to the Convention Center-West Hall and as a staging and drop-off area for busses serving STAPLES Center and the Convention Center. Vehicle parking for STAPLES Center and the Convention Center is provided in several on-site parking structures and surface lots within the Project site and at various locations serving the Convention Center. Deliveries and truck access for the Convention Center are provided at the West Hall truck dock on Cherry Street or the South Hall truck dock at Convention Center Drive.

b. Relevant Land Use Plans

The Project is located within the South Park Area of the Central Business District Redevelopment Project Area of the City of Los Angeles. All development activity on-site is subject to the land use regulations of the *Central Business District Redevelopment Plan*, the City's *Central City Community Plan*, and the *City of Los Angeles Zoning Code*. The City's *General Plan Framework*, adopted in December 1996, the *Downtown Strategic Plan* and the *South Park Development Strategies and Design Guidelines* also provide guidance on land use issues relating to area planning and potential site development. The Project site is also located within the six-county planning area of the Southern California Association of Governments (SCAG), the southern California region's federally-designated metropolitan planning organization, which is responsible for preparing the *Regional Comprehensive Plan and Guide (RCPG)* and the *Regional Transportation Plan (RTP)*. The Project site is included within SCAG's City of Los Angeles subregion. The policies contained in each of these plans that pertain to the Project are described below.

In general, adopted land use policies for the downtown Los Angeles area encourage the development of regionally-oriented attractions that serve to concentrate activities in the downtown core and to provide for regional housing development. The Project generally serves to implement such policies, as discussed below.

(1) City of Los Angeles General Plan Framework

The *City of Los Angeles General Plan Framework (General Plan Framework)*, adopted in December 1996, provides current general guidance on land use issues for the entire City. In the Long Range Land Use Diagram for Metro Los Angeles, shown on pages 3-9 of the *General Plan Framework*, the Project site is contained within an area designated as the Downtown Center. Land uses that are encouraged by the *General Plan Framework* on Downtown Center properties include:

- Major visitor and convention facilities.
- Government offices.
- Uses as recommended by the *Downtown Strategic Plan*.
- Corporate and professional offices, retail commercial (including malls), offices, personal services, eating and drinking establishments, telecommunications centers, entertainment, major cultural facilities (libraries, museums, etc.), commercial overnight accommodations, and similar uses.
- Mixed-use structures integrating housing with commercial uses.
- Multi-family housing (independent of commercial).

- Major transit facilities.
- Inclusion of small parks and other community-oriented activity facilities.

General (highway-oriented) commercial uses such as gasoline and automotive service, lumber and building supplies, nurseries, and similar uses are discouraged in the Downtown Center.

As defined in the *General Plan Framework*, the Downtown Center is the "principal government and business center of the region, with a worldwide market. It is intended to be the highest density center of the City and hub of regional transportation."⁸ The Center is intended to provide a significant number of jobs and to include non-work destinations that generate a high volume of trips. Consequently, it is to function as a hub of regional bus lines or rail transit. Typically, a downtown center is a place of high-density development, with physical form substantially differentiated from that of the lower density neighborhoods of the City.

The function, scale, and identity of the Downtown Center distinguish it as a unique place of national and international importance, a primary destination for businesspersons and travelers from around the world. As a goal of the *General Plan Framework*, the Downtown Center should be maintained as the primary economic, governmental, and social focal point of the region. To support this goal, Downtown Center development should reflect a high design standard. Additionally, nighttime uses should be encouraged and public safety enhanced to meet the needs of residents and visitors.

The *General Plan Framework's* objective for the Downtown Center is to provide for the continuation and expansion of government, business, cultural, entertainment, visitor-serving, housing, industries, transportation, supporting uses, and similar functions at a scale and intensity that distinguishes and uniquely identifies the Downtown Center.

(2) Los Angeles General Plan and Central City Community Plan

The *Los Angeles General Plan (General Plan)* contains objectives, policies, and programs to guide development in Los Angeles for the next twenty years. The City of Los Angeles implements its *General Plan* through Area Community Plans, Specific Plans and *City of Los Angeles Zoning Code (Zoning Code)*,⁹ which regulate uses and the physical size and organization of structures and other spaces.

⁸ *City of Los Angeles, Citywide General Plan Framework, December 11, 1996, page 3.*

⁹ *Los Angeles Municipal Code, Section 12.0, et seq.*

The *Central City Community Plan (Community Plan)* was adopted in 1974, and most recently amended in October 1989. The *Community Plan* states that development in the South Park Area should be people-oriented, focusing on employees, visitors, shoppers and residents. The *Community Plan* designates the South Park Area north of Pico Boulevard as generally High Density Housing and Regional Center Commerce.¹⁰ Regional Center Commerce is not specifically defined in the *Community Plan*, however, this area allows a maximum average floor to area ratio (FAR) of 6:1, and generally encourages the development of large commercial uses, convention-related hotel rooms, new offices, and retail facilities that are oriented to stores serving regional shoppers.¹¹

Relative to uses on the Project site, the *Community Plan* designates all of the Olympic Properties as Regional Center Commerce. For the Figueroa Properties, the *Community Plan* designates the western half as Regional Center Commerce, while the eastern half of the Figueroa Properties is designated for High Density Residential uses. The *Community Plan* allows certain commercial uses in the designated residential areas. The type and intensity of such commercial uses are delineated by [Q] conditions under a Qualified zoning designation.¹² The *Community Plan* is currently being amended, however, the proposed amendment does not affect the designations for the Project site.

The *Community Plan* designates the adjacent STAPLES Center and Los Angeles Convention and Exhibition Center, located south and west of the Project site, as Commercial/Regional Center. The entire Convention Center is designated specifically as a Convention Center use and related Convention Center uses and activities.

(3) City of Los Angeles Zoning Code

The entire Olympic Properties are zoned General Commercial (C2-4D). Properties immediately adjacent to the north and south of the Olympic Properties are also zoned C2-4D, as shown on Figure 16 on page 95. The Harbor Freeway separates the Project site from properties immediately to the west, which are predominantly zoned CM-1 (Commercial Manufacturing). The C2-4D zone and associated height district allows a maximum FAR of 6:1. Various provisions of Zoning Code Section 12.14 (C2 Commercial Zone) allow such specific uses as hotels, restaurants, amusement enterprises, mini-shopping centers, offices, auditoriums and arenas, parking lots and parking buildings.

¹⁰ *Central City Community Plan, pages CC-3 and CC-4.*

¹¹ *Ibid., page CC-4.*

¹² *The symbol [Q] in a zoning designation indicates a qualified classification. This classification places restrictions on the uses of the property and assures development compatible with the surrounding uses.*

Figure 16 Existing Zoning

The western half of the Figueroa Properties is zoned General Commercial (C2-4D) and is subject to the same requirements as discussed under Olympic Properties, above. The eastern half of the Figueroa Properties is zoned Qualified Multiple Dwelling ([Q]R5-4D), as shown in Figure 16 on page 95. Adjacent off-site properties to the east of the Figueroa Properties are also zoned [Q]R5-4D. Specified uses allowed under R5-4D zoning include single family dwellings, multiple family dwellings, hotels, museums, hospitals, and parking uses. The Qualified [Q] zoning designation, generally assigned to the central portion of South Park Area, covers approximately 60 acres. This zone designation permits a mixture of residential and commercial uses. This zone generally limits uses to the following:

- Residential uses permitted in the R5 zone;
- Hotels, motels, and apartment hotels;
- Parking buildings, provided such parking is accessory to the main use of the lot or accessory to the main use of another lot not more than 1,500 feet distant therefrom;
- Any other use permitted in the C4 zone within buildings which were in existence on the lot prior to rezoning;
- Any other use permitted in the C4 zone not to exceed 2:1 FAR; and
- Any other use permitted in the C4 zone with an FAR at 2:1 to 6:1, provided that the Planning Commission finds:
 - The proposed development will be desirable to the public convenience or welfare;
 - the proposed development will be in harmony with the objectives and intent of the *Central City Community Plan*;
 - the City Planning Commission and the Community Redevelopment Agency Board have determined that the proposed development conforms to the Redevelopment Plan;
 - the proposed development will not have an adverse impact on existing or planned housing development in the vicinity; and
 - the proposed development will not reduce the potential for future housing development on any other property planned for housing use in the *Central City Community Plan*.

STAPLES Center and the portion of the Los Angeles Convention and Exhibition Center located north of Pico Boulevard are currently zoned General Commercial (C2-4D) and are subject to

the same requirements as discussed under Olympic Properties, above. A conditional use permit was issued by the City for the permitted uses associated with the Convention Center and STAPLES Center to help establish limitations and conditions under which each facility operates.

(4) Central Business District Redevelopment Plan

The *Central Business District (CBD) Redevelopment Plan* was prepared by the Community Redevelopment Agency (CRA) of Los Angeles and adopted in 1975 to provide specific guidance for land use decisions in the CBD Project Area. The *CBD Redevelopment Plan* designates five “Development Areas” within the Central Business District Redevelopment Project Area (“CBD Project Area”) to provide more specific guidance and policies within each development area. The CBD Project Area, shown in Figure 17 on page 98, generally encompasses the downtown area of Los Angeles and is roughly bounded by the Hollywood Freeway (US-101) on the north, Alameda Street on the east, the Santa Monica Freeway (I-10) on the south and the Harbor Freeway (I-110) on the west.

The Project site is located within the South Park Development Area (“South Park Area”), also shown in Figure 17. The South Park Area follows the CBD Project Area boundary on the west and south, and is bounded on the north by 8th Street and on the east by Main Street. Land uses designated for the South Park Area north of Pico Boulevard include public recreation and school sites, high density housing, Regional Center commerce and parking, and open space.

Relevant planning goals and objectives contained in Section 401 of the *CBD Redevelopment Plan* include:

- To assist in the development of Downtown as a major center of Los Angeles metropolitan region, within the context of the *Los Angeles General Plan* as envisioned by the [*General Plan Framework*] and *City-wide Plan* portions thereof.
- To create a climate that will prepare the Central City to accept that share of anticipated regional growth that is economically and functionally attracted to it.
- To organize growth and change, to reinforce viable functions, and to facilitate the renewal or rehabilitation of deteriorated and underutilized areas.
- To create a modern, efficient and balanced urban environment for people, including a full range of around-the-clock activities and uses, such as recreation and housing.
- To create a symbol of pride and identity which gives the Central City a strong image as a major center of the Los Angeles region.

Figure 17 Redevelopment Project Area Boundaries

- To achieve excellence in design, based on how Central City is to be used by people, giving emphasis to parks, green spaces, street trees, and places designed for walking and sitting.
- To provide a full range of employment opportunities for persons of all income levels.
- To establish an atmosphere of cooperation among businesses, special interest groups and public agencies in the implementation of the Plan.

(5) Downtown Strategic Plan

The Los Angeles City Council adopted the *Downtown Strategic Plan* in 1994 to present a comprehensive outline of policies, programs and projects designed to stimulate the renaissance of downtown through 2020. The *Downtown Strategic Plan* serves to advance the regional and citywide policies discussed above with respect to the concentration of activities downtown. The *Downtown Strategic Plan* sets forth focused initiatives that are appropriate to downtown and that are directed toward a more prosperous and equitable future. The *Downtown Strategic Plan* is based on the following strategies:

- Interrelating the three distinct composite areas of downtown; The City, The Center City, and The Markets,¹³ by developing these distinct composite areas of downtown individually and jointly to form a greater whole.
- Providing for continuity and change by taking into account existing problems and opportunities, and blending new construction with the historic fabric of the existing city.
- Eliminating neighborhood isolation by forming linkages to create greater access and more powerful economic interaction.
- Establishing physical frameworks for access, open space, and built form.

The *Downtown Strategic Plan* designates the Project site and the area to south and west as a convention center district. It designates uses to the north and immediately to the east as mixed use,

¹³ These three areas refer to geographic subareas of the downtown area. “The City” refers to the northern and western portions of downtown, including the Civic Center area, Bunker Hill, the “Financial Core” characterized by the area of high rise office building concentration, South Park, and the Convention Center. The “Center City” refers to the central core of the downtown area including the Broadway, Spring Street and Main Street corridors. “The Markets” refers to the eastern portion of downtown, east of Los Angeles Street, and includes Central City East and the garment, produce, and flower market areas.

including residential. Further to the east, uses are designated for primarily residential use. The *Downtown Strategic Plan's* objectives for tourism, specifically with respect to the Convention Center, include the following:

- To restore to Los Angeles its traditional image as a world magnet for tourist activity;
- To address the needs of all the visitors who visit downtown for business, conventions, trade shows and tourism;
- To maintain the Convention Center as the region's preeminent state-of-the-art convention facility;
- To generate a convention center district that links the facility with the surrounding neighborhoods and districts and provides access to the retail and community activities of the Financial Core and South Park;
- To fully develop all streets and parks to accommodate outdoor activities and to provide pedestrian linkages between this district and the rest of Downtown; and
- To provide downtown visitors with convenient access to all of Downtown's retail and visitor-oriented facilities.

One of the strategies specifically recommended by the *Downtown Strategic Plan* to achieve these objectives is to encourage the retention and further development of major sports venues such as Dodger Stadium, the Los Angeles Memorial Coliseum, and Exposition Park, and to promote the location of a National Basketball Association franchise at the center of the city. This strategy was partially fulfilled with the completion of STAPLES Center in October 1999.¹⁴

The *Downtown Strategic Plan* also identifies 16 proposed catalytic projects recommended to directly achieve the primary objectives of the *Downtown Strategic Plan* and to stimulate further actions. One of these proposed catalytic projects identifies the necessity for a convention headquarters hotel near the Convention Center and streetscape improvements to Figueroa Street. According to the *Downtown Strategic Plan*, implementation of this proposed convention hotel would:

- Contribute to the success of the Convention Center as a major, regional economic asset;

¹⁴ *The Downtown Strategic Plan does not specifically identify STAPLES Center as a major sports venue, since the Downtown Strategic Plan was adopted in 1994, prior to the initiation of specific planning for the area. The specific goal of locating a National Basketball Association franchise at the center of the City has been attained.*

- Generate activity and income that benefits the whole Downtown, and the City of Los Angeles;
- Showcase the Convention Center district and, therefore, enhance the overall image of Downtown; and
- Serve as a critical link among existing neighborhoods and districts.

(6) Figueroa Corridor Economic Development Strategy

The proposed Project would involve development of various elements that would be related to the *Figueroa Corridor Economic Development Strategy (Corridor Strategy)* that was approved by the Community Redevelopment Agency (CRA) in March 1998 to define a means to improve the Figueroa Street corridor economically and physically, and to reinforce its regional importance.¹⁵ The *Corridor Strategy* sets several objectives for the Corridor to:

- Capture the strengths of the corridor's resources and raise the awareness of the corridor as a vital regional destination for business, education, culture and entertainment;
- Create catalytic places and economic incentives that will stimulate development;
- Reposition Figueroa Street in the transportation network of Los Angeles by rebalancing the street to integrate pedestrian and transportation amenities with vehicular needs appropriate for a major civic boulevard; and
- Reinforce the overall identity of the corridor and the unique character of individual districts.

Further, the *Corridor Strategy* established six districts that focus attention upon the unique attributes of each that: (1) defines the prevailing character; (2) identifies desired anchor uses; (3) establishes design objectives; and (4) defines development priorities within open space and transportation uses. These districts extend along Figueroa Street from Vernon Avenue (Exposition Park) on the south, to Wilshire Boulevard on the north.

The proposed Project is situated within the Downtown Events Center District, which extends from Venice Boulevard (just north of the I-10 Freeway) to 9th Street (James M. Wood Boulevard). Other prominent development within the Downtown Events Center District includes STAPLES

¹⁵ CRA/LA, *Figueroa Corridor Economic Development Strategy-Final Draft*, January 12, 1998, approved by CRA/LA March 5, 1998.

Center, the Convention Center, the Variety Arts Center, California Hospital Medical Center, the Hotel Figueroa, the Downtown Holiday Inn, the Fashion Institute of Design & Merchandising (FIDM), Grand Hope Park and several residential developments.

The *Corridor Strategy* identifies “strategic projects” within each district and also provides a “future vision” to serve as a guide to development planning. Due to the adjacency of the properties within the Downtown Events Center District to STAPLES Center and the Convention Center, strategic projects are identified that “focus on hotels and event- and entertainment-related uses, which are programmed to capture a greater share of expenditures from the corridor’s existing employee, student and visitor base, and to capture a greater share of the regional entertainment market by broadening the area’s appeal.”¹⁶ Further, the *Corridor Strategy* emphasizes the importance of improving the walking experience within the Downtown Events Center District by implementing various strategic projects that establish linkages with the Metro Blue Line Pico Station and other transit facilities within the Figueroa Corridor.

(7) South Park Development Strategies and Design Guidelines

An adjunct to the *CBD Redevelopment Plan* and the *Downtown Strategic Plan* is the *South Park Development Strategies and Design Guidelines (Guidelines)*. These *Guidelines* were jointly prepared by the South Park Task Force and the South Park Stakeholders Group (Stakeholders), with support from the CRA. The Stakeholders represent the diverse interests of South Park Area businesses, residents, and property owners. The Stakeholders’ role is to coordinate community improvement programs, promote general downtown beautification, and address such issues as graffiti removal, litter pick-up, increased security, and marketing. They continue to work with the community to identify community improvement solutions and are seeking to institute a business improvement district. The *Guidelines* establish a basis for the economic, physical, and social development and revitalization of the South Park Area.

The *Guidelines* provide guidance for development in the South Park Area by encouraging the creation of a pedestrian-oriented, live/work community where people live in proximity to their place of work. Strategies for the future development of the South Park Area build upon existing centers of activity and identify linkages by creating prominent streetscape segments that are targeted for improvement. Gateways, which serve as identifiable points-of-entry, leading into the South Park Area, are located to reinforce pedestrian character and express the community’s attributes. Linkage improvements are intended to provide a continuous, pleasant environment for pedestrians and to facilitate connections between South Park’s activity centers and downtown. The *Guidelines* identify the east side of Figueroa Street between Pico Boulevard and 11th Street as a linkage and suggests providing visual enhancements that are complementary to the Convention Center.

¹⁶ *Ibid.*, page 15.

The *Guidelines* identify five key development proposals to stimulate appropriate development within the South Park Area. One of these proposals applies directly to the Project site, while the other four apply to other areas of the South Park Area. “Convention Center North” was proposed for the Olympic Properties portion of the Project site, and conceptually includes: a 20-story, convention-oriented hotel; a convention-supporting hotel facility; a five-story international trade show facility; and parking adjacent to the Harbor Freeway. Convention Center North was envisioned in the *Guidelines* as implementing the *Downtown Strategic Plan's* objectives for enhancing the Convention Center.

(8) Regional Comprehensive Plan and Guide

SCAG's *Regional Comprehensive Plan and Guide (RCPG)* was adopted in 1996 as a policy document that sets broad goals for the southern California region and identifies strategies for agencies at all levels of government to use in guiding their decision-making. It includes input from each of the 13 subregions that make up the Southern California region (which is comprised of Los Angeles, Orange, San Bernardino, Riverside, Imperial, and Ventura Counties). The Project site is within the boundaries of the City of Los Angeles subregion, which encompasses the entire City of Los Angeles.

Adopted *RCPG* policies related to land use are contained primarily in Chapter 3, Growth Management. The growth management policies in the *RCPG* encourages local land use actions that could ultimately lead to the development of an urban form that will help minimize development costs, save natural resources, and enhance the quality of life in the region. Specific growth management policies are divided into four main categories: (1) growth forecasts; (2) improving the regional standard of living; (3) maintaining the regional quality of life; and (4) providing social, political, and cultural equity.

The policies related to growth forecasts provide guidance to SCAG in forecasting growth for the region and, therefore, are not directly applicable to the Project. However, several policies related to the *RCPG* goals in the other three categories are applicable, including:

- a. Regional Standard of Living
 - Encourage patterns of urban development and land use that reduces costs on infrastructure construction and make better use of existing facilities.
 - Support local jurisdictions' efforts to minimize the cost of infrastructure and public service delivery, and efforts to seek new sources of funding for development and the provision of services.

b. Regional Quality of Life

- Encourage existing or proposed local jurisdictions' programs aimed at designing land uses which encourage the use of transit and thus reduce the need for roadway expansion, reduce the number of auto trips and vehicle miles traveled, and create opportunities for residents to walk and bike.
- Encourage local jurisdictions' plans that maximize the use of existing urbanized areas accessible to transit through infill and redevelopment.
- Encourage developments in and around activity centers, transportation corridors, under utilized infrastructure systems and areas needing recycling and redevelopment.
- Encourage planned development in locations least likely to cause adverse environmental impact.

c. Social, Political, and Cultural Equity

- Encourage employment development in job-poor localities through support of labor force retraining programs and other economic development measures.

d. In addition to the specific land use policies adopted by SCAG, the Regional Mobility Element (RME) of the RCPG, which is SCAG's principal transportation policy, strategy, and objective statement, contains two goals relevant to land use decisions that pertain to the Project:

- Encourage land use development patterns that complement transportation investments.
- Foster land use decisions that encourage alternatives to the automobile.

2. PROJECT IMPACTS

a. Significance Thresholds/Methodologies

The analysis of land use impacts considers both consistency of the project with adopted plans and policies that govern land use on the project site and the compatibility of proposed uses with adjacent land uses.

A significant impact related to land use plan consistency would result if a project were found to be in substantial conflict with either of the following:

- The land use designation set forth by the *Community Plan* or relevant zoning regulations;
- The applicable goals, policies or objectives contained within the *City of Los Angeles General Plan*, the *Community Plan*, *CBD Redevelopment Plan*, regional plans or other adopted City or CRA plans, as identified in Section IV.A.a(1), Relevant Land Use Plans.

A significant impact related to land use compatibility would result if the interface of physical and operational characteristics of the Project were found to be substantially incompatible with the surrounding land use. The determination of compatibility is based upon a survey of land uses in the area, in combination with the analysis of the physical development, construction and operational characteristics of the Project.

b. Analysis of Project Impacts

The Project includes a major convention hotel with a capacity of 1,200 rooms; a second 600-room hotel; up to 1,115,000 square feet of retail/entertainment/restaurant uses, including a 7,000-seat live theater; up to 870,000 square feet of residential uses (approximately 800 dwelling units); up to 300,000 square feet of office space, including medical offices and a sports medicine center; a health/sports club of up to 125,000 square feet; an open-air plaza to feature year-round venues; realignment of a portion of 12th Street; and combined support parking integrally located throughout the Project site.

All necessary Project approvals would be sought from the City, which could include, but are not necessarily limited to the following: (1) approval of a specific plan; (2) discretionary actions for the Olympic North and Figueroa North development areas which may include, without limitation, conditional use permits and variances to allow office, medical offices, retail, wireless telecommunication facilities, parking, and other uses permitted by the zoning, and actions to approve a commercial corner, master liquor licenses, general plan amendment, community plan amendment, site plan review, shared parking, off-site parking, urban design, and any required findings or actions for development within the existing [Q]R5 zoning; (3) other discretionary actions which may include, without limitation, vesting tract maps, lot line adjustments, and other subdivision actions; revocable permits, street vacations and realignments, or other approvals for off-peak or temporary closure of 11th Street between Figueroa and Georgia Streets; (4) a Development Agreement or amendment thereto; (5) an Owner Participation Agreement or a Disposition and Development Agreement or amendment thereto; (6) a Reciprocal Easement Agreement or amendment thereto; and (7) other agreements or actions of the City in furtherance of the Project.

(1) Land Use Consistency

This analysis discusses the Project's consistency with the provisions and requirements of the various policy plans and regulations which govern planning and development in the portion of downtown Los Angeles nearest to the Project.

(a) City of Los Angeles General Plan Framework

The Project would be consistent with the *General Plan Framework's* land use objectives for the Downtown Center by contributing to its identity as a unique place of national and international importance. It would also contribute by providing entertainment and visitor-serving opportunities by achieving the full economic potential of the Convention Center and serve in maintaining the Downtown Center as the social and economic focal point of Los Angeles. The Project is expected to reflect a high design standard and the parking and lighting proposed for the Project site would be consistent with *General Plan Framework* policies relating to encouraging nighttime uses, enhancing public safety, and improving transit access to meet the needs of residents and visitors. Consequently, the Project is consistent with *General Plan Framework* policies related to the Downtown Center and no significant impacts would result.

(b) Los Angeles General Plan and Central City Community Plan

The Regional Center designation established for the Olympic Properties and the western half of the Figueroa Properties corresponds to the hotel, entertainment, retail, restaurant, office, and parking uses proposed at these Development Areas. The high-density residential zone designation for the eastern half of the Figueroa Properties allows certain commercial uses controlled by zoning Q conditions. The Q classification for the Figueroa Properties permits the proposed residential and hotel development that is anticipated for the Figueroa Central and Figueroa South Development Areas. In support of the adjacent STAPLES Center and the Convention Center designation as Commercial/Regional Center, the Project's related uses and activities will serve downtown visitors with a convention hotel and related entertainment and retail activities, and will promote expansion of the Convention Center to accommodate and hold large national conventions.

Project development standards and urban design character would be governed by a proposed specific plan that would allow a distribution of approved uses as proposed by the Project. The proposed specific plan would be consistent with the limitations of the *Community Plan* that allows a maximum 6:1 FAR over the majority of the Project site. The Project would be consistent with the goals and policies of the *Community Plan* by promoting the Central City as a concentrated center of high-intensity urban activities, including entertainment, residential, commercial, cultural, recreational, and appropriate industrial uses. The Project would not create significant impacts with regard to consistency with the *Los Angeles General Plan* or the *Central City Community Plan*.

(c) **City of Los Angeles Zoning Code**

All of the Olympic Properties are zoned General Commercial (C2-4D). This commercial zone and associated height district allows a maximum FAR of 6.0. The hotel, retail, restaurant, entertainment, Convention Center expansion, and parking structure uses proposed for the Olympic Properties are consistent with existing zone designations, but at a substantially lower overall density. The Olympic West Properties, adjacent to the Harbor Freeway, would be developed within the permitted building height and massing with a proposed FAR of 1.5. This subarea would have a height overlay of 100 feet above grade, with a supplemental height limitation to 150-foot above grade over 25 percent of this subarea. The Olympic East Properties would be developed to the maximum permissible FAR of 6.0, with a height overlay of 175 feet above grade and a supplemental height limitation of up to 600 feet over 15 percent of the subarea. The supplemental height or “tower” portion of the Olympic East Properties would be located on the northwest corner of the subject property and would accommodate the proposed convention hotel. This location also would accommodate a portion of the urban entertainment uses proposed for the Project. The proposed Central Plaza, providing open space and the main visual focal point for the Project, would also be located in this portion of the Project site. Development of the Olympic North Properties would include office uses, possibly related to sports medicine. The proposed development would be within a FAR of 3.0, which translates into a height overlay of 90 feet above grade and a supplemental height limitation of up to 200 feet above grade over 60 percent of the subarea.

The western half of the Figueroa Properties is zoned General Commercial (C2-4D), which allows development to occur up to a maximum 6.0 FAR. The eastern half of the Figueroa Properties is zoned Qualified Multiple Dwelling ([Q]R5-4D). Specified uses allowed under R5-4D zoning include single family dwellings, multiple family dwellings, hotels, museums, hospitals, and parking uses. The hotel, office, residential, and parking structure uses proposed for the Figueroa Properties are consistent with existing zone designations also at a lower density than the maximum allowed. The development proposed for the Figueroa Central Properties shall not exceed a FAR of 6.0, and allow development with a height overlay of 100 feet above grade with a supplemental height limitation up to 350 feet over 25 percent of the subarea and 450 feet over 10 percent of the subarea. The Figueroa South Properties would also be developed within a FAR of 6.0 with a height overlay of 100 feet above grade and a supplemental height limitation up to 350 feet over 20 percent of the subarea. The Figueroa North Properties would accommodate office, retail and restaurant uses, with structured parking. The proposed development would not exceed a FAR of 3.0, with a height overlay of 90 feet above grade and a supplemental height limitation up to 350 feet over 60 percent of the subarea.

The development of the Project would represent FARs between 1.5 and 6.0, all within the maximum 6.0 FAR allowed by the City for the Project site. As a result, the Project would be well within the height district limitations and allowable densities associated with this commercial zone as determined by the *Zoning Code*. Therefore, the height and bulk of the Project is below the

allowable maximum height and bulk of buildings under existing zoning and *CBD Redevelopment Plan* and *Downtown Strategic Plan* standards for proposed development, and no significant impact related to zoning would occur.

(d) Central Business District Redevelopment Plan.

The Project would be consistent with the *CBD Redevelopment Plan* by serving to implement several relevant goals and objectives, such as:

- Assisting in the development of Downtown as a major center of the Los Angeles metropolitan region;
- Contributing to the creation of a climate for regional growth;
- Facilitating the renewal of deteriorated and underutilized areas;
- Contributing to a modern, efficient and balanced urban environment for people by providing a range of entertainment, recreational, commercial and retail uses, including a full range of around-the-clock activities and uses, such as recreation and housing; and
- Providing a full range of employment opportunities for persons of all income levels.

Replacement of the existing interim parking and minor warehouse activities with uses that enhance the utilization of the Convention Center and STAPLES Center is consistent with the long-term vision for development in the South Park Area of the CBD Redevelopment Project Area. The Project is consistent with the land uses designated for the South Park Area north of Pico Boulevard, as it would provide a vibrant combination of hotels, residential, entertainment, restaurant, and retail uses in an area that has deteriorated because of neglect and poor maintenance. The Project would not conflict with the goals and objectives of the *CBD Redevelopment Plan*. Therefore, the Project would not create significant impacts with regard to consistency with the *CBD Redevelopment Plan*.

(e) Downtown Strategic Plan

The development of the Project would serve to implement several *Downtown Strategic Plan* objectives by renewing the traditional image of Los Angeles as a world magnet for tourist activity, providing downtown visitors with convenient access to retail and visitor-oriented facilities, and enhancing the perception of the Convention Center district as the region's preeminent state-of-the-art convention facility.

The Project is the type of catalytic project that would stimulate the downtown area, and provide support for other projects that are envisioned in the *Downtown Strategic Plan*. The Project would be consistent with the objective of the *Downtown Strategic Plan* by:

- Generating activity and income benefiting the whole of Downtown, and the City of Los Angeles;
- Showcasing the Convention Center district including STAPLES Center and, therefore enhancing the overall image of Downtown; and
- Serving to link existing neighborhoods and districts through the Downtown rail transit and other public transit.

The Project would also be consistent with the *Downtown Strategic Plan's* recommendation to provide entertainment, shopping, and other tourist attractions near the Convention Center to ensure a supportive environment for that facility. The Project is therefore consistent with the objectives of the *Downtown Strategic Plan*. The Project would not create significant impacts in regards to consistency with the *Downtown Strategic Plan*.

(f) South Park Development Strategies and Design Guidelines

Development of the Project would serve to implement the goals contained in the *Guidelines*. As discussed above, the Project would serve to fulfill the *Downtown Strategic Plan's* objectives for the Convention Center area, which is also an objective of the *Guidelines*. As discussed in Section IV.C, Population, Housing and Employment, of this Draft EIR, the Project is expected to increase area employment by providing an estimated 5,367 jobs, many of which could be filled by current area residents. Consequently, the Project would be consistent with the *Guidelines'* objective of creating a pedestrian-oriented, live/work community, in which people live in varying degrees of proximity to their place of work and with the *Guidelines'* strategy to build on an existing center of activity in South Park, near the Metro Blue Line Pico Station (designated in the *Guidelines* as an activity center).

The Project is also expected to stimulate other development within the South Park Area by encouraging economic investment in the area and achieving a quality urban design that uses unifying design elements, improvement of pedestrian areas and addition of landscaping. Project design features would also be consistent with the *Guidelines* through implementation of pedestrian linkages at Figueroa Street and 12th Street, across 11th Street to connect the proposed convention hotel with STAPLES Center and the Convention Center, and between the Figueroa Properties and the Metro Blue Line-Pico Station. The Project, therefore, is consistent with the goals of the *Guidelines*. The Project would not create significant impacts in regards to consistency with the *Guidelines*.

(g) Figueroa Corridor Economic Development Strategy

The proposed Project would serve to implement the hotel and entertainment objectives contained within the *Corridor Strategy*. In addition, the proposed residential and complementary retail and office uses within the proposed Project would establish the desired pedestrian linkages consistent with the objective to improve the walking experience within the Downtown Events Center District.

The proposed Project would also help to stimulate development and economic growth that is desired within the Downtown Events Center District as well as within the South Park Area. The Project would provide the desired convention hotel and residential land uses that would promote related growth opportunities for the Convention Center and establish a focal point for special events within the Figueroa Corridor. The proposed Project also contains an integrated streetscape plan as described in Section II.C, Project Characteristics, which would be implemented by the proposed specific plan that would define design features in accordance with the *Corridor Strategy's* Corridor Enhancement Plan. The Project, therefore, is consistent with the goals of the *Corridor Strategy*. The Project would not create significant impacts in regards to consistency with the *Corridor Strategy*.

(h) SCAG Regional Comprehensive Plan and Guide

Implementation of the Project involves the redevelopment of existing parking areas related to the operation of STAPLES Center. This type of infill development serves to implement several SCAG policies including, but not limited to:

- Maximizing the use of existing urbanized areas accessible to transit through infill and redevelopment;
- Potentially increasing public transit use by concentrating employment opportunities;
- Minimizing the need for new infrastructure;
- Implementing redevelopment in and around an activity center and in an area needing recycling and redevelopment; and
- Encouraging local job development.

The Project site is adjacent to the Metro Rail Blue Line-Pico Station. Metro Rail connections can be made from the Blue Line to the Red Line at the Metro Center Station (7th and Flower Streets), and to Los Angeles International Airport, via the Green Line. The Red Line now directly serves mid-Wilshire, Hollywood, North Hollywood, and Union Station, where it connects

with regional rail (Metrolink), interstate rail (Amtrak), and bus transit. Future employees and visitors to the Project can utilize these transit options.

Employment growth directly attributable to the Project will have a significant positive impact on employment in the Central City Area, and will assist in the recovery of downtown Los Angeles, which has been in decline since the recession of the 1990's. As referenced in Section IV.C., Housing, Population, and Employment, the Project is expected to provide approximately 800 new residential units and an estimated 5,367 full-time jobs (includes an estimated 24 existing jobs), which are well within the established growth parameters of both the Central City Area and the Los Angeles subregion as a whole. Accordingly, the Project's effects upon population and housing are considered to be neither adverse nor significant, and the Project appropriately implements the regional policies for the area.

No major new infrastructure facilities would be needed to service the site. Any necessary relocation of, or improvements to, existing infrastructure would enlarge the already extensively developed infrastructure in this area and would be consistent with the SCAG policy of maximizing use of existing urbanized areas through infill and redevelopment.

In addition, as a source of entertainment and a potential tourist attraction, the Project would attract activity to the Convention Center and the downtown area and serve as a catalyst for additional commercial redevelopment in the South Park Area. Moreover, the location of the Convention Center and adjacent Metro Blue Line would encourage expanded transit usage. Consequently, the Project would be consistent with SCAG urban development policy objectives. In response to the Notice of Preparation (NOP) circulated by the City of Los Angeles as part of the Project's environmental review process, SCAG submitted written comments dated September 18, 2000 (included in Appendix A of this Draft EIR). In the NOP comment letter, SCAG identified the *RCPG* policies it considers relevant to the Project. Table 6 on page 113 provides an analysis of Project consistency with these policies.

Based on the analysis of Project consistency with SCAG's *RCPG* policies provided in Table 6, the Project would be consistent with the *RCPG*.

(2) Land Use Compatibility

The Project's operational compatibility with STAPLES Center, the Convention Center, and the other immediately adjacent land uses are discussed below.

Implementation of the Project would involve the relocation of portions of the existing surface parking for STAPLES Center to integrated parking structures that will be located throughout the Project site. Existing activities and scheduled events at STAPLES Center and the Convention

Center may experience short-term disruption during construction. However, the Applicant intends to build a parking structure on the Olympic West Properties to serve existing STAPLES Center parking which currently utilizes parking lots located throughout the Olympic and Figueroa Properties. Further, the Applicant would have this parking structure developed prior to development of the other Olympic Properties, thus minimizing any anticipated impacts from parking disruption. Refer to Section V.F.2, Parking, for further analysis of potential parking impacts.

The Project would also address the proposed expansion plans for the Convention Center (also see discussion in Section III.B, Cumulative Development). Convention Center management has identified the southern portion of the Olympic West development Area as the preferred site, which, together with existing Convention Center property, would allow for a future addition of approximately 250,000 square feet of exhibit/meeting area and Convention Center parking. The Applicant has consented to reserve this portion of the Olympic West Properties as a “holding area” for future Convention Center expansion. This portion of the Project site would remain as surface parking within a reasonable period of time, although the area may be used for construction staging during development of the Project. Thereafter, the Applicant may elect to re-assign otherwise approved uses within the Project site to this holding area, as permitted by the proposed specific plan and approved Equivalency Program (see Section II.B, Project Characteristics). Therefore, the Project is compatible with the plans to accommodate the proposed Convention Center expansion.

The Project, like STAPLES Center and the existing Convention Center, would be a major visitor-serving facility that would attract large numbers of visitors and serve existing visitors, workers, and residents already located in downtown. The Project would also provide a focal point for downtown entertainment, dining, and retail opportunities; introduce the opportunity for a medium-high density downtown living experience; enhance the streetscape and pedestrian environment; and realize the full economic potential of the downtown area through development of a convention hotel. The Project would provide a supportive environment for visitors to the Los Angeles Convention and Exhibition Center and downtown. The increase in visitors to the area would also be generally supportive of tourist and commercial activities now occurring within the downtown area, including many surrounding properties. Events at STAPLES Center, the Convention Center, and within the Project usually occur at staggered times throughout the day. However, the potential for event schedules to overlap does exist, especially when events at all venues coincide on the same weekend. Also, the departure of weekday STAPLES Center and Convention Center patrons may occasionally coincide with the arrival of evening Project patrons during weekdays. The activity levels associated with individual and simultaneous events within and adjacent to the Project, while some patrons and surrounding land owners and tenants object, are commonplace within major entertainment and convention venues, as proposed for the Project site by all relevant land use plans.

Table 6

ANALYSIS OF PROJECT CONSISTENCY WITH SCAG RCPG POLICIES

Relevant Policy ^a	Analysis of Project Consistency
Growth Management Chapter	
3.01 The population, housing and jobs forecasts, which are adopted by SCAG's Regional Council and that reflect local plans and policies, shall be used by SCAG in all phases of implementation and review.	The analysis of population, housing, and jobs forecasts for the Project uses SCAG's current <i>Regional Transportation Plan (RTP)</i> projections. The Project is located within the City of Los Angeles subregion. Project-generated population, housing, and employment growth is within SCAG's forecasts for this subregion. Refer to Section IV.C, Population, Housing, and Employment, for further discussion of this issue.
3.03 The timing, financing, and location of public facilities, utility systems, and transportation systems shall be used by SCAG to implement the region's growth policies.	Development of the Project would occur incrementally over an approximately seven-year period. The project also includes infrastructure provisions for connecting to existing utility systems. In addition, the proposed roadway modifications would improve on-site circulation and support alternative/public transportation systems. The project would not include public facilities, although security measures and fire protection devices would be implemented on-site. As noted in Section IV.C, Population, Housing and Employment, the Project is consistent with regional growth projections, and actually provides beneficial uses to this part of downtown.
3.05 Encourage patterns of urban development and land use that reduces costs on infrastructure construction and make better use of existing facilities.	Refer to the response to Policy 3.03. The proposed Project entails revitalization and redevelopment of an older mixed residential/light industrial area served by existing public facilities and infrastructure. Wherever possible, the project would utilize and/or improve the existing infrastructure systems. The project would concentrate a mix of mutually supportive land uses, including residential, hotel, retail, restaurant, commercial, office, and entertainment uses.
3.09 Support local jurisdictions' efforts to minimize the cost of infrastructure and public service delivery, and efforts to seek new sources of funding for development and the provision of services.	The proposed Project would address on-site public infrastructure improvements, the installation of which would expand upon existing facilities and facilitate public service delivery to the Project site. In addition, the Project is located within the South Park Redevelopment Project Area and would support the Community Redevelopment Agency's redevelopment efforts.
3.10 Support local jurisdictions' actions to minimize red tape and expedite the permitting process to maintain economic vitality and competitiveness.	This policy pertains to the activities of local jurisdictions that are beyond the focus of individual development projects. However, Project implementation would boost economic vitality in the area by encouraging new private sector investment and would contribute to the diversification of the area's employment base through the expansion of hotel and entertainment uses, while encouraging convention-related businesses and the expansion of the Convention Center to enable it to compete on a global scale to attract larger conventions and events.
3.12 Encourage existing or proposed local jurisdictions' programs aimed at designing land uses which encourage the use of transit and thus reduce the need for roadway	The Project would concentrate a mix of mutually supportive land uses near an existing network of roadways, freeways, and transit corridors. Patron amenities to be provided on-site would encourage use of facilities and reduce the need for multiple vehicle trips. Project-generated employment would provide opportunities for local residents to reduce commute times and/or

Table 6 (Continued)

ANALYSIS OF PROJECT CONSISTENCY WITH SCAG RCPG POLICIES

Relevant Policy ^a	Analysis of Project Consistency
expansion, reduce the number of auto trips and vehicle miles traveled, and create opportunities for residents to walk and bike.	walk, bike or take transit to work. However, as discussed in Section IV.F, Transportation/Circulation, the projected increase in the on-site population would result in an increase in the number of vehicle trips to/from the Project site and an associated increase in vehicle miles traveled.
3.13 Encourage local jurisdictions' plans that maximize the use of existing urbanized areas accessible to transit through infill and redevelopment.	The Project entails the fulfillment of revitalization and redevelopment objectives for an area in the City of Los Angeles that is designated Regional Center. The project site would continue to be served by the MTA bus and LADOT shuttle service (DASH, local and regional lines), MTA Blue Line rail service and various other regional bus lines. Direct transfers to the MTA Red Line provide frequent service to Union Station and Hollywood and also permit convenient access to Metrolink commuter rail and Amtrak's regional/national rail service from Union Station. All of these interconnections would also be available for Project employees and visitors.
3.14 Support local plans to increase density of future development located at strategic points along the regional commuter rail, transit systems, and activity centers.	Implementation of the proposed Project would increase the density of development on a site located within the Downtown Events Center, as designated by the <i>Figueroa Corridor Plan</i> , which is well served by public transit systems, including rail, bus, and shuttle services, as discussed in the response to Policy 3.13.
3.15 Support local jurisdictions' strategies to establish mixed-use clusters and other transit-oriented developments around transit stations and along transit corridors.	The Project would concentrate a mix of mutually supportive land uses, including hotel, retail, restaurant, entertainment, office, and residential uses near existing public facilities, infrastructure, and transit corridors. As discussed above in response to Policy 3.13, the site is well served by public transit systems, including rail, bus, and shuttle services.
3.16 Encourage development in and around activity centers, transportation corridors, underutilized infrastructure systems, and areas needing recycling and redevelopment.	The Project facilitates the fulfillment of revitalization and redevelopment objectives for an area in the City of Los Angeles that is designated Regional Center. The Project site would encourage development in the Downtown Events Center, an identified activity center, as designated by the <i>Figueroa Corridor Plan</i> . As discussed above, existing public facilities, infrastructure, and transportation corridors serve the Project site. Existing commercial, entertainment and residential uses also surround the Project site.
3.17 Support and encourage settlement patterns which contain a range of urban densities.	The Project includes 800 residential units within close proximity to the commercial center of downtown Los Angeles. Project implementation would result in an increased density of development in a currently underutilized area where current trends and approved planning objectives of the City of Los Angeles encourage similar development. Surrounding land uses include commercial, underutilized light industrial and residential development of varying densities, which are regulated by local ordinances and planning policies.
3.18 Encourage planned development in locations least likely to cause environmental impact.	The Project entails the conversion of surface parking lot and redevelopment within an older, urbanized, and underutilized area of downtown Los Angeles. Project uses would be generally more intrusive in terms of noise, odors, and light than the existing parking lot uses located on-site. Although residential properties are located adjacent to the site, the development of more desirable commercial uses and the associated project operations would be consistent with current development objectives and site zoning and would result in few

Table 6 (Continued)

ANALYSIS OF PROJECT CONSISTENCY WITH SCAG RCPG POLICIES

Relevant Policy ^a	Analysis of Project Consistency
	significant impacts. Current remediation activities of existing hazardous conditions on-site are currently underway and will be completed prior to beginning Project construction on the affected site.
3.21 Encourage the implementation of measures aimed at the preservation and protection of recorded and unrecorded cultural resources and archaeological sites.	Archaeological and paleontological resources are not known to exist within the project area. However, if encountered during excavation and grading activities, any discovery of such resources would be treated in accordance with state and federal guidelines for disclosure, recovery, and preservation, as appropriate. New construction adjacent to the historic Variety Arts Center would be complementary and compatible in design in accordance with the City of Los Angeles' standards. Refer to Section IV.L, Historic Resources, for project design features and mitigation measures proposed in conjunction with these activities.
3.22 Discourage development, or encourage the use of special design requirements, in areas with steep slopes, high fire, flood, and seismic hazards.	The Project site does not contain any steep slopes or high fire risks. Drainage from the Project site is channeled through the Pico Boulevard Drain and the Cherry Street Drain to Ballona Creek. These drains are capable of accommodating the majority of storm water associated with a 100-year storm event without damaging consequences. In addition, as discussed in Section IV.K, Geologic and Seismic Hazards, the Project would meet seismic safety standards, and mitigation measures are recommended to reduce any seismic risks to acceptable levels.
3.23 Encourage mitigation measures that reduce noise in certain locations, measures aimed at preservation of biological and ecological resources, measures that would reduce exposure to seismic hazards, minimize earthquake damage, and to develop emergency response and recovery plans.	Refer to Sections IV.K, Geologic and Seismic Hazards, and IV.H, Noise, for analyses of potential Project impacts and associated mitigation measures aimed at reducing such impacts. As discussed in Section IV.I.2, Police, the Project would also include a crisis management plan to aid in the evacuation of the site and facilitate emergency response.
3.24 Encourage efforts of local jurisdictions in the implementation of programs that increase the supply and quality of housing and provide affordable housing as evaluated in the Regional Housing Needs Assessment.	This policy pertains to the activities of local jurisdictions and is beyond the focus of individual development projects. However, Project would include 800 residential units of which 20 percent (160 units) would qualify as being affordable and would be provided either onsite or offsite within the affected area. Refer to Section IV.C, Population, Housing, and Employment.
3.27 Support local jurisdictions and other service providers in their efforts to develop sustainable communities and provide, equally to all members of society, accessible and effective services, such as: public education, housing, health care, child care, social services, recreational	The Project would concentrate a mix of mutually supportive land uses, including hotel, retail, restaurant, entertainment, office, and residential uses in the downtown area, which provide good access to public services.

Table 6 (Continued)

ANALYSIS OF PROJECT CONSISTENCY WITH SCAG RCPG POLICIES

Relevant Policy ^a	Analysis of Project Consistency
facilities, law enforcement, and fire protection.	
Air Quality Chapter	
5.07 Determine specific programs and associated actions needed (e.g., indirect source rules, enhanced use of telecommunications, provision of community-based shuttle services, provision of demand management based programs, or VMT/emission fees) so that options to command and control regulations can be assessed.	As discussed above in response to Policy 3.13, the Project site is well served by public transit systems, including rail, bus, and shuttle services. Roadway modifications proposed as part of the project would support these alternative/public transportation systems, improve on-site circulation, and complement transportation improvements currently planned by the City of Los Angeles Department of Transportation. The Project would also include a comprehensive TDM program intended to address the transportation needs of future employees. Please refer to Section IV.E, Air Quality, for further discussion of emissions reduction strategies.
5.11 Through its environmental document review process, SCAG should help ensure that plans at all levels of government (regional, air basin, county, subregional and local) consider air quality, land use, transportation and economic relationships to ensure consistency and minimize conflicts.	This policy pertains to the activities of SCAG that are beyond the focus of individual development projects. However, Sections IV.E, Air Quality, IV.F, Transportation/Circulation, and this Section IV.A, Land Use, include analyses of project consistency with applicable local, county, regional, air basin, and state policies. Many of these plans and policies support a multi-disciplinary approach that incorporates air quality, land use, transportation, and economic relationships (e.g., MTA's CMP, SCAG's RCPG, and SCAQMD's AQMP). As part of the project evaluations, mitigation measures are recommended to minimize potential impacts and/or conflicts.
Water Quality Chapter	
11.07 Encourage water reclamation throughout the region where it is cost-effective, feasible and appropriate to reduce reliance on imported water and wastewater discharges. Current administrative impediments to increased use of wastewater should be addressed.	This policy pertains more to the activities of local jurisdictions or regional entities than to the Project. Reclaimed water is not currently available at the Project site. If reclaimed water is made available in the future, the Applicant shall connect to the system and use reclaimed water on-site for landscape irrigation and other purposes, as appropriate.
<p>^a Relevant policies have been excerpted directly from SCAG's Regional Comprehensive Plan and Guide. However, the policy numbers listed correspond with those provided in SCAG's NOP comment letter dated September 18, 2000, which is included in Appendix A of this Draft EIR.</p> <p>Source: PCR Services Corporation, December 2000.</p>	

The Project includes the creation of an open-air plaza which would serve to link the convention hotel, to be located on the Olympic East Development Area, past various retail and restaurant uses, and across 11th Street to STAPLES Center and the Convention Center. The plaza would create synergy between continuing activities at STAPLES Center, the Convention Center, and the general downtown area. The plaza would become a community focal point and would also

serve as a venue for special events and city-wide celebrations. The Project would also act to increase public use of Gilbert Lindsay Plaza and Figueroa Street by encouraging pedestrian activity in areas around STAPLES Center and the Convention Center. This combination of outdoor activities with other proposed entertainment, retail, and restaurant uses would be designed to create linkages between uses, as well as to adjacent development areas within the surrounding community.

Overall, the Project would combine with existing adjacent land uses to create a well-designed, modern, efficient, and balanced urban environment; including a full range of day and nighttime activities and uses that is desired and encouraged in order to achieve the long term realization of development strategies for this area of downtown. Therefore, the Project would be compatible with the majority of surrounding land uses.

3. MITIGATION MEASURES

The Project would not result in any significant environmental impacts upon known land use plans or surrounding land uses, and, therefore, no mitigation measures are required.

4. ADVERSE EFFECTS

The Project would be consistent with the *General Plan* land use designations, as implemented by the *Central City Community Plan*, for the site with the procurement of a specific plan, a general plan amendment to reference the specific plan, and other discretionary entitlements which may include a CUP for the sale of alcohol in connection with the proposed Project hotels, restaurant and entertainment uses, and potentially for the location of wireless communications equipment. The Project would also be consistent with relevant land use policies contained in the *CBD Redevelopment Plan*, *Downtown Strategic Plan*, the *South Park Design Guidelines*, the City's *General Plan Framework*, and the *SCAG RCPG*. Therefore, no significant impacts to land use compatibility and consistency with existing land use regulations are anticipated by the implementation of the Project.

5. CUMULATIVE IMPACTS

The Project would implement important local and regional goals and policies for the immediate Project area, which would assist the City of Los Angeles in achieving short- and long-term planning goals and objectives for the area. In general, these plans recognize an urban infill and intensification of existing uses and redevelopment of the existing commercial, retail, entertainment and hotel uses in the area, while preserving and improving the neighboring South Park Area

community character. Related projects under consideration in the surrounding area include land uses and densities which would implement and support important local and regional planning goals and policies as well. Therefore, no significant cumulative land use impacts are anticipated.

IV. ENVIRONMENTAL IMPACT ANALYSIS
B. AESTHETICS
1. VISUAL QUALITY

a. ENVIRONMENTAL SETTING

(1) Existing Visual Environment

(a) Land Use Context

The Project site is centrally located within the Downtown Center of the City of Los Angeles, as identified by the City of Los Angeles *General Plan Framework*. The Downtown Center encompasses an urbanized, densely developed area that serves as the central core of government, commerce, industry, culture, and entertainment for the City of Los Angeles. This area is bounded generally by the Hollywood Freeway and the Santa Monica Freeway on the north and south, respectively, the Los Angeles River on the east, and the Harbor Freeway on the west.

A mix of commercial facilities, wholesale/retail uses, light industrial uses and residential uses occupies properties surrounding the Project site to the north and east. Olympic Boulevard, which traverses the northern portion of the site, is a corridor of retail and commercial facilities and residential buildings. The downtown high-rise office towers are visually prominent to the north and east. A Holiday Inn Hotel, the historic Figueroa Hotel and Petroleum Building, and several new high-rise residential buildings are located adjacent to the northeastern edges of the site. The historic Variety Arts Center is located adjacent to the Figueroa Properties North. Adjacent to the Figueroa Properties on the east, on Flower Street, are various low- to mid-rise wholesale, retail, office, residential, institutional and commercial facilities.

West and south of the Project site are STAPLES Center and the Convention Center, which dominate the visual landscape in the area. STAPLES Center, which opened in October 1999, is located at the southwest corner of 11th Street and Figueroa Street. The facility includes over 950,000 square feet of building area and seats 20,000 persons, including approximately 160 luxury boxes and 2,500 club seats with office and retail uses concentrated along the Figueroa Street side to facilitate a pedestrian-oriented urban street edge. STAPLES Center is a curvilinear structure with its curved facade and walls of glass reflecting the curved glass and steel walls of the Convention Center's South Hall. Built with a massive supertruss, most of the exterior walls and roof are sloped. Sixty-

foot high walls of glass lean out over the sidewalks and adjacent plazas creating a dynamic contemporary look. The glass walls allow visual access to STAPLES Center's lobbies at night, which glow from interior lighting and exterior architectural lighting. The lobbies are especially visible from the pedestrian plaza in front of STAPLES Center at the southwest corner of 11th Street and Figueroa Street.

The Los Angeles Convention and Exhibition Center, is comprised of over 870,000 square feet of exhibit space, 64 meeting rooms, lobbies, restaurants and food courts. The Convention Center West Hall, which opened in 1971, and the Convention Center South Hall, completed in 1993 as part of a major expansion, are connected by a meeting room concourse that spans Pico Boulevard. The architectural firm of Gruen Associates/Pei Cobb Freed & Partners designed this expansion. It is comprised of two towering glass and steel pavilions and the connecting meeting room concourse. The contemporary building has an expansive, curvilinear, predominantly steel- and glass-sheathed exterior and a dramatic, multi-story glass pavilion marking the entry. The Convention Center and STAPLES Center are considered important architectural landmarks for the downtown area.

As shown in Section II.B., Project Location, the Project site consists of all or a portion of six City blocks located east and west of South Figueroa Street, between Olympic Boulevard on the north and Pico Boulevard on the south. The Olympic Properties, located to the north of STAPLES Center and the Convention Center, and the Figueroa Properties, located to the east of STAPLES Center and the Convention Center, are currently occupied by surface parking. Figueroa Properties Central is also occupied by three warehouse/mechanical buildings, one and two stories in height.

The Project site exhibits little topographic relief and there are no slopes or hillsides in the area. Existing landscaping on the site is limited to minimal ornamental landscaping. Landscaping in the general area is sparse and limited to periodic street trees lining the Project site along portions of Olympic Boulevard and Byram, Bixel and Georgia Streets; street trees along 11th and 12th Streets, 12th Drive and Gilbert Lindsay Drive; and street trees along Figueroa, Flower and Hope Streets. Trees are generally less than fully mature. The most extensively landscaped areas in the Project site vicinity are found in Gilbert Lindsay Plaza in front of the Convention Center and south of STAPLES Center. Each of the parking lots has fencing and extensive ground covering.

(b) Existing Visual Qualities

An evaluation of visual qualities encompasses the identification of visual resources in relation to the surrounding environment and in relation to the expected visual character of the area as articulated in applicable adopted City plans and policies. This evaluation recognizes that individuals respond differently to changes in the visual environment and that an adverse visual scene to one

person may represent an improved visual condition to another. As a result, this section is necessarily influenced by a degree of subjectivity.

(i) Visual Resources

Visual resources on and adjacent to the Project site may be characterized as urban features of the landscape, consistent with the location within a metropolitan setting. As such, existing visual resources include: the Los Angeles Convention and Exhibition Center; the historic Variety Arts Center, Petroleum Building and Hotel Figueroa; STAPLES Center; Gilbert Lindsay Plaza; and streetscaping and landscaping associated with buildings and public rights-of-way. Such elements of the landscape as the height and orientation of existing buildings, building setbacks, and sidewalks adjacent to the Project site may also be appropriately considered as integral components of the aesthetic character of the area, as they define the scale of the built environment at ground level and assist in defining visual access to the Project site.

STAPLES Center and the Los Angeles Convention and Exhibition Center, by virtue of their size and dramatic architectural design, are the most prominent buildings in proximity to the Project site and represent significant visual resources. These two buildings are also prominent at night, due to the spectacular architectural lighting and the glow from the building lobbies (see Section IV.B.2, Light and Glare, for further discussion of existing lighting conditions). The Variety Arts Center is listed in the National Register of Historic Places, the Hotel Figueroa is eligible for listing in the National Register and the Petroleum Building is designated as a Los Angeles Historic-Cultural Monument (see Section IV.L, Historic Resources). Although additional buildings and land uses throughout the Project area collectively contribute to the existing commercial and residential character of the neighborhood, Gilbert Lindsay Plaza constitutes the only other prominent visual resource present in the project area. The Plaza is the most highly landscaped area in the vicinity with a dense grove of adolescent willows that serves as a bus plaza and entryway to the Convention Center's West Hall and STAPLES Center. The surface parking lots and the warehouse/mechanical buildings found on the Project site do not possess unique or valuable aesthetic attributes, nor do they contribute demonstrably and positively to the local aesthetic character of the community.

(ii) Visual Access

Those landscape features that determine a viewer's line-of-sight from a vantage point define the available visual access, or viewshed within a given field of view. Existing views may be partially or substantially obstructed or wholly blocked by modification of the environment (e.g., grading, landscaping, etc). The State of California and the City of Los Angeles have formally

acknowledged the value of access to visual resources.¹⁷ A distinction is drawn in this analysis between public and private vantage points in order to identify the different categories of viewers affected. Public vantage points are those that are publicly accessible, such as streets, freeways, parks and vista points. Private vantage points are those that are located on private property.

(iii) Public Vantage Points

Public vantage points in the vicinity of the Project site are generally associated with public street and freeway corridors approaching or adjacent to the site. These include: the Harbor and Santa Monica Freeways; the elevated freeway interchange to the south; and Figueroa Boulevard, Olympic Boulevard, Flower Street, 11th Street, 12th Street, and Pico Boulevard. Views from these vantage points may be characterized as urban in nature. Freeway views encompass the panorama of the downtown skyline to the north and east, expanses of predominantly industrial and commercial development surrounding the Project site, and mixed light industrial, commercial, and residential land uses immediately adjacent to the Project site. Figure 18 on page 123 shows mapped vantage points of photographs included in this section. Figure 19, Photograph 1, on page 124 shows a typical view from Cherry Street adjacent to the Harbor Freeway in the vicinity of the Project site. The downtown skyline to the north constitutes the primary visual resource in the vicinity, while STAPLES Center and the Convention Center serve as the predominant visual focus for the immediate area. Due to the proximity and the scale of the Convention Center's southern and western facades, the Convention Center is the dominant visual focus from Harbor and Santa Monica Freeways interchange to the south.

Views from the streets surrounding the Project site are largely confined by development lining the street corridors. Due to the flat, relatively undifferentiated topography of the area, few long-range views are available from vantage points along street corridors. Views from Figueroa Street and 11th Street, adjacent to the Project site, are largely dominated by STAPLES Center and the Convention Center, as shown in Photographs 2 through 4 in Figure 19 on page 124 and Figure 20 on page 126. Views across the Figueroa Properties and from Olympic Boulevard to the north and east are comprised of high-rise commercial and residential buildings on Olympic Boulevard and Flower Street, as shown in Photographs 5 through 8 in Figure 20 on page 126, and Figure 21 on page 127.

¹⁷ See California Government Code Section 65302, which permits the Land Use Element of a General Plan to make provision for protection of aesthetic resources and views; *Nollan v. California Coastal Commission*, 483 US 825 (1987), where view protection was identified as a legitimate government interest; and the City of Los Angeles 1979 Scenic Highway Plan, where views of aesthetic resources are identified as meriting protection and enhancement.

Figure 18 Photograph Location Map

Figure 19 Photographs of Existing Project Site and Surrounding Area

(iv) Private Vantage Points

Commercial and residential uses north, south, and west of the Project site typically have short-range views of mixed-use development in the project area. As most surrounding development is one to two stories in height, existing views are dominated by STAPLES Center and the Convention Center. Long-range views exist from the commercial and residential properties along Olympic Boulevard, north of the Project site, from the upper floors of those building facades adjacent to Olympic Boulevard. Expansive views of STAPLES Center, Convention Center and dense urban development to the south are available from these buildings. Views of the Project site from high-rise structures located to the north and east are limited due to intervening development, however, the upper stories of the TCW building located at the corner of 9th Street and Figueroa Boulevard would have views of STAPLES Center, Convention Center and the Project site. Long-range views are available from land uses west of the Harbor Freeway and south of the Santa Monica Freeway including the downtown skyline to the north, which is partially obstructed by the Convention Center in the foreground.

(2) Policy and Regulatory Environment

The Project is located within the South Park Development Area of the Central Business District Redevelopment Project Area of the City of Los Angeles. All development activity on-site is subject to the development design regulations of the *Central Business District Redevelopment Plan* and the *City of Los Angeles Zoning Code*. The City's *General Plan Framework*, adopted in December 1996, the *Downtown Strategic Plan*, and the *South Park Development Strategies and Design Guidelines* also provide guidance on development design issues relating to potential site development. In general, adopted plans and policies for the downtown Los Angeles area encourage the development of regionally oriented attractions that serve to concentrate activities in the downtown core. These plans and policies identify the expected visual character of the project area resulting from the application of the following design standards.

(a) City of Los Angeles Urban Design Policies

The *General Plan Framework* provides the best indication of the City's vision for the future development of the Project site and vicinity. The Downtown Center is the principal government and business center of the region, with a worldwide market. It is intended to be the highest density district of the City as well as a hub of regional transportation. The Downtown Center is therefore intended to provide a broad range of goods and services supported by a variety of land uses, including industrial parks, corporate and professional offices, entertainment facilities, retail commercial centers, and other supporting uses to serve multiple communities.

Figure 20 Photographs of Existing Project Site and Surrounding Area

Figure 21 Photographs of Existing Project Site and Surrounding Area

The City has developed policies intended to promote distinct neighborhood and community identities and increase overall "liveability" for City residents through the development of attractive commercial corridors and visual amenities. These policies, contained within the Urban Form and Neighborhood Design Element of the *General Plan Framework*, address patterns of development intensity, building height, and other structural elements that determine the City's physical character and visually differentiate centers or districts, such as open space, transportation corridors, public facilities, activity centers, and focal centers. The primary aesthetic policy of the *General Plan Framework* applicable to the Project site acknowledges that the built form of regional centers will vary by location and specifies that regional centers should contain pedestrian-oriented areas and design elements.

The segment of the Harbor Freeway (I-110) between Martin Luther King, Jr. Boulevard and the Hollywood Freeway (US-101) interchange is designated as a Scenic Highway (city route) in the City's adopted Scenic Highway Plan, in acknowledgement of the views of the downtown high-rise urban core. The Project would be visible from a segment of this Harbor Freeway corridor, which passes immediately west of the Project site and is elevated adjacent to STAPLES Center and the Convention Center. However, views are of short duration due to automobile speeds and are intermittent in nature due to the presence of STAPLES Center, Convention Center, and other development along the freeway. According to the Scenic Highway Plan, designation of a highly urbanized Scenic Highway indicates that consideration should be given within the scenic corridor (i.e., the area visible from a scenic highway) to development-related design review, signage control, street lighting, landscaping, green median strips, walkway design, and amenities such as murals and fountains.

The *Downtown Strategic Plan*, which provides focused planning and development initiatives and programs for the geographic subareas comprising downtown, designates the Project site and area to the southwest as the Convention Center District. Land uses to the north and east are designated by the *Downtown Strategic Plan* as mixed use, including residential uses. The *Downtown Strategic Plan* recommends a series of landscaped, pedestrian-friendly streets around the Convention Center to eliminate the perception that the facility is isolated and to increase pedestrian activity and links to the "Financial Core" (the Downtown area characterized by the high rise office building concentration). Figueroa and 12th Streets are emphasized in this recommendation.

The Project is located within the Central Business District (CBD) Redevelopment Project Area. The CBD *Redevelopment Plan* has designated distinct Planning Areas and established general standards for development design. Accordingly, the Project is located within the South Park Development Area of the CBD Redevelopment Project Area. Standards include limitations on building height and size, provision of adequate light and privacy between buildings, the creation of open space, and use of landscaping.

The *South Park Development Strategies and Design Guidelines* (“*Guidelines*”) are consistent with the Redevelopment Plan and are intended to serve as a catalyst for development in the area.¹⁸ Relevant to aesthetic considerations, the *Guidelines* identify linkages, which are prominent streetscape segments targeted for improvements and gateways which are identifiable point-of-entry intersections leading into the South Park area of the CBD. Linkage improvements are intended to provide a continuous and pleasant environment for pedestrians through the use of such elements as landscaping, selective sidewalk widening, distinctive paving materials for sidewalks and crosswalks, street furniture, and information kiosks.

Linkages or prominent streetscape segments targeted for improvements identified in the *South Park Development Strategies and Design Guidelines* within and adjacent to the Project area include: the east side of Figueroa Street between Pico Boulevard and 11th Street, both sides of Figueroa Street between 11th and 9th Streets; along Olympic Boulevard between Francisco and Main Streets; 11th Street between Figueroa and Hope Streets; Hope Street between Olympic and Venice Boulevards; and Olympic Boulevard between Figueroa and Los Angeles Streets. Gateways or identifiable point-of-entry intersections, located along linkages, are suggested in the *Guidelines* as opportunities to reinforce South Park’s pedestrian character, announce arrival into South Park, reflect the specific nature of their context, and provide images that will come to define South Park. The intersection of Figueroa Street and Olympic Boulevard, adjacent to the Project site, is identified as a gateway. Linkages along Figueroa Street and along Olympic Boulevard are identified to create a connection between this gateway and the gateway identified for Eighth Street and Hope Street.

Figueroa Street is further identified within the *Guidelines* as a view corridor, with the Convention Center serving as the predominant orientation landmark from which views of the downtown skyline are available. The Convention Center is also recognized as an activity center around which future development should be planned to enhance locations where people gather and disperse. The *Guidelines* express recommendations for the design of new development so as to maintain existing view corridors and activity centers.

The proposed Project would involve development of various elements that would be related to *The Figueroa Corridor Economic Development Strategy* (“*Corridor Strategy*”) that was approved by the Community Redevelopment Agency (CRA) in March 1998 to define a means to

¹⁸ *This is an advisory document developed by CRA in cooperation with the South Park Stakeholders Group. The South Park Development Strategies and Design Guidelines, while developed for consistency with the Central Business District Redevelopment Plan and Downtown Strategic Plan, are not adopted by the City or the CRA and are not binding requirements. The document is intended to serve as guidance for development and revitalization of the South Park Section of the City (see Section IV.A, Land Use for further discussion).*

improve the Figueroa Street corridor economically and physically, and to reinforce its regional importance.¹⁹

Further, the *Corridor Strategy* established six districts to focus attention upon the unique attributes of each that: 1) defines the prevailing character; 2) identifies desired anchor uses; 3) establishes design objectives; and 4) defines development priorities within open space and transportation uses. These districts extend along Figueroa Street from Vernon Avenue (Exposition Park) on the south, to Wilshire Boulevard on the north.

The proposed Project is situated within the Downtown Events Center District, which extends from Venice Boulevard (just north of the I-10 Freeway) to 9th Street (James M. Wood Boulevard). Other prominent development that is within the Downtown Events Center District includes STAPLES Center, the Convention Center, the Variety Arts Center, California Hospital Medical Center, the Hotel Figueroa, the Downtown Holiday Inn, the Fashion Institute of Design & Merchandising (FIDM), Grand Hope Park and several residential developments.

The *Corridor Strategy* identifies “strategic projects” within each district and also provides a “future vision” to serve as a guide to development planning. The *Corridor Strategy* emphasizes the importance of improving the walking experience within the Downtown Events Center District by implementing various strategic projects that establish linkages with the Metro Blue Line Pico Station and other transit facilities within the Figueroa Corridor. The intent of the Figueroa Corridor “vision” with respect to Figueroa Street character is to: (1) establish a physical character for the street that is commensurate with the significance of Figueroa Street to Los Angeles and, in particular, to the Central City; and (2) establish an overall continuity of physical form and, at the same time, a distinctive character in each district. The *Corridor Strategy* emphasizes the importance of developing a visual identity for the Corridor through the improvement of visual continuity along its entire length. The *Corridor Strategy* further states that implementation of streetscape improvements will achieve that end and benefit businesses, pedestrians and transportation users. These streetscape improvements include: installation of street banners; development of a signage program; engagement of local artists; and coordinating pedestrian amenities and transit elements.

(b) Signage Regulations and Policies

(i) City of Los Angeles Sign Regulations

The City of Los Angeles regulates the placement, construction, and modification of all exterior signs and sign support structures through Division 62 (Building Code) of the *City of Los*

¹⁹ *Community Redevelopment Agency of the City of Los Angeles, Figueroa Corridor Economic Development Strategy-Final Draft, January 12, 1998, approved March 5, 1998.*

Angeles Municipal Code (LAMC). Building permits must be obtained from the Department of Building and Safety for any proposed signs, and electrical permits must be obtained for signs illuminated by electrical lighting. Specific *LAMC* requirements and restrictions are dependent upon signage type; however, general constraints on design, construction, materials, potential for hazard to traffic, and determination of such hazard are applicable. Specifically, signs located within 500 feet of a freeway that are perceptible by motorists shall be subject to road hazard evaluation by LADOT prior to issuance of applicable permits. In addition, signs located within 2,000 feet of a freeway shall be subject to review by the Department of Building and Safety to determine that the sign will not be viewed primarily from a freeway or an on-ramp or off-ramp. This determination is based upon whether the sign may be viewed clearly for a greater distance from the freeway than from an adjacent surface street. The Project site is also subject to specific State-mandated signage regulations due to its location in proximity to roadways and the Harbor and Santa Monica Freeways. The *CBD Redevelopment Plan* states that signs shall be permitted in the CBD Redevelopment Project Area only in conformity with State statutes and local codes and ordinances.

(ii) Community Redevelopment Agency Skyline Signage Policy

CRA has the authority to review and approve identification signs at or near the top of all buildings within the CBD Redevelopment Project Area. The CRA has therefore developed the Skyline Signage Policy Framework, incorporating flexible guidelines consistent with City ordinances governing signage.²⁰ The policy establishes the guidelines related to signage area, compatible materials, number of signs, identification symbol, nighttime identity, and adaptability. One of the guideline objectives is to contribute to a cohesive Downtown skyline image. Another objective states that while principal contributors to the skyline image should include a limited number of distinctive, articulated architectural landmarks, all buildings should contribute visual interest to the skyline and have a clear identity within the Downtown community. In addition, CRA encourages consideration of signage design during development of the architectural program, to assure that signage criteria are considered while building design is still flexible.

(iii) South Park Signage Recommendations

The *South Park Development Strategies and Design Guidelines* cite the tendency for uncontrolled signage to prioritize maximum visibility to motorists at the expense of the pedestrian environment and overall visual quality. Two categories of signage are addressed: municipal signs and private signs. Municipal signage standards suggest the provision of unified signage with designs for place identification and vehicular circulation, as well as orientation maps, directional signs and tourist information boards in areas of pedestrian concentration. Private signage standards include the integration of signage with building architectural elements, consideration of the

²⁰ *Community Redevelopment Agency of the City of Los Angeles, Skyline Signage Policy Framework, adopted January 13, 1986.*

pedestrian viewing environment, development of clear graphic signage for parking lots and integration with fencing and screening elements, and the elimination of billboards.

The plans and policies identified above provide the applicable design criteria and standards used to evaluate the Project's consistency with the expected visual character of the project area as defined by these plans and policies.

b. PROJECT IMPACT

(1) Significance Thresholds/Methodologies

A project would have a significant impact upon visual qualities if any of the following apply:

To visual resources:

- If the project introduces elements that would substantially detract from the existing visual character or primary visual resources of the area.
- If significant features or elements (such as structures, public plazas, art or gardens) that contribute positively to the visual character of an area are removed or demolished.

To visual access:

- If the project would obstruct significant views from public street and freeway corridors or private property vantages currently enjoyed.

To policies and regulations:

- If the project introduces elements that would substantially detract from the expected visual character of the area as articulated in applicable adopted City plans and policies:

(2) Analysis of Project Impact**(a) Project Characteristics**

The Project includes the construction of: two hotels, a 1,200-room convention hotel and another 600-room hotel; retail/entertainment/restaurant uses, including a live theater; office space; health club; an open-air plaza to feature year-round venues; approximately 800 residential units; and combined structured and surface parking located throughout the Project site. As described in Section II, Project Description, the proposed Project site is located east and west of Figueroa Street, between Olympic Boulevard on the north and Pico Boulevard on the south and is bisected by Figueroa Street. Existing parking lots and structures on the Figueroa Properties Central would be removed to accommodate the Project. Figure 12 in Section II.C., Project Characteristics, depicts the conceptual plan for the proposed Project.

Because project design is presently in the conceptual stage, no specific project building design is available for evaluation. Conceptual plans have been prepared according to Project Design Guidelines discussed below (see also Section II.C., Project Characteristics). The Project Design Guidelines have been developed to: 1) create a special downtown sports and entertainment district; 2) provide a rich mixture of uses that supports a lively, round-the-clock environment; 3) focus activity on the street, creating a safe and vibrant pedestrian-oriented district; 4) encourage a public atmosphere with distinctive visual elements involving signage lighting and landscape/hardscape features; and 5) build strong linkages that connect the district to downtown and the surrounding urban fabric. Key elements of these Design Guidelines are listed below:

(i) Site Planning**a. Building-Street Relationship:**

- Build a strong relationship between the ground level of a building and the street.
- Configure buildings to maintain a continuous edge along the street; define the street and other important public/common spaces.
- Orient buildings to the street and provide generous windows and openings at the street level.
- In particular, maximize retail store storefronts and entrances along the street and other important public/common spaces.

b. Open Space:

- Provide a diversity of outdoor spaces (size, shape, type, use) throughout the Specific Plan area; those spaces that are used as gathering spaces should emphasize public safety.
- Outdoor spaces may include plazas, courtyards, pedestrian walks (paseos), terraces, and planted gardens.
- In general, plazas and courtyards should be well-defined spaces that take on the character of outdoor rooms.
- Building architecture and landscape features should contain plazas and courtyards.

c. Circulation, Access & Parking:

- Locate pedestrian walks to provide convenient access to transit facilities.
- Minimize the number of sidewalk curb cuts that provide access to parking and service/loading facilities to facilitate pedestrian activity, make them safe where they are located, avoid blind corners and steep slopes of ramps approaching street level.
- Screen and buffer service/loading facilities.
- Screen adjacent public streets, open space and other sensitive uses from service/loading facilities; ideally service and loading facilities will be provided at the subterranean level.
- Locate access to service docks away from primary pedestrian walks and main building entrances.

d. Sun/Shade:

- Locate towers to maximize their exposure to light and air, as well as define view corridors.
- Locate building towers so as to minimize mid-day and afternoon shade upon streets and other important public/common spaces.
- Rely upon trees, canopies, arcades, and similar features to regulate the opportunity for sun and shade along public streets and within other important public/common spaces.

(ii) Architecture**a. Architectural Character:**

- Buildings should be designed in a contemporary architectural style and character that is complementary to STAPLES Center and the Project as a whole.
- Residential, hotel, and mixed-use buildings along Flower Street should complement the South Park District.
- In general, building architecture should present a clean, contemporary style reflecting the sports and entertainment nature of the proposed Project.

b. Massing and Scale:

- Use building mass and orientation to define and place strong visual emphasis on the street and other important public/common spaces.
- Buildings should provide a “podium” that maintains the desired continuous building edge along the street, and shall not exceed the established maximum base height.
- Towers will rise above the podium, in accordance with the above-described Sun/Shade guidelines, and shall not exceed the established maximum tower height.
- A pedestrian-oriented scale should be maintained at the street level. Building articulation and detail, decorative elements, transparent glass, and the use of quality materials will minimize the scale of the architecture.

c. Articulation and Fenestration:

- Use fenestration (windows and doors) to unify a building’s appearance and add to a street façade’s interest and three-dimensional quality.
- Provide well-marked, articulated building entrances.
- Building entrances should be differentiated by use.
- Retail storefronts should be clear glazing, encourage use of awnings where appropriate.

d. Material and Colors:

- Materials and colors should convey the special character, energy and ambiance of the overall Project.
- Storefronts should have clear transparent glazing; generally avoiding either tinted or reflective glass.
- Materials and colors should be compatible with the STAPLES Center and the Convention Center.

(iii) Landscape**a. Streetscape/Sidewalks:**

- Design streets and sidewalks for safe, comfortable and efficient movement on foot; protect and shade pedestrians.
- Provide landscape improvements such as street trees, street furniture, street lighting, and paving; street trees should be the primary landscape component.
- Plant street trees so as to define the street and sidewalk; provide consistency in species, size, and frequent spacing of trees along a street to create a pleasant rhythm and define the street and pedestrian environment.
- The design of street furniture and other street amenities should promote district identity and unify the area but avoid interfering with pedestrian flow.

The Project's streetscape and landscape concepts are based on reinforcing the hierarchy of streets as described below and shown in Figure 22 on page 137 and Figure 23 on page 138.

- *Grand Boulevard* - Figueroa Boulevard is designed as a grand boulevard with a formal design treatment. Street trees are to be palms planted as a processional colonnade alternating with large canopy trees to achieve an aura of grandeur. This street also operates as an important pedestrian corridor, and therefore provides a wide sidewalk (18 to 22 feet) that accommodates large crowds and significant sidewalk activity including outdoor café-style seating.

Figure 22 Streetscape Plan

Figure 23 Landscape Plan

- *Arterial Street* - Olympic and Pico Boulevards are significant avenues of vehicular traffic through the district. Large, spreading canopy trees without intervening palms are regularly spaced for a semi-formal appearance. A wide sidewalk (15 to 18 feet) is maintained to provide pedestrians with a comfortable distance from moving vehicles.
- *Collector Street* - Eleventh, 12th, Flower, Georgia and Francisco Streets are important pedestrian links to adjacent areas. Their design is to be pedestrian friendly with randomly planted canopy trees and sufficiently wide sidewalks (12 to 15 feet). Twelfth Street is realigned to create a safe and controlled intersection with the Convention Center drop-off road.
- *11th Street Temporary Closure* - Eleventh Street between Georgia and Figueroa Street permits temporary off-peak closure to vehicular traffic for special events and safe pedestrian flows. Closure is accomplished with attractive traffic barriers, removable bollards and/or special paving treatment that differentiate the portion of the street subject to temporary closure.
- *Service Street* - Cherry Street along the backside of the Convention Center and Figueroa East parking structure is primarily devoted to service and parking access. Narrower sidewalks are provided (10 to 12 feet) and columnar trees are irregularly spaced for an informal appearance.

b. Plazas/Courtyards/Paseos:

- Make plazas and courtyards comfortable for human activity such as standing, sitting, socializing, and eating.
- Plazas and courtyards should provide comfort in terms of shaded areas from summer sun and glare, and access to warming winter sunlight.
- Provide seating within plazas and courtyards with consideration given to noontime sun and shade; this may be a combination of permanent and temporary seats.

c. Roofscape/Terraces:

- Provide accessible outdoor building and rooftop terraces and congregation areas to augment the on-grade open space and landscape character of the site.
- Include trees and other plantings in permanent and temporary planters that will shade and add interest to the space.

- Outdoor furniture, including seating should be incorporated and placed with consideration to sun and shade and other factors contributing to human comfort.

d. Public Artwork:

- Provide opportunities for the incorporation and installation of outdoor and publicly accessible artwork throughout the Project, consistent with CRA art policy.

(iv) Lighting

a. Streetscape:

- Utilize streetlights and streetscape lighting to promote pedestrian safety and efficient circulation.
- Streetscape lighting should match the scale and character of district buildings and add to the identity of the area.

b. Architectural:

- Locate architectural lighting to promote public safety and support the Project's vitality and nightlife.
- Architectural lighting should complement the building.
- Shield lighting to minimize impacts and glare upon adjacent sensitive uses and roadways.

c. Landscape:

- Incorporate landscape lighting to promote public safety and support the Project's vitality and nightlife.
- Landscape lighting should be of a character and scale that relates to the pedestrian and highlights special landscape features.
- Shield landscape lighting to minimize impacts and glare upon adjacent sensitive uses and roadway.

d. Special Lighting and Signage Zone:

A Special Lighting and Signage Zone would establish signage and lighting standards and guidelines encompassing the frontage along Figueroa Street (between Pico and Olympic Boulevards), 11th Street (between Georgia and Figueroa Streets) and the intersections of Figueroa Street and Olympic Boulevard, Figueroa Street and 11th Street, and Figueroa Street and 12th Street. Lights sources permitted under the Special Lighting and Signage Zone would include:

- Billboard washes and spot lighting.
- Neon, cold cathode.
- Exposed Incandescent Lamps and Tivoli Lights.
- Search (xenon) Lights and Klieg Lights.
- Special Laser light shows.
- Jumbotron/LED/Electronic Readerboard lights.

(v) Signage**a. Wall Murals/Billboards/Jumbotrons/LED/Electronic Readerboards:**

- Accentuate the architecture of the Project and contribute to a lively and visually stimulating experience.

b. Way-finding Kiosks/Directories:

- Locate directory signs to guide and orient pedestrians to the Project and local transit options and its surroundings.
- The appearance of directory signs should contribute to the identity of the Project.

c. Regulatory Signs:

- Locate regulatory signs to clearly guide and direct visitors.
- Scale regulatory signs to motorists or pedestrians as appropriate.

d. Building Identification Signs:

- The location, size, and appearance of building identification signs should complement the architecture of the building and overall character of the Project.

e. Tenant Identification Signs:

- The location, size, and appearance of tenant identification signs should lend support to retail/street activity, complimenting the architecture of the building, and overall character of the Project.

f. Storefront Signs:

- Complement the storefront design and building architecture, as well as contribute to the shopping/entertainment experience desired for the Project.

g. Special Lighting and Signage Zone Standards:

- *Operating Hours:* Illuminated signs may be permitted to remain lit and operational from dusk to midnight.
- *Minimum Illuminated Sign Area:* A minimum aggregate surface area of 50 percent of an illuminated building sign shall be electronically animated, either by means of flashing borders, writing, pictorial representations, emblems or other figures of similar character or by means of a flashing sign surface serving as a field backdrop during operation.
- *Minimum Height for Illuminated Signs:* Signs shall not be located below a height of 10 feet, except illuminated storefront signs, and theater billboards.
- *Maximum Height for Illuminated Signs:* Signs shall not be located above a height of 150 feet, except building identity signs.

(vi) Special Features:**a. Central Plaza:**

- The Central Plaza should operate as the forecourt to the retail entertainment center, and as the central meeting/public gathering place for the Project.

- The Central Plaza should facilitate the connection with STAPLES Center Plaza, specifically, design elements should be continuous.
- Provide maximum flexibility in the use of the space, with a minimum of obstructions sited interior to the plaza.
- Employ lighting techniques that present a “high-tech” display and offer a unique and visually stimulating experience.
- Additionally, lighting should be of a character that accentuates the surrounding architecture, highlights special uses and activities, and contributes to the comfort and safety of the plaza’s occupants.
- Minimize glare upon adjacent properties, sensitive uses, and roadways; shield the special event lighting as necessary

b. 11th Street Temporary Closure:

- Articulate the design of the 11th Street temporary closure area to differentiate it from a standard street.
- The design and treatment of the 11th Street temporary closure area should unify this space with the central plaza and the entry plaza space (“Star Plaza”) of STAPLES Center, with special emphasis given to the paving design, curb treatments, and temporary street closure/detour devices.

(b) Construction

Construction activity typically involves disturbance of existing natural and man-made features and development of structures that are temporarily devoid of external treatments designed to promote a pleasant visual appearance. Construction at the Project site would involve the construction of temporary barriers designed to screen much of this activity from view from adjacent streets and sidewalks. Construction activity may actually be a source of visual interest to pedestrians. Where feasible, the temporary barriers would provide view ports to view the on-going construction.

The corner of Figueroa and 11th Streets presently serves as a pedestrian gateway to the neighboring STAPLES Center and Convention Center for patrons who park in areas located to the north and east, including the Project site. As discussed in Section IV.F.3, Pedestrian Safety, a temporary covered pedestrian walkway would be provided along Figueroa Street and 11th Street, on the side of the streets adjacent to the proposed Project site, when needed, to ensure adequate

pedestrian access. However, this walkway, along with other temporary construction barriers, could also potentially serve as targets for graffiti and other unattractive visual features, if not properly monitored. If this occurs, a significant visual impact at an important gateway to STAPLES Center and the Convention Center would result from project construction. A mitigation measure has been included so that this potentially significant visual impact would be reduced to a less than significant level.

(c) Operation

(i) Visual Qualities

a. Visual Resources

The present character of the Project site and surrounding area is urban in nature and is dominated by the presence of STAPLES Center and the Convention Center, as previously discussed. The presence of the Project would serve to reinforce the role of this area as a center of activity, consistent with the *Downtown Strategic Plan* and the *CBD Redevelopment Plan*. The Project would connect the existing visual landmarks in this area. Due to the prominence of STAPLES Center and Convention Center relative to surrounding development, the focus of attention within the Project area would, therefore, expand to include the Project, thereby enhancing the image of the area as a unified activity center rather than individual buildings.

Development of the Project would alter the visual character of the site through replacement of the existing surface parking lots and warehouse buildings. The existing paved parking lots and warehouse buildings would be removed and hotels, entertainment, retail and residential buildings would be developed. While the Project would result in an intensification of development, Project Design Guidelines would ensure that the design of the Project would be contemporary in architectural style and character, complementary to STAPLES Center and the Convention Center. This would minimize potential for conflict between the architectural styles of the Project, STAPLES Center and the Convention Center and the potential for the Project to detract from STAPLES Center or the Convention Center. Unifying design elements to be employed for consistency among STAPLES Center, the Convention Center and the Project include architectural features, signage, lighting, landscaping and hardscaping. Service areas, parking garages above grade, and mechanical equipment would be situated out of view of adjacent roadways and buildings or would be screened by landscape or architectural barriers.

As described in the Project Design Guidelines and the Design Plan for the Project (see Section II.C., Project Characteristics), Project landscaping would promote a pedestrian-oriented environment, with activity focused on the street. This would be achieved through the proposed open spaces areas including streetscapes, entry forecourts, paseos, plazas/courtyards, roofscape terraces,

and the Central Plaza located across 11th Street from STAPLES Center. Deciduous canopy trees, tall rows of palms for special emphasis, flowers and plants, attractive paving and hardscape, and outdoor seating would be the primary landscape components of the Project's open space areas. The consistency of these features would further unify and define the area as a district.

The Project's streetscape concept would reinforce the hierarchy of streets by design and function, promote pedestrian safety and comfort, and build a strong interface between Project buildings and sidewalks. As shown in the hierarchy of streetscape design, presented in Figure 22 on page 137, Figueroa Boulevard would be developed as a "grand boulevard" with a formal streetscape. Less formal streetscaping, as proposed for the other surrounding streets, would also be design to promote pedestrian activity. The Project's streetscape plan would be consistent with the improvements to linkages or specific streetscape segments targeted for improvements in the *South Park Development Strategies and Design Guidelines*. The linkages defined by the *Guidelines* on the Project site along Figueroa Boulevard, Olympic Boulevard, and 11th Street would be visually enhanced and would provide a continuous, pleasant environment for pedestrians as recommended by the *Guidelines*.

All of the Olympic Properties are zoned General Commercial (C2-4D). This commercial zone and associated height district allows a maximum FAR of 6.0. The Project conforms (conditionally, in some cases) to the permitted uses within this zone designation. The Olympic West Properties, adjacent to the Harbor Freeway, will be developed within the permitted building height and massing with a proposed FAR of 1.5. This subarea would have a height overlay of 100 feet above grade, with a supplemental height limitation to 150-foot above grade over 20 percent of this subarea. The southern portion of this development area would accommodate the proposed extension of the Convention Center, thus creating a visual linkage between the existing and proposed convention facilities.

The Olympic East Properties will be developed to the maximum permissible FAR of 6.0, with a height overlay of 175 feet above grade and a supplemental height limitation of up to 600 feet over 15 percent of the subarea. The supplemental height or "tower" portion of the Olympic East Properties would be located on the northwest corner of the Property and would contain the proposed convention hotel. With the limited subarea application of the supplemental height, the tower would have a slender appearance giving the primary focus of development massing to the street level. The tower would be a dominant orientation landmark further "a beacon" identifying this area as a gateway to the South Park area. The height of the tower would also provide a visual linkage to the downtown high-rises to the north and east. This location also would accommodate a portion of the urban entertainment uses proposed for the Project. The central plaza, providing open space and the main visual focal point for the Project, would also be located in this portion of the Project site. Development of the Olympic North Properties will include office uses, possibly related to sports medicine. The proposed development will be within a FAR of 3.0, which translates into a height

overlay of 80 feet above grade and a supplemental height limitation of up to 200 feet above grade over 60 percent of the subarea.

The western half of the Figueroa Properties is zoned General Commercial (C2-4D), which allows development to occur up to a maximum 6.0 FAR. The eastern half of the Figueroa Properties is zoned Qualified Multiple Dwelling ([Q]R5-4D). Specified uses allowed under R5-4D zoning include single family dwellings, multiple family dwellings, hotels, museums, hospitals, and parking uses. The proposed hotel, office and residential uses within this subarea are consistent with existing zone designations. The development proposed for the Figueroa Central Properties shall not exceed a FAR of 4.5, and allow development per a height overlay of 100 feet above grade with a supplemental height limitation up to 350 feet over 25 percent of the subarea and 450 feet over 10 percent of the subarea. The Figueroa South Properties will also be developed within a FAR of 4.5 with a height overlay of 100 feet above grade and a supplemental height limitation up to 350 feet over 20 percent of the subarea. The Figueroa North Properties will accommodate office, retail and restaurant uses, with structured parking. The proposed development will not exceed a FAR of 3.0, with a height overlay of 90 feet above grade and a supplemental height limitation up to 350 feet over 60 percent of the subarea.

The development of the Project would represent FARs between 1.5 and 6.0, all within the maximum 6.0 allowed by the City for the Project site. Therefore, notwithstanding the increased height relative to STAPLES Center and the Convention Center, the Project would be well within the height district limitations associated with this commercial zone as determined by the *City of Los Angeles Zoning Code*. Therefore, the height and bulk of the Project is compatible with the height and bulk of buildings allowed under existing zoning and *CBD Redevelopment Plan* and *Downtown Strategic Plan* standards for proposed development, thus no significant impact upon visual resources would occur in this regard.

Although the height and bulk of the Project would present a contrast to some of the existing commercial and residential buildings located immediately to the north along Olympic Boulevard and east along Flower Street, the Project would be consistent with CRA/South Park residential redevelopment located one block to the north including the Metropolitan, Skyline, and Renaissance apartment developments. Additionally, the retail frontage and proposed street improvements along 11th and 12th Streets would promote a pedestrian connection to the east and the proposed residential uses would provide a linkage to the residential South Park neighborhood. The proposed Project development characteristics represent the development intensity and building heights expected of the area as articulated in applicable adopted City plans and policies. In addition, the extensive landscaping and walkways proposed around and through much of the Project would reflect the *Downtown Strategic Plan's* recommendation of a series of landscaped, pedestrian friendly streets around the Convention Center. The proposed streetscapes would enhance the existing aesthetic quality of the area and would place the emphasis on the street and other public/common spaces. This would soften the transition between the proposed Project and adjacent existing land uses. This

would represent a beneficial effect, as presently there is little transition between adjacent existing land uses and the surface parking lots, which do not contribute positively to the local aesthetic character of the community.

The front façade of the Variety Arts Center that faces Figueroa Street is considered the most important exterior building feature. The south and east faces of the building are currently utilized as advertising space (i.e., advertising walls) painted on architecturally unembellished facades. The advertisements are frequently changed. The proposed Project would include an office building located immediately south and east of the Variety Arts Center.

The proposed Project could result in an impact to the five-story Variety Arts Center if the proposed development were to tower above the Variety Arts Center, thereby resulting in a loss of visual access to the Variety Arts Center from the south and east. Even though a building podium and a building would be part of the same overall structure, only the podium could abut the Variety Arts Center. The potential building above the podium will be set back from the Variety Arts Center, thus minimizing any impact upon this historic five-story building. In addition, the front façade of the Variety Arts Center will not be blocked by the Project development or operation. The Variety Arts Center was originally designed to abut other buildings on all sides with the exception of the front façade facing Figueroa Street. In fact, until 1987, a hotel was located immediately south of the Variety Arts Center. Therefore, with the incorporation of Project design features, the loss of visual access to any of these three sides of the building, would not represent a significant impact to visual resources and no significant impacts are anticipated.

Potential development of the Figueroa North Properties would have a contemporary architectural style and character that is sympathetic to the Variety Arts Center building. The development of Figueroa Street as a “grand boulevard” will provide greater opportunities for pedestrians to view the Variety Arts Center in comparison with existing conditions. Although the proposed development would eliminate both commercial opportunities to advertise on the Variety Arts Center building walls and the visual interest generated by that advertising, the proposed development will recapture the original Variety Arts Center design approach and purpose by focusing views on the front façade of the building. The advertising, which is frequently changed, not only does not contribute to the historic context of the Variety Arts Center, but may actually detract or compromise some of the historic nature of this building. The proposed Project would not demolish or create incompatible uses that would result in a long-term loss of access to or substantial alteration of the Variety Arts Center during its operations. The design of the adjacent development would not result in buildings that are visually incompatible with the Variety Arts Center and, therefore, no significant impacts would occur.

As discussed above, unifying design elements would be employed for consistency among STAPLES Center, the Convention Center, and the Project further defining the area as a special downtown sports and entertainment district. The height and bulk of the Project would be compatible

with the height and bulk of buildings allowed under existing zoning and *CBD Redevelopment Plan* and *Downtown Strategic Plan* standards for proposed development. The Project would be consistent with planned development characteristics expected of the area and would provide pedestrian-oriented transitions between the Project and existing adjacent land uses. Design of the Project would not result in buildings that are visually incompatible with the Variety Arts Center. Therefore, the Project would not introduce elements that would substantially detract from the existing visual character or primary visual resources of the area and would not remove or demolish elements that contribute positively to the visual character of an area. No significant impacts to visual resources would occur.

(ii) Visual Access

The Project would be located within the viewshed of the Harbor Freeway and, to a lesser extent, the Santa Monica Freeway. Due to the elevation of the freeway and the height and mass of the Project relative to STAPLES Center and the Convention Center, the Project could become an equally prominent feature visible from the freeway, even considering that the Project would be within the foreground of the freeway viewshed only briefly. The construction of buildings on the existing surface parking lots within the Olympic Properties would reduce existing open views to the east, beyond the Project site. However, Project structures, especially the supplemental height or “tower” portions of the Olympic and Figueroa Properties would be dominant orientation landmarks visually defining the Project in the freeway viewshed. The towers would also provide a visual linkage to the downtown high-rises to the north and east.

The Project site would dominate views along Olympic Boulevard and Figueroa Street in the area, and would shift some of the prominent view of STAPLES Center and the Convention Center to the Project structures. STAPLES Center and Convention Center presently dominate views from Olympic Boulevard to the south and views to the west from Figueroa and Flower Streets in the few blocks adjacent to the proposed Project site. Construction of the proposed Project would reduce existing views of STAPLES Center and Convention Center from these locations. Although existing views of STAPLES Center and the Convention Center would be reduced, the Project would be consistent with height and zoning requirements and with the overall large-scale development pattern of STAPLES Center and Convention Center area. It would also be designed in an architectural style that would be complementary to STAPLES Center and Convention Center and the South Park District. In addition, views of STAPLES Center and Convention Center from the surrounding streets are limited to a few adjacent blocks due to surrounding development. Therefore, no significant impacts would result from the change in the visual environment.

The Project would be prominent in the viewshed of some commercial and residential properties immediately north of the Project site and would largely obstruct views to the south. However, STAPLES Center and the Convention Center currently block views to the south. Views of STAPLES Center and the Convention Center would be obstructed from northern vantage points

by the Project. Although the Project would be consistent with height and zoning requirements and with the overall large-scale development pattern of STAPLES Center and Convention Center area, the Project would potentially result in a significant impact to visual access. The actual extent of impact will be dependent on the final design of the Project. As the potential for a significant impact exists, it is conservatively concluded that the Project would result in a significant impact.

Development of the Project would increase the visibility of the site relative to the surrounding area. Views of the site would be available from a greater distance due to the building height of the Project. Project structures would be partly visible from surrounding streets, the Harbor and Santa Monica Freeways and other areas within a few miles in all directions. The heights of the Project structures would be consistent with the Downtown high-rise commercial development.

The Project would become part of the viewshed for the upper floors of surrounding high-rise buildings. Views from the upper stories of these structures would be disrupted by the Project. However, the view from these buildings provide a broad visual coverage of the area, and the Project site makes up only one element, or a small percentage, of that view. The Project would not entirely block any unique view from surrounding buildings. Also, the Project would be consistent with the urban character of this area and no substantial change in the character of views would be expected to result. Therefore, since the height and bulk of the Project is compatible with existing and planned development; and the Project would not remove a valued visual feature or largely obstruct a valued existing view; no significant impact on views from these buildings is expected.

(iii) Policy and Regulatory Compliance

City of Los Angeles Urban Design Policies

Proposed development is consistent with applicable General Plan Framework policies regarding the Downtown Center associated visual amenities and pedestrian accommodations. The overall development program would result in the elimination of existing paved parking lots and warehouse buildings which do not present exceptional visual qualities and is consistent with standards established by the Framework for high-quality development design. The unifying design features and landscaping would follow the *Downtown Strategic Plan*'s recommendation to create "pedestrian-friendly" streets, in particular by addressing pedestrian linkages along Figueroa, 11th and 12th Streets, and Olympic Boulevard. Project design features would also be compatible with the *South Park Development Strategies and Design Guidelines* regarding maintenance of view corridors, use of unifying design elements, improvement of pedestrian areas, and landscaping of street and building edges.

Signage Regulations and Policies

The Project would establish sign standards and guidelines encompassing the frontage along Figueroa Street (between Pico and Olympic Boulevards), 11th Street (between Georgia and Figueroa Streets) and the intersections of Figueroa Street and Olympic Boulevard, Figueroa Street and 11th Street, Figueroa Street and 12th Street, the Central Plaza and development facing the Central Plaza. Proposed signage associated with the Project may include a Jumbotron or LED monitor, an animated marquee, illuminated building identification, tenant identification, storefront signs, signs to aid wayfinding, and other graphic elements ranging from banners to interactive electronic displays. The Project may also include informational, directional or advertising signage. The analysis presented below discusses impacts associated with signage that can be perceived during daytime hours. The impacts associated with signage lighting are discussed in Section IV.B.2, Light and Glare.

Project Design Guidelines would be consistent with recommendations for private and public signage standards expressed in the *South Park Development Strategies and Design Guidelines*. Through application of the Project Design Guidelines signage design would be unified and contribute to the identity of the Project, would include integration of building architectural elements, would guide and orient pedestrians, and would be scaled to pedestrians or motorist as appropriate, as recommended by the *South Park Development Strategies and Design Guidelines*. The Project's proposed use of signage, graphics and lighting to define the Project as a distinctive place, emphasizing exciting and innovative expressions would be consistent with the *South Park Development Strategies and Design Guidelines* recommendations to establish a sense of place and reflect the unique identity of the Convention Center area.

Project signage would be subject to design regulations included in the Specific Plan. Design features which may be appropriate for developments such as the Project include the following: use of consistent nomenclature; use of typefaces which are easy to read; use of type sizes that are readable from the desired distance, but not so large as to appear out of scale; selection of sign colors which enhance legibility; determination of appropriate sign height based on sight line visibility; and consideration of the appropriateness of sign information relative to the location of the sign in question (i.e., visible from the freeway versus only visible from local streets). Project signage at or near the top of all buildings would also be subject to design review under the CRA's Skyline Signage Policy Framework. CRA has the authority to review and approve identification signs at or near the top of all buildings within the CBD Redevelopment Project Area.²¹ Project Design Guidelines would be consistent with recommendations for contributing to a cohesive Downtown skyline image and contributing distinctive, articulated architectural landmarks with visual interest and have a clear identity. The Project Design Guidelines designate the convention

²¹ *Community Redevelopment Agency of the City of Los Angeles, Skyline Signage Policy Framework, adopted January 13, 1986.*

hotel (proposed for Olympic East Properties) to serve as an identifiable landmark and orienting element on the skyline with rooftop identity signage that is elegantly signed and lit. Signage throughout the Project site will identify and define the Project. Project-related signage is proposed as part of the larger program of lighting, hardscaping and other improvements to the pedestrian environment, which is intended to contribute to revitalized street-level activity throughout the area. In particular, on-site signage focused on the intersection of Figueroa and 11th Streets would lend an element of activity and animation appropriate to the area's growing role as a major entertainment destination. Project signage would be consistent with the applicable plans and regulations, would complement STAPLES Center and Convention Center and would contribute to a sense of place reflecting the unique identity of the area and the creation of a major public outdoor “gathering place.” However, as the Project would introduce substantial signage to the visual environment, impacts to visual quality due to signage are significant.

c. MITIGATION MEASURES

(1) Construction

During construction the following mitigation measure would be implemented:

1. The Applicant shall ensure, through appropriate postings and daily visual inspections, that no unauthorized materials (such as graffiti or posters) would be posted on temporary construction barriers or temporary pedestrian walkways and that any such temporary barriers and walkways are maintained in a visually attractive manner throughout the construction period.

(2) Operation

Although no measures have been identified to mitigate significant impacts to visual quality during operations, urban design standards, defined in the Project's Specific Plan Design Guidelines (See Section II.C., Project Characteristics), have been incorporated into the proposed Project to ensure an appropriate aesthetic appearance. Project development plans will include specific siting of structures and facilities, structural design, signage design and landscaping measures. In addition, implementation of the design guidelines in the Project's Specific Plan would ensure consistency with the *General Plan Framework*, *Downtown Strategic Plan*, *CBD Redevelopment Plan*, and the *South Park Development Strategies and Design Guidelines*.

d. ADVERSE EFFECT

The proposed project is generally consistent with all applicable policies contained in the *CBD Redevelopment Plan*,²² the *Downtown Strategic Plan*, the *South Park Strategic Development Strategies and Design Guidelines* and the *City's General Plan Framework*. The proposed Project development characteristics represent the development intensity and building heights expected of the area as articulated in applicable adopted City plans and policies. The height and bulk of the Project would present a contrast to some of the existing commercial and residential buildings located in the immediately vicinity. However, the extensive landscaping and walkways proposed around and through much of the Project would enhance the existing aesthetic quality of the area and would place the emphasis on the street and other common spaces throughout the Project. In addition, the building podiums would also reduce project scale, the greater articulation of form, material and color would give the taller project buildings an attractive pedestrian oriented base. This would soften the transition between the proposed Project and adjacent existing land uses. This would represent a beneficial effect, as presently there is little transition between adjacent existing land uses and the surface parking lots, which do not contribute positively to the local aesthetic character of the community. The proposed Project would not introduce elements that would substantially detract from the Project area or remove any significant features or elements that contribute positively to the visual character of an area. The proposed Project would be consistent with the expected visual character of the area as articulated in applicable adopted City plans and policies. Mitigation listed above would reduce any temporary impact associated with construction activities to less than significant. The Project would obstruct views of STAPLES Center and the Convention Center from vantage points north of the Project site. Although the Project would be consistent with height and zoning requirements and with the overall large-scale development pattern of STAPLES Center and Convention Center area, the Project would result in a significant impact to visual access. Project signage would be consistent with the applicable plans and regulations, would complement STAPLES Center and Convention Center and would contribute to a sense of place reflecting the unique identity of the area and the creation of a major public outdoor “gathering place.” However, as the Project would introduce substantial signage to the visual environment, impacts to visual quality due to signage are significant.

e. CUMULATIVE IMPACT

The cumulative development analysis is based on the related projects plus background growth. The related projects that are currently planned in close proximity to the Project site are illustrated in the related projects map provided in Section III.B, Cumulative Development. These

²² As discussed in Section IV.A, Land Use, the Project is consistent with the *CBD Redevelopment Plan*. The parking lots, while not generally considered to be consistent with the *CBD Redevelopment Plan* on their own, are supportive of a land use that is consistent with the *CBD Redevelopment Plan*.

related projects include office, residential, hotel and retail land uses. As with the proposed Project, these projects involve the redevelopment of existing land uses into new uses which would cumulatively convert the existing visual character from aging low rise buildings and vacant lots to an urban infill redeveloped live/work area with pedestrian accommodations, consistent with the planned vision for the area. This trend would be expected to continue implementation of *General Plan Framework* policies promoting view corridors and visual amenities in the South Park area, as well as *Downtown Strategic Plan* and *CBD Redevelopment Plan* planning and development design goals. Cumulative development would also contribute to increased building density in the area. As visual quality is a function of design and massing, and this information is not currently available for the related projects, there is the potential for adverse impacts to visual quality. Therefore, impacts to visual quality would be cumulatively significant.

IV. ENVIRONMENTAL IMPACT ANALYSIS
B. AESTHETICS
2. LIGHT AND GLARE

a. ENVIRONMENTAL SETTING

(1) Introduction

(a) Light

Artificial light may be generated from point sources, focused points of origin representing unshielded light sources, as well as from indirectly illuminated sources of reflected light. The effects of proposed modifications of nighttime light conditions are contextual and depend upon the existing lighting environment, light intensity, and proximity to light sources. Nighttime illumination of properties with sensitive receptors may adversely affect certain land use functions, such as those of a residential or institutional nature (e.g., a hospital). Such uses constitute sensitive receptors as they are typically occupied during evening hours and are subject to disturbance by bright light sources.

(b) Glare

Reflective light or glare is primarily a daytime phenomenon caused by the reflection of sunlight or artificial light by highly polished surfaces such as window glass or reflective materials and, to a lesser degree, from broad expanses of light-colored surfaces. Reflective light is common in urban areas, where it can be an annoyance for residents and pedestrians and create hazards for motorists. Instances of adverse glare generation are typically associated with buildings with exterior facades largely or entirely comprised of highly reflective glass or other mirror-like material from which the sun reflects at a low angle in the periods following sunrise and prior to sunset. Where it is a result of sunlight striking a reflective surface at a low angle, glare is a stationary, but potentially regularly occurring, phenomenon intensified at certain times of year. During evening and nighttime hours, glare effects may result from vehicle headlights reflecting off polished surface of buildings or other structures, affecting other motorists or nearby residents. Glare generation is essentially a transitory phenomenon, as it is related to either moving vehicles or sun angles that vary according to seasons and time of day. Similar to light impacts, glare impacts may adversely affect residences and motorists, both of which are considered sensitive receptors. As no adopted City policies exist

regarding measurement of glare impacts, the determination of significance is generally subjective and relative to existing conditions.

(2) Project Vicinity

(a) Light

The area surrounding the Project site supports a variety of land uses. To the south of the Olympic Properties and to the west of the Figueroa Properties are STAPLES Center and the Los Angeles Convention and Exhibition Center facilities. Commercial, retail, residential, and hotel uses are generally located to the north along Olympic Boulevard, and wholesale and retail uses are generally located to the east along Flower Street.

The Project area exhibits relatively high ambient nighttime light levels due to the densely developed nature of this part of downtown, which contribute to a perceptible “glow” in the night sky visible from a distance of several miles in all directions. Light sources include overhead light standards lining the Harbor Freeway, streetlights and stoplights along the major and secondary surface streets adjacent to the Project site, illuminated billboards and other signs, security lights associated with buildings and structures, light emanating from building interiors, pedestrian lights within Gilbert Lindsay Plaza and on STAPLES Center and Convention Center grounds, and automobile headlights. A distinctive glow emanates from STAPLES Center’s exterior architectural lighting and from the interior lobby lighting, visible due to the exterior glass walls that allow visual access. The Variety Arts Center, directly north of Olympic Boulevard, between Figueroa Street and Flower Street provides another source of nighttime lighting. Two of the Variety Arts Center building sides are currently utilized as advertising space (i.e., advertising walls) painted on architecturally unembellished facades. A bank of spotlights from the adjacent surface parking lot sometimes lights these advertisements. Light levels are typically highest surrounding STAPLES Center and Convention Center and in proximity to intersections of major streets such as Figueroa Street and Olympic Boulevard. These light sources currently contribute to increased ambient nighttime illumination levels that spill over onto and illuminate adjacent sensitive uses.

(b) Glare

Glare generation within the project area is typically caused by light reflected off expanses of glass and polished facades of buildings. Due to the denser development and higher concentration of multi-story buildings along Figueroa Street (particularly north of the Project site) and, to a lesser degree, Olympic and Pico Boulevards (particularly east of the Project site), greater potential for the generation or reflection of daytime or nighttime glare would be expected along these major arterial roadways and at intersections than along secondary roadways. STAPLES Center and the Convention Center buildings, represent moderate sources of glare potential due to the glass façades

and pavilions and the broad, undifferentiated expanses of concrete and metal panels forming the façades. The sloped and curved features of the STAPLES Center glass walls reduces glare generation. Glass façades with low-reflectivity and setbacks from surrounding roads, however, prevent glare generation from causing substantial adverse impacts to surrounding land uses or motorists.

(3) Project Site

(a) Light

The Project site is predominately occupied by surface parking with two warehouse/mechanical buildings located on a portion of the Figueroa Properties. The Olympic and Figueroa Properties are primarily illuminated during evening and nighttime hours by parking lot lighting, security lights, pedestrian walkway lights and incidental landscape lighting; illumination is also contributed by the illuminated pavilions, exteriors, and grounds of STAPLES Center and the Convention Center. One distinctive source of lighting found on the Project site is the STAPLES Center marquee located on the southwest corner of the Olympic West Properties. The electronic message board is easily visible at night from the Harbor Freeway and surrounding areas. The Figueroa and Olympic Properties are less brightly illuminated than STAPLES Center or Convention Center.

Several land uses adjacent to the Project represent the primary sensitive receptors of nighttime lighting and are already exposed to high ambient lighting levels from adjacent streetlights and existing buildings. These sensitive receptors include the occupants of apartment buildings adjacent to the north end of the Olympic Properties along the north side of Olympic Boulevard and the south side of 9th Street; the Holiday Inn located on the southeast corner of the Olympic Boulevard/Figueroa Street intersection; the Figueroa Hotel located on the northwest corner of the same intersection; the Inn Towne Hotel located just north of the Figueroa Hotel; and the apartment building on the northeast corner of the Olympic Boulevard/Flower Street intersection.

(b) Glare

There are no buildings, structures or facilities on the Project site that presently generate substantial adverse glare. The existing warehouse buildings on the Figueroa Properties are constructed of non-reflective materials and pose no potential for glare generation. In addition, the presence of deep building setbacks accompanying the warehouse/service buildings further reduces any potential for glare generation from these buildings. The presence of numerous surface parking lots within the Figueroa and Olympic Properties represent moderate potential for glare conditions reflected off vehicle windows and surfaces in some locations during daytime and nighttime hours. Sensitive receptors to glare generation include motorists in the project area and, as with light

impacts, residential uses and (to a lesser degree) hotel and motel uses along Figueroa Street and Olympic Boulevard. However, as glare is a transitory phenomenon, receptors other than motorists are somewhat less sensitive to glare impacts than to light impacts.

(4) Policy and Regulatory Environment

The City of Los Angeles *General Plan Framework* contains policies relating to street lighting within the Infrastructure and Public Services Element. These policies describe guidelines related to lighting on private streets and pedestrian-oriented areas, ensuring quality lighting to minimize or eliminate the adverse impact of lighting, and placement of street trees.

The *City of Los Angeles Municipal Code (LAMC)* contains a list of lighting-related requirements including illumination restrictions, street lighting requirement and illuminated signage restriction. In addition, the City of Los Angeles Bureau of Street Lighting maintains a list of general street lighting issues which would be applicable to the proposed Project, addressing the need for determination of roadway and sidewalk illumination levels in accordance with Illuminating Engineers Society (IES) standards and adopted City standards; the necessity for equipment testing and approval by the Bureau of Street Lighting; mandatory street tree placement at least 20 feet from existing or proposed streetlights; the presence of potentially historic streetlights in the project area; and the minimization of glare and light impacts upon private off-site property.

As discussed in Section IV.B.1, Visual Quality, building permits must be obtained from the Department of Building and Safety for any proposed signs, and electrical permits must be obtained for signs illuminated by electrical lighting. Specific Municipal Code requirements and restrictions are dependent upon signage type, however, general constraints on design, construction, materials, potential for hazard to traffic, and determination of such hazard are applicable.

The *South Park Development Strategies and Design Guidelines* contain suggested functional and decorative lighting recommendations. Lighting treatment is considered both a desirable unifying element and a means for distinguishing separate districts and neighborhoods. Recommendations for lighting include incorporation of three distinct lighting fixtures, utilization of historic streetlights, if any, and utilization of Convention Center lighting fixtures along Figueroa Street, adjacent to the Convention Center.

b. PROJECT IMPACT

(1) Significance Thresholds/Methodologies

A project would have a significant light or glare impact if the following apply:

- **Light:** The project would result in an increase in ambient illumination levels that would be disruptive to sensitive uses; e.g., residences.
- **Light:** The project generates a nighttime spill-over of light onto adjacent sensitive receptors (i.e., occupants of residential uses, some institutional uses) significantly affecting occupant vision, sleep, and privacy;
- **Glare:** The project generates glare that would cause a hazard or clear visual nuisance by serving as a distraction or interference to vision or concentration.

(2) Analysis of Project Impact

(a) Light

(i) Construction

Any Project construction activities involving nighttime activities would require lighting of work areas. This lighting would be necessarily focused downward or shielded, oriented toward Project property, and away from adjacent sensitive residential receptors. Furthermore, construction hours within the project areas would be restricted in accordance with *LAMC* requirements.²³ Therefore, no significant lighting impacts are anticipated during project construction.

(ii) Operation

The proposed project would introduce new sources of nighttime illumination on the Project site. The existing illumination sources associated with the parking lots present on the Figueroa and Olympic Properties and the warehouse buildings present on the Figueroa Properties would be removed. These light sources currently contribute to increased ambient nighttime illumination levels, which spill over onto and illuminate adjacent sensitive uses. Light associated with the Project would include illumination associated with the hotels, retail, commercial, entertainment and residential facilities. This may include entertainment concept lighting, illuminated signage, or architectural lighting to highlight elements or details of the buildings. Lighting sources may include; billboard washes and spot lighting, neon, incandescent lamps, searchlights, electronic readerboards, special laser light shows and Jumbotron/LED screens. Additional light associated with the Project would include illumination of public walkways and plazas and parking lot light standards. The Jumbotron screens would be used for broadcasting live sporting and entertainment events and would be located in the central plaza.

²³ *Construction activities, which make loud noise to the disturbance of persons occupying sleeping quarters in a place of residence, are prohibited between the hours of 9:00 P.M. and 7:00 A.M.*

As part of the Project's Specific Plan, Design Guidelines, (See Section II.C., Project Characteristics) lighting standards and guidelines would be established encompassing the frontage along Figueroa Street (between Pico and Olympic Boulevards), 11th Street (between Georgia and Figueroa Streets) and the intersections of Figueroa Street and Olympic Boulevard, Figueroa Street and 11th Street, and Figueroa Street and 12th Street. The standards related to lighting include the following:

a. Streetscape:

- Utilize streetlights and streetscape lighting to promote pedestrian safety and efficient vehicular circulation.
- Streetscape lighting should match the scale and character of Project buildings and add to the identity of the area.

b. Architectural:

- Locate architectural lighting to promote public safety and support the Project's vitality and nightlife.
- Architectural lighting should complement the building, highlighting unique defining features.
- Shield lighting to minimize impacts and glare upon adjacent sensitive receptors and roadways.

c. Landscape:

- Incorporate landscape lighting to promote public safety and support the Project's vitality and nightlife.
- Landscape lighting should be of a character and scale that relates to the pedestrian and highlights special landscape features
- Shield landscape lighting to minimize impacts and glare upon adjacent sensitive receptors and roadway.

In addition specific guidelines related to the Central Plaza have been proposed as follows:

d. Central Plaza:

- Employ lighting techniques that present a “high-tech” display and offer a unique and visually stimulating experience.
- Additionally, lighting should be of a character that accentuates the surrounding architecture, highlights special uses and activities, and contributes to the comfort and safety of the plaza’s occupants.
- Minimize glare upon adjacent properties, adjacent sensitive receptors, and roadways; shield the special event lighting as necessary.

The Project would substantially increase ambient light levels on the project site and in the vicinity. State and city permit review would insure that proposed lighting would not pose hazards to motorists. Nighttime illumination, particularly special-event related lighting, associated with the convention hotel and entertainment facilities could be visible from the neighboring motels, apartment buildings, and Holiday Inn and Figueroa Hotels.

The additional nighttime illumination from the Project would replace existing ambient nighttime illumination associated with the parking lots on the Figueroa and Olympic Properties with illumination levels that are generally appropriate to the downtown location. Project structures would also block some of the lighting associated with STAPLES Center and the Convention Center presently visible from the neighboring motels, apartment buildings, and Holiday Inn and Figueroa Hotels. In addition, Project lighting design dictates that Project lighting would be shielded to minimize lighting impacts upon adjacent sensitive uses and roadways.

The proposed use of a variety of light sources and illuminated signage elements is consistent with recommendations for outdoor lighting as proposed by the *South Park Development Strategy and Design Guidelines*. Project illumination would provide unifying elements, as recommended by the *Guidelines*, throughout the Project site. The Project’s proposed use of signage, graphics and lighting to define the Project as a distinctive place, emphasizing exciting and innovative expressions, would be consistent with the *Guidelines* recommendations to establish a sense of place and reflect the unique identity of the Convention Center area.

Project-related light sources would also be consistent with policies contained within the *General Plan Framework*. As discussed previously, under the Project’s Specific Plan Design Guidelines, architectural and signage lighting would be designed to promote public safety and support the Project’s vitality and nightlife. This would be consistent with the goal of the *General Plan Framework* for Downtown Centers, that nighttime uses should be encouraged and public safety enhanced to meet the needs of residents and visitors. Project-related light sources would be complementary to STAPLES Center’s and the Convention Center’s use of illumination and are

intended to further unify the light environment surrounding the Project. The Project's illumination would contribute to creating a major public outdoor gathering place for special downtown events. It would also help foster a rich and vibrant pedestrian environment with retail, restaurant, entertainment, and cultural venues that appeal to residents and visitors at all hours. In addition, the Project's Specific Plan Design Guidelines define specific characteristics for central plaza lighting. Central plaza lighting, in particular lighting for signage, would employ techniques that present a "high-tech" display and offer a unique and visually stimulating experience. Also, lighting for the central plaza would be of a character that accentuates the surrounding architecture, highlights special uses and activities, and contributes to the comfort and safety of the plaza's occupants. These lighting techniques would be consistent with the *General Plan Framework* in promoting the function, scale, and identity of the area as a Downtown Center, which would distinguish itself as a unique place of regional and national importance and as a primary destination for business and leisure visitors to Los Angeles. Project-related light sources would be required to be in conformance with City lighting-related requirements contained in the Municipal Code and with the proposed Specific Plan. Project light sources would be consistent with these policies.

Illumination emanating from the Figueroa and Olympic Properties would be perceptible from adjacent sensitive receptors. Project lighting sources that would potentially make the greatest contribution to increases in nighttime illumination would include; billboard washes and spot lighting, neon, incandescent lamps, searchlights, electronic readerboards, special laser light shows and Jumbotron/LED screens. Light associated with the Project illumination of public walkways, plazas, and parking lots would contribute to a lesser extent. Nighttime illumination from the proposed Project would be most apparent to the occupants of the Holiday Inn, Figueroa and Inn Towne Hotels, and the apartment buildings on the north side of Olympic Boulevard and on the northwest corner of 9th and Georgia Streets. These land uses are already exposed to and have adjusted to a high level of urban lighting. In addition, it is expected that occupants of the adjacent hotels would choose those locations to purposely be near this center of activity. However, the Project would involve an increase in ambient nighttime illumination levels that could potentially affect the vision, sleep, and privacy of sensitive receptors. Therefore, although Project illumination would be consistent with applicable plans and regulations, would contribute to the Project objective of creating a rich and vibrant environment, and would contribute to pedestrian safety through lighting of public walkways, plazas, and parking lots, the increase in illumination from the proposed Project would result in a significant impact to adjacent sensitive receptors. Project illumination would also be apparent to the residential uses proposed as part of the Project for the Figueroa Central Properties. However, the Project illumination would be part of the existing environment chosen by the future residents.

(b) Glare**i. Construction**

Construction heavy equipment and building materials would not generate glare that would cause a hazard or clear visual nuisance. In addition, construction activity would be screened from view by temporary barriers. No significant glare impacts are anticipated during project construction.

ii. Operation

The intensity of glare and reflectivity would depend on the types of building materials that are used and the ultimate design of the approved project. The Project is not expected to create unusual or isolated glare impacts since the proposed Project buildings would be constructed of materials with minimal potential for glare generation. Any glass or reflective surface to be used on the facade would either have low-reflectivity or accompanied by a non-glare coating, or would be sufficiently screened to prevent off-site glare impacts. New landscaping, paving, and other ground surface areas associated with the Project would not increase or create reflective conditions. Furthermore, Project lighting design standards dictate that Project lighting shall not create glare upon nearby roadways, freeways, residences and other sensitive uses.

The conversion of existing surface parking uses on the Figueroa and Olympic Properties to hotel, commercial, and residential buildings presents the potential to moderately decrease glare conditions, due primarily to the indirect reflection of sunlight by parked vehicles and the direct glare generated from vehicle headlights during nighttime use of facilities or special events. Reduction of such glare could potentially diminish this visual nuisance to the occupants of the Holiday Inn, Figueroa and Inn Towne Hotels, and the apartment buildings on the north side of Olympic Boulevard and on northwest corner of 9th and Georgia Streets. Glare impacts upon other surrounding properties would be less than significant. Thus, the project would not generate glare that causes a hazard or clear visual nuisance resulting in a significant impact.

c. MITIGATION MEASURES

Project development plans will include detailed specifications regarding light fixture types and locations, as well as glare-reducing or screening elements. In addition to the following mitigation measures, urban design standards will be incorporated into the proposed Project's Specific Plan to ensure an appropriate Project illumination.

1. The Applicant shall prepare a Lighting Plan in coordination with the Department of City Planning to establish lighting standards and guidelines.

2. To the extent feasible and consistent with the functions and uses of the Project, the following mitigation measures shall be addressed in the design of the Project's facilities:
 - a. Pedestrian-level lighting shall be used adjacent to Olympic Boulevard and Figueroa, 11th, 12th, and Flower Streets.
 - b. Floodlights shall be located so as to minimize impacts onto sensitive receptors.
 - c. The Applicant shall coordinate with the Bureau of Street Lighting as to whether the streetlights shall be refurbished and/or reinstalled to preserve the character of the community, in addition to providing adequate lighting to motorists and pedestrians.
 - d. All new lighting shall be designed to minimize glare and to prevent light impacts upon adjacent sensitive receptors.
 - e. The use of highly reflective building materials for the exterior walls of the Project structures shall be minimized.
 - f. Use high performance glass with high shading coefficient and low reflectivity, such as Heat Mirror or Low E type glass.
 - g. Architectural and/or landscape screening elements shall be incorporated into project design so as to minimize glare impacts on adjacent sensitive receptors.
 - h. Parking facilities exits shall be located and designed so as to minimize glare impacts from vehicle headlights on adjacent sensitive receptors.

d. ADVERSE EFFECTS

The Project would be consistent with City street lighting policies contained within the *General Plan Framework*, as well as lighting-related requirements contained in the *LAMC*. However, significant light impacts would occur as the result of the development of the proposed Project. Even with implementation of the mitigation measures listed above, light sources associated with the Project, including building and signage lighting, would contribute to increased ambient nighttime illumination levels that would spill over onto and illuminate adjacent sensitive receptors, producing significant impacts that could not be mitigated. The project would not generate glare, caused by light reflected off expanses of undifferentiated expanses of glass or polished surfaces, that would cause a hazard or clear visual nuisance by serving as a distraction or interference to vision or concentration.

e. CUMULATIVE IMPACT

The cumulative development analysis is based on the related projects plus background growth of eight percent (one percent per year from 2000 to 2008). As illustrated in Section III.B, Cumulative Development, related projects are currently planned in close proximity to the Project site. These related projects include office, residential, hotel, and retail land uses. As with the Project, these projects involve the redevelopment of existing land uses into new uses. Cumulatively, the related projects and background growth would continue to redevelop existing land uses and contribute to increased nighttime illumination levels in the project area. This would be consistent with policies of the *City of Los Angeles General Plan Framework* and *South Park Development Strategy and Design Guidelines* for the area. In addition, such increased illumination levels would continue the trend established throughout the downtown area. Cumulative development would be subject to additional assessment of lighting impacts at the time of project proposal. Ambient nighttime light levels would likely increase in the project area, which could spill over onto, illuminate and/or visually distract neighboring residential, motel, and commercial uses and their occupants. Mitigation of impacts on a project-by-project basis would help reduce light and glare impacts resulting from related projects, however, significant cumulative impacts may be unavoidable. Likewise, illumination emanating from the Project would create significant unavoidable light impacts that could not be fully mitigated. Although increased light and glare in the area is consistent with the urban character of downtown, cumulative light and glare impacts would be significant.

IV. ENVIRONMENTAL IMPACT ANALYSIS
B. AESTHETICS
3. SHADE/SHADOW

a. ENVIRONMENTAL SETTING

The issue of shade/shadow pertains to the blockage of direct sunlight by on-site buildings, which affects adjacent property. Shading is an important environmental issue because the users or occupants of certain land uses, such as residential, recreational, churches, schools, outdoor restaurants, and pedestrian areas have expectations for direct light and warmth from the sun. These land uses are termed "shadow-sensitive."

Shadow patterns were calculated for the following periods in this analysis:

- Winter Solstice: December 21 9:00 A.M. to 3:00 P.M.
- Summer Solstice: June 21 9:00 A.M. to 5:00 P.M.

These periods were selected to represent the portion of the day during which maximum seasonal shading occurs and could be expected to be of concern to most people. Collectively, the seasonal shadow patterns identified above define an annual shadow pattern that can be attributed to existing and future development under the Project. The shadow exhibits included in this section identify the maximum extent of winter and summer shadows from this development. When the shadows appear to shade off-site shadow-sensitive uses, the shadow exhibits also identify the extent of shadow coverage between morning and afternoon hours (composite shadow), and the movement of the shadows throughout the day (shadow arc).

The area around the proposed Project site was surveyed in July 2000. Adjacent shadow-sensitive uses noted during this survey consisted of Gilbert Lindsay Plaza, the Convention Center West Hall entry pavilion, lobby and concourse, the Holiday Inn Hotel, the Figueroa Hotel, the First United Methodist Church, California Hospital Medical Center, and a number of motels and apartment buildings located primarily along Hope and Flower Streets south of Pico Boulevard, and north of Olympic Boulevard south of 9th Street. These uses are identified in the exhibits provided in this section. As shown in Figure 24 on page 166 and Figure 25 on page 167, neither winter or summer shadows from the existing warehouse/mechanical buildings found on the Project site currently shade any of these uses.

Figure 24 Existing Winter Shadows

Figure 25 Existing Summer Shadows

As shown, the winter or summer shadows from the existing warehouse/mechanical buildings barely extend off-site. In comparison, the winter and summer shadows from some of the land uses located near the Project site do extend off-site. Winter shadows cast by adjacent off-site land uses shade seven (7) adjacent shadow-sensitive uses including the Gilbert Lindsay Plaza, one multi-family residential structure, three hotels and the United Methodist Church. Of these uses, one multi-family residential structure (adjacent to Flower Street), two hotels, and the United Methodist would be shaded for three hours or more in the winter. Summer shadows cast by adjacent land uses shade four (4) adjacent shadow-sensitive uses including two hotels, Salvation Army, and United Methodist Church. None of these uses would be shaded for more than four hours in the summer.

b. PROJECT IMPACT

(1) Significance Thresholds/Methodologies

A project would have a significant shade/shadow impact if it would shade currently unshaded off-site shadow-sensitive uses for more than three hours between the hours of 9:00 A.M. and 3:00 P.M. between late October and early April (“winter”), or for more than four hours between the hours of 9:00 A.M. and 5:00 P.M. between early April and late October (“summer”).²⁴

(2) Analysis of Project Impact

(a) Construction

No significant shade/shadow impacts are anticipated during construction.

(b) Operation

The Project includes a 1,200-room convention hotel; retail/entertainment/restaurant uses, potentially including a live theater; office space; health club; an open-air plaza to feature year-round venues; a second hotel; residential uses; and combined structured and surface parking located throughout the Project site. Figure 12 of Section II.C., Project Characteristics, depicts the illustrative plan for the proposed Project.

Project design guidelines dictate the following standards in regards to shade and shadow:

- Locate towers to maximize their exposure to light and air, as well as define view corridors;

²⁴ *City of Los Angeles, Draft L.A. CEQA Thresholds Guide, May 14, 1998.*

- In addition, site building towers so as to minimize mid-day and afternoon shade upon streets and other important public/common spaces; and
- Rely upon trees, canopies, arcades, and similar features to regulate the opportunity for sun and shade along public streets and within other important public/common spaces.

Specific architectural plans have not yet been prepared for the proposed Project. Therefore, this shade/shadow analysis assumes a development envelope for the proposed Project. This envelope covers approximately 27 acres over all or portions of six city blocks. This approach is conservative in that it is unlikely that the Project structures would actually fill this entire envelope. This analysis also assumes the “maximum supplemental” building height proposed for each Project subarea individually.

For example, the Olympic West Properties would have a maximum height overlay of 100 feet above grade, with a maximum supplemental height limitation to 150-feet above grade over 20 percent of this subarea. For this analysis the maximum supplemental height limitation of 150 feet above grade is applied to the whole subarea. This conservative approach analyzes the shadows potentially created by the tallest portion of the subarea no matter where the maximum supplemental height limitation is ultimately applied. For the Olympic West Properties, the maximum supplemental height limitation would only be applied to up to 20 percent of the subarea, the shadows created in this subarea would be expected to be significantly smaller than shown in the analysis. Further, the Olympic East Properties, which would accommodate the tallest Project structures, would have a maximum height overlay of 175 feet above grade, with a maximum supplemental height limitation of up to 600 feet above grade over 15 percent of this subarea. For this analysis, the maximum supplemental height limitation of 600 feet above grade is applied to the desired location of the proposed convention hotel (15 percent of the subarea at the southeast corner of Olympic Boulevard and Georgia Street), and the balance of the Olympic East Properties would retain a height limitation of 175 feet.

Figure 26 and Figure 27 on pages 170 and 171, respectively, identify the maximum extent of winter and summer shadows that could be cast by the proposed Project built to the maximum potential development envelope. Winter shadows cast by the maximum supplemental building height from the proposed Project could potentially shade 26 off-site shadow-sensitive uses including the Convention Center West Hall entry pavilion, Gilbert Lindsay Plaza, 15 multi-family residential structures, six hotels, three Salvation Army buildings, United Methodist Church, and Our Lady Chapel. Of these uses, four multi-family residential structures (two adjacent to Georgia Street and two adjacent to Francisco Street), Gilbert Lindsay Plaza and the three Salvation Army buildings would be shaded for three hours or more. The Project could thus result in significant shading impacts on adjacent sensitive uses during winter.

Figure 26 Maximum Future Winter Shadows

Figure 27 Maximum Future Summer Shadows

Summer shadows cast by the maximum supplemental building height from the proposed Project could potentially affect the Convention Center West Hall entry pavilion, four multi-family residential structures, two hotels, and the United Methodist Church. One of the multi-family residential structures (adjacent to Francisco Street) would be shaded for more than four hours. The Project could thus result in significant shading impacts during summer.

For further analysis, the shading cast by the Project has been identified for each of the Olympic and Figueroa Properties in Figure 28 through Figure 33 on pages 173 through 178. These figures show the shadow cast by the maximum height proposed for the subarea, in addition to those cast by the maximum supplemental height for each subarea. The shadows cast by buildings constructed within the height overlay would represent a more likely scenario than those cast by the maximum supplement height. As shown in Figure 30, neither the shadows cast by the maximum height nor those cast by the maximum supplemental height for Olympic West Properties would shade a sensitive use for more than three hours in the winter or for more than four hours in the summer.

The approximate location of the tower, to which the maximum supplemental height would be applied, has been identified for the Olympic East Properties. Therefore, as shown in Figure 29, for the shadow analysis for this property, the maximum supplemental height has been applied to only a portion of the property with the maximum height applied to the remainder of the property. Of the summer shadows cast by the Olympic East Properties, no sensitive uses would be shaded for more than four hours, as shown in Figure 29. With the winter shadows cast by the Olympic East Properties, the maximum height would shade two multi-family residential structures (adjacent to Francisco Street) for more than three hours, as shown in Figure 29.

Of the summer shadows cast by the Olympic North Properties, no sensitive uses would be shaded for more than four hours, as shown in Figure 30. With the winter shadows cast by the Olympic North Properties, the maximum supplemental height would shade two multi-family residential structures (adjacent to Georgia Street) for more than three hours, as shown in Figure 30. The maximum height would also shade one of these multi-family residential structures for more than three hours. Neither the shadows cast by the maximum height nor those cast by the maximum supplemental height for Figueroa North and Central Properties (Figure 31 and Figure 32, respectively) would shade a sensitive use for more than three hours in the winter or for summer for more than four hours in the summer. Only the winter maximum supplemental height shadows cast by the Figueroa South Properties would shade a sensitive use (Gilbert Lindsay Plaza) for more than three hours, as shown in Figure 33.

The Project would result in significant shading impacts to five off-site shadow-sensitive uses during the winter, including two multi-family residential structures (adjacent to Francisco Street) shaded by the Olympic East Properties; two multi-family residential structures (adjacent to Georgia Street) shaded by Olympic North Properties; and the Gilbert Lindsay Plaza shaded by the Figueroa

Figure 28 Summer and Winter Shadows – Olympic West Properties

Figure 29 Summer and Winter Shadows – Olympic East Properties

Figure 30 Summer and Winter Shadows – Olympic North Properties

Figure 31 Summer and Winter Shadows – Figueroa North Properties

Figure 32 Summer and Winter Shadows – Figueroa Central Properties

Figure 33 Summer and Winter Summer and Winter Shadows – Figueroa South Properties

South Properties. The significance of the potential shading described above is predicated on any existing shading. If the sensitive uses described above were currently shaded by other existing uses, no significant impact would occur. However, as shown in Figure 24 and Figure 25, the off-site buildings do not shade the four above-mentioned multi-family residential structures during the winter or summer. Gilbert Lindsay Plaza is briefly shaded during the winter by the Convention Center. However, this shading would occur at a different time than Project shading.

The Project impacts could be reduced by application of Project design guidelines related to shade, reducing the height of the Project structures, setting the maximum height portion of the Project structures away from the shadow-sensitive uses, or stepping back the roofs for the Olympic East, Olympic North and Figueroa South Properties. The result would be to reduce, where feasible, anticipated shading of those uses to less than three hours between the hours of 9:00 A.M. and 3:00 P.M. between late October and early April, or for less than four hours between the hours of 9:00 A.M. and 5:00 P.M. between early April and late October.

c. MITIGATION MEASURES

The following mitigation measure is required to reduce significant shade-shadow impacts:

1. To reduce shading from the Project structures on the Olympic East, Olympic North and Figueroa South Properties, design elements, including roof form, setback, building height and massing, shall be implemented (to the extent feasible and consistent with the functions and uses of the Project) to avoid shading currently unshaded off-site shadow-sensitive uses for more than three hours between the hours of 9:00 A.M. and 3:00 P.M. between late October and early April, or for more than four hours between the hours of 9:00 A.M. and 5:00 P.M. between early April and late October.

d. ADVERSE EFFECT

The Project would result in significant shading impacts to five off-site shadow-sensitive uses during the winter. No off-site shadow-sensitive uses would be impacted during the summer. These impacts would be reduced with implementation of the Project design guidelines and the recommended mitigation measure. However, it may not be feasible to reduce all shading impacts to less than significant and still be consistent with the functions and uses of the Project. In this case, a significant shading impact would remain.

e. CUMULATIVE IMPACT

The cumulative development analysis is based on the related projects plus background growth of eight percent (one percent per year from 2000 to 2008). Shading could potentially increase in the vicinity of the Project site as a result of cumulative development. Although the height and specific location of the related projects is not precisely known, existing off-site shadow-sensitive uses along Olympic Boulevard could potentially be shaded by such development. The nearest related projects are located along Figueroa and Flower Streets between the Figueroa North and Figueroa South Properties. The shadows cast by these structures could potentially shade adjacent off-site shadow-sensitive uses during the winter and the summer. In such a case, the Project would contribute to cumulative shading to the shadow-sensitive uses north of Olympic Boulevard. Cumulative development would thus increase shading in the area, and shading impacts would be cumulatively significant.

IV. ENVIRONMENTAL IMPACT ANALYSIS

C. POPULATION, HOUSING AND EMPLOYMENT

All development activity in the *Central City Community Plan (Community Plan) Area* (Downtown Center) in general, and on the Project site in particular, is subject to the housing and economic development policies of the *Central Business District Redevelopment Plan (CBD Redevelopment Plan)*, and the City's *Community Plan*. The Housing Element of the City's *General Plan Framework*, the *Downtown Strategic Plan*, and the *South Park Development Strategies and Design Guidelines (Guidelines)* also provide guidance on housing and economic development issues against which potential on-site development must be considered.

The Southern California Association of Governments (SCAG), the region's federally designated metropolitan planning organization, is responsible for preparing the *Regional Comprehensive Plan and Guide (RCPG)* and the *Regional Transportation Plan (RTP)*. Adopted in May 1998, the *RTP* contains a set of baseline socioeconomic projections that are used as the basis for SCAG's transportation planning. They include projections of total population, households, and employment at the regional, county, subregional, jurisdictional, census tract and transportation analysis zone levels. The *RTP* uses 1994 as the base year with projections for the years 2000, 2005, 2010, 2015, and 2020. Because 2000 Census data is not yet available, SCAG *RTP* projections are currently the most useful set of population, household, and employment forecasts for the type of analysis contained in this EIR.

1. ENVIRONMENTAL SETTING

Historically, The Downtown Center has primarily provided employment opportunities for residents from throughout the region but has provided relatively few housing options. This trend, while still evident in forecasts of future employment and population, is beginning to weaken. In 1990, there was over ten times the number of employees in the Downtown Center (240,837) than there were residents of the area (22,374). That ratio of employees to residents is forecasted to drop to just over eight times the number of employees (206,498) than residents (25,367) in 2000, followed by a further drop in 2010 (213,006 jobs and 30,926 residents, for a ratio of slightly under seven).

a. Housing and Population

Data published by SCAG in the *RTP*, projects that the resident population of the Central City Community Plan Area (25,367 persons in 2000) consists of approximately 0.7 percent of the total population of the City of Los Angeles (3,845,308 persons in 2000). SCAG forecasts the population of the Central City Community Plan Area to increase to 30,926 by 2010. This represents a forecasted 21.9 percent growth over the 10-year period, or 5,559 new residents over the next decade.

A total of 10,658 dwelling units were estimated for the Central City Community Plan Area in 2000. The SCAG forecast for the Central City Community Plan Area indicates a projected increase to 14,185 dwelling units by 2010. The forecasted percentage increase in housing supply in the Central City Community Plan Area, 33.1 percent, is substantially greater than the estimated population percentage increase for the same period. SCAG's City of Los Angeles subregion²⁵ was estimated to have a population of 3,845,308 in 2000, and is forecasted to grow to 4,298,937 by 2010, representing an increase of 11.8 percent. The growth in housing supply that is expected during the same period is nearly equal to the population growth estimated for the City of Los Angeles subregion. The number of housing units is forecasted to grow from 1,355,944 in 1994 to 1,518,780 in 2010, an increase of 12.0 percent.

As is shown in Table 7 on page 183, the Central City Community Plan Area's population and housing supply are expected to grow at a faster rate between 2000 and 2010 than either the City of Los Angeles or the SCAG six-county region. This level of population growth contrasts with the recession period from 1990 to 1994, when the Central City Community Plan Area's population growth rate (3.3 percent) was slightly below that of the City of Los Angeles (3.9 percent), and half that of the SCAG region's growth rate (6.6 percent). The growth in housing supply for the recession period was greater in the Central City Community Plan Area (4.3 percent) than in either the City of Los Angeles (2.7 percent) or the SCAG region as a whole (3.7 percent), and is aligned closely with the growth patterns of current housing forecasts.

b. Employment

Downtown Los Angeles is a major employment center which provides jobs in many employment sectors. Office and professional employment, which constitutes the majority of

²⁵ *There are thirteen SCAG subregions throughout the SCAG region which assist with developing and coordinating input to the regional planning process. The entire City of Los Angeles is one SCAG subregion. Input from these subregions is reflected throughout the RCPG, by recognizing commonalities and diversity between and among local jurisdictions in meeting the challenges of growth and change in the SCAG region. The RCPG, adopted in 1996, sets broad goals for the southern California region and identifies strategies for agencies at all levels of government to use in guiding their decision-making.*

Table 7

**HOUSING AND POPULATION PROJECTIONS
1990-2010**

POPULATION					Population Growth	
Geographic Zone	1990	1994	2000	2010	2000-2010	Percentage
<i>Central City</i>	22,374	23,122	25,367	30,926	5,559	21.9%
<i>Community Plan Area</i>						
Los Angeles City subregion (SCAG)	3,518,315	3,656,224	3,845,308	4,298,937	453,629	11.8%
SCAG Regional Area Total	14,640,832	15,610,144	16,999,453	19,490,659	2,491,206	14.7%
HOUSING UNITS					Housing Growth	
Geographic Zone	1990	1994	2000	2010	2000-2010	Percentage
<i>Central City</i>	9,803	10,222	10,658	14,185	3,527	33.1%
<i>Community Plan Area</i>						
Los Angeles City subregion (SCAG)	1,304,095	1,339,183	1,355,944	1,518,780	162,836	12.0%
SCAG Regional Area Total	5,329,631	5,524,631	5,726,447	6,750,207	1,023,760	17.9%

Source: SCAG RTP projections, May 1998; California Department of Finance, E-5 2000; PCR Services Corporation.

downtown employment, is concentrated in office buildings located within the financial district located on the east side of the Harbor Freeway to the north of the Project site. The downtown area is also a major center for local, county, state, and federal government employment located in the Civic Center, northeast of the Project site. Such regional industries as the garment, toy and small electronics industries are also concentrated in the downtown area. The Los Angeles flower, produce, and jewelry markets are located downtown, as well as medical-related employment that is associated with the California Medical Center and a variety of private clinics and medical offices. The downtown hotels, STAPLES Center, and the Los Angeles Convention and Exhibition Center also provide a wide array of employment opportunities. Businesses on the Project site currently employ very few people, an estimated 24 employees associated with parking facilities.

(1) Trends

During the early 1990s, California, and southern California in particular, suffered through one of the most severe regional economic recessions in its history. According to SCAG data, Los Angeles County lost an estimated 481,648 jobs between 1990 and 1994, or approximately 10.4 percent from 1990 employment levels. Job losses during this recession within the City of Los Angeles were worse, as the city lost an estimated 234,228 jobs or 12 percent of citywide employment. This constriction of the local employment supply resulted from several trends affecting the region, including changes in world markets; the downturn in aerospace and related

manufacturing jobs, which were associated with changes in national defense priorities and reductions in orders for civilian aircraft; a significant downturn in local construction; an unusual slowdown in spending relative to income, causing a corresponding decline in retail sales; corporate restructuring in general involving major acquisitions or mergers resulting in downsizing; an unprecedented string of natural disasters (e.g., earthquakes, fires and floods) and civil disturbances.

Although the national economy came out of the recession in 1993, the California economy, and particularly the southern California economy, lagged behind the national recovery until recently. The southern California region finally closed the “job growth gap” with the rest of the United States in early 1996, however, the regional job growth rate has shown a fairly sharp slowdown since the beginning of 1997, while the U.S. as a whole experienced steady employment growth ranging between 2.1 percent and 2.5 percent throughout 1997.²⁶

(a) Unemployment Trends

State data show that the 1980 unemployment rate in the City of Los Angeles was almost one percentage point higher than that in the County (7.4 percent in the City vs. 6.6 percent in the County). By 1990, the unemployment rate declined to 6.7 percent in the City and 5.9 percent in the County. As a result of the recession, however, the unemployment rate increased about one-third by 1995, to 9.0 percent in the City and 8.0 percent in the County. By April 1998 unemployment rates had dropped again to 7.0 percent in the City and 6.1 percent in the County, indicating that there is currently a surplus of workers who are available in the City and County to accept new job opportunities associated with economic growth. SCAG’s *RCPG* anticipates that this trend will continue into the future. By 2010, SCAG predicts a 6.0 percent to 7.0 percent gap between the region’s labor force and number of jobs. Further, the *RCPG* estimates that the region’s “unemployment rate in 2010 would still be about one percentage point higher than the national average forecast by the U.S. Bureau of Labor Statistics.”²⁷

(b) Employment Trends

In 1990, according to data compiled by SCAG in the Economy chapter of *RCPG*, jobs in the services, trade (retail and wholesale) and manufacturing sectors together accounted for nearly two-thirds (64 percent) of regional employment. Government services accounted for the next largest share (12 percent). Between 1972 and 1986, the fastest growing sectors of the region’s economic base were professional services (143 percent), tourism/entertainment (132 percent), and

²⁶ Southern California Association of Governments, *Regional Economic Trends*, January 1998, page 9.

²⁷ Southern California Association of Governments, *Regional Comprehensive Plan and Guide*, March 1996, page 2-34.

transportation/wholesale trade (59 percent). Manufacturing experienced only modest growth (e.g., an increase of 7 percent in diversified manufacturing).

At the regional level, SCAG forecasts that the services, trade and government sectors will account for over three-quarters (79 percent) of all job growth between 1990 and 2010. Among the industries that make up the region's economic base, the leaders in job growth will be professional services (68 percent), tourism/entertainment (67 percent) and transportation/wholesale trade (46 percent).²⁸ The City and County of Los Angeles dominate the regional economy, suggesting that these trends will also be experienced throughout most of the SCAG region.

(c) Employment Projections

As shown in Table 8 on page 187, SCAG's 1998 *RTP* employment forecasts predict a slower rate of job growth for the Central City Community Plan Area than either the Los Angeles City subregion or the SCAG region as a whole. Regional employment is expected to grow by 665,646 additional jobs, or 15 percent between 2000 and 2010. During that same time period, the Los Angeles City subregion is forecasted to grow by 186,675 jobs, or 10 percent. Within the Central City Community Plan Area, employment is projected to increase by three percent, to 213,006 jobs by 2010.

c. Planning Policies and Programs

(1) Regional Plans and Policies

The Project site is located within the City and County of Los Angeles and is also within the SCAG regional planning area. SCAG is an association of local government agencies within a six-county planning area that consists of Los Angeles, Orange, Ventura, San Bernardino, Riverside, and Imperial Counties, and was formed for the purpose of developing consensus and coordination relating to regional issues that cross-jurisdictional boundaries. SCAG is the southern California region's federally designated metropolitan planning organization and is responsible for preparing the *RCPG* and *RTP*. The Project site is included within SCAG's City of Los Angeles subregion.

SCAG prepared the *RCPG* in conjunction with its constituent members and other regional planning agencies. Adopted in March 1996, the *RCPG* serves as a framework to guide decision-making with respect to the growth and changes that can be anticipated by the year 2015 and beyond. The *RCPG* provides a general view of various regional plans. At the regional level, the goals, objectives and policies in the *RCPG* are relevant yardsticks for measuring consistency with adopted

²⁸ *Ibid.*, Table 2.J-5.

plans. However, the authority and responsibility for land use and other critical planning decisions rests with individual city and county governments. Accordingly, the *RCPG* proposes a strategy for local governments to use voluntarily to address issues related to future growth and to provide a means for assessing the potential impact of projects within the regional context. The Growth Management chapter of the *RCPG*, adopted June 1994, is a mandated section that presents forecasts establishing the socio-economic parameters for growth and development in the region. These forecasts were used throughout the *RCPG* as baseline data, for such analysis chapters as the Regional Mobility and Air Quality chapters. Another purpose of the Growth Management chapter is to address the issues related to growth and land use, and to suggest guiding principles for development that support the overall goals of the *RCPG*.

The Housing chapter of the *RCPG*, adopted September 1994, is not mandated and does not establish any requirements for local governments. However, SCAG is responsible for assisting cities and counties in fulfilling their statutory obligations to prepare and regularly update the housing elements of their general plans. The Housing chapter of the *RCPG* provides a regional framework for local housing strategies that are responsive to market area needs and state mandates. As such, the Housing chapter is an important tool for coordinating local housing development strategies within southern California. It also includes goals associated with increasing the supply of housing in the region, particularly housing that is affordable to low- and moderate-income households, however, no formal policies are provided.

Finally, the Economy chapter of the *RCPG*, a non-mandated section, assesses the region's economy, the trends that brought it to its current state, and projected changes in the future. The Economy chapter discusses strengths and weaknesses of the region's economy, where economic expansion opportunities lie in the future, and strategies to enhance the region's competitiveness in the national and world economy. No formal policies are included.

The SCAG Regional Council adopted the *RTP* in May 1998. The 1998 *RTP* contains a total of 19 policies to guide future regional decisions. All of these policies are transportation-related and none of them deal specifically with growth-related issues. However, SCAG has not yet developed updated growth-related policies in the *RCPG*, therefore these *RTP* policies are still more relevant to the Project.

(2) City of Los Angeles and Local Community Housing and Economic Development Goals and Policies

The Housing Element is one of six primary City-wide Elements of the City's General Plan. The Housing Element, adopted by the City Council in November 1993, provides a guide to housing development within the City by assessing housing needs for all economic segments of the community. These housing needs are then incorporated into housing policy and programs intended

Table 8
EMPLOYMENT PROJECTIONS
1990-2010

Geographic Zone	1990	1994	2000	2010	Employment Growth	
					2000-2010	Percent
Central City Community Plan Area	240,837	201,074	206,498	213,006	6,506	3.2%
Los Angeles City subregion	1,939,322	1,705,104	1,851,595	2,038,270	186,675	10.1%
SCAG Regional Area Total	4,615,644	4,133,999	4,557,891	5,223,355	665,464	14.6%

Source: SCAG Regional Transportation Plan, May 1998

to produce housing opportunities for all residents of the community, consistent with the identified housing needs. The principal purpose of the City's Housing Element is to promote housing affordability and availability and to preserve housing stock in appropriate areas in the City.

As discussed in Section IV.A., Land Use, the *Community Plan* supplements the City's *General Plan* by providing more specific policies and more detailed patterns of intended development for the South Park Area of the CBD Redevelopment Project Area, where the Project is located. The *Community Plan* recommends that the South Park area should be established as a commercial-residential complex with an area reserved for open space, recreational, cultural and civic uses, retail activities, community buildings, and restaurants.

Development for the South Park Area should be pedestrian-oriented, and encourage interaction between visitors, shoppers, employees and residents. The *Community Plan* housing policies state that:

- The major concentrations of Central City housing shall be located in South Park, Bunker Hill, Central City East, and Little Tokyo.
- The *Community Plan* shall promote the development of new dwelling units through its implementation programs. In addition to those new dwelling units developed within areas designated for housing on the Plan Map, development of new and rehabilitated dwelling units within blocks and buildings designated for commercial use shall be encouraged.
- Rehabilitation and continued residential use of existing residential buildings, especially higher density residential buildings, located within the Central City

Community Plan Area, is encouraged where appropriate regardless of the general land use designation of the area in which they are located.

(3) Community Redevelopment Agency Housing and Economic Development Goals and Policies

Housing goals and objectives have also been developed for the CBD Redevelopment Area. The *CBD Redevelopment Plan* provides the official guide for implementation of redevelopment activities. Within the *CDB Redevelopment Plan*, goals and policies are described for redevelopment actions including property acquisition, relocation of displaced tenants and businesses, and replacement of housing. The *South Park Development Strategies and Design Guidelines* provide further advisory housing goals and objectives for South Park (see Section IV.A., Land Use).

The *South Park Design Guidelines* provide more specific guidance for redevelopment and new development in the South Park area. The *Guidelines* set forth five general objectives as follows:

- Building a Mixed-Use District
- Encouraging Economic Development
- Providing a Range of Housing Options
- Creating a Live/Work Community
- Achieving Quality Urban Design

The planning strategy builds on existing centers of activity in and adjacent to the South Park Area, such as the STAPLES Center and the Convention Center. The *Guidelines* planning strategy presents development and improvement scenarios for specific sites, districts, and streets around activity centers. One improvement scenario proposed in the *Guidelines* calls for two hotels and convention-related development on a portion of the Project site immediately north of the Convention Center (Olympic West).

2. PROJECT IMPACTS

a. Significance Thresholds/Methodologies

A project would have a significant impact on population, housing or employment if it would do any of the following: (1) cause a substantial alteration in the location, distribution, density, or

growth rate of population, housing or employment planned for the area; (2) conflict with basic goals or expectations set forth in regional (e.g., SCAG) plans or in City of Los Angeles plans, such as the *General Plan Framework*, *Community Plan*, or *CBD Redevelopment Plan*, for the area in which the components of the project would be located; or (3) displace existing residences or businesses.

The determination of impacts on population, housing or employment is based upon the reported distribution and growth rate of population, housing and employment for the City of Los Angeles, specifically the Central City Community Plan Area. A finding of consistency with the goals and expectations set forth in regional and City of Los Angeles plans is determined by reviewing the *RCPG*, *RTP*, *General Plan Framework*, *Community Plan*, and *CBD Redevelopment Plan*. In addition, the *Guidelines*, while not an adopted policy document, provides additional guidance for determining consistency.

b. Construction Impacts

It is estimated that approximately 4,296 construction workers would be employed during the construction of the Project. The number of workers is derived based upon proposed floor area of proposed Project land uses. Owing to the regional nature of the construction industry, these construction employment estimates are appropriately evaluated on a regional basis. Specifically, employees in the construction industry work at different locations throughout the region depending upon where the construction is located. These employees do not typically relocate closer to a construction site as the length of time spent at a specific job site is limited. Therefore, impacts to housing and population related to construction workers would be less than significant.

c. Housing and Population

Land acquisition for the Project does not involve the acquisition of any housing; therefore, no residential relocation is planned. The construction of all Project housing (approximately 800 units) is scheduled to be completed by 2008. The following analysis assumes that all 800 residential units are also occupied by 2008.

As shown in Table 7 on page 183, the forecasted number of housing units in the Central City Community Plan Area in 2000 was 10,658. SCAG projects that the Central City Community Plan Area housing unit count will increase to 14,185 in 2010. By interpolation, the number of housing units in 2008 is estimated to be 13,576 units, an increase of 2,918 beyond expected 2000 levels. The additional 800 housing units attributable to the Project are well within SCAG's estimated growth projection, representing 27 percent of the forecasted housing growth between 2000 and 2010. With regards to the City of Los Angeles subregion, the additional 800 residential units attributable to the proposed project represents 0.6 percent of the growth anticipated for the entire subregion. Based on

population density figures from the 1990 Census, 800 newly constructed dwelling units would be expected to house 2,272 residents. This figure is derived assuming an average household size of 2.84 persons, which was the average household size for households within a one-mile radius of the Project site. The 2000 population in the Central City Community Plan Area is forecasted to be 25,367. SCAG forecasts the Central City Community Plan Area population to increase to 30,926 in 2010. By interpolation, the 2008 projected population would be 29,754, an increase of 4,387 persons over the 2000 population. The population growth associated with the addition of 800 residential units is within SCAG's estimated growth parameters, and represents 52 percent of the anticipated population growth. This population growth represents 0.6 percent of the growth forecasted for the City of Los Angeles subregion for the years 2000 to 2010, consistent with the Project's contribution to the subregion's housing supply.

Thus, population and housing growth due to the Project are well within the established growth parameters of both the Central City Community Plan Area and the City of Los Angeles subregion as a whole. Accordingly, the Project's effects upon population and housing are considered to be less than significant, and would appropriately implement regional and City policy for the area.

d. Employment

The Project is proposed for development on property currently used as surface parking and minor service, warehouse and electrical facilities for the STAPLES Center. These surface parking facilities currently employ an estimated 24 employees. These employees would be given priority in obtaining employment at structures built to replace surface lots and the parking facilities associated with the Project.

Table 9 on page 191 provides a listing of derived direct employment impacts that would be associated with the Project. Using employment factors derived for various commercial activities, an estimated 5,367 jobs would be created by the Project by 2008. Approximately one-third (33 percent) of these jobs would be related to hotel facilities; the balance would be related to restaurant (16 percent); retail (13 percent); entertainment (13 percent); office (11 percent); medical office (11 percent); and health club (3 percent) facilities. The Project site currently accounts for an estimated 24 employees associated with the operation of the existing surface parking and warehouse facilities, for a total net employment increase of 5,343 from the Project. (See Table 9 on page 191).

Between 1990 and 2000 the Central City Community Plan Area lost an estimated 34,339 jobs, mostly occurring during the recession that occurred from 1990 to 1994. The employment directly attributable to the Project will assist the economic revitalization of the Central City Community Plan Area by replacing approximately 16 percent of the jobs lost during the previous decade. More specifically, SCAG's 1998 *RTP* forecasts that employment within the Central City

Table 9

ESTIMATED EMPLOYMENT CHANGE

Proposed Development	Employment Derivation Factor^a (sq.ft./ employee)	Square Feet of Development^b	Jobs Created by proposed Project
Convention Hotel	909	1,060,000	1,166
Hotel	909	530,000	583
Office	292	165,000	565
Medical Office	234	135,000	577
Health Club	680	125,000	184
Entertainment	680	485,000	713
Restaurant	250	215,000	860
Retail	577	415,000	719
Subtotal		<u>3,130,000</u>	<u>5,367</u>
Existing Parking Facilities	50,000	1,188,037	(24)
TOTAL NEW EMPLOYMENT			5,343

^a San Diego Association of Governments, *Traffic Generators Guide, 1998*

^b The Project, as proposed, will allow transfers among uses, however, such transfers will not result in less than 1,400 hotel rooms or 500 residential units.

Source: PCR Services Corporation

Community Plan Area will be 206,496 jobs in 2000, growing to 213,006 jobs by 2010. By interpolation, SCAG's employment projection for 2008 indicates that employment in the Central City Community Plan Area would increase by 5,185 jobs, to 211,457. The estimated employment increase from the implementation of the Project is 103 percent of the projected overall Central City Community Plan Area employment increase. Thus, the employment growth directly attributable to the Project will have a favorable impact on employment in the Central City Community Plan Area, and will assist in the recovery of downtown Los Angeles employment levels last seen prior to the economic recession of the early 1990s.

e. Consistency with City and Local Community Housing and Economic Development Policies

(1) City of Los Angeles and Local Community Housing Goals and Policies

The Project would advance City and local community goals by contributing to the effort to bring about new commerce, employment, and housing in the Central City Community Plan Area. The proposed entertainment and retail uses would be compatible with both the Convention Center and the STAPLES Center, and would work to implement adopted City policy for the Convention Center area. Development of the Project would implement the *Community Plan* goals of providing recreational, civic, cultural, and retail uses in the vicinity of the Convention Center.

(2) Community Redevelopment Agency Goals and Policies.

The Project is consistent with the *South Park Design Guidelines* by encouraging economic development through new commercial, entertainment, and retail opportunities; creating a mixed-use district, encouraging quality urban design, and creating a live/work community. The Project is expected to help revitalize and increase the desirability of the area and encourage the demand for and the development of new commercial activities and housing in the area. The *Guidelines* designate the Project site as an area to be redeveloped with land uses supportive of the Convention Center. The Project would fulfill this objective by attracting visitors and patrons to the Convention Center area, thereby helping to create a “destination” in the Convention Center area. In addition, the Project is consistent with the *Guidelines* by implementing a strategy that calls for the development of a convention hotel in close proximity to the Convention Center. Project-related retail and entertainment amenities are anticipated to assist in attracting large national and international conventions to Los Angeles, and attract significant economic benefits due to an increase in spending by out-of-town guests.

(3) Consistency with the Regional Comprehensive Plan and Guide.

The Project is consistent with the goals of the RCPG. Close proximity between jobs and housing reduces employee travel time and average vehicle trip length. The community at large benefits from reduced traffic and congestion, which in turn leads to reduced levels of noise, air pollution, and use of natural resources. However, this depends both on the total number of jobs and housing units available in proximity to one another, and that a wide range of jobs and housing units, both in type and cost, exists such that those who live in the housing may also be employed nearby. By having a strong linkage between jobs and housing, greater individual and group benefits may result. The Project will generate an estimated 5,343 new jobs and contain 800 new residential units. It is expected that persons who live within the South Park Area or in close proximity could thus capture a substantial number of the Project’s employment opportunities. Additionally, factors, which influence the decision to live within the Project site, would be direct access to transit and the proximity to downtown employment.

(4) Summary of Project Impact Analysis

The Project’s 800 new residential units and its estimated population increase of 2,272 new residents would be well within growth parameters established for the *Community Plan* area. The population and housing growth associated with the Project is consistent with guidelines established in the *City General Plan*, *Community Plan*, and the *Guidelines*, by promoting the area as a highly livable urban environment within downtown. The Project’s residential units will have an integrated, mixed-use character that also corresponds to the development goals and policies set for the area immediately surrounding the Project site. This estimated growth from the Project represents a small

portion of the growth forecasted for the SCAG Region and the City of Los Angeles subregion. Therefore, housing and population impacts associated with the Project would be less than significant at the local, subregional, and regional levels.

An estimated net employment increase of 5,343 new jobs would result from the implementation of the Project. In addition, it is anticipated that the location of these jobs within the Central City Community Plan Area will improve the balance between jobs and housing and result in greater individual and group benefits. While this estimate exceeds the forecasted growth in employment levels for the Central City Community Plan Area projected by 2008, it represents a significant positive impact on employment in the downtown area, which endured a substantial reduction in employment during the 1990s and for which 2010 employment levels are still expected to remain more than 10 percent below 1990 levels. The Project is anticipated to add 2,272 residents and 5,343 jobs to the Central City Community Plan Area, a ratio of 2.35 jobs added for every resident added. This ratio is below historical levels for the area, and supports the trend of reducing the jobs-to-residents ratio.

3. MITIGATION MEASURES

The Project would not result in any significant environmental impacts upon housing, population and employment and therefore no mitigation measures are required.

4. ADVERSE EFFECTS

The Project will not result in any adverse environmental impacts to housing, population and employment.

5. CUMULATIVE IMPACTS

As discussed in Section IV.C.2(c), the Project would generate 800 additional residential units within the Central City Community Plan Area, with full occupancy to occur by 2008. Related projects within this area are expected to contribute an additional 503 new housing units²⁹, for a cumulative total of 1,303 units. SCAG projects an increase of 2,918 housing units for the same area by 2008. This growth is below SCAG's projected housing unit growth for the Central City Community Plan Area and therefore, the Project in combination with related projects would not

²⁹ Please see Section III.B., *Cumulative Development*, of this EIR for a detailed listing of all related projects.

result in a significant cumulative impact to housing. Similarly, the estimated increase in population attributable to the Project is estimated to be 2,272 persons, compared with the forecasted population increase of 4,387 within the overall Central City Community Plan Area. Related projects are expected to contribute an additional 1,429 persons to the area's population over the same period. Thus, the cumulative population growth for the Central City Community Plan Area is 3,701, still below the population growth parameters established by SCAG. The Project in combination with related projects would not result in a significant cumulative impact to population.

The related projects and project growth within the Central City Community Plan Area would result in a cumulative increase in construction employment. As stated above, because of the regional nature of the construction industry, these construction job estimates are appropriately evaluated on a regional basis. Specifically, employees in the construction industry work at different locations throughout the region depending upon where the construction is located. These employees do not typically relocate closer to a construction site as the length of time spent at a specific job site is limited. Therefore, cumulative impacts to housing and population related to construction workers would be less than significant.

As discussed in Section IV.C.2(d), the increase in employment attributable to the Project is estimated to be 5,343 jobs. The SCAG forecasted employment increase is 5,185 jobs within the overall Central City Community Plan Area. Related projects are expected to contribute an additional 7,704 jobs to the area's employment over the same period. Thus, the cumulative job growth for the Central City Community Plan Area is estimated to be 13,047. Although this figure is above the anticipated growth forecasted to 2010, this job growth is still below the 1990 figure for the Central City Community Plan Area, which lost 16.5 percent of its jobs between 1990 and 1994. The accumulated job growth of the Project in combination with related projects is considered beneficial and represents a sizeable recovery of jobs lost during the previous decade within the Central City Community Plan Area. Therefore, the Project in combination with related projects would not result in a significant cumulative impact to employment.

IV. ENVIRONMENTAL IMPACT ANALYSIS
D. DRAINAGE AND SURFACE WATER QUALITY

The analysis of drainage impacts included in this section is based on the *Storm Drainage Environmental Impact Report* prepared by Psomas Associates, Inc., dated September 13, 2000. This study is presented in Appendix C of this Draft EIR.

1. ENVIRONMENTAL SETTING

a. Drainage

(1) Regional Setting

The City of Los Angeles (City) is located within the Los Angeles River Basin, an area which includes the coastal portions of Los Angeles County and part of Ventura County, and into which drain the Los Angeles River, the Rio Hondo, and the San Gabriel River. The majority of the City is located within a gently sloping coastal plain of low relief which contains few large depressions or ponding areas. Given the highly urbanized character of the City, impervious surfaces constitute a greater percentage of terrain than do natural surfaces, thereby limiting the infiltration of precipitation and increasing the rate of storm water runoff. Runoff volumes and rates are further increased by the presence of drainage channels throughout the City, including channelized and/or culverted streams and rivers. Thus, drainage issues pertaining to flooding potential are directly related to the ability of storm drains and other flood control facilities to accommodate storm water runoff. Other factors which influence drainage characteristics include: local precipitation patterns; the size, topography, and permeability of the tributary drainage area; the location of floodplains or dams with the potential to be breached; and the location of lakes or other water bodies with the potential to experience seiches (wave oscillation of the surface water in an enclosed basin initiated by a seismic event).³⁰

Storm drains within the City are constructed and maintained by both the City Department of Public Works, Bureau of Engineering (BOE) and the Los Angeles County Flood Control District (LACFCD). In general, the City constructs interconnecting drains that are tributary to the LACFCD's major storm drains and open flood control channels (e.g., the Los Angeles River,

³⁰ *Los Angeles Citywide General Plan Framework Draft Environmental Impact Report, pages 2.8-1 - 2.8-4.*

Ballona Creek). In addition, the U.S. Army Corps of Engineers aids in the construction of certain major flood control projects.³¹

(2) Local Setting

The Project site is located within a drainage area comprised of two watersheds. Runoff from the watersheds drains in both north-south and east-west directions, within local streets and underground storm drain systems. Runoff from the Project site drains to drainage facilities located in Pico Boulevard and Cherry Street. These systems confluence at Budlong Avenue and Jefferson Boulevard and then flow westerly to the outlet at Ballona Creek which then flows to the Pacific Ocean. For this study, the drains in the Project vicinity are identified as the Pico Boulevard Drain and Cherry Street Drains shown in Figure 34 on page 197.

Land uses within the existing two watersheds are of a highly urbanized nature. Very little undeveloped area remains in the watershed upstream of the project site. A field investigation and review of aerial photographs revealed that current land uses adjoining the Project site boundary consist of high-density apartments, commercial developments, and parking facilities. The land within the Project site boundary currently consists primarily of paved parking lots. Under existing conditions, runoff from the parking lots flows to large catch basins that are distributed throughout the Project site. The catch basins are connected either directly to the storm drain system or are piped to parkway drains in the curb. The runoff flows from the parkway drains through the gutters to the public catch basins and into the storm drain system.

The Project site does not contain surface water bodies, nor does it contain any blueline stream, as designated by the United States Geological Survey. The Project site is within Federal Emergency Management Agency (FEMA) Flood Zone C, which indicates an area of minimal flooding.³² The Project site consists almost entirely of impervious surfaces. Minimal pervious surfaces are associated with these areas.

Based upon an evaluation of the City's design calculations, field investigations, and discussions with the Los Angeles Convention and Exhibition Center staff and BOE staff, it was determined that some flooding occurs downstream of the Los Angeles Convention and Exhibition Center, south of Pico Boulevard. The existing drainage system downstream of the Project site is flowing at or above capacity and therefore, the streets and Los Angeles Convention and Exhibition Center property are subject to flooding.

³¹ *Ibid*, page 2.8-4.

³² *Flood Insurance Rate Map, Community Panel 060137 0068 D, revised February 4, 1987.*

Figure 34 Storm Drain Infrastructure

Pico Boulevard Drain

The existing Pico Boulevard drainage system was analyzed in five (5) reaches, extending from Venice Boulevard at the downstream end to 7th Street at the upstream end. The existing Pico Boulevard Drain was relocated between Venice Boulevard and Georgia Street when the Los Angeles Convention Center was constructed in 1968. The drainage watershed for the Pico Boulevard Drain upstream of the project is approximately 210 acres. The watershed is bounded by Wilshire Boulevard to the north, 12th Street to the south, Grand Avenue to the east, and Blaine Street west of the Harbor Freeway.

Reach 1, between Venice Boulevard and Pico Boulevard, is located within South Convention Hall Drive, a private street located within the Los Angeles Convention and Exhibition Center property. The drain is a 54-inch reinforced concrete pipe (RCP) at Venice Boulevard, then changes into double 48-inch RCPs within South Convention Hall Drive, and finally, into a 60-inch RCP at Pico Boulevard. Reach 1 intercepts runoff from the Los Angeles Convention and Exhibition Center South Hall, Pico Boulevard, and South Convention Hall Drive.

Prior to the construction of the Los Angeles Convention and Exhibition Center South Hall, runoff along Pico Boulevard, from Figueroa Street to Cherry Street, was routed north-south within the streets. With the construction of the South Convention Hall, those outlets were eliminated and flow was restricted to Pico Boulevard and South Convention Hall Drive. The 50-year peak flow in Pico Boulevard is approximately 200 cubic feet per second (cfs), and is restricted to the northerly half of the street. At South Convention Hall Drive, the runoff crosses Pico Boulevard onto the Convention Center South Hall site, resulting in flooding up to 1.5 feet deep.

Reach 2, located in Pico Boulevard, from South Convention Hall Drive to Gilbert Lindsay Drive is a 60-inch RCP. A burp catch basin with an outlet capacity of 148 cfs is located at the intersection of Gilbert Lindsay Drive and Pico Boulevard. A diversion structure located upstream of the burp catch basin controls flow to the basin. Downstream of the burp basin, there is a 24-inch RCP that drains the areas west of Hope Street, eventually joining the 60-inch RCP. Reach 2 intercepts runoff from the Convention Center West Hall and the area east of the Project to Grand Avenue.

Reach 3, located between the STAPLES Center and the Los Angeles Convention and Exhibition Center, runs from Pico Boulevard to Georgia Street. It starts at 11th Street as a 10.75-foot wide by 3.25-foot high reinforced concrete box culvert (RCB) until just in front of the Los Angeles Convention and Exhibition Center entry where it becomes a 6-foot by 6-foot RCB. A 33-inch RCP draining from the east joins the RCB at 12th Street. Reach 3 intercepts runoff from the STAPLES Center, the Figueroa Properties portion of the project site, and easterly to Grand Avenue.

Reach 4, located in Georgia Street, from 11th Street to Olympic Boulevard is a 45-inch RCP. Reach 4 intercepts runoff from the easterly half of the Olympic Properties portion of the Project site.

Reach 5, the remainder of the drains upstream of Olympic Boulevard, consists of 18-inch to 33-inch RCP main lines. The drains intercept runoff from the area bounded by Olympic Boulevard on the south, Wilshire Boulevard to the north, Flower Street on the east, and Blaine Street on the west.

Cherry Street Drain

The existing Cherry Street Drain crosses the Harbor Freeway at 12th Place and drains southerly to Jefferson Boulevard. From the Harbor Freeway and 12th Place intersection, the Cherry Street drain runs northerly (downstream to upstream) in Cherry Street. At 11th Street, the drain runs easterly to Georgia Street. South of the intersection of Cherry Street and 11th Street, a burp basin with a design outlet capacity of 55 cfs flows onto Cherry Street.

The drainage watershed for the Cherry Street Drain immediately upstream of the Project site is approximately 35 acres, bounded by Olympic Boulevard on the north, Georgia Street on the east, and the Harbor Freeway to the west. Prior to construction of the Los Angeles Convention and Exhibition Center, a greater area was tributary to the Cherry Street Drain. The peak 50-year runoff in Cherry Street was approximately 120 cfs. With the development of the Los Angeles Convention and Exhibition Center, flow in Cherry Street was reduced to 60 cfs, with the remaining flow diverted to Pico Boulevard.

b. Surface Water Quality, NPDES Permits and Regional Board Requirements

Surface water quality can be affected by a number of variables, including: (1) land use; (2) hydrology; (3) meteorology; (4) geology; and (5) soils. Land uses may affect surface water quality based on associated activities; for example, an office building generates little in the way of exterior pollutants which can be washed away by runoff, whereas a surface parking lot has deposits of oil, gasoline, and other pollutants which can be washed away by runoff. Meteorology may affect surface water quality through the quantity and intensity of storm events which determine to what extent pollutants are washed away by runoff. Geology and soils may affect surface water quality in that they determine infiltration and runoff velocity. The more infiltration of runoff into the soil, and the slower the runoff (i.e., as in running over a flat surface instead of downhill), the less ability the runoff has to carry sediments and pollutants.

In receiving waters, excess sediments cause high turbidity and rapid accumulation of sediments in lakes and ponds, with adverse impacts on biological organisms. In urban areas, toxins

such as zinc, copper, and lead, which can cause toxic effects in high concentrations, are most commonly associated with surface runoff. Additionally, other toxic elements, especially those associated with hazardous waste, can be present within surface flows.

(1) Construction

Regulatory and permitting processes have been established to control the quality of water runoff from urban construction sites. In 1972, the Federal Water Pollution Control Act, also referred to as the Clean Water Act (CWA), was amended to provide that the discharge of pollutants to waters of the United States from any point source is unlawful, unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) general permit. In 1990, the U.S. Environmental Protection Agency (EPA) issued regulations requiring that discharges of storm water associated with construction activity that includes clearing, grading, or excavation resulting in soil disturbance of at least five acres of total land area be regulated by a NPDES general construction storm water permit. In California, NPDES permits are issued through the State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCB). The SWRCB has adopted a statewide general construction permit that applies to most construction activities. The County of Los Angeles and local agencies are regulated specifically by NPDES Permit No. CAS614001.³³ This permit allows storm water discharges under certain conditions during the construction period. Permit compliance must be achieved prior to, and is verified at the time of, individual project application review by the local RWQCB. The primary objectives of the construction storm water permit are to:

- Reduce excessive erosion potential;
- Minimize excessive sedimentation;
- Prevent other materials used at the site from causing off-site contamination;
- Eliminate non-storm water discharge from the construction site;
- Install appropriate measures to reduce impacts on watering from the finished project, and ensure that these measures will be maintained; and
- Establish maintenance commitments on the post-construction site.

The NPDES general construction permit requires that all developers of land where construction activities will occur over more than five acres do the following:

³³ *Community Redevelopment Agency of Los Angeles, Los Angeles Sports and Entertainment Complex Draft EIR, March 26, 1997.*

- Eliminate or reduce non-storm water discharges to storm sewer systems and other waters of the nation;
- Develop and implement a Storm Water Pollution Prevention Plan (SWPPP); and
- Develop and implement a monitoring program and reporting plan in accordance with NPDES requirements.

The NPDES general construction permit prohibits the discharge of materials other than storm water. However, the permit recognizes that certain non-storm water discharges, including pipe flushing and testing, street washing, and dewatering may be necessary. Such discharges are allowed if they are infeasible to eliminate, do not cause or contribute to a violation of water quality standards, and do not require permits from the local RWQCB.

In order to obtain a permit for an individual project under the NPDES construction general permit, a project applicant must submit a Notice of Intent (NOI) together with a SWPPP to the SWRCB. The SWPPP identifies activities that could cause pollutants to enter the storm water system and includes a description of measures to control these pollutants. The SWPPP includes a list of Best Management Practices (BMP) which are typically designed to do all or some of the following:³⁴

- Minimize erosion and sedimentation during construction;
- Describe measures which eliminate pollution of storm runoff by any chemicals and materials used during the construction period;
- Contain waste;
- Minimize the amount of area that is disturbed at any one time;
- Stabilize the disturbed area;
- Protect slopes and channels;
- Control the perimeter of the site;
- Control internal erosion;
- Show areas of long-term post-construction control measures.

³⁴ *Camp Dresser & McKee, California Storm Water Best Management Practices Industrial Handbook, Appendix A, Table 2.*

Project applicants are required to conduct inspections of sites before and after storm events to identify areas contributing to construction-related storm water discharge and to evaluate whether SWPPP control practices are adequate and properly implemented or whether additional control practices are needed.

(2) Operation

The EPA considers street surfaces to be the primary source of storm water pollution in urban areas. The Project site is currently associated with several street-generated pollutants, including: tire wear residue; petroleum products; oil and grease; metals and hydrocarbons washed from the paved areas; fertilizers, pesticides, and dirt from landscaped areas; and litter and animal droppings. The majority of these pollutant loads are usually washed away during the first flush of storm activity occurring after the dry-season period.

As a requirement of the Regional Water Quality Control Board, Los Angeles Region, project applicants are required to implement a Standard Urban Storm Water Mitigation Plan (SUSMP) during the operational life of the project to ensure that storm water pollution is addressed in one of the most effective ways possible, by incorporating Best Management Practices (BMPs) in the design phase of development. This Regional Board requirement provides for numerical design standards (water quality design standards) to ensure that storm water runoff is managed for water quality concerns in addition to flood protection and that pollutants carried by storm water are retained and not delivered to waterways.

2. PROJECT IMPACT

a. Significance Thresholds/Methodologies

A project would have a significant impact to drainage or surface water quality if development of the project were to result in any of the following:

- Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
- Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;

- Violate any water quality standards or waste discharge requirements; or
- Otherwise substantially degrade water quality.

Impacts to the local drainage system were evaluated by determining whether, via a comparison of anticipated increases in runoff quantities and storm drain capacity, post-Project storm water flows could be accommodated by the local storm drain system with the on-site storm drain improvements proposed as part of the Project site. Impacts on surface water quality were assessed by analyzing the composition of post-Project and construction-related runoff relative to the regulatory requirements described above.

b. Analysis of Project Impacts

(1) Drainage

(a) Construction

Construction of the proposed Project will not result in a significant change to existing hydrologic conditions. The existing downstream storm drain system, as designed by BOE, is flowing at or above capacity. Adding additional storm drain capacity is not recommended since it may improve the flooding situation locally, but would transfer the flooding to other downstream locations. The design hydrologic conditions before and after development will remain unchanged as a result of the Project. The existing drainage patterns and flow distribution shall be maintained. The area of the proposed development currently consists of fully paved parking lots. The BOE design calculations were prepared based on the areas being 100% impervious, which is consistent with a fully developed or paved site. No increase in runoff over existing conditions would occur during Project construction. Consequently, no change between the pre- and post-Project design flows will occur. No significant drainage impacts would occur during the construction of the proposed Project.

During construction, the existing 30-inch RCP located along 12th Street will be abandoned and realigned with a new 30-inch RCP, as shown on Figure 34. This will be accomplished as part of the realignment of 12th Street due to the Project.

The storm drain realignment discussed above could require temporary traffic lane closures and sidewalk closures during construction. Such lane closures could have temporary significant impacts on traffic circulation. The extent of potential impacts should be minimized by the fact that most of the streets in the Project vicinity currently provide substantial traffic carrying capacity and will be able to accommodate traffic management for temporary lane closures.

A full engineering study of the proposed alignment/size will be required to insure that equivalent hydraulic capabilities are maintained. On-site drainage systems must be designed and installed in a way to maintain existing drainage patterns. Upon completion of the final site plan, the exact size, material and location of the proposed storm drains shall be determined.

Although the Project may require the relocation of storm drain facilities, no significant impacts to drainage or water quality would occur. Impacts to air quality, transportation/circulation and noise from the proposed project, that include potential storm drain relocation, are analyzed in IV.E, Air Quality; IV.F, Transportation/Circulation; and IV.H, Noise, within this document.

Segments of the Pico Boulevard Drain and Cherry Street Drain located upstream and downstream of the Project site area, and other smaller storm drains currently located within the Project site area, would be maintained and would continue to service the Project site as well as off-site properties. Changes in the existing slope gradient would be minimal in order to maintain direction of runoff flows. Furthermore, the distribution of flows between the Pico Boulevard Drain and the Cherry Street Drain would be preserved. Existing properties in the area served by these storm drains would therefore not be adversely affected during construction.

(b) Operation

The operational phase of the Project will not result in a significant change to existing hydrologic conditions. As discussed above for the construction phase of the Project, the existing downstream storm drain system, as designed by BOE, is flowing at or above capacity. Adding additional storm drain capacity is not recommended since it may improve the flooding situation locally, but would transfer the flooding to other downstream locations. Therefore, the proposed Project will be designed to ensure that hydrologic conditions before and after development will remain unchanged as a result of the Project. The Project would also not have any additional effects on the perviousness of the Project site, or the pattern or quantity of storm water runoff beyond those described under construction. The BOE design calculations were prepared based on the Project areas being 100 percent impervious, which is consistent with a fully developed or paved site. The Project would actually slightly decrease the amount of pervious surface by providing landscaped areas, potentially reducing the amount of surface runoff. Also, the existing drainage patterns and flow distribution shall be maintained. Therefore, no significant impact resulting from a change between the pre- and post-Project design flows will occur. In addition, the buildings' drainage facilities and landscaping in comparison with the existing surface parking lots on the Project site, would potentially slow runoff leaving the site. Therefore, no significant drainage impacts would occur during operation of the Project. All future systems will be designed to be in conformance with BOE standards.

(2) Surface Water Quality**(a) Construction**

Surface water quality could potentially be significantly affected by construction activities. The primary concerns relating to surface water quality associated with construction of the Project are: (1) sediment transport from construction site runoff; and (2) discharges relating to the storage, handling, use and disposal of chemicals, fertilizers, pesticides, adhesives, coatings, lubricants, fuel, and other potentially hazardous materials.

Grading activities associated with construction would temporarily increase the amount of suspended solids from surface flows derived from the Project site during a concurrent storm event due to sheet erosion of exposed soil. In addition, on-site watering activities (utilized to reduce airborne dust) could contribute marginally to increased sediment loading of surface runoff during dry weather conditions. However, because the proposed Project would involve a construction area of greater than five acres, an NPDES permit under the Countywide general construction permit would be required, and BMPs would be implemented as part of the required SWPPP. BMPs would serve to minimize sedimentation, prevent contamination of hazardous materials, and eliminate non-storm water discharges. Compliance with the County's NPDES permit (No. CAS614001) and all relevant storm water quality management programs of federal, State, County and City agencies would reduce any potential impacts on receiving waters to less than significant levels.

During construction, the proposed Project would not violate any water quality standards or waste discharge requirements, nor would the Project impair the beneficial uses of receiving waters. With the implementation of BMPs, the Project would not result in significant impacts to surface water quality. No significant impacts would occur.

(b) Operation

The Project would cause an increase in automobile traffic and parking, which would likely result in an increased concentration of vehicle-related contaminants in the stormwater runoff. While there is a likely increase of pollutants generated by automobiles, the nature of the pollutants is similar to the existing use and the overall quality of the stormwater runoff is not anticipated to change significantly from the existing conditions.

Stormwater runoff from commercial, residential and industrial areas contains concentrations of petroleum product pollutants, heavy metals, coliform bacteria, oxygen-demanding substances and total suspended solids. During operations, the Project Applicant would be required to select source control and treatment control BMP(s) from the list approved by the Regional Board and included in the SUSMP. For example, these treatment control BMPs may include swales, infiltration basins at

the end of swales, biofilters, green belts, detention basins, and catch-basin basket inserts. In combination, these treatment control BMPs must be sufficiently designed and constructed to treat, infiltrate, or filter the first 0.75 inch of storm water runoff from a storm or a storm event. The SUSMP will specify the treatment control BMPs and other source control BMPs that will be built into the Project.

During operations, the Project would not violate any water quality standards or waste discharge requirements, nor would the Project impair the beneficial uses of receiving waters. With the implementation of BMPs, the Project would not result in significant impacts to surface water quality. Furthermore, by replacing the existing surface parking lots with urban land uses, the quantity of urban contaminants in relation to existing Project uses would be reduced; this is a beneficial effect of Project development. No significant impacts would occur.

3. MITIGATION MEASURES

a. Drainage

(1) Construction

Development of the proposed Project shall comply with all applicable State and local codes and ordinances pertaining to drainage issues. Specifically, all new connections to the existing storm drain system shall be designed and constructed per applicable City of Los Angeles Municipal Code requirements and design standards. All designs shall be subject to review and approval by the City Engineer and the Department of Building and Safety, prior to issuance of building permits.

Although the proposed Project is not expected to result in significant impacts with respect to drainage, the following measure shall further ensure that neither the Project site nor surrounding properties are subject to increased flood hazard:

1. Prior to construction activities on any development area, the Applicant shall prepare a master erosion control plan for that development area, which includes detailed flood control plans, for the City of Los Angeles Department of Public Works, Bureau of Engineering. The plans shall include hydrology/hydraulic calculations and drainage improvement plans, showing quantitatively how projected storm water runoff would not exceed existing design conditions. Such plans shall be reviewed and approved by the City prior to the issuance of building permits.

(2) Operation

Mitigation measures are not required as the proposed Project would not generate additional significant drainage impacts during operation.

b. Surface Water Quality**(1) Construction**

As construction of the Project will comply with all applicable requirements associated with NPDES Permit No. CAS614001 and all relevant storm water quality management regulations, no significant impact would occur and no mitigation measures would be required.

(2) Operation

As discussed above, the Project will implement source control and treatment control BMP(s) from the list approved by the Regional Board and included in the Standard Urban Stormwater Mitigation Plan (SUSMP). In addition, the following mitigation measure is recommended to ensure that the Project would not result in significant impacts to surface water quality:

2. The Applicant shall construct catch basins, roof drains, surface parking drains connecting directly to the existing storm drain system, and any other drainage improvements, as may be required by the Bureau of Engineering.

4. ADVERSE EFFECTS

With adherence to all applicable regulations and implementation of the measures outlined above, Project impacts on drainage and surface water quality would be less than significant.

5. CUMULATIVE IMPACTS

Project impacts related to drainage and surface water quality issues are localized on-site and do not affect any off-site areas associated with the related projects or the ambient growth. Cumulative development in the area would, however, increase the overall potential for increases in surface water runoff and a decline in surface water quality. Nevertheless, with adherence to applicable federal, State, County and City regulations and good engineering practices, these impacts will be less than significant. No cumulative impacts would therefore be associated with the proposed project and related projects with respect to drainage and surface water quality issues.

IV. ENVIRONMENTAL IMPACT ANALYSIS

E. AIR QUALITY

1. ENVIRONMENTAL SETTING

a. Regulatory Setting

In response to longstanding concerns regarding air pollution, Federal, State and local authorities have adopted various rules and regulations requiring evaluation of the impact of a project on air quality and appropriate mitigation for air pollutant emissions. The following discussion focuses on current air quality planning efforts and the responsibilities of the agencies involved in these efforts. A discussion of ambient air quality standards is also provided.

(1) Authority for Current Air Quality Planning

A number of plans and policies have been adopted by various agencies that address air quality concerns. Those plans and policies that are relevant to the proposed Project are discussed below.

(a) Federal Clean Air Act

The Federal Clean Air Act (CAA) was first enacted in 1955 and has been amended numerous times in subsequent years (1963, 1965, 1967, 1970, 1977, and 1990). The CAA establishes Federal air quality standards, known as National Ambient Air Quality Standards (NAAQS), and specifies future dates for achieving compliance. The CAA also mandates that states submit and implement a State Implementation Plan (SIP) for local areas not meeting these standards. These plans must include pollution control measures that demonstrate how the standards will be met. The City of Los Angeles is included in the South Coast Air Basin (Basin), which has been designated as a non-attainment area for certain pollutants that are regulated under the CAA. By a separate State statute, the South Coast Air Quality Management District (SCAQMD) has been established as the local air pollution control agency for the Basin.

The 1990 amendments to the CAA identify specific emission reduction goals for areas not meeting the NAAQS. These amendments require both a demonstration of reasonable further progress toward attainment and incorporation of additional sanctions for failure to attain or to meet

interim milestones. The sections of the CAA applicable to the development of the proposed Project include Title I (Non-attainment Provisions) and Title II (Mobile Source Provisions).

Title I provisions were established with the goal of attaining the NAAQS for the following criteria pollutants: (1) ozone (O₃); (2) nitrogen dioxide (NO₂); (3) sulfur dioxide (SO₂); (4) particulate matter (PM₁₀, comprised of airborne particles less than or equal to 10 microns in diameter); (5) carbon monoxide (CO); and (6) lead (Pb). Table 10 on page 210 lists the NAAQS currently in effect for criteria pollutants. The CAA also sets certain deadlines for meeting the NAAQS within the Basin including: (1) O₃ by the year 2010; (2) PM₁₀ by the year 2006; and (3) CO by the year 2000.

The Basin fails to meet the National standards for O₃, PM₁₀, and CO and therefore is considered a Federal non-attainment area for these pollutants. Non-attainment designations are categorized into four levels of severity: moderate; serious; severe; and extreme. In addition, the Basin is classified as being in maintenance for NO₂ since it is currently in attainment and measures are being taken to ensure that it does not go back into non-attainment. Table 10 on page 210 lists the criteria pollutants and Table 11 on page 211 lists the Basin's relative attainment status.

Mobile source emissions are regulated in accordance with Title II provisions. These provisions require the use of cleaner-burning gasoline and other cleaner-burning fuels such as methanol and natural gas. Automobile manufacturers are also required to reduce tailpipe emissions of hydrocarbons and nitrogen oxides (NO_x). In addition, other CAA requirements, including Title V, which requires facility-wide permits for "major stationary sources" may be applicable to the project. Regulatory standards to meet the requirements of Title V have been adopted by the SCAQMD and are set forth in SCAQMD Regulation XXX.

(b) California Clean Air Act

The California Clean Air Act (CCAA), signed into law in 1988, requires all areas of the State to achieve and maintain the California Ambient Air Quality Standards (CAAQS) by the earliest practical date. The CAAQS incorporate additional standards for most of the criteria pollutants and has set standards for other pollutants recognized by the State. California standards tend to be more restrictive than Federal standards and are based on even greater health and welfare concerns. California has also set standards for sulfates, hydrogen sulfide, vinyl chloride and visibility-reducing particles. The Basin does meet the standards for sulfates, hydrogen sulfide and vinyl chloride, but does not meet the California standard for visibility and is not expected to fully meet the visibility standard until 2010. Table 11 also show the CAAQS currently in effect for criteria pollutants.

Table 10

AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards ^a	National Standards ^a	Pollutant Health Effects	Major Pollutant Sources
Ozone (O ₃)	1 Hour	0.09 ppm (180 Fg/m ³)	0.12 ppm (235 Fg/m ³)	High concentrations can directly affect lungs, causing irritation. Common effects are damage to vegetation and cracking of untreated rubber.	Motor vehicles.
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	Interferes with the transfer of fresh oxygen to the blood and deprives sensitive tissues of oxygen.	Internal combustion engines, primarily gasoline-powered motor vehicles.
	8 Hour	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)		
Nitrogen Dioxide (NO ₂)	Annual Average	—	0.05 ppm (100 Fg/m ³)	Irritating to eyes and respiratory tract. Colors atmosphere reddish-brown.	Motor vehicles, petroleum refining operations, industrial sources, aircraft, ships, railroads.
	1 Hour	0.25 ppm (470 Fg/m ³)	—		
Sulfur Dioxide (SO ₂)	Annual Average	—	80 Fg/m ³ (0.03 ppm)	Irritates upper respiratory tract; injurious to lung tissue. Can yellow the leaves of plants; destructive to marble, iron and steel. Limits visibility and reduces sunlight.	Fuel combustion, chemical plants, sulfur recovery plants and metal processing.
	24 Hour	0.04 ppm (105 Fg/m ³)	365 Fg/m ³ (0.14 ppm)		
	1 Hour	0.25 ppm (655 Fg/m ³)	—		
Particulate Matter (PM ₁₀)	Annual Geometric Mean	30 Fg/m ³	—	May irritate eyes and respiratory tract. Absorbs sunlight, reducing amount of solar energy reaching the earth. Produces haze and limits visibility.	Dust and fume-producing industrial and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities such as wind-raised dust and ocean spray.
	24 Hour	50 Fg/m ³	150 Fg/m ³		
	Annual Arithmetic Mean	—	50 Fg/m ³		
Lead (Pb)	30 days	1.5 Fg/m ³	—	May cause brain and other nervous system damage and digestive problems. Some lead-containing chemicals cause cancer in animals.	Leaded gasoline, paint, smelters, and refineries.
	Calendar Qtr	—	1.5 Fg/m ³		

^a ppm = parts per million; Fg/m³ = micrograms per cubic meter; mg/m³ = milligrams per cubic meter.

Source: California Air Resources Board, 1996, and the USEPA, 1997.

Table 11

SOUTH COAST AIR BASIN ATTAINMENT STATUS

Pollutant	National Status	California Status
Ozone (O ₃)	Extreme	Extreme
Carbon Monoxide (CO)	Serious	Serious
Sulfur Dioxide (SO ₂)	Attainment ^a	Attainment ^a
Nitrogen Dioxide (NO ₂) ^b	Maintenance ^b	Maintenance ^b
PM ₁₀	Serious	Serious
Lead (Pb)	Attainment ^a	Attainment ^a

^a A pollutant is designated as in attainment if the standard for that pollutant was not violated at any site in the area during a three year period.

^b NO₂ is classified as being in maintenance since it is currently in attainment and measures are being taken to ensure that it does not go back into non-attainment.

Source: California Air Resources Board, 1999.

Local air quality management districts, such as the South Coast Air Quality Management District (SCAQMD), regulate air pollution from commercial and industrial facilities. All air pollution control districts have been formally designated as in attainment or non-attainment for each State air quality standard. Table 11 lists the criteria pollutants and the Basin's attainment status relative to the CAAQS and NAAQS.

Serious non-attainment areas are required to prepare air quality management plans that include specified emission reduction strategies in an effort to meet clean air goals. These plans are required to include, among other emissions-reducing activities, Best Available Retrofit Control Technology for existing sources; control programs for area sources and indirect sources; a SCAQMD permitting system designed to allow no net increase in emissions from any new or modified permitted sources of emissions; transportation control measures; sufficient control strategies to achieve a five percent or more annual reduction in emissions (or 15 percent or more in a three-year period) for Reactive Organic Compounds (ROC), NO_x, CO and PM₁₀; and demonstration of compliance with the California Air Resources Board's established reporting periods for compliance with air quality goals.

(c) South Coast Air Quality Management District

The SCAQMD has jurisdiction over approximately 12,000 square-miles consisting of the Basin (a 6,600 square-mile area encompassing all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties) and the Los Angeles County and Riverside County portions of what was formerly the Southeast Desert Air Basin under State classification. While air quality in this area has improved, with 1999 (the latest year for which comprehensive data are available) registering some of the lowest levels of air pollutant concentrations in decades, the Basin requires continued diligence to meet air quality standards. The SCAQMD has adopted a

series of Air Quality Management Plans (AQMP) to meet the California and National ambient air quality standards. The most recent version of the AQMP was adopted in 1997. Portions of the AQMP that are required to meet Federal CAA requirements have been submitted to the U.S. Environmental Protection Agency (USEPA) and will therefore become federally enforceable once they are approved by the USEPA. The 1997 AQMP describes a comprehensive air pollution control program that focused on attaining the California and National ambient air quality standards in the Basin and those portions of the Southeast Desert Air Basin that are under the jurisdiction of the SCAQMD. In relation to earlier plans, the 1997 AQMP places greater emphasis on the most highly effective controls and regulations, rather than a breadth of controls on smaller sources such as land uses. It also focuses more on particulate emissions that result from incomplete fuel combustion than previous plans, recognizing recent research on particulates and health effects. Notwithstanding, the 1997 AQMP still calls for the implementation of all feasible control measures and the advancement and use of new technologies where possible.

The SCAQMD also adopts rules to implement portions of the AQMP. Several of these rules may apply to construction or operation of the proposed Project. For example, Rule 403 requires the implementation of best available control technology (BACT) to control fugitive dust. In addition, certain stationary sources of air pollution, such as boilers and heaters, may require permits from the SCAQMD pursuant to Rules 201, 202 and 203. Emission increases related to those sources may be subject to SCAQMD Regulation XIII or Regulation XXX which among other things requires that the BACT be utilized to reduce pollutants, and requires that any increases of criteria air pollutants be offset by achieving equivalent emission reductions at the facility within the Basin. In addition, the proposed Project may be subject to CAA Title V, as stated in SCAQMD Regulation XXX, under which all equipment located at the facility must be in compliance with all terms, requirements, and conditions specified in a Title V permit. Finally, the Project may be subject to SCAQMD Rule 2202 which requires employers of more than 250 employees at a worksite to implement strategies that help to reduce mobile source emissions.

In addition to the AQMP and its rules and regulations, SCAQMD has published a handbook (CEQA Air Quality Handbook, November 1993) that is intended to provide local governments and CEQA practitioners with guidance for analyzing and mitigating project-specific air quality impacts. This handbook provides standards, methodologies and procedures for conducting air quality analyses in EIRs.

(d) Regional Comprehensive Plan and Guide

The Southern California Association of Governments (SCAG) is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino and Imperial Counties and serves as a forum for regional issues relating to transportation, the economy, community development and the environment. SCAG is the Federally designated metropolitan planning organization (MPO) for the majority of the southern California region and is the largest MPO in the

nation. With respect to air quality planning, SCAG has prepared the *Regional Comprehensive Plan and Guide (RCPG)* for the SCAG region, which includes Growth Management and Regional Mobility chapters that form the basis for the land use and transportation control portions of the AQMP and are utilized in the preparation of air quality forecasts and the consistency analysis that is included in the AQMP.

b. Existing Air Quality Conditions

(1) Regional Air Quality

The distinctive climate of the Basin, in which the Project site is located, is determined primarily by its terrain and geographical location. Regional meteorology is largely dominated by a persistent high pressure area which commonly resides over the eastern Pacific Ocean. Seasonal variations in the strength and position of this pressure cell cause changes in the weather patterns of the area. Warm summers, mild winters, infrequent rainfall, moderate daytime on-shore breezes, and moderate humidity characterize local climatic conditions. This normally mild climatic condition is occasionally interrupted by periods of hot weather, winter storms, and hot easterly Santa Ana winds.

The Basin is an area of high air pollution potential, particularly from June through September. This condition is generally attributed to light winds and shallow vertical atmospheric mixing. This frequently reduces pollutant dispersion, thus causing elevated air pollution levels. Pollutant concentrations in the Basin vary with location, season and time of day. Ozone (O₃) concentrations, for example, tend to be lower along the coast, higher in the near inland valleys and lower in the far inland areas of the Basin and adjacent desert.

Over the past 30 years, substantial progress has been made in reducing air pollution levels in southern California. The area previously was in non-attainment for all NAAQS, except SO₂. The area is now defined as in attainment for NO₂, lead, and SO₂, with CO approaching attainment. PM₁₀ and ozone levels, while reduced substantially from their peak levels, are still far from attainment.

(2) Local Area Conditions

(a) Existing Pollutant Levels at Nearby Monitoring Stations

The SCAQMD maintains a network of air quality monitoring stations located throughout the Basin. The proposed Project site is located in downtown Los Angeles. As defined by the SCAQMD, the monitoring station most representative of existing air quality conditions in the area of the proposed Project site is the Central Los Angeles Monitoring Station, which is located at 1630 North Main Street, approximately three miles northeast of the Project site. Criteria pollutants, including O₃, CO, NO₂, SO₂, and PM₁₀ are monitored at this station. The most recent data available

from this monitoring station encompassed the years 1995 to 1999. The data, shown in Table 12 on page 215, shows the following pollutant trends:

Ozone (O₃) - The maximum ozone concentration recorded during the reporting period was 0.17 ppm (1995). During this reporting period, the California standard of 0.09 ppm was exceeded between 6 and 38 times annually. The lowest reading was recorded in 1997, at only six exceedances. The National standard of 0.12 ppm was exceeded between zero and five days annually during the five-year reporting period, with the maximum number of exceedances occurring in 1995 and 1998, and the minimum number of exceedances occurring in 1997.

Carbon Monoxide (CO) - The maximum recorded one-hour concentration during the reporting period was 10.0 ppm (1995 and 1996). During this reporting period, there were no exceedances of the California or National one-hour CO standards. The maximum recorded eight-hour CO concentration was 8.4 ppm, recorded in 1995 and 1996. The California and National standards, both reported at 9.0 ppm for the eight-hour average, were not exceeded during the reporting period.

Nitrogen Dioxide (NO₂) - The highest recorded concentration of NO₂ during the reporting period was 0.25 ppm (1996). The California NO₂ standard was not exceeded during the reporting period, nor were there any violations of the National NO₂ standard.

Sulfur Dioxide (SO₂) - The highest recorded concentration of SO₂ during the reporting period 1995 to 1999 was 0.14 ppm (1998). No violations of the California or National SO₂ standards were recorded during this reporting period.

Particulate Matter (PM₁₀) - The highest recorded concentration during the reporting period was 141 micrograms per cubic meter (Fg/m³) of air particulates (1995). During this reporting period, the California PM₁₀ standard was exceeded between 18 and 31 percent of the time annually, with the highest number of exceedances in 1999 and the lowest number of exceedances recorded in 1996 and 1998. PM₁₀ is monitored every six days coincident with a National schedule; thus, PM₁₀ exceedances are based on the number of days that sampling actually occurred. No exceedances of the National standard occurred between 1995 and 1999.

Lead (Pb) - The Basin is currently in compliance with California and National standards for lead.

Table 12

**POLLUTANT STANDARDS AND CENTRAL LOS ANGELES
MONITORING STATION AMBIENT AIR QUALITY DATA**

	1995	1996	1997	1998	1999
Ozone (O₃)					
<i>California Standard (1-hr avg. > 0.09 ppm)</i>					
<i>National Standard (1-hr avg. > 0.12 ppm)</i>					
Maximum Concentration 1-hr period (ppm)	0.17	0.14	0.12	0.14	0.12
Days California standard exceeded	38	24	6	17	13
Days National 1-hr standard exceeded	5	4	0	5	1
Carbon Monoxide (CO)					
<i>California Standard (1-hr avg. > 20 ppm)</i>					
<i>California Standard (8-hr avg. > 9 ppm)</i>					
<i>National Standard (1-hr avg. > 35 ppm)</i>					
<i>National Standard (8-hr avg. > 9 ppm)</i>					
Maximum concentration 1-hr period (ppm)	10	10	9	8	n/a
Maximum concentration 8-hr period (ppm)	8.4	8.4	7.9	6.1	6.37
Days California 1-hr standard exceeded	0	0	0	0	0
Days National 1-hr standard exceeded	0	0	0	0	0
Days California 8-hr standard exceeded	0	0	0	0	0
Days National 8-hr standard exceeded	0	0	0	0	0
Nitrogen Dioxide (NO₂)					
<i>California Standard (1-hr avg. > 0.25 ppm)</i>					
<i>National Standard (AAM > 0.05334 ppm)</i>					
Maximum 1-hr concentration (ppm)	0.24*	0.25	0.20	0.17	n/a
Annual Arithmetic Mean (AAM)	0.0450*	0.0436	0.0430	0.0398	n/a
Days California standard exceeded	0*	0	0	0	0
Percent National standard exceeded	0*	0	0	0	0
Sulfur Dioxide (SO₂)					
<i>California Standard (1-hr avg. > 0.25 ppm)</i>					
<i>National Standard (AAM > 0.03 ppm)</i>					
Maximum 1-hr concentration (ppm)	0.01	0.01	0.02	0.14	n/a
Annual Arithmetic Mean (AAM)	0.0010	0.0015	0.0007	0.0008	n/a
Days California standard exceeded	0	0	0	0	0
Days National standard exceeded	0	0	0	0	0
Particulate Matter (PM₁₀)					
<i>California standard (24-hr avg. > 50 Fg/m³)</i>					
<i>National standard (24-hr avg. > 150 Fg/m³)</i>					
Maximum 24-hr concentration (Fg/m ³)	141	138	102	80	88
Percent samples exceeding California standard	23	18	24	18	31
Percent samples exceeding National standard	0	0	0	0	0

AAM = Annual Arithmetic Mean ppm = parts per million Fg/m³ = micrograms per cubic meter

* Less than 12 full months of data. May not be representative.

n/a = not available

Note: Ambient data for airborne lead is not included in this table since the Basin is currently in compliance with State and National standards for lead. Ambient data for fine particulate matter (PM_{2.5}) is not available since this pollutant was only identified as a criteria pollutant in 1997 and, as such, data has not yet been collected on PM_{2.5} concentrations.

Sources: South Coast Air Quality Management District, Air Quality Data 1995-1999; California Air Resources Board.

2. ENVIRONMENTAL IMPACTS

a. Significance Thresholds

Air quality planning within the Basin is based on attainment of the NAAQS and CAAQS. To this end, the SCAQMD has established thresholds of significance for the assessment of air quality impacts attributable to private development projects. The thresholds seek to promote NAAQS and CAAQS attainment.

(1) Regional Impacts

The SCAQMD has promulgated daily and quarterly emission thresholds for project construction as well as daily emission thresholds for project operations. The SCAQMD thresholds are set at a level that either promote or maintain regional attainment of the relevant ambient air quality standards. A project is deemed to have a significant impact on regional air quality if emissions (specified in either pounds of pollutant emitted per day or per quarter) of specified pollutants related to either project construction or operation exceed the significance threshold. These regional significance thresholds are summarized in Table 13 on page 217.

(2) Local Impacts

Based on the State CEQA Guidelines, the proposed Project would have a significant impact upon local area air quality if it causes a new exceedance or a “measurable increase” in an existing exceedance of an NAAQS or CAAQS. The significance thresholds for new exceedances consist of the relevant NAAQS or CAAQS, as listed in Table 13. Measurable increases in significance thresholds only apply when ambient pollutant concentrations prior to project development exceed either the NAAQS or CAAQS. These local pollutant concentration thresholds are summarized in Table 14 on page 218.

Emissions of sulfates, hydrogen sulfide, lead, and vinyl chloride are expected to be negligible, based on the types of fuels to be consumed (i.e., gasoline and diesel) during Project construction and operations. Though listed in the CAAQS, these pollutants would likely be generated in negligible quantities, and the SCAQMD only monitors for these pollutants on a limited basis at a limited number of SCAQMD monitoring stations. As these pollutants are not a problem within the Basin, the SCAQMD has not established significant thresholds for them, and they are therefore not further analyzed in this Draft EIR.

Table 13

SCAQMD REGIONAL SIGNIFICANCE THRESHOLDS

Air Contaminant	Construction (Pounds per Day)	Construction (Tons per Quarter)	Post-Construction Operations (Pounds per Day)
Carbon Monoxide	550	24.75	550
Nitrogen Oxides	100	2.50	55
Reactive Organic Compounds	75	2.50	55
Particulate Matter	150	6.75	150
Sulfur Oxides	150	6.75	150

Source: South Coast Air Quality Management District, *CEQA Air Quality Handbook*, November 1993.

(3) Sensitive Receptors

Some population groups, such as children, the elderly, and acutely ill and chronically ill persons, especially those with cardio-respiratory diseases, are considered more sensitive to air pollution than others. Sensitive land use receptors in the vicinity of the project site include residential uses, schools, hospitals and senior housing. Other land uses in the vicinity of the proposed Project site include commercial and office buildings, retail stores and parking lots. These other uses are not considered to be sensitive receptors. While pedestrians accessing these uses could include some members of sensitive population groups, these individuals are not specifically identified in the analysis in accordance with SCAQMD methodology, since their presence in the vicinity of the proposed Project site would be limited and/or intermittent.

b. Methodologies/Analysis of Project Impacts

An analysis of the potential air quality impacts of the proposed Project was conducted for both the construction and post-construction operation phases of the proposed Project. For each of these phases, an analysis was performed for regional emissions. An analysis of the potential impacts on local ambient PM₁₀ concentrations from Project-related construction activities was also conducted. For post-construction operations, the analysis also addresses local area concentrations of a specific pollutant, carbon monoxide. CO is the primary pollutant of concern when analyzing local traffic-related air quality impacts, and it is the only pollutant from mobile sources for which standardized modeling methodologies for estimating localized concentrations have been developed and approved by the SCAQMD. The worksheets for the air quality modeling are provided in Appendix D of this Draft EIR.

Table 14

LOCAL POLLUTANT CONCENTRATION (MEASURABLE INCREASE) THRESHOLDS

Air Contaminant	Averaging Time	Most Stringent Air Quality Standard	Significant Change in Air Quality Concentration
Carbon Monoxide	1-hour	20 ppm	n/a
	8-hour	9 ppm	n/a
Suspended Particulate Matter # 10 Fm (PM ₁₀)	24-hour	50 Fg/m ³	2.5 Fg/m ³
	Annual	30 Fg/m ³	1 Fg/m ³
	Geometric Mean		

n/a = the measurable increase threshold is not applicable since ambient CO concentrations in the vicinity of the project site are below both the California and National Ambient Air Quality Standards

ppm = parts per million

Fg/m³ = micrograms per cubic meter

Source: South Coast Air Quality Management District Rule 1303, May 1996.

(1) Construction

(a) Regional Construction Impacts

Construction of the proposed Project would generate PM₁₀ pollutant emissions from the following activities: (1) site preparation operations (grading/excavation); (2) travel by construction workers to and from the site; (3) delivery and hauling of construction materials and supplies to and from the site; (4) fuel combustion by onsite construction equipment; and (5) the application of architectural coatings and other building materials that release reactive organic compounds.

Construction emissions are calculated based on the type and magnitude of development which would be accommodated under the proposed Project, the mix of construction equipment required to build the project, and emission factors from the SCAQMD's *CEQA Air Quality Handbook* and USEPA's *Compilation of Air Pollutant Emission Factors (AP-42)*. Site preparation, which includes grading, scraping and excavation after demolition of existing structures, was determined to produce the greatest regional construction emissions because this scenario represents the highest projected level of concurrent construction activity over the largest area and the highest projected level of construction equipment use. Therefore, this phase of construction was used to calculate the worst-case construction impacts for the Project.

Estimates of regional construction emissions were based upon the following worst-case assumptions:

- 1) All construction equipment would be diesel-powered and would operate simultaneously for 10 hours per day.

- 2) The equipment mix for site preparation and construction activities would include scrapers, graders, bulldozers, excavators, etc., as detailed in Appendix D of this Draft EIR.

Daily and quarterly construction-related regional emissions for the proposed Project are presented in Table 15 on page 220. Construction-related daily emissions would exceed SCAQMD significance thresholds for NO_x, CO, ROC, and PM₁₀. Construction-related quarterly emissions would exceed SCAQMD significance thresholds for NO_x, CO, and ROC. Thus, emissions of these pollutants would result in a significant short-term regional air quality impact. Quarterly emissions of SO_x and PM₁₀ and daily emissions of SO_x would be less than significant, since levels of these emissions would fall below the SCAQMD significance thresholds.

(b) Local Construction Impacts

Construction emissions for the proposed Project were estimated by defining construction activity areas and activity levels within these areas and are based on current emission factor data.³⁵ During construction, the main source of local air pollutant emissions would occur during grading and excavation when large numbers of diesel-powered construction equipment would be involved with soil disturbance. The analysis assumes concurrent grading and excavation activities within the individual activity areas. For the purposes of this analysis, grading emissions are defined as the emissions associated with the leveling of the site, while excavation includes emissions associated with the lifting and dropping of dirt. As such, the emission forecasts provided below reflect a specific set of conservative assumptions based on a hypothetical construction scenario wherein a relatively large amount of construction is occurring in a relatively intensive manner. Actual emissions of individual construction activities would, in all probability, be less than those forecasted.

During the grading/excavation phase of construction, fugitive PM₁₀ emissions would be at their greatest magnitude.³⁶ Concurrent fugitive and equipment emissions represent the greatest potential for construction impacts with regard to PM₁₀. During construction, emissions of other criteria pollutants and additional pollutants for which California has set standards would not pose the potential to significantly impact the identified sensitive receptors. Therefore, the analysis of local air quality impacts from construction activities focuses on PM₁₀ emissions and the resulting impact on sensitive receptors.

Computer modeling of PM₁₀ emissions determined above was performed to determine impacts on nearby residential receptors. The USEPA 1996 *Guideline on Air Quality Models* (GAQM) specifies the use of the USEPA Industrial Source Complex Short Term (ISCST) model for

³⁵ Emission factor data was taken from the USEPA AP-42, *Compilation of Air Emission Factors, October 1998*.

³⁶ Fugitive PM₁₀ is airborne particulate matter from soil disturbance (i.e., digging, grading, bulldozing, driving on unpaved roads, etc.) generated during grading/excavation.

Table 15

WORST-CASE PROJECT-RELATED REGIONAL CONSTRUCTION EMISSIONS

	Estimated Emissions ^a				
	CO	NO _x	PM ₁₀ ^b	ROC	SO _x
Daily Emissions (lbs/day)^c	1343	1497	168	550	90
SCAQMD Daily Threshold (lbs/day)	550	100	150	75	150
Lbs/Day Over (Under)	793	1397	18	475	(60)
Quarterly Emissions (tons/quarter)	34.5	44.0	4.1	18.5	2.7
SCAQMD Quarterly Threshold (tons/quarter)	24.75	2.5	6.75	2.5	6.75
Tons/Quarter Over (Under)	9.75	41.5	(265)	16.1	(4.05)

^a Worst-case construction impacts are based upon the highest projected daily and quarterly emissions occurring during the demolition, site preparation and construction phase.

^b Fugitive dust emissions are based on USEPA AP-42 assumptions.

^c Daily estimate based on 22.5 working days per month.

Source: PCR Services Corporation, December 2000.

computing downwind pollutant concentrations from area sources such as construction activities. The nearest offsite residential buildings were selected as receptors because the applicable ambient air quality standard is expressed in terms of a 24-hour average and the nearest residential buildings are the closest locations where an exposure of this duration could occur (i.e., people would not likely be present for a continuous 24-hour period at other sensitive locations, such as parks, nor at the property fence line). The ISCST model was run using the SCAQMD mandated 1981 meteorological data from the Central Los Angeles Monitoring Station. Meteorology, in addition to construction activity location and levels, is a key determinant in the identification of potential impacts. As the ambient air quality standard is expressed in terms of an exceedance, the analysis takes into account hourly wind data (i.e., direction and velocity) for every hour of the year during the construction period and computes hourly ground level PM₁₀ concentrations. These concentrations are then averaged over a 24-hour period for comparison against the relevant significance thresholds. This methodological requirement creates the potential for atypical wind patterns to create an impact that would not typically occur based on prevailing wind patterns.

The 24-hour California standard for PM₁₀ is established at 50 Fg/m³. The SCAQMD has established that in cases where ambient conditions exceed this threshold, projects cannot increase PM₁₀ concentrations by more than 2.5 Fg/m³. Construction activity at the Olympic North Properties has the greatest potential for impacts on nearby residential sensitive receptors, with the closest receptor located at the corner of Francisco Street and Olympic Boulevard. The maximum forecasted PM₁₀ concentration increase of 1.95 Fg/m³ would occur at this location. Impacts from construction activities on other sensitive receptors, further from the Project site, such as Tenth Street School and Norwood Street School, would be much less than 1.95 Fg/m³ due to the dispersion properties of PM₁₀ (i.e., the pollutant dissipates further from the source). Since the construction activity area with the greatest potential for impacts would fall below the 2.5 Fg/m³ significance threshold, it can be concluded that construction within any given activity area throughout the proposed Project site

would similarly fall below the threshold. Therefore, local air quality impacts relative to PM₁₀ concentrations would be less than significant.

(2) Operations

Project operational impacts were evaluated for Project buildout by 2008. In order to properly analyze operational emissions, it is important to assign appropriate emissions and emission factors to the individual pollutant sources. Mobile source emission forecasts are sensitive to the forecast year, as future mobile source emission factors are substantially reduced as cleaner on-road vehicles are introduced into the vehicle fleet.

(a) Regional Operation Impacts

Air pollutant emissions associated with Project occupancy and operation would be generated by both the consumption of energy (electricity and natural gas) and by the operation of on-road vehicles. Emissions associated with energy consumption are classified by the SCAQMD as regional stationary source emissions. Electricity is considered an area source since it is produced at various locations within, as well as outside of, the Basin. Since it is not possible to isolate where electricity is produced, these emissions are considered to be regional in nature. Emissions of criteria pollutants associated with the production of energy were calculated using emission factors from the SCAQMD's *CEQA Air Quality Handbook*.

Emissions modeled for the regional on-road air quality analysis were compiled using the URBEMIS7G emission inventory model. This computer model projects emission rates for motor vehicles based on a desired year of analysis, a projected vehicle fleet mix, projected vehicle speeds, and whether these emissions are expected to occur during the summer or the winter months. Assumptions used in preparing the model analysis were consistent with those recommended in SCAQMD's *CEQA Air Quality Handbook*. The regional on-road emissions were based on average daily trips for the proposed various land uses.³⁷

To calculate regional emissions solely attributable to the proposed Project, emissions from future baseline conditions without the Project were subtracted from emissions associated with future baseline conditions with the Project (future baseline with Project minus future baseline without Project equals net project only emissions). Net Project emissions were calculated for the Project buildout, as shown in Table 16 on page 222. As indicated therein, regional emissions resulting from the proposed Project are expected to exceed the SCAQMD thresholds for CO, NO_x, PM₁₀, and ROC.

³⁷ The project's average daily trips are presented in Section V.L.1, Transportation/Circulation, of the Draft EIR.

Table 16

PROJECT-RELATED OPERATIONAL EMISSIONS

Emission Source	CO (Pounds per Day)	NO _x (Pounds per Day)	PM ₁₀ (Pounds per Day)	ROC (Pounds per Day)	SO _x (Pounds per Day)
Baseline without Project Emissions					
On Road Mobile Sources ^a	0	0	0	0	0
Stationary Sources ^b	0	0	0	0	0
Total Baseline without Project Emissions	0	0	0	0	0
Project Emissions					
On Road Mobile Sources ^a	2498	463	329	824	0
Stationary Sources ^b	33	191	4	4	15
Miscellaneous Sources ^c	15	20	4	52	3
Total Baseline with Project Emissions	2546	674	337	880	18
Net Project Emissions					
On Road Mobile Sources ^a	2498	463	329	824	0
Stationary Sources ^b	33	191	4	4	15
Miscellaneous Sources ^c	15	20	4	52	3
Total (Proposed Project)	2546	674	337	880	18
SCAQMD Significance Threshold	550	55	150	55	150
Over (Under)	1996	619	187	825	(132)

^a Calculated based on average daily trips, as presented in Section IV.F.1, Traffic, Transportation/Circulation, of this Draft EIR.

^b Based on electricity and natural gas consumption obtained from the SCAQMD's CEQA Air Quality Handbook.

^c Based on emissions from miscellaneous sources such as charbroilers, chillers, emergency generators, architectural coatings and landscape and garden equipment.

Source: PCR Services Corporation, December 2000.

Development projects for which toxic emissions are of a concern usually include industrial, manufacturing, and commercial land uses such as gas stations and dry cleaning facilities. While these types of uses are not anticipated to occur at the Project site, a potential exists that on-site development may include uses, which have the potential to emit air toxics. It is important to note that any such facility would require a permit from the SCAQMD. The regulations, which guide the issuance of these permits, require that any potential health risk be reduced to acceptable levels and that emissions be reduced to less than one pound per day. With adherence to the SCAQMD's existing regulations, Project operations would have a less than significant impact on human health.

(b) Local Operation Impacts

During the operational phase of the Project, traffic would have the potential for local area impacts. An analysis of selected intersections was performed to determine the potential for the creation of CO impacts (hotspots). Local area CO concentrations were projected using the CALINE-4 traffic pollutant dispersion model. The analysis of CO impacts followed the protocol

Table 17

SELECTED INTERSECTIONS ANALYZED FOR CO IMPACTS

Weekday P.M. Intersections	Saturday Evening Intersections
1) Francisco and Olympic	1) Cherry and Pico
2) Figueroa and 9 th	2) Georgia and 11 th
3) Figueroa and Olympic	3) Francisco and Olympic
4) Figueroa and 11 th	4) Figueroa and Olympic
5) Flower and 9 th	5) Figueroa and Olympic
6) Flower and Olympic	6) Flower and 11 th

Source: PCR Services Corporation, December 2000.

recommended by the California Department of Transportation and published in the document entitled *Transportation Project-Level Carbon Monoxide Protocol*, December 1997. The analysis is also consistent with procedures identified through the SCAQMD CO modeling protocol, with all four corners of each intersection analyzed to determine whether Project traffic would result in a CO concentration that exceeds National or State CO standards. Six intersections were selected for analysis for weekday P.M. and Saturday P.M. peak hour traffic volumes based on their Level of Service (LOS), the Project's traffic contribution to the intersection and the proximity of the intersection to sensitive receptors. The intersections listed in Table 17 below have the highest potential for CO hotspot formation due to a poor LOS (functioning near or above capacity) and high Project traffic contributions.

Future CO concentrations were determined for the weekday P.M. peak and Saturday P.M. peak time periods by adding the predicted increase in CO concentrations attributable to implementation of the proposed Project to a projected ambient concentration (i.e., a future baseline condition). Based upon guidance from the SCAQMD, an ambient CO concentration was projected for 2008 based upon the past 15 years of air quality data from the Anaheim Monitoring Station (Chico, 1998). The Central Los Angeles Monitoring Station was used in the analysis as it is the most representative of existing conditions at the Project site. Baseline conditions as well as the Project's contribution to CO concentrations were identified for the weekday P.M. and Saturday evening peak hours. The A.M. peak hour was not chosen for analysis because the P.M. peak hour represents worst-case conditions with respect to traffic volumes.

The CALINE-4 model generates CO concentrations averaged over a one-hour time period under worst-case atmospheric conditions for the area, including low wind speeds and low atmospheric circulation. Eight-hour concentrations were calculated by converting one-hour concentrations to eight-hour equivalents, using the conversion protocol recommended by the SCAQMD.

The results of the local area CO dispersion analysis are presented in Table 18 and Table 19 on pages 225 and 226, respectively. As shown, Project-related traffic is not anticipated to result in any exceedances of the State one-hour CO standard of 20 ppm at any of the study intersections during the P.M. and Saturday P.M. peak periods. Similarly, eight-hour concentrations would remain below the State standard of 9 ppm.

Since significant impacts would not occur at the intersections with the highest potential for CO hotspot formation, no significant impacts are anticipated to occur at any other locations in the Project vicinity. Consequently, sensitive receptors in the area would not be significantly affected by CO emissions generated by Project-related traffic. Localized air quality impacts related to mobile source emissions would therefore be less than significant for the proposed Project.

c. Consistency with Adopted Plans and Policies

The SCAQMD has adopted criteria for assessing consistency with applicable regional plans and the Air Quality Management Plan in its CEQA Air Quality Handbook. This section of the air quality analysis examines the consistency of the proposed Project with the AQMP.

(1) SCAQMD Handbook Policy Analysis

In accordance with the procedures established in the SCAQMD CEQA Air Quality Handbook, the following criteria are to be addressed in order to determine project consistency with SCAQMD and SCAG policies:

1. Will the project result in any of the following:
 - An increase in the frequency or severity of existing air quality violations; or
 - Cause or contribute to new air quality violations; or
 - Delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.
2. Will the project exceed the assumptions utilized in preparing the AQMP?

With respect to the first criterion, SCAQMD methodologies require that an air quality analysis include forecasts of project emissions in a regional context during construction, and in a regional as well as local context during project occupancy. These forecasts are provided. Since the consistency criteria identified under the first criterion pertain mostly to pollutant concentrations rather than to total regional emissions (i.e., air quality standards are expressed as concentrations

Table 18

WEEKDAY EVENING TRAFFIC LOCAL AREA CARBON MONOXIDE (CO) DISPERSION ANALYSIS

Intersection	Peak Period^a	1-Hour Ambient Concentration (ppm)	Maximum 1-Hour Project Contribution^b (ppm)	Maximum 1-Hour Concentration^b (ppm)	8-Hour Ambient Concentration (ppm)	Maximum 8-Hour Project Contribution (ppm)	Maximum 8-Hour Concentration^b (ppm)
Francisco and Olympic	P.M.	5.65	1.9	7.6	5.17	1.6	6.8
Figueroa and 9 th	P.M.	5.65	3.9	9.6	5.17	3.2	8.4
Figueroa and Olympic	P.M.	5.65	1.5	7.2	5.17	1.3	6.4
Figueroa and 11 th	P.M.	5.65	0.9	6.6	5.17	0.8	5.9
Flower and 9 th	P.M.	5.65	0.8	6.5	5.17	0.7	5.8
Flower and Olympic	P.M.	5.65	1.8	7.5	5.17	1.5	6.7

ppm = parts per million.

^a *Peak hour traffic levels based on Section IV.F.1, Traffic, of this Draft EIR.*

^b *The most stringent Air Quality Standard for 1-hour average concentration is 20 ppm, and 9 ppm for an 8-hour average concentration.*

Source: PCR Services Corporation, December 2000.

Table 19

SATURDAY EVENING TRAFFIC LOCAL AREA CARBON MONOXIDE (CO) DISPERSION ANALYSIS

Intersection	Peak Period ^a	1-Hour Ambient Concentration (ppm)	Maximum 1-Hour Project Contribution (ppm)	Maximum 1-Hour Concentration ^b (ppm)	8-Hour Ambient Concentration (ppm)	Maximum 8-Hour Project Contribution (ppm)	Maximum 8-Hour Concentration ^b (ppm)
Cherry and Pico	Sat.	5.65	1.6	7.3	5.17	1.3	6.5
Georgia and 11 th	Sat.	5.65	2.7	8.4	5.17	2.2	7.4
Francisco and Olympic	Sat.	5.65	2.7	8.4	5.17	2.2	7.4
Figueroa and Olympic	Sat.	5.65	1.0	6.7	5.17	0.8	6.0
Figueroa and 11 th	Sat.	5.65	1.2	6.9	5.17	1.0	6.2
Flower and Olympic	Sat.	5.65	1.0	6.7	5.17	0.8	6.0

ppm = parts per million.

^a *Peak hour traffic levels based on Section IV.F.1, Traffic, of the Draft EIR.*

^b *The most stringent Air Quality Standard for 1-hour average concentration is 20 ppm, and 9 ppm for an 8-hour average concentration.*

Source: PCR Services Corporation, December 2000.

[Fg/m³] rather than emission limits [lbs/hour]), the analysis of the Project's impact on localized pollutant concentrations is used as the basis for evaluating Project consistency. As discussed in the preceding sections, localized concentrations for PM₁₀ and CO have been prepared for the proposed Project.

PM₁₀ was determined to be the primary impacting pollutant for construction activities. As discussed earlier, Project-related construction was evaluated to determine potential impacts on ambient PM₁₀ concentrations from grading and excavation operations. These impacts were evaluated at sensitive receptors in the vicinity of the Project site, and the impacts were compared to the measurable increase threshold of 2.5 Fg/m³ as promulgated by the SCAQMD Rule 1303. The results of this analysis indicated that Project construction-related PM₁₀ emissions would be below the relevant significance threshold. Therefore, construction-related PM₁₀ emissions would not cause an increase in the frequency or severity of any existing air quality violations; would not cause or contribute to new air quality violations; and therefore would not impede the timely attainment of air quality standards.

As also previously indicated, carbon monoxide has been identified as the preferred pollutant for assessing local area air quality impacts from motor vehicle operations. Based on the methodologies set forth by SCAQMD, the measure of local area air quality impacts which indicates whether a project would cause or affect a violation of an air quality standard is the estimated CO concentrations at selected receptor locations located in close proximity to the Project site. As previously discussed, no violations of the State or Federal carbon monoxide standards are projected to occur as a result of Project operations.

In addition, air quality planning within the Basin focuses on the attainment of ambient air quality standards at the earliest feasible date. Projections for achieving air quality goals are based on assumptions regarding population, housing and growth trends. Thus, the determination of Project consistency focuses on whether or not the proposed Project exceeds the assumptions utilized in preparing the forecasts presented in the AQMP.

Determining whether or not a project exceeds the assumptions reflected in the AQMP involves the evaluation of three criteria: (1) consistency with population, housing and employment growth projections; (2) proposed Project mitigation measures; and (3) appropriate incorporation of land use planning strategies. The following discussion provides a detailed analysis of each of these three criteria.

- Is the project consistent with the population, housing and employment growth projections upon which AQMP forecasted emission levels are based?

A project is consistent with the AQMP in part if it is consistent with the population, housing, and employment assumptions that were used in the development of the AQMP. In the case of the 1997 AQMP, two sources of employment data form the basis for the projections of air pollutant emissions, including the City of Los Angeles General Plan and SCAG's Growth Management Chapter of the *Regional Comprehensive Plan and Guide (RCPG)*. The proposed Project is consistent with the types, intensity and patterns of land use envisioned for the site vicinity in the RCPG. In addition, the estimated workforce projections for the Project would fall within the growth projections for the City of Los Angeles, the City of Los Angeles subregion and the County of Los Angeles. Thus, it can be concluded that the proposed Project would be generally consistent with the growth projections upon which the AQMP attainment strategies are based.

In addition, the *Regional Transportation Plan (RTP)*, adopted by SCAG, projects that employment in the City of Los Angeles subregion, in which the proposed Project site is located, will grow by approximately 186,700 jobs between 2000 and 2010. The proposed Project is projected to result in a net increase of approximately 5,343 full-time regular jobs at the proposed Project site, or approximately 2.86 percent of the total job growth projected for the subregion. This level of employment growth would not be sufficiently large enough to call into question the employment forecasts for the subregion adopted by SCAG. Because the SCAQMD has incorporated these same projections into the AQMP, it can be concluded that the proposed Project would be consistent with the projections in the AQMP.

- Does the project implement all feasible air quality mitigation measures?

The Project is proposed to implement all feasible mitigation measures to reduce air quality impacts in part through the issuance of required approvals and permits by the SCAQMD and other agencies. The proposed Project would also incorporate a wide array of key air pollution control strategies identified by the SCAQMD, as described below.

- To what extent is project development consistent with the land use policies set forth in the AQMP?

The proposed Project would serve to implement a number of land use policies set forth by the City of Los Angeles and SCAG. For example, the City of Los Angeles' Air Quality Element encourages new development at or in close proximity to major transit corridors. The concentration of employment on the proposed Project site would provide improved opportunities for the use of public transit, including bus and rail service, and other alternative transportation modes, thereby supporting the objective of reducing vehicle miles traveled and vehicular air pollutant emissions. Please refer to Section IV.A, Land Use, of the Draft EIR for further discussion of the Project's consistency with applicable land use policies.

A comprehensive parking master plan would also be implemented as part of the proposed Project, with sufficient parking provided onsite to meet the demand generated by the potential uses. This parking master plan would meet the parking requirements set forth by the City Zoning Code and provide direct street access to parking facilities. The parking master plan would minimize impacts to adjacent uses by reducing unnecessary exhaust emissions which result from insufficient parking facilities. Please refer to Section IV.F.2, Parking, of the Draft EIR for further discussion Project parking.

Based on the analysis above, the proposed Project would meet the criteria specified by the SCAQMD which are used to determine consistency with applicable SCAQMD and SCAG policies. The Project would therefore be consistent with adopted air quality plans and policies.

3. MITIGATION MEASURES

The following mitigation measures set forth a program of air pollution control strategies designed to reduce the Project's air quality impacts.

(1) Construction

The measures identified below implement SCAQMD measures associated with onsite grading activities, construction equipment travel on paved roads, as well as the SCAQMD's intent to control fugitive dust emissions associated with demolition activities and construction equipment travel onsite.

(a) Land Clearing/Earth-Moving

1. The Applicant shall secure any necessary permits from the SCAQMD.
2. Non-toxic soil stabilizers shall be applied according to manufacturers' specifications or vegetation shall be planted on all inactive construction areas (i.e., previously graded areas inactive for 10 days or more and not scheduled for additional construction activities within 12 months) to the extent feasible.
3. Exposed pits (i.e., gravel, soil, dirt) with five percent or greater silt content shall be watered twice daily, enclosed, covered or treated with non-toxic soil stabilizers according to manufacturers' specifications.
4. All other active sites shall be watered at least twice daily.

5. All grading activities shall cease during second stage smog alerts and periods of high winds (i.e., greater than 25 mph) if soil is being transported to offsite locations and cannot be controlled by watering.
6. All trucks hauling dirt, sand, soil, or other loose materials offsite shall be covered or wetted or shall maintain at least two feet of freeboard (i.e., minimum vertical distance between the top of the load and the top of the trailer).
7. A construction relations officer shall be appointed by the Applicant to act as a community liaison concerning onsite construction activity, including resolution of issues related to fugitive dust generation.
8. Diesel fueled onsite generators may not be used during construction of the proposed Project.

(b) Paved Roads

9. All construction roads internal to the construction site that have a traffic volume of more than 50 daily trips by construction equipment, or 150 total daily trips for all vehicles, shall be surfaced with base material or decomposed granite, or shall be paved.
10. Streets shall be swept if visible soil material has been carried onto adjacent public paved roads.
11. Construction equipment shall be visually inspected prior to leaving the site and loose dirt shall be washed off with wheel washers as necessary.

(c) Unpaved Roads

12. Water or non-toxic soil stabilizers shall be applied, according to manufacturers' specifications, as needed to reduce offsite transport of fugitive dust from all unpaved staging areas and unpaved road surfaces.
13. Traffic speeds on all unpaved roads shall not exceed 15 mph.

(2) Operation

14. In order to reduce the long-term mobile source emissions associated with the proposed Project, the Applicant shall continue to implement transportation systems management and demand management measures and comply with SCAQMD Rule 2202, which applies to all employers who employ 250 or more persons on a full or

part-time basis at a single worksite. This rule, which aims to reduce volatile organic compounds (VOCs), NO_x, and CO, provides employers a menu of options that they can choose from to reduce emissions related to employee commutes.

4. ADVERSE EFFECTS

With implementation of the mitigation measures described above, Project construction would continue to generate NO_x, CO, ROC, and PM₁₀ emissions that exceed SCAQMD regional significance thresholds for construction activities. Therefore, construction of the proposed Project would have a significant and unavoidable impact on regional air quality. This impact, however, would be short-term in nature. Local air quality impacts associated with construction emissions would remain less than significant.

During the operational phase, the proposed Project would result in regional emissions that exceed SCAQMD significance thresholds for CO, NO_x, PM₁₀, and ROC. The mitigation measures identified above would reduce these air quality impacts, but emissions would remain above SCAQMD significance thresholds. Therefore, operation of the proposed Project would have a significant and unavoidable impact on regional air quality. No significant impacts to local air quality would result from Project operations.

5. CUMULATIVE IMPACTS

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. The SCAQMD's methodology differs from the cumulative impacts methodology employed elsewhere in this Draft EIR, in which all foreseeable future development within a given service boundary or geographical area is predicted and associated impacts measured. The SCAQMD's approach for assessing cumulative impacts is based on the fact that the SCAQMD's Air Quality Management Plan forecasts attainment of ambient air quality standards in accordance with the requirements of the Federal and State Clean Air Acts, taking into account SCAG's forecasted future regional growth. Therefore, if all cumulative projects are individually consistent with the growth assumptions upon which the SCAQMD's AQMP is based, then future development would not impede the attainment of ambient air quality standards and a significant cumulative air quality impact would not occur. Cumulative air quality impacts for the proposed Project were evaluated in the context of Los Angeles County as a whole for the projected buildout year of 2008.

Based on the SCAQMD's significance threshold, a project would have a significant cumulative air quality impact if the daily project vehicle miles traveled to daily countywide vehicle miles traveled ratio exceeds the ratio of daily project employees to daily countywide employees. An

Table 20

PROJECT CUMULATIVE AIR QUALITY IMPACTS

Daily Vehicle Miles Traveled for Project ^a	278,826
Daily Vehicle Miles Traveled Countywide ^b	187,402,117
Daily Vehicle Miles Traveled Ratio	0.001488
Number of Employees at Project ^a	5,343
Number of Employees Countywide ^c	5,063,640
Employment Ratio	0.001051
Significance Test --	
Daily Vehicle Miles Traveled Ratio Greater Than Employment Ratio	YES

^a Increase over existing conditions.

^b Data obtained from Table A9-14-A of the SCAQMD's CEQA Air Quality Handbook, November 1993.

^c Data obtained from SCAG's Regional Transportation Plan, Socioeconomic Projections, April 1998.

Source: PCR Services Corporation, December 2000.

assessment of the Project's cumulative impacts associated with the Project is presented in Table 20 above. As shown, the Project's rate of growth in vehicle miles traveled is greater than the Project's rate of growth in employment. Therefore, the Project would have a significant cumulative impact on air quality.

IV. ENVIRONMENTAL IMPACT ANALYSIS
F. TRANSPORTATION/CIRCULATION
1. TRAFFIC

This section is based upon the technical report, *L.A. Sports & Entertainment District EIR Traffic Study* prepared by The Mobility Group with Kaku Associates, dated December 2000, which analyzes the potential impact of the proposed Project on the surrounding street and freeway system. This study is presented in Appendix E of this Draft EIR.

a. ENVIRONMENTAL SETTING

(1) Regional Roadway System

The Project site is currently served by an extensive freeway network. Primary regional access to the study area is provided by the Santa Monica (I-10) and Harbor (I-110/SR-110) Freeways. The Santa Monica Freeway runs in an east-west direction south of the proposed Project, while the Harbor Freeway runs north-south along the Project's western boundary. These two freeways also provide access to the Hollywood (US-101), Pasadena (SR-110) and Golden State (I-5) Freeways to the north, to the San Bernardino (I-10) and Pomona (SR-60) Freeways to the east, and to the Santa Ana (I-5) Freeway to the southeast. The Project site is located within the downtown Los Angeles area where numerous freeway ramps to and from the Santa Monica and Harbor Freeways provide access for the Project area. On-ramps to the Santa Monica Freeway are located at Flower Street, Grand Avenue, and Los Angeles Street. Off-ramps from the Santa Monica Freeway serving the Project area are provided at Hoover Street, Pico Boulevard/Cherry Street, Grand Avenue, and Los Angeles Street. On-ramps to the Harbor Freeway are provided at 8th Street, Olympic Boulevard/11th Street, and Washington Boulevard. Harbor Freeway off-ramps are located at 9th Street (James Wood Boulevard), Olympic Boulevard/Blaine Street/11th Street, Pico Boulevard/Cherry Street, and Adams Boulevard.

(2) Local Roadway System

The local roadway system in the vicinity of the Project site forms a comprehensive grid system allowing for several options to access the area. Several of the streets function as one-way couplets, while others provide for two-way travel. The major north-south streets serving the Project study area include Figueroa Street, Flower Street (which function as a couplet), Hope Street, Grand Avenue, and Olive Street (which function as a couplet). The major east-west streets are 9th Street

(James Wood Boulevard), Olympic Boulevard, 11th Street, Pico Boulevard, Venice Boulevard, and Washington Boulevard.

The Project site would be directly served by Olympic Boulevard on the north, Pico Boulevard on the south, Figueroa, Flower and Hope Streets on the east, and Cherry Street on the west. Brief descriptions of these facilities are included below:

- Olympic Boulevard: Olympic Boulevard is a two-way street, which travels in an east-west direction providing six travel lanes in the vicinity of the Project. There are peak hour parking restrictions on both sides of the street
- 11th Street: 11th Street travels in an east-west direction. It is a two-way street between Cherry Street and Flower Street. Between Cherry Street and Figueroa Street, 11th Street is a five-lane street with two lanes eastbound and three lanes westbound. Between Figueroa Street and Flower Street, 11th Street is a four-lane street with two travel lanes in each direction. East of Flower Street, 11th Street is one-way westbound with three travel lanes, its eastbound counterpart is 12th Street.
- Pico Boulevard: Pico Boulevard is an east-west street providing a total of five travel lanes west of Figueroa Street (two westbound and three eastbound). East of Figueroa Street, Pico Boulevard narrows to provide two travel lanes in each direction.
- Figueroa Street: In the vicinity of the Project site, Figueroa is a two-way street, providing two southbound lanes and four northbound lanes. North of Olympic Boulevard, Figueroa Street is a one-way northbound street providing a total of four travel lanes. North of 9th Street (James Wood Boulevard), Figueroa Street widens to provide five northbound travel lanes.
- Flower Street: Flower Street is a one-way southbound street, providing four travel lanes in the vicinity of the Project site. The Metro Blue Line Pico Station is located on the east side of Flower Street, just north of Pico Boulevard.
- Hope Street. Hope Street is a two-way north-south street, providing two travel lanes and two parking lanes in the vicinity of the Project. Hope Street functions as a local distributor street.

(3) Event Center Circulation

The Los Angeles Convention and Exhibition Center is located adjacent to the Project site. General access to the Convention Center is provided by the same freeway and roadway facilities

discussed above. The Convention Center provides parking in several off-street parking areas. Parking garages are located at the South Hall, West Hall, Cherry Street Garage, and Venice Garage. Access to the South Hall parking area is generally provided off of Venice Boulevard, while the West Hall is accessed via Cherry Street and 11th Street, as well as from Pico Boulevard. The Cherry Street Garage is accessed from Cherry Street and the Venice Garage from Venice Boulevard.

The Convention Center has developed a sophisticated system to guide traffic circulation on the public streets around the Convention Center site. This system has two basic components: one relating to patrons traveling to event parking in private automobiles; and one oriented towards taxicabs and shuttle busses. The circulation system established for patron vehicles is based on a clockwise rotation pattern around the Convention Center, which emphasizes right-hand turns into parking facilities and discourages unsignalized left-hand turning movements. Off-street access for taxicabs and shuttle busses is provided at Gilbert Lindsay Plaza (south of STAPLES Center), and along the south side of Pico Boulevard, between Cherry and Figueroa Streets.

STAPLES Center is also located adjacent to the Project site, with general access being provided by the same freeway and roadway system discussed above. During its first year of operation, STAPLES Center provided off-street parking at 28 separate parking locations that supplied approximately 6,000 parking spaces. Several of these lots are no longer provided due to lack of use or demand. Currently, STAPLES Center provides parking in 16 separate off-street lots supplying approximately 5,615 spaces. These include designated lots for premium ticket holders and for the general public.

The *South Park Event Parking and Circulation Management Plan (PCMP)* was implemented prior to the opening of STAPLES Center to coordinate mobility and parking in the South Park area of downtown Los Angeles, including STAPLES Center, the Convention Center, and nearby office, commercial, and residential uses. The *PCMP* was prepared under the direction of the City of Los Angeles Department of Transportation (LADOT), and in coordination with various other groups, including the CRA, Caltrans, and the Convention Center. Under the *PCMP*, the City of Los Angeles has installed certain traffic control improvements, in addition to a variety of transportation improvement measures that were recently installed in the South Park area as part of the mitigation measures required for construction of STAPLES Center. Together, these improvements include the following:

- New and upgraded closed-circuit television cameras to monitor traffic activity;
- Upgraded computerized traffic signal controls, including the LADOT Adaptive Traffic Control System (ATCS), which adjusts signal timing in response to actual traffic volumes;

- Street widening and conversion of key street segments to two-way operation that enhance access/egress;
- Installation of eight Changeable Message Signs (CMS) to advise drivers of traffic conditions, alternate routes, and parking locations;
- Installation of inbound guide signs to direct motorists to parking locations;
- Installation of outbound guide signs to direct motorists back to freeways;
- Installation of a Highway Advisory Radio System to provide ongoing information to motorists about access/egress routes, parking, and traffic conditions;
- Provision of on-site control staff at key locations during events to keep traffic moving smoothly; and
- Provision of a South Park Traffic Management Center to operate and coordinate the changeable message signs, highway advisory radio, traffic signal controls, and on-site traffic control staff.

The *PCMP* establishes expected activity levels for STAPLES Center and the Convention Center within five categories, or “event levels.” These levels range from Level 1, representing the smallest crowd at either facility, to Level 5, representing the largest concurrent combined-venue crowds. Detailed plans for traffic and parking management have been prepared and are routinely implemented for Levels 3 through 5 events. The process includes monthly event management meetings among all affected facilities and involved agencies to discuss and plan for managing upcoming events.

(4) Existing Traffic Volumes and Levels of Service

In conjunction with LADOT, a total of 40 intersections were identified for analysis of traffic conditions. The locations of the analyzed intersections are shown in Figure 36 on page 237, and correspond to the locations where traffic impacts from the proposed Project are most likely to occur.

At the direction of LADOT, traffic analysis was conducted for the weekday P.M. peak hour (approximately 5:00 P.M. to 6:00 P.M.), and for the Saturday evening hour (7:00 P.M. to 8:00 P.M.). These two time periods were selected as being the most likely to receive the highest total traffic impacts from the proposed Project, thus these periods would provide the most conservative (i.e., worst case) analysis. The weekday P.M. peak hour is typically the heaviest traffic period of all and includes commuter traffic from downtown employment. The Saturday evening peak hour typically

Figure 36 Intersection Analysis Locations

includes vehicle trips associated with entertainment and sporting events held at STAPLES Center and/or events held at the Convention Center. Further, the Saturday peak hour was chosen due to the assumed peaking characteristics of the planned entertainment uses associated with the proposed Project. Traffic counts were conducted to coincide with a “Level 4” event scenario as defined in the *PCMP* (i.e., a major event simultaneously held at STAPLES Center and the Convention Center) to ensure that the traffic analysis adequately reflected a high activity period in the Project study area.

Weekday and Saturday peak period traffic counts were conducted at all 40 analyzed intersections. The weekday counts were conducted on Thursday, December 16, 1999 from 4:00 P.M. to 7:00 P.M. The Saturday peak period counts were conducted on Saturday, January 8, 2000 from 5:00 P.M. to 8:00 P.M. The study of traffic impacts was conducted for the weekday P.M. peak hour and for the Saturday evening peak hour because those are the times when the trips from the component land uses of the project and trips on the roadway system (including downtown commuting, STAPLES Center, and the Convention Center) combine to create the highest traffic volume. It should be noted that on both count days there was an event scheduled in both STAPLES Center and the Convention Center. The Saturday count included the activity associated with the Greater Los Angeles Auto Show and a Los Angeles Clippers basketball game. Therefore, the existing counts include high activity levels at both STAPLES Center and the Convention Center.

Level of Service (LOS) is a qualitative measure used to describe the condition of traffic flow, ranging from excellent conditions at LOS A to overloaded conditions at LOS F. LOS E and F indicate poor operation of significant delays at intersections. LOS D is typically recognized by transportation officials as the minimum satisfactory service level in urban areas. The *Critical Movement Analysis-Planning* (Transportation Research Board, 1980) method of intersection capacity analysis was used to determine the intersection volume-to-capacity (V/C) ratio and the corresponding LOS for turning movements and intersection characteristics at the 40 analyzed intersections. Table 31 on page 239 defines the ranges of V/C ratios and their corresponding LOS for signalized intersections.

With the exception of two intersections (Cherry Street/Olympic Boulevard, and Francisco Avenue/Olympic Boulevard), all the analyzed intersections are signalized. For purposes of analysis, all Project-related intersections were treated as signalized intersections. All signalized intersections being studied are incorporated in both the LADOT Automated Traffic Surveillance and Control (ATSAC) and Adaptive Traffic Control System (ATCS) signal systems covering the study area. In accordance with LADOT procedures, capacity values at intersections included in the ATSAC and ATCS systems were increased by a total of 10 percent to reflect the estimated beneficial effect of ATSAC and ATCS on the transportation system.

Table 33 on page 240 summarizes the existing weekday P.M. peak hour and Saturday peak hour V/C ratios and corresponding levels of service at the 40 analyzed intersections. As shown, all

Table 31
INTERSECTION LEVEL OF SERVICE DEFINITIONS

Level of Service	Interpretation	Volume/ Capacity (V/C)
A	Excellent operation. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation.	< 0.600
B	Very good operation. Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form.	0.601 - 0.700
C	Good operation. Occasionally drivers may have to wait for more than 60 seconds, and backups may develop behind turning vehicles. Most drivers feel somewhat restricted.	0.701 - 0.800
D	Fair operation. Cars are sometimes required to wait for more than 60 seconds during short peaks. There are no long-standing traffic queues. This level is typically associated with design practice for peak periods.	0.801 - 0.900
E	Poor operation. Some long-standing vehicular queues develop on critical approaches to intersections. Delays may be up to several minutes.	0.901 - 1.000
F	Forced flow. Represents jammed conditions. Backups from locations downstream or on the cross street may restrict or prevent movement of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop-and-go type traffic flow.	> 1.000

Source: Highway Capacity Manual, Transportation Research Board, Washington, D.C., 1985 and Interim Materials on Highway Capacity, MCHRP Circular No. 212, 1982.

of the analyzed intersections are currently operating at satisfactory levels of service (i.e., LOS D or better) during the weekday P.M. peak hour and during the Saturday peak hour. Many intersections are operating at LOS A or LOS B in both peak hours, indicating no traffic congestion or problems. The only intersection operating at LOS D is at Cherry Street and Pico Boulevard, which operates at LOS D in both the weekday P.M. peak hour and Saturday peak hour.

(5) Existing Transit Service

The traffic analysis study area is currently served by a number of local and inter-city transit operations, including the DASH downtown shuttle operated by LADOT, local buses operated by the Los Angeles County Metropolitan Transportation Authority (MTA) and others, and the Metro Blue Line rail transit system, also operated by MTA. In addition, taxi service is available throughout the Project area.

Table 33

EXISTING CONDITIONS –INTERSECTION LEVEL OF SERVICE

No.	Intersection	Weekday P.M. Peak Hour		Saturday P.M. Peak Hour	
		V/C	LOS	V/C	LOS
1.	Blaine Street and Olympic Boulevard	0.683	B	0.490	A
2.	Blaine Street and I-110 SB off-ramp	0.294	A	0.377	A
3.	Blaine Street and 11 th Street	0.739	C	0.551	A
4.	Cherry Street and Olympic Boulevard	0.405	A	0.272	A
5.	Cherry Street and I-110 NB on-ramp/11 th Street	0.458	A	0.650	B
6.	Cherry Street and Pico Boulevard	0.864	D	0.811	D
7.	Georgia Street and 9 th Street (James Wood Boulevard)	0.401	A	0.446	A
8.	Georgia Street and Olympic Boulevard	0.586	A	0.549	A
9.	Georgia Street and 11 th Street	0.330	A	0.440	A
10.	Francisco Street and 9 th Street (James Wood Boulevard) (East)	0.382	A	0.269	A
11.	Francisco Street and Olympic Boulevard	0.377	A	0.550	A
12.	Figueroa Street and 8 th Street	0.618	B	0.273	A
13.	Figueroa Street and 9 th Street (James Wood Boulevard)	0.551	A	0.364	A
14.	Figueroa Street and Olympic Boulevard	0.662	B	0.500	A
15.	Figueroa Street and 11 th Street	0.692	B	0.556	A
16.	Figueroa Street and 12 th Street (North)	0.378	A	0.368	A
17.	Figueroa Street and 12 th Street (South)	0.355	A	0.265	A
18.	Figueroa Street and Pico Boulevard	0.628	B	0.522	A
19.	Flower Street and 9 th Street (James Wood Boulevard)	0.430	A	0.532	A
20.	Flower Street and Olympic Boulevard	0.642	B	0.490	A
21.	Flower Street and 11 th Street	0.527	A	0.499	A
22.	Flower Street and 12 th Street	0.437	A	0.232	A
23.	Flower Street and Pico Boulevard	0.697	B	0.457	A
24.	Hope Street and 11 th Street	0.473	A	0.267	A
25.	Hope Street and 12 th Street	0.204	A	0.127	A
26.	Hope Street and Pico Boulevard	0.428	A	0.299	A
27.	Grand Avenue and 17 th Street	0.578	A	0.368	A
28.	Grand Avenue and 18 th Street	0.365	A	0.379	A
29.	Los Angeles Street and I-10 WB off-ramp	0.520	A	0.378	A
30.	Figueroa Street and 7 th Street	0.641	B	0.296	A
31.	Flower Street and 7 th Street	0.694	B	0.238	A
32.	Flower Street and 8 th Street	0.570	A	0.221	A
33.	Hope Street and 9 th Street (James Wood Boulevard)	0.378	A	0.102	A
34.	Hope Street and Olympic Boulevard	0.468	A	0.208	A
35.	Grand Avenue and 9 th Street (James Wood Boulevard)	0.424	A	0.115	A
36.	Grand Avenue and Olympic Boulevard	0.533	A	0.280	A
37.	Grand Avenue and 11 th Street	0.512	A	0.118	A
38.	Olive Street and 9 th Street (James Wood Boulevard)	0.388	A	0.128	A
39.	Olive Street and Olympic Boulevard	0.473	A	0.246	A
40.	Olive Street and 11 th Street	0.421	A	0.096	A

Source: The Mobility Group/Kaku Associates, December 2000.

The major streets in the Project area provide transit access between downtown Los Angeles and surrounding communities. Frequent peak hour transit service reaches a variety of destinations both within and outside this study area. MTA operates 38 local and limited stop Metro Bus routes within about three-quarters mile of the Project site. In the afternoon peak hour, approximately 307 runs are made. Most routes have average service intervals of five to 20 minutes.

In addition to the bus service, the MTA also operates the Metro Blue Line rail system, which travels between downtown Los Angeles and downtown Long Beach. The Blue Line travels at-grade for the majority of its alignment, transitioning to subterranean between 11th and 12th Street and continuing underground into the CBD. Transfer to the Metro Red Line is also available at the 7th Street Metro Center. In the vicinity of the Project, there is an at-grade Blue Line station on Flower Street north of Pico Boulevard (the Pico/Convention Center Station). The Pico Station is also served by Metro Bus lines 30, 31, 56, 70, 81, 427, 434, 436, 439, 442, 444, 445, 446, 447, and DASH Route A.

The Blue Line provides service seven days a week operating from approximately 4:00 A.M. to 12:00 midnight on the weekdays. Service is provided in five to 20 minute intervals. Between 4:00 and 6:30 P.M. the Blue Line operates every five to eight minutes on weekdays. After 8:00 P.M., service is provided every 20 minutes. On weekends, the Blue Line operates every 12 to 20 minutes. The last Blue Line train to leave the Pico station in the northbound direction is at 11:34 P.M. and at 11:47 P.M. in the southbound direction.

The City of Los Angeles runs a downtown shuttle service, the DASH Bus System, that serves the Figueroa Corridor. The two DASH lines that service the Project area are Route A and Route F. The DASH system primarily operates during the weekday, however, there is a weekend service, which covers the majority of the downtown area.

Route A extends from Little Tokyo and the Civic Center area, northeast of the Project site, to Pico Boulevard via 1st Street and the Figueroa Corridor. Service is provided on that route every five minutes from 6:30 A.M. to 6:30 P.M. Near the Project site, Route A has stops at Figueroa Street/Olympic Boulevard (northbound), Flower Street/Olympic Boulevard (southbound), Figueroa Street/12th Street (north-bound), Flower Street/12th Street (southbound), Figueroa Street/Pico Boulevard (northbound), and Flower Street/Pico Boulevard (southbound).

Route F runs between the western portion of the Financial District and the Exposition Park area near the University of Southern California, southwest of the Project site. This route is also focused in the Figueroa Corridor, and provides service every 15 minutes from 6:30 A.M. to 6:30 P.M. Route F also operates on weekends. Stops on Route F are located at Figueroa Street/Olympic Boulevard (northbound), Flower Street/Olympic Boulevard (southbound), Figueroa Street/12th

Street (both northbound and southbound), Figueroa Street/Pico Boulevard (both northbound and southbound), and Figueroa Street/Venice Boulevard (both northbound and southbound).

In addition to the DASH Bus System, other shuttle buses that are privately operated also connect certain downtown businesses and restaurants to STAPLES Center, enabling these customers to park at their office or dinner destinations and then take the shuttle buses to STAPLES Center.

(6) Transportation Plans

The SCAG *Regional Transportation Plan (RTP)* sets out the long-range transportation policy and infrastructure improvement program for the Southern California region. It was adopted in 1998 and is currently being updated although no new draft plan has yet been released. The *RTP* identifies long-range improvements for all transportation modes, including highway, transit, HOV and truck facilities. No major infrastructure improvements are identified in the specific area of the Project. No major mixed flow, arterial, HOV/HOT facility improvements are planned in the general area of the Project. A number of planned transit corridors will enhance transit service to the downtown area, including increases in Metrolink commuter rail service, the Blue Line LRT to Pasadena, the East Los Angeles Rail Corridor, and the Wilshire Corridor and Exposition Corridor Busways. The Alameda Corridor project (currently under construction) will significantly enhance rail freight travel from the Los Angeles/Long Beach ports to southeast of downtown, with an expected decrease in truck movements in the Corridor. One of the *RTP* policies most relevant to this Project is the goal of Livable Communities to reduce auto travel, and to support pedestrian and transit-oriented mixed use development, which the design of this Project will accomplish.

The *City of Los Angeles General Plan Transportation Element (GPTE)* defines the long-range transportation plan for the City. In the area of the Project, the *GPTE* identifies Figueroa Street, Olympic Boulevard, and Grand Avenue as Major Highways (Class II), and Flower Street, Hope Street, Olive Street, Pico Boulevard, Venice Boulevard, 8th Street, 9th Street, and parts of Albany Street and Blaine Street as Secondary Highways. A commuter bikeway is shown on the *GPTE* for Pico Boulevard and Olympic Boulevard is designated as a Transit Priority Street in the area of the Project. Relevant transportation policies in the *GPTE* include an increase in transit service and facilities; the promotion of TDM/non-auto programs; the implementation of Transportation System Management (TSM) strategies; and supporting development in regional centers, like downtown, and along mixed land use boulevards, such as Olympic and Figueroa Boulevards.

The *Central City Community Plan (Community Plan)* is currently being revised and is in draft review stage. The *Community Plan* defines a broad range of transportation policies and long term potential transportation improvements for the Downtown. Few of the improvements are specific to the area of the Project, although some that could affect it are as follows. The *Community*

Plan identifies some general arterial corridor improvements, including: (a) improving the capacity of key arterial streets between the Hollywood Freeway and the Santa Monica Freeway, with compatible traffic management technologies, and (b) adding HOV lanes in arterial access corridors to the CBD or arterials within the CBD. Potential candidates include 8th/9th Streets, and Olive Street/Grand Avenue in the vicinity of the Project. The *Community Plan* calls for an internal transit circulation system, similar to the *Downtown Los Angeles Strategic Plan* (see below), and enhancements to pedestrian circulation. The *Community Plan* identifies the Convention Center/Arena sphere of influence as a Special Study Area with the potential for the (STAPLES) Arena to positively impact development in the area serviced by mass transit that would be able to encourage pedestrian orientation and multiple trip entertainment and restaurant uses associated with the Convention Center and STAPLES Center. The *Community Plan* also proposes continuing to limit on-site parking for office buildings greater than 100,000 square feet in the affected Traffic Impact Zone north of Olympic Boulevard in the area of the Project, to a maximum of 0.6 parking space per 1,000 square feet with 0.4 space per 1,000 square feet either being provided off-site or substituted by a Transportation Demand Management (TDM) program.

The *Downtown Los Angeles Strategic Plan (DSP)*, completed in 1994, lays out a long-range plan for the downtown area. A number of specific transportation recommendations are made in the area of the Project, including the following. The *DSP* identifies Figueroa Street, Flower Street, Grand Avenue, Olympic Boulevard, 11th Street, and Pico Boulevard as Mixed Flow Streets. The *DSP* further identifies Transit Priority Streets on 7th, 8th, 9th Streets and Olive Street, and Regional Bus Access Streets on Figueroa Street, 8th Street, 9th Street, and Wilshire Boulevard, and it identifies Olympic Boulevard, 11th Street, and Olive Street as Avenidas in the Plan. The *DSP* also recommends an internal transit circulator system, utilizing buses, to connect the Convention Center area to the Financial District, Broadway, the Civic Center, Union Station and Chinatown. In the area of the Project, the routes proposed for this circulator service included Figueroa Street, Olympic Boulevard, Pico Boulevard, and Grand Avenue.

b. PROJECT IMPACT

(1) Significance Thresholds

(a) Intersection Analysis

The LADOT has established threshold criteria that are used to determine if a project has a significant traffic impact at a specific location. A project impact is considered significant if the following conditions are met as shown in Table 35 on page 244. Using these LADOT criteria, for example, a project would not have a significant impact at an intersection if it is operating at LOS C after the addition of project traffic and the incremental change in the V/C ratio is less than 0.040. However, if the intersection is operating at LOS F after the addition of project traffic and the

Table 35

SIGNIFICANT IMPACT THRESHOLDS – INTERSECTION CONDITION

With Project Traffic		Project-Related Increase in V/C Ratio
LOS	V/C Ratio	Ratio
C	0.701 – 0.800	Equal to or greater than 0.040
D	0.801 – 0.900	Equal to or greater than 0.020
E, F	>0.900	Equal to or greater than 0.010

Source: *The Mobility Group/Kaku Associates, December 2000.*

incremental change in the V/C ratio is 0.010 or greater, the project would be considered to have a significant impact at that intersection.

(b) CMP Freeway and Arterial Analysis

As per the standards of significance presented in the *Los Angeles Congestion Management Program (CMP)*, a significant impact would occur if:

- The Project increases traffic demand on a CMP arterial facility by two percent of capacity ($V/C \geq 0.020$) causing, or worsening, the location to operate at LOS F ($V/C \geq 1.000$); or
- The Project increases traffic demand on a CMP freeway section such that the demand to capacity (D/C) ratio increases by two percent or more ($D/C \geq 0.02$).

(2) Methodology

(a) Intersection Analysis

(i) Trip Generation

The number of vehicle trips expected to be generated by the Project was estimated for each of the two time periods being analyzed. Trip generation rates/equations from the Institute of Transportation Engineers, *Trip Generation – 6th Edition*, a standard source for trip rate information, were utilized to estimate the number of the vehicle trips from the new development uses. Certain adjustments were made to the trip generation estimates in order to more accurately reflect the specific conditions at the Project site and in the downtown Los Angeles area. The Project site is in the CBD, and immediately adjacent to STAPLES Center and the Convention Center, which would

lead to a significant number of trips to the Project coming from these adjacent uses and the downtown area in general. This, along with the high level of transit service to the site, would result in significantly less new vehicular trips being generated by the Project than would typically be the case, thereby reducing effects on the regional roadway system.

A number of visitors to the Project site would already be in the area because they would be visiting either STAPLES Center or the Convention Center. These would be people attending an event at STAPLES Center, or attending an event at the Convention Center and/or staying in the proposed Convention Center hotel. These people would not be expected to generate new vehicle trips by visiting Project uses, but would walk to those uses, having already parked their cars. Based on a review of events and activities typically scheduled at these facilities, as well as preliminary market analysis, the following interactions with the Project were estimated:

- Approximately 12 percent of visitors to the Project's restaurant and retail uses would already be in the area visiting STAPLES Center and/or the Convention Center;
- Approximately 10 percent of visitors to the entertainment uses and 20 percent of visitors to the restaurant and retail uses would already be in the area visiting the Convention Center; and
- Approximately 40 percent of the trips to/from the Project's hotel would be associated with the Convention Center.

Trip rates were adjusted to allow for internal capture within the Project, and reflect the synergy that occurs among the different Project land uses in a mixed-used development. This would include people who visit the Project site for multiple purposes, such as eating at a restaurant and shopping at the retail uses; people staying in the hotel and eating at a restaurant and/or shopping or using the health club; or people who work at the office uses and also visit other uses on the Project site during the day and night. In order to adequately reflect these multiple visits generated from one vehicle trip to the site, trip rates were reduced by five to 10 percent for office, retail, health club and residential uses, and by 15 to 20 percent for hotel and restaurant uses.

Trip generation rates were also adjusted to reflect the fact that the Project site is adjacent to downtown rail and bus transit service. Given the high level of transit service, and based upon past and current transit use in the downtown area, trip generation rates were reduced by five to 10 percent for restaurant, theater, retail, health club, and residential uses, and by 15 to 20 percent for hotel (including shuttle/tour buses) and office uses, to account for use of transit to the Project. In addition, due to the proximity of the Project within walking distance of many downtown land uses (i.e., office and residential buildings), it was assumed that five to 10 percent of trips to the hotel, restaurant, retail, health club, office, and residential uses would walk to the Project site from the surrounding area.

The trip rates were also adjusted to reflect pass-by trips, which are trips that are already on the street system that are passing by the Project but would now divert into the Project to visit one or more of the uses. LADOT standards used in estimating pass-by trips and pass-by reductions were applied at 10 percent for restaurant, 20 percent for health club, and 20 to 30 percent for retail uses. No pass-by reductions were made for the office, hotel, theater, entertainment, and residential uses on the site.

It is estimated that the Project would generate approximately 3,610 vehicle trips in the weekday P.M. peak hour (1,880 inbound and 1,730 outbound), and approximately 5,180 vehicle trips in the Saturday evening peak hour (3,585 inbound and 1,595 outbound) as shown in Table 37 on page 247.

(ii) Project Trip Distribution

The distribution of Project trips determines which streets the Project traffic would use to get to and from the Project. The distribution pattern assumed for the Project is shown on Figure 37 on page 248. This pattern was based upon a number of factors, including the types of Project land uses; the types, characteristics, and connectivity of individual streets in the study area; and the likely origins and destinations of Project visitors. The estimated trip distribution was also based on resources, such as trip distribution information available in the CMP and from regional population data, and consideration of the market area for the Project land uses.

The trip distribution takes into account regional access via the freeway system and principal arterials, as well as local access via the surrounding roadway system, including the fact that a significant number of trips are expected to come from the downtown area due to its proximity to the Project.

(iii) Project Trip Assignment

Project-generated trips were assigned to the roadway network based on the trip distribution parameters identified above, as well as a number of other factors, *PCMP* and current traffic access patterns for STAPLES Center. Project traffic is expected to access the site via major arterial roadways in the area. Project-generated traffic is not expected to utilize 11th Street and 12th Street west of the Harbor Freeway, nor other streets in the adjacent residential neighborhoods, as the experience to date with STAPLES Center has shown that event-related traffic does not utilize those streets.

As the Project would extend over six blocks, with different uses being located on each block, and with different levels of parking supply on each block, the destination of vehicle trips to the Project site would be determined more by the location of parking than by the location of the actual

Table 37

PROPOSED PROJECT TRIP GENERATION

Land Use	Quantity	Units	Weekday P.M. Peak Hour			Saturday Peak Hour		
			Inbound	Outbound	Total	Inbound	Outbound	Total
Hotel	1,800	Rooms	277	245	522	292	259	550
Theater	7,000	Seats	63	63	126	1,140	60	1,200
Entertainment	195,000	GSF	121	71	193	917	496	1,414
Restaurant	265,000	GSF	586	289	875	850	418	1,268
Retail	385,000	GSF	373	404	777	140	129	269
Health Club	125,000	GSF	212	136	348	106	68	174
Office	165,000	GSF	40	198	238	8	37	45
Medical Office	135,000	GSF	93	250	343	12	32	43
Residential	800	d.u.	<u>116</u>	<u>74</u>	<u>190</u>	<u>124</u>	<u>93</u>	<u>217</u>
Total Trips			1,881	1,731	3,612	3,588	1,593	5,181

GSF = gross square feet

d.u. = dwelling unit

Source: The Mobility Group/Kaku Associates, December 2000.

land use. While many people would park in the same block as their destination, many others may park in a different block and walk one or two blocks to their destination, or park off-site and walk into the Project site. Project-generated trips were thus distributed to individual blocks on the Project site based on parking supply. In addition, it is expected some trips to the Project site would park off-site. Virtually all employee parking would occur off-site and that, depending on the time of day/evening, a portion of visitor trips would also park off-site. This is consistent with a key Project goal of dispersing Project-related parking on-site and at convenient off-site locations to minimize congestion and emphasize pedestrian linkages between adjacent areas.

It is estimated that approximately 10 percent of trips during the weekday P.M. peak hour would park off-site and about 25 percent of trips during the Saturday evening peak hour would park off-site. These trips were thus assigned to off-site destinations generally within two or three blocks to the north (Figueroa Corridor), northeast, and east (9th Street/Olympic Boulevard Corridor) of the Project site, to reflect this off-site parking.

Finally, the trip assignment process took into account the fact that the Project is eliminating certain existing surface parking lots that serve STAPLES Center. Approximately two-thirds of the parking accommodated at these surface parking lots would be relocated within the Project. For the purpose of this analysis, the existing trips to these surface lots were first estimated, then subtracted

Figure 37 Project Trip Distribution

from the roadway system, and finally added back to the roadway system, based on anticipated new destinations. This process was accomplished as follows:

- The number of parking spaces in each of these lots represents the maximum number of inbound trips that occurs for an event.
- The number of trips entering during the weekday evening peak (5:00 P.M. to 6:00 P.M.) and Saturday evening peak (7:00 P.M. to 8:00 P.M.) was then estimated using the time of arrival profiles from the *Los Angeles Sports and Entertainment Complex Draft EIR*,³⁸ which indicated that five percent of event traffic arrives between 5:00 P.M. to 6:00 P.M. and 50 percent arrives between 7:00 P.M. to 8:00 P.M.
- These trips were then subtracted from the roadway network using the trip distribution identified in the *Los Angeles Sports and Entertainment Complex Draft EIR*.³⁹
- The majority of these trips were then reassigned to the proposed parking structure on the Olympic West properties that will accommodate 2,200 STAPLES Center parking spaces.
- The residual amount were then assigned to destinations within two or three blocks to the north, northeast, and east of STAPLES Center, representing parking in other STAPLES Center and public parking lots.

(b) CMP Freeway and Arterial Analysis

The Los Angeles County Congestion Management Plan (CMP) requires new development projects to analyze potential project impacts on *CMP* monitoring locations. The freeway and arterial analysis was undertaken in accordance with the *CMP* requirements. The *CMP* requires that the traffic study analyze traffic conditions at all *CMP* arterial monitoring intersections where the proposed project would add 50 or more trips during either the A.M. or P.M. weekday peak hours of adjacent street traffic. The *CMP* also requires traffic studies to analyze mainline freeway monitoring locations where the project would add 150 or more trips in either direction during either A.M. or P.M. weekday peak hours.

³⁸ *Los Angeles Community Redevelopment Agency, Los Angeles Sports and Entertainment Complex Draft EIR, PCR Services Corporation, March 1997.*

³⁹ *Ibid.*

(3) Project Design Features

(a) Access and Circulation

The principal vehicular circulation to access/egress the Project would take place via the surrounding public street system. There would be no internal surface-level vehicular circulation, with one exception: a private street looping through the northwest corner of the Olympic East Properties from Francisco Street to Georgia Street, which would serve as passenger drop-off and loading for taxis, shuttle busses, and other private/tour busses, and to create an intimate urban retail setting. Otherwise, vehicular circulation would occur via the public street system to parking garages that would be integrated throughout the Project to serve the various land uses.

The Project site is well served by regional freeways from four directions as described above. Fourteen freeway on- and off-ramps connect the Project site to the surface street system. The Project site is also served by a comprehensive grid system of surface streets comprising five major north-south streets, five major east-west streets, and four secondary streets. The principal access routes to the Project site are expected to be Olympic Boulevard from the west (as well as 8th Street and Pico Boulevard); Figueroa Street, Flower Street, Hope Street, Grand Avenue and Olive Street from the north and south; and Olympic Boulevard, 11th Street, 12th Street, and Pico Boulevard from the east.

Driveway access is proposed for parking for each Project block/property, as shown in Figure 39 on page 251. For the Olympic West properties, access/egress would be provided on Cherry Street (right-in, right-out only), on Olympic Boulevard (right-in, right-out only), and on Georgia Street (full movement access). For the Olympic East properties, access/egress would be provided on Olympic Boulevard opposite Francisco Street (full movement access), and on Georgia Street (full movement access). For the Olympic North properties, access/egress would occur on both Georgia Street and Francisco Street (both full movement access).

For the Figueroa North properties, access/egress would occur on both Figueroa Street and Flower Street (both right-in, right-out only). For the Figueroa Central properties, access/egress would be provided at 11th Street, Flower Street, and 12th Street (all right-in, right-out only). For the Figueroa South properties, access/egress would be provided on both Figueroa Street and Flower Street (both right-in, right-out only).

These access locations have been identified to facilitate vehicular access to the Project from the main surface streets, and to minimize conflicts with pedestrians. For example, vehicular access to the Olympic East properties would not be provided from 11th Street or from Figueroa Street, so that the high pedestrian volumes on these block faces would not be disrupted. Similarly, no

Figure 39 **Project Access/Egress**

vehicular access would be provided to the Figueroa Central properties from Figueroa Street, so that the anticipated high volumes of pedestrian crossings would not be disrupted.

(b) Roadway System

Two changes to the existing roadway system are proposed as part of the Project. First, in order to enhance pedestrian circulation and safety, the curb-to-curb width of 11th Street, between Figueroa and Georgia Streets, would be reduced in width from 92 feet to 70 feet midblock and from 83 feet to 67 feet on Figueroa Street. The existing generally four-lane configuration with left turn lanes and the eastbound loading zone at STAPLES Center would be retained, but the narrower street section would facilitate pedestrian crossings and create a more suitable pedestrian-oriented environment. In addition, the Project envisions that, at times, 11th Street would be closed to the public between Figueroa and Georgia Streets to facilitate safe pedestrian flow and to enhance the pedestrian environment. Closure of this portion of 11th Street currently occurs during major events at STAPLES Center. These closures would be extended to start earlier in the evening, on weekends, and occasionally during midday, as required to accommodate event scheduling. During the morning and evening peak commute periods, 11th Street would remain open to allow vehicular access adjacent to STAPLES Center and the Los Angeles Convention and Exhibition Center and to ensure unimpeded access to freeway on/off-ramps during these periods.

In addition, 12th Street, between Figueroa and Flower Streets, would be realigned as part of the Project, such that the west end of 12th Street would align directly across from 12th Drive (west of Figueroa Street, between STAPLES Center and Gilbert Lindsey Plaza), thereby eliminating the current offset intersections of 12th Drive and 12th Street with Figueroa Street and improving vehicular circulation, pedestrian circulation and pedestrian safety. The existing four-lane configuration of 12th Street on this block would be maintained. No significant impacts to traffic/circulation would result from this realignment of 12th Street.

(c) Project Transportation Strategy

The Project proposes to take advantage of, and build upon, the unique transportation characteristics of the Project site.

The Project site is adjacent to substantial bus and rail transit service, including local and regional bus service, the Metro Blue Line light rail line (station at Flower Street/Pico Boulevard), and the Metro Red Line subway (station at Figueroa Street/7th Street), all within easy walking distance of the Project. The Red Line also provides connections to the regional Metrolink rail system at Union Station. In addition, the DASH shuttle provides additional transit connections to the greater downtown area. This high level of transit service to the site would facilitate access to the

Project by transit, such that a significant number of trips to and from the Project would be made by transit. The Project site is also well-served by carpool/vanpool facilities including the Harbor Freeway transitway carpool/bus lanes (HOV) south of Adams Boulevard, which also connect to the HOV lanes on the I-105 Freeway.

The Project site is also adjacent to both STAPLES Center and the Los Angeles Convention and Exhibition Center. A significant number of visitors to the proposed Project are expected to be already in the area to visit either STAPLES Center or the Convention Center. For example, a person attending an event at STAPLES Center or the Convention Center may also visit a restaurant or go shopping in the Project. These visitors to the Project would not create additional trips to the site because they would already be there for another purpose. In the same way, the Project site is located in downtown Los Angeles close to many existing office buildings in the Financial District and Bunker Hill, as well as other existing commercial and residential uses in the downtown area, and within a short distance of the USC campus. A strong connection is therefore expected between the Project site, the rest of downtown, and the USC/Exposition Park area as people walk, take transit, or drive short distances from these downtown uses to the Project site.

These unique characteristics of the Project site would encourage the use of transit and walking for Project trips. The Project would take further advantages of these characteristics by emphasizing connections to the surrounding community through pedestrian, transit, and visual linkages. This use of several modes of access would reduce the level of vehicular access required by the Project.

Due to the size of the Project and its dispersed location over six blocks, traffic accessing the Project would also tend to be dispersed over numerous access routes and roadways rather than being focused or concentrated on only a few locations. In this way, the Project would distribute parking among several on-site and off-site locations, and would include the use of shared parking to facilitate and encourage the dispersal of vehicular traffic, avoid congestion, reinforce the pedestrian linkages, and integrate the Project with the Figueroa Corridor. While the Project would provide on-site parking, additional private and public parking supply in the vicinity of the Project would be utilized, in order to accommodate 100 percent of the anticipated peak parking demand. This dispersed approach to peak parking would avoid the need to build an oversupply of Project-related parking. Parking dispersal would also serve to enhance pedestrian linkages by spreading peak parking demand among both on-site and off-site lots to encourage walking into the Project. The extensive number of arterial roadways and freeway ramps serving the site, which would reduce the traffic volumes and impacts on any specific roadway or freeway ramp, would also facilitate this dispersal strategy.

Finally, the Project area has in the recent past been the focus of intense study and the development of traffic circulation and parking management strategies for STAPLES Center and the Los Angeles Convention and Exhibition Center, as identified under Environmental Setting of this

section. A substantial amount of physical and operational traffic improvements have been installed in the general South Park area to facilitate traffic flow and operations, including access/egress to the area and circulation within the area. The improvements include informational signing, dynamic (changeable) directional signing, a Highway Advisory Radio (HAR) System, traffic signal upgrades, street widenings, a Traffic Operation Center, and the use of traffic control officers during certain events at STAPLES Center or the Convention Center.

In addition, the *PCMP*, discussed on page 235 and below, was implemented to coordinate mobility and parking in the South Park Area. All of these measures have been successful in achieving effective traffic access and circulation in the general Project area since 1998. The Project would be compatible with and utilize these elements and expand upon them to help the continued facilitation of effective traffic circulation and parking management in the area of the Project. The Project would also support the implementation of traffic management measures for the residential areas west of the Harbor Freeway, to ensure that Project traffic does not impact those neighborhoods.

(d) *South Park Event Parking and Circulation Management Plan (PCMP)*

As discussed above, traffic and parking conditions in the Project area are coordinated through the *PCMP*. The *PCMP* was developed by LADOT and the L.A. Arena Company to manage and coordinate the varying traffic and parking conditions caused by changes in activity levels at STAPLES Center and the Los Angeles Convention and Exhibition Center. As one of the visitor-generating venues in the South Park area, the Project would participate in the *PCMP*, in order to assist in accommodating both traffic and parking demand in the area.

(4) Analysis of Project Impacts

(a) Construction

Project construction would not occur all at once, but rather, as a discrete number of different construction events during the period leading to final buildout of the Project, and would probably occur on an individual block-by-block basis.

During periods of construction activity for the Project, activity would typically involve construction workers, plus the arrival and departure of trucks delivering materials to the site and removing debris resulting from demolition and excavation activities. Both the number of construction workers and trucks would vary throughout the construction process in order to maintain a reasonable schedule of completion.

In general, the construction workers are expected to arrive and depart the site during off-peak hours. Specifically, they are expected to arrive prior to 7:00 A.M. and depart between 3:00 P.M. to 4:00 P.M. Consequently, the impact on peak-hour traffic in the vicinity of the site would be negligible. Depending upon the specific nature of the construction activity (e.g., demolition, excavation, or concrete pouring), truck traffic would be distributed evenly across the workday. During certain activities (e.g., excavation), the truck traffic would be focused on the earlier portions of the workday, with trucks arriving prior to the actual start of work.

It is anticipated that the construction-related traffic would be largely freeway-oriented. Construction workers would arrive and depart via nearby on- and off-ramps serving the Harbor and Santa Monica Freeways. The most commonly used Harbor Freeway ramps would be those nearest the site, including the 8th/9th Street ramps and the Olympic/Blaine/11th Street ramps. On the Santa Monica Freeway, the Flower Street and Grand Avenue ramps would serve most of the construction worker traffic. Also, the Cherry Street/Pico Boulevard off-ramp from the northbound Harbor Freeway and the westbound Santa Monica Freeway would serve a portion of this traffic. Given the off-peak nature of the construction worker traffic, no impact is anticipated with regard to freeway mainline or ramp conditions.

In addition to construction worker and truck traffic, construction activity associated with the Project could require temporary lane closures on certain streets adjacent to the proposed Project site, particularly during utility relocation activity. It is unlikely that complete closure of any major street would be required. Temporary partial traffic lane closures and sidewalk closures would be required for utility relocation as discussed in Sections IV.D, Drainage, and IV.J.2, Sewer, including 12th Street, Olympic Boulevard (between Georgia Street and Figueroa Boulevard), and Cherry Street (between 11th Street and Olympic Boulevard). Although these closures could temporarily disrupt traffic flow in this area, impacts would be temporary but less than significant. They may, however, contribute to conditions at intersections operating at unacceptable conditions (i.e., LOS D and worse). Other than for utility relocation, full lane closures are not expected to be required, although short-term and partial lane and/or sidewalk closures may be required adjacent to construction sites on occasion throughout the construction period.

One exception to this would be the realignment of 12th Street between Figueroa and Flower Streets that would occur as part of the Project. This would involve vacation of the existing street and construction of a new street largely to the south of the existing alignment, except at the east end where 12th Street meets Flower Street. Although the existing street would remain open during most of the construction period for the new street, there would be a short period of time when 12th Street may need to be partially or fully closed as the realignment at Flower Street is completed. This would be a temporary but significant impact.

Other than for the utility relocation discussed above, other full lane closures are not expected to be required, although short-term partial lane and/or sidewalk closures may be required adjacent to construction sites on occasion throughout the construction period.

(b) Operation

(i) Intersection Impact Analysis

a. Weekday P.M. Peak Hours

Based on the LADOT thresholds of significance, the Project would result in a significant traffic impact at 17 intersections during the weekday P.M. peak hour, as shown in Table 39 on page 257. Thirteen of the 17 impacted intersections would continue to operate at LOS D or better, with the implementation of the proposed Project. Of the remaining four impacted intersections, three would operate at LOS E, and one at LOS F, although this intersection would operate at LOS E without the proposed Project.

b. Saturday Evening Peak Hours

Based on the LADOT thresholds of significance, the Project would result in a significant traffic impact at 10 intersections during the Saturday evening peak hour, as shown in Table 39. All of the impacted intersections would continue to operate at LOS D or better with the proposed Project, with the exception of the intersection of Cherry Avenue and Pico Boulevard, which would operate at LOS F with the Project (and LOS E without the Project).

(ii) Freeway Ramp/Intersection Analysis

There are numerous freeway ramps and access routes from the freeway system via the surface arterial street system to the Project. This would lead to a dispersed pattern of traffic whereby vehicles use many different ramps, rather than the traffic being focused on only one or two ramps. The key off-ramps that will be utilized by freeway traffic are discussed below.

The 9th Street (James Wood Boulevard) southbound off-ramp is a long exit ramp from the SR-110 Harbor Freeway southbound, which joins 9th Street (James Wood Boulevard) prior to the intersection of 9th Street (James Wood Boulevard) and Georgia Street. This ramp provides a significant distance of queuing space and, as shown in Table 39, the intersection of Georgia and

Table 39

PROPOSED PROJECT TRAFFIC IMPACT

No.	Intersection	Type	Weekday P.M.						Saturday Evening					
			Future Without Project		Future With Project		Change in V/C	Significant Impact	Future Without Project		Future With Project		Change in V/C	Significant Impact
			V/C	LOS	V/C	LOS			V/C	LOS	V/C	LOS		
1	Blaine & Olympic	Signalized	0.742	C	0.770	C	0.028	No	0.563	A	0.696	B	0.133	No
2	Blaine & I-110 SB Off	Signalized	0.340	A	0.362	A	0.022	No	0.417	A	0.454	A	0.047	No
3	Blaine & 11 th	Signalized	0.831	D	0.895	D	0.064	Yes	0.617	B	0.665	B	0.048	No
4	Cherry & Olympic	Signalized	0.468	A	0.525	A	0.057	No	0.330	A	0.375	A	0.045	No
5	Cherry & I-110 NB On/11 th	Signalized	0.584	A	0.666	B	0.082	No	0.724	C	0.828	D	0.104	Yes
6	Cherry & Pico	Signalized	0.992	E	1.059	F	0.067	Yes	0.915	E	1.015	F	0.100	Yes
7	Georgia & 9 th	Signalized	0.508	A	0.618	B	0.110	No	0.520	A	0.622	B	0.102	No
8	Georgia & Olympic	Signalized	0.668	B	0.762	C	0.094	Yes	0.618	B	0.727	C	0.109	Yes
9	Georgia & 11 th	Signalized	0.367	A	0.569	A	0.202	No	0.479	A	0.834	D	0.355	Yes
10	Francisco & 9 th (East)	Signalized	0.791	C	0.818	D	0.027	Yes	0.447	A	0.521	A	0.074	No
11	Francisco & Olympic	Signalized	0.435	A	0.704	C	0.269	Yes	0.598	A	0.770	C	0.172	Yes
12	Figueroa & 8 th	Signalized	0.790	C	0.832	D	0.042	Yes	0.377	A	0.510	A	0.133	No
13	Figueroa & 9 th	Signalized	0.741	C	0.813	D	0.072	Yes	0.466	A	0.538	A	0.072	No
14	Figueroa & Olympic	Signalized	0.820	D	0.993	E	0.173	Yes	0.604	B	0.778	C	0.174	Yes
15	Figueroa & 11 th	Signalized	0.792	C	0.906	E	0.114	Yes	0.619	B	0.818	D	0.199	Yes
16	Figueroa & 12 th (North) ^a	Signalized	0.460	A	N/A				0.420	A	N/A			
17	Figueroa & 12 th (South)	Signalized	0.432	A	0.608	B	0.176	No	0.306	A	0.495	A	0.189	No
18	Figueroa & Pico	Signalized	0.739	C	0.795	C	0.056	Yes	0.602	B	0.639	B	0.037	No
19	Flower & 9 th	Signalized	0.581	A	0.713	C	0.132	Yes	0.632	B	0.726	C	0.094	Yes
20	Flower & Olympic	Signalized	0.771	C	0.924	E	0.153	Yes	0.556	A	0.771	C	0.215	Yes
21	Flower & 11 th	Signalized	0.633	B	0.745	C	0.112	Yes	0.572	A	0.726	C	0.154	Yes
22	Flower & 12 th	Signalized	0.573	A	0.650	B	0.077	No	0.291	A	0.352	A	0.061	No
23	Flower & Pico	Signalized	0.846	D	0.880	D	0.034	Yes	0.521	A	0.547	A	0.026	No
24	Hope & 11 th	Signalized	0.537	A	0.661	B	0.124	No	0.302	A	0.501	A	0.199	No
25	Hope & 12 th	Signalized	0.298	A	0.375	A	0.077	No	0.172	A	0.232	A	0.060	No
26	Hope & Pico	Signalized	0.512	A	0.611	B	0.099	No	0.345	A	0.367	A	0.022	No

Table 25 (Continued)

PROPOSED PROJECT TRAFFIC IMPACT

No.	Intersection	Type	Weekday P.M.						Saturday Evening					
			Future Without Project		Future With Project		Change in V/C	Significant Impact	Future Without Project		Future With Project		Change in V/C	Significant Impact
			V/C	LOS	V/C	LOS			V/C	LOS	V/C	LOS		
27	Grand & 17 th	Signalized	0.690	B	0.728	C	0.038	No	0.427	A	0.462	A	0.035	No
28	Grand & 18 th	Signalized	0.453	A	0.480	A	0.027	No	0.451	A	0.507	A	0.056	No
29	Los Angeles & I-10 WB Off	Signalized	0.615	B	0.648	B	0.033	No	0.456	A	0.516	A	0.060	No
30	Figueroa & 7 th	Signalized	0.750	C	0.784	C	0.034	No	0.346	A	0.384	A	0.038	No
31	Flower & 7 th	Signalized	0.806	D	0.856	D	0.050	Yes	0.289	A	0.407	A	0.118	No
32	Flower & 8 th	Signalized	0.710	C	0.756	C	0.046	Yes	0.291	A	0.421	A	0.130	No
33	Hope & 9 th	Signalized	0.481	A	0.510	A	0.029	No	0.150	A	0.189	A	0.039	No
34	Hope & Olympic	Signalized	0.584	A	0.623	B	0.039	No	0.245	A	0.336	A	0.091	No
35	Grand & 9 th	Signalized	0.529	A	0.561	A	0.032	No	0.149	A	0.264	A	0.115	No
36	Grand & Olympic	Signalized	0.609	B	0.629	B	0.020	No	0.327	A	0.389	A	0.062	No
37	Grand & 11 th	Signalized	0.591	A	0.704	C	0.113	Yes	0.148	A	0.371	A	0.223	No
38	Olive & 9 th	Signalized	0.499	A	0.533	A	0.034	No	0.178	A	0.249	A	0.071	No
39	Olive & Olympic	Signalized	0.585	A	0.670	B	0.085	No	0.311	A	0.420	A	0.109	No
40	Olive & 11 th	Signalized	0.489	A	0.561	A	0.072	No	0.126	A	0.272	A	0.146	No

^a Eliminated by Project with realignment of 12th Street to Figueroa & 12th Drive (South).

Source: The Mobility Group/Kaku Associates, December 2000

9th Street (James Wood Boulevard) would operate at LOS B in both the weekday P.M. peak hour and Saturday evening peak hour and no significant impact would be caused by the Project at this intersection. Project-related impacts to the ramp at this location would be less than significant.

The 9th Street (James Wood Boulevard) northbound off-ramp is an exit ramp from the SR-110 Harbor Freeway northbound, with a long distance from the freeway exit ramp to the intersection at 9th Street (James Wood Boulevard) and Francisco Street at the end of the ramp. Table 39 indicates that this intersection would operate at LOS D in the weekday P.M. peak hour, and LOS A on a Saturday evening peak with a significant impact caused by the Project in the P.M. peak.

The Olympic Boulevard southbound off-ramp is an exit ramp from the southbound SR-110 Harbor Freeway to Blaine Street. As shown in Table 39, this intersection would operate at LOS A in both the weekday P.M. and Saturday evening peak periods with no significant impact caused by the Project. This off-ramp was recently improved and widened in conjunction with the recently constructed STAPLES Center project. It is concluded that there would be no impact on this off-ramp.

The Cherry Street/Pico Boulevard northbound off-ramp from the I-10 Santa Monica Freeway provides a long exit ramp terminating at the intersection of Cherry Street and Pico Boulevard. This intersection, as shown in Table 39, would operate at LOS F in both the weekday P.M. peak and Saturday evening peak hour with the Project causing significant impacts during both time periods at this location. However, there is one city block between this intersection and the signalized intersection to the south that is actually the termination of the freeway ramps. In addition, the ramps extend a long distance back to the freeway.

The Grand Avenue eastbound off-ramp from the I-10 Santa Monica Freeway provides a long exit ramp terminating at the intersection of Grand Avenue and 18th Street. The impact analysis, as shown in Table 39, indicates that this intersection will operate at LOS A in both the weekday P.M. peak and Saturday evening peak hour with no significant impact caused by the Project. Thus, no significant impacts would occur on this ramp.

The Los Angeles Street westbound off-ramp from the I-10 Freeway terminates at the end of the off-ramp at the intersection of Los Angeles Street and 17th Street. As shown in Table 39, this intersection would operate at LOS B in the weekday P.M. peak, and LOS A in the Saturday evening peak hour with no significant impact caused by the Project. Thus, no significant impacts would occur at this ramp.

(iii) Residential Street Analysis

West of the Harbor Freeway there are a number of residential streets, primarily 9th Street, (James Wood Boulevard), 11th Street, and 12th Street, that could potentially be impacted by the Project. An evaluation was conducted to address this issue as described below.

The arterial streets approaching the Project site from the west are 8th Street (a Secondary Highway), Olympic Boulevard (a Major Highway), and Pico Boulevard (a Secondary Highway). Other streets include 9th Street (James Wood Boulevard, also a Secondary Highway), 11th Street (a Collector Street), and 12th Street (a Local Street). Olympic Boulevard leads to the primary parking entrances to the Olympic Properties. There is only one parking entrance located on 11th Street (a right-in/right-out for the Figueroa Central block), with no parking entrances from 11th Street to the Olympic Properties. Pico Boulevard serves the south end of the Project, and parking entrances on both Figueroa Street and Flower Street to the Figueroa Central and Figueroa South blocks.

It is expected that Project traffic will use the major streets of Olympic Boulevard and Pico Boulevard, and not the minor/local streets of 9th, 11th and 12th Streets, for a number of reasons. Firstly, these major streets have the best name recognition and offer the most direct approach route with the highest travel speeds and fewest stops (signals rather than more frequent stop signs). Secondly, the minor streets do not provide direct access routes to the Project parking driveways (12th Street in particular does not provide good access to the Project site, terminating at Cherry Street). Thirdly, measures were implemented in conjunction with the opening of STAPLES Center, to direct traffic on the major roadways through directional signing of approach/egress routes to avoid the residential neighborhoods. Operating experience during the first year of STAPLES Center has shown there to be no significant volumes of the STAPLES Center traffic using streets such as 11th and 12th Streets west of the Harbor Freeway. Ninth Street is not expected to be used as a traffic route to the Project for similar reasons, with both 8th Street and Olympic Boulevard being more direct and convenient streets. In addition, land uses along 9th Street are primarily commercial and institutional rather than residential.

Even though it is considered unlikely, there is some potential for a small amount of the Project traffic to use these streets. For this reason, further analysis was conducted to explore this potential. The anticipated distribution of Project traffic, as shown in Figure 38, estimated a total of eight percent of Project traffic would use Olympic Boulevard and Pico Boulevard to access the Project site. Potentially, some of this traffic could “cut-through” the residential neighborhood on 11th Street and 12th Street, rather than stay on the arterial roadways. If as much as 20 percent of this traffic did this, then potentially approximately 765 daily vehicles might use 11th and 12th Streets in total on a typical weekday. On a Saturday, arterial traffic volumes are lower, so less traffic might divert off those streets. If three quarters of the weekday total (or 15 percent) used neighborhood streets, then potentially approximately 580 daily vehicles might use 11th and 12th Streets in total on a

typical Saturday. Assuming that two-thirds of these vehicles might use 11th Street and one-third might use 12th Street (because 11th Street is a more direct route), then the potential impacts at four key locations on 11th and 12th Streets are summarized in Table 39.

LADOT has developed criteria for significant impacts on local residential streets as follows:

Projected Average Daily Traffic With Project (Final ADT)	Project Related Increase in ADT
0 – 999	16% or more of final ADT
≥ 1,000	12% or more of final ADT
≥ 2,000	10% or more of final ADT
≥ 3,000	8% or more of final ADT

As shown in Table 39, on a weekday, potential impacts could occur on 11th Street east of Burlington Avenue, and on 12th Street east of Burlington Avenue and between Valencia and Albany Streets, with potential traffic increases slightly above LADOT criteria for significant impact. The potential increase on 11th Street between Valencia Street and Albany Street would be less than significant according to LADOT criteria. A similar situation could occur on a Saturday, as shown in Table 39, again where potential increases could be slightly above LADOT criteria for three of the four locations, indicating potential significant impacts.

While the above analysis evaluated the potential for significant impacts, the actual occurrence of such impacts is considered unlikely due to the fact that the arterial streets provide the most direct and convenient access to the Project site and its driveways, and that experience with STAPLES Center has shown no significant traffic intrusion into the neighborhood.

The Project Applicant is committed to preventing any significant traffic impacts occurring on these residential streets west of the Harbor Freeway due to the Project, and will work with LADOT to accomplish this as necessary. This could include additional signage for the Entertainment District, in addition to that for STAPLES Center, to define major street approach/egress routes, as well as additional measures, or the Project Applicant depositing monies with LADOT for the development and implementation of a Neighborhood Traffic Management Program, if it becomes necessary, using any unused monies to be refunded to the Project Applicant after three years.

(iv) Closure of 11th Street

As described above, the Project proposes the regular temporary closure of 11th Street outside of the weekday A.M. and P.M. peak periods, in order to facilitate safe pedestrian flow and to enhance

the pedestrian environment in the general area of STAPLES Center, the Convention Center, and the Project.

The Plaza that is planned will be used for all types of civic, community, and commercial events, including film premieres, exhibits, art shows, music, community events, and multi-media events/promotions. The synergy between the L.A. Entertainment District north of 11th Street and STAPLES Center and the Convention Center south of 11th Street will lead to high volumes of pedestrian movements across 11th Street. The juxtaposition of the Plaza opposite the main entrance to STAPLES Center and Star Plaza also suggests that for many events, it would be more practical and safer for these spaces to operate as one large physical civic outdoor space, without traffic passing along 11th Street, which divides the two spaces.

While the Project proposes to close the section of 11th Street between Georgia Street and Figueroa Street on a regular basis for such events, the street would remain under public ownership and operation, and would be kept open during peak traffic flow periods.

Eleventh Street is not an Arterial Street in the City's General Plan. Furthermore, traffic count information shows that traffic volumes are typically low on 11th Street between Figueroa Street and Cherry Street, ranging from 6,100 to 10,900 daily vehicles and averaging 7,800 daily vehicles on a weekday. The daily vehicle total is about 4,200 on a Saturday and about 3,700 on a Sunday. Eleventh Street is therefore not a critical link in the area's street network. While 11th Street does lead to freeway ramps with the Harbor Freeway at Cherry and Blaine Streets, there are alternative routes available to those ramps during the temporary closures. The southbound on-ramp at Blaine Street and 11th Street can be accessed via Olympic Boulevard and Blaine Street rather than 11th Street, and, in fact, is currently signed to direct the majority of traffic to do so. Instead of accessing the northbound on-ramp at Cherry Street and 11th Street via 11th Street, traffic could use alternate ramps at 9th Street (via Olympic Boulevard and Georgia Street), and at 8th Street (via Figueroa Street and 8th Street). Finally, traffic using the northbound off-ramp from the Harbor Freeway to Pico Boulevard and Cherry Street, can continue northbound on Cherry Street to Olympic Boulevard or remain on the Harbor Freeway to 9th Street.

The feasibility of temporarily closing 11th Street was analyzed for the Saturday evening peak hour, which would be the time of highest traffic volume on the adjacent roadway network on a Saturday with incoming traffic to both STAPLES Center and the Project. The analysis assumed that traffic temporarily diverted away from 11th Street between Georgia and Figueroa Streets would use Cherry Street, Olympic Boulevard, Pico Boulevard, Figueroa Street, Hope Street and Olive Street. This analysis can be considered a conservative "worst case", as it assumed that traffic diverted by

the temporary closure of 11th Street would generally take the nearest alternate route, rather than all traffic diverting onto Figueroa Street.⁴⁰

The Traffic Study determined that without the temporary closure of 11th Street, the Project would create ten significant impacts after mitigation, although all locations would operate at LOS D, except for the Cherry Street/Pico Boulevard intersection, which would operate at LOS F. With the closure of 11th Street, the Project would create nine significant impacts, with five locations operating at LOS D, and four locations operating at LOS F. The four intersections operating at LOS F include Cherry Street/Pico Boulevard, Georgia Street/Olympic Boulevard, Francisco Street/Olympic Boulevard, and Figueroa Street/Olympic Boulevard.

With mitigation and without the closure of 11th Street, the Project would cause five significant impacts, although four locations would operate at LOS C and one at LOS D. With mitigation and with the closure of 11th Street, the Project would cause eight significant impacts, of which six locations would operate at LOS C, and two would operate at LOS E (Francisco Street/Olympic Boulevard and Figueroa Street/Olympic Boulevard).

During the Saturday evening peak hour, temporary closure of 11th Street would lead to high turning volumes (i.e., approximately 800 vehicles per hour) at certain key intersections, including the westbound left turn on Olympic Boulevard at Georgia Street, the westbound left turn on Olympic Boulevard at Francisco Street, and the northbound left turn on Figueroa Street at Olympic Boulevard. Heavy, although lower, turning volumes would occur for eastbound left turns on 11th Street at Georgia Street, northbound right turns on Georgia Street at Olympic Boulevard, and westbound right turns on 11th Street at Figueroa Street.

Some of these turning movements would not necessarily create significant impacts or poor operations, while others could be mitigated or improved by the provision of temporary turning lanes delineated by traffic cones and the deployment of traffic control officers (for example, providing a temporary dual right turn lane northbound on Georgia Street at Olympic Boulevard and a temporary dual northbound left turn lane on Figueroa Street at Olympic Boulevard), and additional traffic management measures. However, even with such temporary measures, the intersections of Figueroa Street/Olympic Boulevard and Francisco Street/Olympic Boulevard would operate at LOS E.

The above analysis addresses a “worst case” condition rather than a typical condition because it addresses a Level 4 *PCMP* Condition involving STAPLES Center and Convention Center events, as well as full activity on the Project site, including a sold-out theater event. There would be many Saturday evenings when a lower level of activity would occur either at STAPLES

⁴⁰ For this analysis, some of the westbound 11th Street traffic was assumed to divert onto Olive Street and Hope Street to Olympic Boulevard.

Center or particularly at the Convention Center. The low traffic volumes on 11th Street at other times also indicate that temporary closure of 11th Street should not be a problem during the midday and afternoon periods. Nevertheless, it is precisely during the higher activity periods that there is the greatest need to temporarily close 11th Street for enhanced pedestrian circulation and safety in the Project area. Thus, the benefit of an improved pedestrian environment on 11th Street may outweigh the impacted vehicular conditions on Olympic Boulevard.

In addition to traffic management measures discussed above, additional management of the parking supply would help to alleviate poor traffic conditions on Olympic Boulevard. During times of 11th Street closure and high event activity, a higher proportion of vehicles could be parked east of Figueroa Street and south of 11th Street, thereby reducing the traffic load on Olympic Boulevard. For example, during the period of highest parking demand for the Project on a Saturday evening, the Convention Center parking supply is typically unused. Use of the Convention Center parking facilities to the south of 11th Street, as well as other public parking in the area east of Figueroa Street, would reduce the number of vehicles using Olympic Boulevard to access the parking garages on Olympic West and Olympic East Properties, thereby reducing traffic volumes and improving traffic conditions on Olympic Boulevard. Given the operational success of the STAPLES Center *PCMP*, it is likely that these impacts can be reduced.

In order to create a more pedestrian friendly and “seamless” environment along 11th Street, the Project proposes that potential design and traffic control features could include the following:

- Reduce the current mid-block 92’ curb-curb width to a 70’ curb-curb width. This will probably involve a 15-20’ street vacation on the north side of the street.
- Provide two traffic lanes plus one left turn lane in each direction.
- Retain the existing loading/waiting zone area adjacent to STAPLES Center.
- Provide special paving on 11th Street, between the Plaza and STAPLES Center, to link these areas together, and provide a visual message to motorists of a special environment. This paving will need to delineate and distinguish the road surface from the Plaza and sidewalk areas, and retain the necessary lane striping.
- Provide a roadway edge treatment other than a standard curb/gutter (for example, a rolled curb), which might also include bollards, planters, etc.

It is proposed that the street would be closed on a regular basis for events in the Plaza, STAPLES Center, and the Convention Center. The details of when and how the street would be closed will be addressed in the Specific Plan, and could include the following proposed parameters:

- Street could remain open during peak periods and nighttime (3:00 A.M. to 9:00 A.M., and 4:30 P.M. to 6:30 P.M.) on weekdays.
- Street could be closed down between 9:00 A.M. and 4:30 P.M., and 6:30 P.M. to 3:00 A.M., as necessary for events in the Plaza, STAPLES Center and the Convention Center, as well as on weekends and holidays.
- Street would be closed down only between Georgia and Figueroa Streets.
- Street would remain in public ownership and operation.
- Planning for closures of 11th Street could be accomplished through the regular actions of the South Park Event Coordination Committee.
- Street closures could be accomplished via the following types of measures:
 - Possibly street level barricades and signs, if necessary, or pop-up bollards across 11th Street on west side of Figueroa Street, and east side of Georgia Street.
 - Turning on of illuminated overhead signs (probably on signal mast arms) indicating “No Entry,” “Left Turn Only,” and “Right Turn Only” facing 11th Street westbound at Figueroa Street and 11th Street eastbound at Georgia Street.
 - Use of South Park Changeable Message Signs (CMS) to provide advance warnings of street closures, at the following locations:

11th Street WB at Grand Avenue
 Flower Street SB at Olympic Boulevard
 Cherry Street NB at 12th Street
 Figueroa Street NB at 18th Street
 11th Street EB at Blaine Street (portable)

The closure of 11th Street will have corresponding benefits to the residential neighborhoods on the west side of the Harbor Freeway, by redirecting traffic to major arterials such as Olympic Boulevard and Pico Boulevard.

A Traffic Control Plan will be prepared, subject to approval by LADOT and the City Council, for the closure of 11th Street.

(v) **CMP Freeway and Arterial Analysis**

Based on the Project's trip distribution and additional analysis of the anticipated dispersal of trips beyond the immediate Project area, the number of Project trips likely to pass through the *CMP* monitoring locations closest to the Project was calculated. These findings are described in the following paragraphs.

a. CMP Arterial Analysis

According to the *CMP*, the following four arterial monitoring stations are closest to the Project site:

- Sunset Boulevard and Alvarado Street;
- Wilshire Boulevard and Alvarado Street;
- Western Avenue and 9th Street (James Wood Boulevard); and
- Alameda Street and Washington Boulevard.

The intersection of Western Avenue/9th Street was not analyzed as part of the *CMP* analysis as less than 50 peak hour Project trips would pass through this intersection. The remaining three intersections were analyzed. As can be seen from Table 41 on page 267, the analysis indicates that the Project would have a less than significant impact on *CMP* arterial monitoring locations.

b. CMP Freeway Analysis

The *CMP* identifies the following freeway monitoring stations that are closest to the Project site:

- I-10 west of Vermont Avenue;
- I-10 east of La Brea Avenue;
- I-10 west of I-710;
- US-101 east of Alvarado Street;
- US-101 south of Santa Monica Boulevard;
- US-101 west of Vignes Street;

Table 41

**CMP ANALYSIS – ARTERIAL MONITORING LOCATIONS
INTERSECTION LEVEL OF SERVICE**

N ^o	Intersection	P.M. Peak Hour							
		Existing		Future Without Project		Future With Project		Change in V/C	Significant Impact
		V/C	LOS	V/C	LOS	V/C	LOS		
1.	Sunset/Alvarado	0.866	D	1.013	F	1.022	F	0.009	No
2.	Wilshire/Alvarado	0.572	A	0.669	B	0.678	B	0.009	No
3.	Washington/Alameda	0.641	B	0.750	C	0.759	C	0.009	No

Source: The Mobility Group/Kaku Associates, December 2000.

- I-5 north of Stadium Way;
- I-5 east of I-710;
- SR-110 south of US-101;
- SR-110 at Alpine Street;
- SR-110 at Pasadena Avenue;
- SR-110 at Slauson Avenue; and
- SR-60 east of Indiana.

The *CMP* analysis found that the Project would add more than 150 peak hour trips in either direction to three of the above *CMP* freeway monitoring locations. As can be seen from Table 43 on page 268, the Project would cause significant impacts at two of the *CMP* freeway monitoring locations. At Station 1048, SR-110 south of US-101, the P.M. peak hour northbound D/C ratio would increase by 0.033 and the southbound D/C ratio would increase by 0.035. At Station 1049, SR-110 at Alpine Street, the P.M. peak hour northbound D/C ratio would increase by 0.029 and the southbound D/C ratio would increase by 0.031. Both sections of freeway would be operating at LOS F (even without the Project), and as these increases are slightly above the threshold of an increase in D/C ratio of 0.02, the increases at these locations would both constitute a significant impact. The Project would not cause significant impacts at any other *CMP* freeway monitoring locations.

Table 43

CMP ANALYSIS - FREEWAY MONITORING LOCATIONS

Future With Project Conditions

			Northbound/Eastbound P.M. Peak Hour Vehicles								
Freeway Segment			Without Project	Demand Project Volume	With Project	Capacity	D/C	LOS (A-F)	LOS	Change in D/C	Significant Impact
Station	Route	Location									
1013	I-10	West of Vermont	19,960	151	20,111	12,500	1.609	F	F(3)	0.012	No
1048	SR-110	South of US-101	12,774	260	13,034	8,000	1.629	F	F(3)	0.033	Yes
1049	SR-110	Alpine	9,581	173	9,754	6,000	1.626	F	F(3)	0.029	Yes

			Southbound/Westbound P.M. Peak Hour Vehicles								
Freeway Segment			Without Project	Demand Project Volume	With Project	Capacity	D/C	LOS (A-F)	LOS	Change in D/C	Significant Impact
Station	Route	Location									
1013	I-10	West of Vermont	18,593	138	18,731	12,500	1.498	F	F(3)	0.011	No
1048	SR-110	South of US-101	11,899	282	12,181	8,000	1.523	F	F(3)	0.035	Yes
1049	SR-110	Alpine	8,924	188	9,112	6,000	1.519	F	F(3)	0.031	Yes

Source: The Mobility Group/Kaku Associates, December 2000

(vi) Transit Analysis

The proposed Project is located adjacent to the Pico/Flower Blue Line light rail station and close to numerous bus routes, which together provide a substantial level of rail and bus transit to the area. It is therefore expected that a significant number of trips to and from the Project would use transit.

Approximately 695 transit trips would be generated by the Project in the weekday P.M. peak hour, and 575 transit trips would be generated during the Saturday evening peak hour. (These estimates include a factor of 1.4 to convert vehicle trips to person trips, as per the *CMP*).

The transit service that serves the site is comprised of the Metro Blue Line, 28 bus routes, and the LADOT DASH service. During the weekday P.M. peak hour, the Project area is directly served by a total of 19 trains (northbound and southbound, providing both inbound and outbound service in both directions for 336 total bus movements to/from the Project area). In addition, there

are 32 DASH buses (northbound and southbound to/from the Project site for a total of 64 bus movements). During the Saturday evening peak hour, a total of eight trains (northbound and southbound, for 16 total train movements) and 53 buses (inbound and outbound service for 106 total bus movements) serve the Project site.

These transit vehicles collectively provide a transit capacity of approximately 38,000 person trips to/from the area during a weekday peak hour (19,000 on the light rail and 19,000 on the bus system), and 13,500 person trips during the Saturday evening peak hour (8,000 on the rail and 5,500 on the bus system). Future light rail capacity is likely to be even higher as Blue Line station platforms are extended to accommodate these conditions rather than the current two-car trains.

During the weekday peak P.M. peak hour, the 695 transit trips generated by the Project would comprise about two percent of the total transit capacity serving the area. During the Saturday evening peak hour, the 575 transit trips generated by the Project would comprise about four percent of the transit capacity serving the area. This analysis demonstrates that the Project would not significantly impact the transit system serving the area. This analysis is based on current levels of transit service and hours of operation (including Blue Line service up to about 11:50 P.M.).

c. MITIGATION MEASURES

(1) Construction

1. Prior to construction, the Applicant shall, in consultation and cooperation with the South Park Event Coordinating Committee, develop and implement a Construction Management Plan for construction of the Project. The goals of the Construction Management Plan shall be to minimize conflicts with STAPLES Center and Convention Center operations and conflicts and delays in construction of the Project.

The Construction Management Plan shall provide for the coordination of construction staging areas and traffic controls, in order to assist in the orderly flow of pedestrian and vehicular traffic in the Project area, and to/from STAPLES Center and the Convention Center events; and of labor, materials and construction vehicles to the construction site, including the staging of delivery trucks on public streets surrounding the Project site. The Construction Management Plan shall also address measures to ensure adequate access to STAPLES Center and to the Convention Center, if temporary lane closures on adjacent roadways are required.

Prior to full implementation of mitigation measures in this section, the Construction Management Plan should consider the use of temporary operational techniques (e.g., coning, temporary/changeable signs, etc.), as appropriate to the circulation needs of particular events.

(2) Operation

(a) Introduction

The above analysis identified that the Project would cause significant traffic impacts at 17 locations in the P.M. peak hour and at 10 locations in the Saturday evening peak hour. During the P.M. peak hour, seven of the significant impacts would be at locations where the resultant level of service will be LOS C and six will be at locations where the resultant level of service will be LOS D. At all these locations, traffic operations will be at an acceptable level with the Project. A total of three impacts will occur at locations where the resultant LOS will be LOS E, and one will be at a location where LOS F will result with the Project.

(b) Background

The Project is located in the downtown Los Angeles area, where most of the street system is fully built out and is already striped for maximum capacity and operational effectiveness within the available right-of-way. In most cases, street widenings are not feasible, because either right-of-way acquisition is not possible, or because it is not practical or desirable to reduce sidewalk widths due to high pedestrian flows on downtown sidewalks.

In the specific area of the Project, some significant roadway improvements were implemented as part of the recently constructed STAPLES Center project, including an extension of Cherry Street from 11th Street to Olympic Boulevard, and intersection widenings at Georgia Street/Olympic Boulevard, Olympic Boulevard/Figueroa Street and 11th Street/Figueroa Street.

Also, the South Park Traffic Management Project was recently implemented, comprising significant improvements for the operation of the roadway system in the South Park area and including traffic signal system upgrades to ATCS, additional directional signage, changeable message signs (CMS), a Highway Advisory Radio (HAR) system, and a Traffic Operations Center and STAPLES Center events. The South Park Event Management Committee (consisting of representatives of the Convention Center, STAPLES Center, Los Angeles Police Department, and LADOT) meets regularly to plan and coordinate traffic management needs and strategies for the area.

With traffic signals in the area already a part of both the City's ATSAC (first generation) and ATCS (second generation) traffic signal control systems, and with the resources of the South Park Traffic Management System, the area surrounding the Project site has the most extensive and sophisticated system of traffic management and control anywhere in the City of Los Angeles.

Overall Mitigation Strategy

In the context of this background, the overall mitigation strategy for the Project comprises the following elements:

- Implement specific roadway improvements where necessary, feasible and practical.
- Maintain a good balance between vehicular and pedestrian circulation, emphasizing adequate sidewalk widths and pedestrian safety.
- Encourage transit use and trip reduction measures.
- Provide off-site parking for the majority of employees.
- Participate in the South Park Event Management Committee to coordinate Project traffic flows and circulation with that of STAPLES Center and Convention Center events.
- Ensure adjacent residential neighborhoods are protected from traffic and parking impacts.
- Identify and design mitigation measures to enhance pedestrian safety.

(c) Specific Roadway Improvements

In order to address significant traffic impacts the following specific street mitigation measures are proposed.

2. Blaine Street/11th Street/SR-110 Southbound On-Ramp. The Project would create a significant traffic impact in the P.M. peak hour at this location, changing the V/C ratio from 0.831, LOS D to 0.895, LOS D. Lane re-striping or street widening of either 11th Street or Blaine Street is not possible at this location without taking additional right-of-way, which is not considered feasible. However, it is possible to improve the freeway on-ramp from its current one lane configuration to a two lane configuration. The ramp would be widened to two lanes, probably involving a retaining wall on the west side. This will increase storage capacity on the on-ramp and should benefit operation of the intersection, although the impact would remain significant.
3. Cherry Street & Pico Boulevard. The Project would cause a significant impact at this location in both the P.M. peak hour and the Saturday evening peak hour. The

proposed mitigation measure is to widen the northbound approach on Cherry Street at this intersection, which currently provides an exclusive left lane, one shared through/left lane, one shared through/right lane, and an exclusive right turn lane, and re-stripe to provide two exclusive left turn lanes, two through lanes, and an exclusive right turn lane. This mitigation measure would eliminate the significant impact at this intersection in both the P.M. peak hour and the Saturday evening peak hour.

4. Georgia Street & Olympic Boulevard. The Project would cause a significant impact at this location in both the P.M. peak hour and the Saturday evening peak hour, although in both cases the level of service would remain LOS C with a V/C ratio of 0.762 in the P.M. peak hour, and 0.727 in the Saturday evening peak hour. The proposed improvement at this location is to add a westbound protected left turn phase on Olympic Boulevard, and to widen the northbound approach on Georgia Street to replace the existing configuration of one shared left/through lane and one shared through/right lane with one exclusive left turn lane, one through lane, and one exclusive right turn lane. While this would facilitate traffic movements at the intersection, the significant impacts would remain in both time periods.
5. Francisco Street & Olympic Boulevard. The Project would cause significant impacts at this intersection in both the P.M. peak hour and the Saturday evening peak hour, although in both cases the level of service would be LOS C, which would remain an acceptable operating condition. The Project proposes to install a new traffic signal at this location. With the Project, the V/C ratio would be 0.704 in the P.M. peak hour, and 0.770 in the Saturday evening peak hour. The proposed mitigation measure is to widen Olympic Boulevard on the south side of the street and re-stripe the westbound approach to provide a dual left turn lane (into the Project driveway). Also, to provide a four-lane Project driveway, configured for two inbound lanes and two outbound lanes to the underground parking garage. The outbound lanes should be striped for a shared left/through/right turn lane and an exclusive right turn lane. Immediately to the west of the Project driveway, provide a one lane southbound entry to the on-site surface driveway into the site. Also, re-stripe the southbound approach on Francisco Street from the current single shared left/through/right lane to one exclusive left turn lane and a shared through/right lane. These measures, while improving traffic flow at the intersection, would not mitigate either time period. No further mitigation is proposed for two reasons. Firstly, LOS C would remain an acceptable operating condition. Secondly, while providing a wider exit driveway from the Project (additional exit lane) would improve the LOS, it would degrade the pedestrian environment and so is not recommended.
6. Figueroa Street & Olympic Boulevard. The Project would cause a significant impact at this intersection in both the P.M. peak hour and the Saturday evening peak hour. In the P.M. peak hour the V/C ratio would be increased from 0.820, LOS C to 0.993, LOS E, while in the Saturday evening peak hour it would increase from 0.604, LOS B to 0.778, LOS C. The proposed mitigation measure is to re-stripe the eastbound

approach on Olympic Boulevard, which currently provides an exclusive left turn lane, three through lanes, and an exclusive right turn lane, to provide two exclusive left turn lanes, three through lanes, and an exclusive right turn lane. Also, to widen the westbound approach on Olympic Boulevard and re-stripe the approach, which currently provides an exclusive left turn lane, two through lanes, and a shared through/right turn lane, to provide an exclusive left turn lane, three through lanes, and an exclusive right turn lane. In addition, lengthen the existing northbound left turn on Figueroa Street. These measures would fully mitigate the Saturday evening peak hour impact, reducing the V/C ratio from 0.778, LOS C to 0.656, LOS B. In the P.M. peak period, they would partially mitigate the impact and would reduce the V/C ratio from 0.993, LOS E, to 0.863, LOS D, although a significant impact would remain.

7. Grand Avenue & 11th Street. The Project would cause a significant impact at this intersection in the P.M. peak hour, increasing the V/C ratio from 0.591, LOS A to 0.704, LOS C. The proposed mitigation measure is to re-stripe the westbound approach on 11th Street from one shared left/through lane and one exclusive through lane, to provide one exclusive left turn lane, and two through lanes. This measure would fully mitigate the impact at this location. This would require removing on-street parking on 11th Street between Grand Avenue and the alley east of the intersection (approximately 12 spaces). This would not be a significant impact due to the abundance of off-street parking in the immediate area.

(d) Neighborhood Protection

As discussed above, no significant traffic or parking impacts are expected in the residential neighborhood to the west of the Harbor Freeway. However, because there remains the potential for such impacts to occur on an occasional basis, the Project Applicant proposes certain actions to ensure the neighborhood is protected against such occurrences.

Firstly, many elements of the proposed mitigation program are designed to keep traffic on the major arterials and away from residential streets in the neighborhoods. There are a series of improvements to enhance capacity on Olympic Boulevard between Cherry Street and Flower Street, for example, adding turn lanes into the “front door” of the Project. On the other hand, street widening and/or capacity enhancement measures are not recommended on 11th Street due to a desire to make this street a more pedestrian-oriented environment, and to discourage through traffic on 11th Street. In addition, the following measure is recommended:

8. The Applicant shall fund up to \$100,000 for studies, evaluations, and implementation of a Neighborhood Traffic Management Plan, if necessary. Such actions would be carried out by or under the direction of LADOT, with the participation of the Applicant. The Applicant would post a bond for the \$100,000

and monies would be released as a plan or individual measures are agreed upon and implemented. After a period of three years from opening of the Project, the bond would be terminated and/or any unused monies returned to the Applicant. This program would include both traffic management measures, as well as the implementation of any residential permit parking district programs requested by the neighborhoods and approved by LADOT.

(e) General Mitigation Measures

In addition to the measures identified above that will directly mitigate and/or avoid significant impacts, the following general mitigation measures will be implemented, which will help traffic flow in the area and enhance the operations of the impacted intersections.

9. The Applicant shall enhance connections and linkages to transit. This will particularly include physical linkages to the Metro Blue Line Station at Flower Street/Pico Boulevard, as well as directional signage to bus and rail lines, and the provision of landscaped bus stops with passenger amenities such as benches, shaded areas, and electronic real-time transit information.
10. The Applicant will install six new bus shelters throughout the project area, at locations to be agreed between the Applicant, LADOT, and LACMTA. These will be City standard bus shelters at a minimum, although the Applicant may modify the design to fit in with the overall urban design/streetscape of the Project with the approval of the City.
11. The Applicant will provide up to two transit information kiosks on-site (one on the Olympic properties and one on the Figueroa properties) for the purpose of providing information about the available transit in the area, and of dispensing tickets/passes, if feasible.
12. The Applicant will install 30-foot wide crosswalks at Figueroa Street/Olympic Boulevard, Figueroa Street/Pico Boulevard, 12th Street/Flower Street, and Pico Boulevard/Flower Street, where and as feasible.
13. The Applicant shall initiate and maintain a transportation demand management program that will actively promote the use of transit and rideshare, including providing Project employees and visitors with transit and rideshare information.
14. The Applicant shall provide off-site parking for employees (to the north, east, and south of the Project) along with shuttle bus service from parking locations to the Project.

15. The Applicant shall provide fixed signage on access/egress corridors to the Project to help direct inbound traffic to parking facilities, and outbound traffic to arterials and freeway ramps, up to a total of \$25,000.
16. The Applicant shall participate in providing up to three additional changeable message signs (CMS), if necessary, on the surface street system in the Project area, that will be linked into the existing Traffic Operations Center (TOC), that will help direct traffic and ensure smooth traffic flows during Convention Center and STAPLES Center events and during closures of 11th Street.
17. The Applicant will participate with Caltrans to provide one additional changeable message sign (CMS) on the freeway mainline system, if Caltrans determines it to be necessary or desirable.
18. The Applicant will coordinate with Caltrans and LADOT to develop fixed and changeable signage programs to direct traffic to utilize the various different freeway off-ramps in the Project area, where necessary.
19. The Applicant shall participate in the existing South Park Event Parking & Circulation Management Plan, and the ongoing traffic management activities coordinated by the South Park Event Coordinating Committee.

(f) Closure of 11th Street

In order to facilitate the closing of 11th Street between Georgia Street and Figueroa Street, on a regular basis outside the morning and evening peak periods, the following measure is recommended:

20. Develop a Traffic Control Plan, requiring LADOT approval, prior to completion and public use of the plaza to the north of 11th Street. Among the potential measures that could be included in the plan are the following (subject to the approval of LADOT):
 - Implement temporary traffic barriers or pop-up bollards on 11th Street west of Figueroa Street and east of Georgia Street to prevent traffic entering 11th Street between Georgia and Figueroa Streets during closure periods.
 - Add electronic signs to signal poles and signal mast arms at the intersections of 11th Street/Figueroa Street and 11th Street/Georgia Street, to indicate “No Entry”, “Turn Left”, and “Turn Right” during street closures.

- Add changeable message signs at locations to be determined by LADOT, advising motorists of alternate routes to 11th Street during street closures. Such signs would be located in the immediate vicinity of the block of 11th Street to be closed, at the following intersections:
 - 11th Street & Figueroa Street
 - Olympic Boulevard & Figueroa Street
 - Olympic Boulevard & Georgia Street
 - 11th Street & Georgia Street

- Add similar signs on the street approaches to the block of 11th Street to be closed to give motorists advance warning and information of alternate routes, such as at the following locations:
 - 11th Street, east of Flower Street
 - 11th Street, east of Olive Street
 - Cherry Street, south of 12th Street

- If necessary, provide additional temporary measures, such as coning temporary traffic lanes, at the following locations:
 - Olympic Boulevard & Figueroa Street
 - Olympic Boulevard & Georgia Street
 - 11th Street & Georgia Street
 - 11th Street & Figueroa Street

d. ADVERSE EFFECTS

(1) Construction

The temporary full closure of 12th Street during street and utility realignment would cause a significant, unavoidable traffic impact.

(2) Operation

The analysis identified Project-related significant traffic impacts at 17 locations in the weekday P.M. peak hour. The physical mitigation measures identified would eliminate two of these significant impacts and reduce the impact at one additional location. Significant impacts would remain at 15 locations, although only two locations would operate at LOS E. The remaining 13 locations would continue to operate at satisfactory conditions, with six locations operating at LOS C

and seven locations operating at LOS D. Significant impacts would remain at the following locations in the P.M. peak hour:

- Blaine Street and 11th Street (LOS D)
- Georgia Street and Olympic Boulevard (LOS C)
- Francisco Street and 9th Street (LOS D)
- Francisco Street and Olympic Boulevard (LOS C)
- Figueroa Street and 8th Street (LOS D)
- Figueroa Street and 9th Street (LOS D)
- Figueroa Street and Olympic Boulevard (LOS D)
- Figueroa Street and 11th Street (LOS E)
- Figueroa Street and Pico Boulevard (LOS C)
- Flower Street and 9th Street (LOS C)
- Flower Street and Olympic Boulevard (LOS E)
- Flower Street and 11th Street (LOS C)
- Flower Street and Pico Boulevard (LOS D)
- Flower Street and 7th Street (LOS D)
- Flower Street and 9th Street (LOS C)

During the Saturday evening peak hour, the impact analysis identified significant traffic impacts at 10 locations. The physical mitigation measures identified would eliminate two of these impacts. Significant impacts would remain at eight locations, which would all operate at satisfactory conditions (five locations at LOS C, and three locations at LOS D). Significant impacts would remain at the following locations in the Saturday evening peak hour:

- Cherry Street and 11th Street (LOS D)
- Georgia Street and Olympic Boulevard (LOS C)
- Georgia Street and 11th Street (LOS D)
- Francisco Street and Olympic Boulevard (LOS C)
- Figueroa Street and 11th Street (LOS D)
- Flower Street and 9th Street (LOS C)
- Flower Street and Olympic Boulevard (LOS C)
- Flower Street and 11th Street (LOS C)

The feasibility of physical mitigation measures was investigated for all locations where it was determined there would be a significant impact with the project. At a number of locations, no feasible physical mitigation was found, usually because intersection approaches have already been striped and signalized to the maximum number of lanes available and/or to the optimal lane

configuration, or because it was not considered desirable to change signal phasing/operations, to reduce sidewalk widths, or because right-of-way acquisition was not feasible.

Physical mitigation measures (such as roadway widening or restriping for additional right turn lanes) would degrade the pedestrian walking and safety environment, and would enhance roadway capacity in an area where substantial roadway capacity already exists, as shown by the forecast LOS C and LOS D conditions at many locations. In addition, further roadway widening could encourage additional auto trips, less use of transit, and potentially could lead to traffic intrusion into the residential neighborhoods to the west of the Harbor Freeway.

The following summarizes conditions at locations where the inclusion of mitigation measures was deemed to be infeasible.

Cherry Street & 11th Street

The Project would cause a significant traffic impact at this location in the Saturday evening peak hour, changing the V/C ratio from 0.724, LOS C to 0.828, LOS D. This intersection was significantly improved as part of the STAPLES Center project, including the addition of Cherry Street to the north, lane re-striping, and addition of signage. No further feasible mitigation measure has been identified for this location. This would remain a significant impact, although LOS D would remain an acceptable operating condition.

Georgia Street & 11th Street

The Project would cause a significant impact at this location in the Saturday evening peak hour, increasing the V/C ratio from 0.479, LOS A to 0.834, LOS D. Further street widening is not proposed as this would be contrary to the objective of enhancing the pedestrian environment. A potential mitigation measure to re-stripe the westbound approach to add a shared through/right lane was rejected due to the increased pedestrian conflicts that would be caused. This impact would therefore remain significant.

Francisco Street & 9th Street

The Project would have a significant impact at this intersection in the PM peak hour, changing the V/C ratio of 0.791 and LOS C without the Project to 0.818 and LOS D with the Project, although LOS D would be an acceptable operating condition. While the analysis included the planned development of the adjacent Metropolis project, it did not include the planned mitigation measure for that project to widen Francisco Street and reconfigure the southbound approach from the current one left turn lane to the planned two left turn lanes. With this

improvement in place there would be no significant impact with the Project. For this reason, no further mitigation was identified at this location.

Figueroa Street & 11th Street

The Project would cause a significant impact at this intersection in both the PM peak hour and the Saturday evening peak hour. The PM peak hour V/C ratio would increase from 0.792, LOS C to 0.906, LOS E, while the Saturday evening peak hour V/C ratio would increase from 0.619, LOS B to 0.818, LOS D.

Part of the Project design is to provide for a pedestrian-oriented environment along 11th Street, between the Project and STAPLES Center and the Los Angeles Convention and Exhibition Center, to the maximum extent possible. Roadway widening would not be compatible with this goal as it would degrade the pedestrian environment (longer crosswalks, narrower sidewalks, etc.). Further, this intersection is currently striped for optimal lane configurations on each street approach, so no improvement can be gained through re-striping. For these reasons, no physical mitigation measures are recommended for this intersection. It is proposed that the Project provide a signing program (both on the public street system and in the Project parking garages) to encourage traffic to use Olympic Boulevard and Pico Boulevard rather than 11th Street. This would improve traffic operations at this intersection but would not necessarily mitigate the impacts, so for the purposes of this analysis it is assumed that a significant impact would remain at this location during both the PM peak hour and the Saturday evening peak hour.

Flower Street & Olympic Boulevard

The Project would cause a significant impact at this intersection in both the PM peak hour and the Saturday evening peak hour. The PM peak hour V/C ratio would increase from 0.771, LOS C to 0.924, LOS E, while the Saturday evening peak hour V/C ratio would increase from 0.556, LOS A to 0.771, LOS C. Further street widening is not proposed as this would be contrary to the objective of enhancing the pedestrian environment. A potential mitigation measure to re-stripe the southbound approach to add a shared through/right lane was rejected due to the increased pedestrian conflicts that would be caused. This impact would therefore remain significant.

While no feasible mitigation could be identified at these locations, and therefore significant impacts would remain, it will be noted that the resultant LOS is in all cases LOS C or LOS D, which would still be acceptable operating conditions, and that in numerous instances the actual LOS would not change with the Project. The additional mitigation measures identified should help improve traffic flow and operating conditions at those locations where feasible physical mitigations were not identified.

While significant impacts were identified with respect to freeway mainline operations at two CMP analysis locations, no feasible physical mitigation measures are available within the confines of a Project specific analysis. There is no capacity within the existing freeway rights-of-way to restripe and the number of travel lanes are already maximized. It is not feasible to obtain additional right-of-way for widening because of the existing physical constraints and adjacent land uses in the downtown area.

Relationship to South Park Event Parking & Circulation Management Plan

The traffic and parking conditions in the Project area are coordinated through the *South Park Event Parking and Circulation Management Plan (PCMP)*. The *PCMP* was developed to manage and coordinate the varying traffic and parking conditions caused by the changes in activity levels at STAPLES Center and the Los Angeles Convention and Exhibition Center.

As one of the visitor-generating venues in the South Park area, the Project would participate in the *PCMP* in order to assist in accommodating both traffic and parking demand in the area.

The *PCMP* includes a number of components that would be important to Project visitors:

- South Park Event Coordinating Committee
- South Park Traffic Management Center
 - Closed Circuit Television Coverage
 - Upgraded Traffic Signal Control
- Visitor Information Program
 - Freeway and Surface Street Changeable Message Signs
 - Highway Advisory Radio
- Traffic Control Staff
 - LAPD Pedestrian Control
 - LAPD Traffic Control
 - LADOT Traffic Control Officers

The South Park Event Coordinating Committee is made up of representatives of the area venues and the agencies that have responsibility for the control of traffic in the area. The Committee meets weekly during the peak activity season and on an as-needed basis (biweekly or monthly) during the remainder of the year. The venue operators forecast activity levels for the upcoming period based on scheduled events and bookings, and the Committee then schedules an appropriate traffic/parking plan based on the projected activity level.

The Project would participate in the Committee meetings so that the variations in the traffic and parking demand at the Project can be factored into the mix. Ticket sales for the theater and

scheduled activity at the hotel banquet facility will most likely be the Project components that would have the most influence on the Committee choice of plan levels.

The South Park Traffic Management Center is the control center for the implementation of the various traffic and parking management plans in the area. Based on the plan levels selected by the Committee, the Traffic Management Center is activated. At the present time, the Management Center is staffed for the more active event levels. It is not expected that the South Park Traffic Management Center would be activated and staffed based on the activity at the Project alone. However, the Management Center would assist in coordinating the traffic and parking for the venue as a part of the overall demand patterns in the area.

The Management Center has a number of tools at its disposal to assist visitors to the area. The *PCMP* includes a program to upgrade the traffic signals in the South Park district to make them more responsive to the varying traffic patterns generated by the event traffic in the area. The beneficial effects of the upgraded signal system will be available to the visitors to the Project whether the Management Center is open or not. Closed circuit television allows the Management Center to view the key approach routes to the area and to advise incoming motorists as to the best streets to use. This information can be disseminated to incoming visitors via the changeable message signs and/or the highway advisory radio.

As parking lots and structures in the area fill, the status of parking availability is relayed to the engineers in the Management Center and the information can be relayed to incoming visitors. The parking supply for the Project would be included in the managed supply in the area so that unused Project parking could be made available to the incoming area visitors.

Traffic control staff is deployed for the busier events in the South Park area. Again, it is not expected that traffic control staff (LAPD or LADOT staff) would be deployed for crowds at the Project only. However, traffic control staff deployed for activities at STAPLES Center and/or the Los Angeles Convention and Exhibition Center would also control traffic and pedestrian activity generated by the Project visitors.

By joining the *PCMP*, the Project will add to the managed parking supply available to visitors to the area. The traffic generated by the Project will be treated as part of an overall area wide managed program, taking advantage of infrastructure improvements and city-owned parking facilities that would not be available for visitor traffic in any other area of the City.

e. CUMULATIVE IMPACTS

Cumulative effects of the traffic from ambient growth and related projects, as described in Section III.B, Cumulative Development of this Draft EIR, have been incorporated into the analysis described above. Consequently, impacts of cumulative growth are already incorporated into the traffic model and are equivalent to those indicated for the Future Without Project conditions in Table 39. In the absence of the Project, without considering mitigation measures that might be implemented by related Projects, future traffic conditions at study intersections would result in a decline of service at 17 of 40 intersections during the weekday P.M. peak hour and eight of 40 intersections during the Saturday evening peak hour. Mitigation measures for future projects, which contribute to cumulative traffic growth at these intersections, would be expected to be implemented by these projects in coordination with LADOT.

IV. ENVIRONMENTAL IMPACT ANALYSIS
F. TRANSPORTATION/CIRCULATION
2. PARKING

This section is based upon the technical report, *L.A. Sports & Entertainment District EIR Traffic Study*, prepared by The Mobility Group with Kaku Associates, dated December 2000, which analyzes the potential impact of the Project on the local parking supply. This study is presented in Appendix E of this Draft EIR.

a. ENVIRONMENTAL SETTING

The Project area is currently served by a large number of parking facilities including those operated by STAPLES Center and the Convention Center, as well as a large number of other public and private parking lots. The Convention Center provides approximately 5,100 on-site parking spaces. These spaces are divided into four major areas: the West Hall which provides approximately 1,900 spaces, the South Hall (1,200 spaces), the Cherry Street Garage (870 spaces), and the Venice Boulevard Garage (1,120 spaces). For the majority of events held at the Convention Center, the on-site parking supply provided is more than sufficient to meet the parking demand created by the event. During very large events (e.g. the Auto Show), off-site parking occurs, utilizing off-street lots in the area as well as the Grand Avenue Garage at Grand Avenue and 17th Street (which also operates a shuttle connection).

In addition to STAPLES Center and the Convention Center parking facilities, there are several privately owned off-street parking facilities within the area that provide additional supply. Even during concurrent events, the existing parking supply in the vicinity of the Project is more than adequate. Not all of this parking supply is utilized, and significant event parking activity does not occur west of the Harbor Freeway. During times when there are not any events, there is a large unused parking supply.

The Project site currently consists primarily of paved surface parking lots. These surface parking lots are used for STAPLES Center parking. The number of parking spaces within these lots, by block, is shown in Table 45 on page 284. As shown, there are 3,249 surface parking spaces on the Project site. Of the total 3,249 spaces, approximately 2,774 spaces are reserved for STAPLES Center season/premier ticket holders, and the remaining 475 spaces are available to the general public.

The existing parking supply in the vicinity of the proposed Project includes the parking that currently exists on the Project site, the parking for STAPLES Center and the Los Angeles

Table 45

PROJECT SITE EXISTING SURFACE PARKING SPACES

Block	Existing Parking Spaces
Olympic West Properties	884
Olympic East Properties	1,190
Olympic North Properties	185
Figueroa North Properties	148
Figueroa Central Properties	367
Figueroa South Properties	475
Total	3,249

Source: The Mobility Group/Kaku Associates, December 2000.

Convention and Exhibition Center, and the private parking in the area. Of the 5,000 parking spaces the Convention Center currently provides, up to 3,100 spaces are made available to events at STAPLES Center when there are no event conflicts with Convention Center activities. In addition, the area bounded by 7th Street to the north, Grand Avenue to the east, the Santa Monica Freeway to the south and the Harbor Freeway to the west provides 1,000 on-street curb parking spaces (although many of these are restricted during peak access hours) and 18,450 off-street commercial parking spaces.

b. PROJECT IMPACT

(1) Significance Thresholds/Methodologies

For the purposes of this EIR, the Project would be considered to have a significant impact with regard to parking if the parking supply provided by the Project, either on-site or off-site by covenant per standard City procedures, did not meet the number of spaces required by the *Zoning Code*.

The *Zoning Code* allows the parking demands of mixed-use projects to be evaluated by analyzing the shared parking aspects of the development. A separate analysis was conducted to assess the estimated parking demand for the Project. This analysis included an estimate of parking demand for each of the Project land uses for a typical weekday and for a Saturday during the peak month of the year for Project parking demand. The analysis also addressed parking demand on an hour-by-hour basis throughout the day.

Shared parking recognizes that parking spaces can be used to serve two or more individual land uses without conflict or encroachment. The shared parking phenomenon has long been

observed in central business districts, suburban community districts, and other areas where land uses are combined. Shared parking is really the result of two conditions:

1. Variations of the peak accumulation of parked vehicles occur because of time differences in the activity patterns of adjacent or nearby land uses (by hour, by day, and by season). For example, office employees can use a parking facility during the day and the same parking can serve patrons of an adjacent theater at night.
2. There are clearly relationships among land use activities in a mixed-use development that result in people visiting two or more land uses from a single automobile trip to a given mixed-use development project.

The peak parking demand ratios used for each land use are shown in Table 47 on page 286.

The analysis assumed a certain amount of transit use to the Project, in that 25 percent of the office workers would arrive by transit (based on empirical data for office mode split in downtown Los Angeles). Other uses would see 5 percent to 20 percent transit usage. An estimate was also made of internal capture of trips within the Project and adjacent uses. The critical time is when there are concurrent events occurring at STAPLES Center and the Convention Center. During these times, it was assumed that some of the patrons to the event(s) would eat a meal, shop or visit some of the entertainment venues in the Project as part of their trip. Thus, these customers would already be parked in STAPLES Center or Convention Center lots and would not have to be accommodated in the Project's parking supply.

The estimate of internal capture to the Project was based on the market surveys prepared for the Project. These surveys estimated that the retail and restaurant venues at the Project could expect as much as one-third of their traffic to be walk-in from the event visitor. Internal capture to other land uses within the Project was estimated to be in the five to 10 percent range for all uses except the Project's hotel banquet facilities where 25 percent of the guests were estimated to already be on-site (Convention Center visitors or Project hotel guests).

Finally, seasonal variations were also considered. A shared parking analysis was completed based on the peak month of the year. For this particular combination of land uses, the month of June was found to represent peak conditions. In June, all land uses on the site are experiencing peak demand of 100 percent of their annual peak except retail, which experiences 75 percent of its December demand. Thus for this Project, a June day represents the peak day of the year.

Project parking demand was also calculated for more typical day conditions. This typical day would likely occur in the January-March time period when the retail restaurant and entertainment land uses are at approximately 75 percent of their June peak. On a typical day, the

Table 47

PROJECT PARKING DEMAND RATES

Land Use	Weekday Rate	Weekend Rate
Office	3.0 spaces/1,000 sq. ft.	0.5 spaces/1,000 sq. ft.
Retail	3.8 spaces/1,000 sq. ft.	4.0 spaces/1,000 sq. ft.
Restaurant, Entertainment	10 spaces/1,000 sq. ft.	10 spaces/1,000 sq. ft.
Theater	0.3 spaces/seat	0.3 spaces/seat
Medical Office	5.0 spaces/1,000 sq. ft.	5.0 spaces/1,000 sq. ft.
Health Club	5.0 spaces/1,000 sq. ft.	5.0 spaces/1,000 sq. ft.

Source: The Mobility Group/Kaku Associates, December 2000.

live theater is estimated to be at 50 percent of its peak and the hotel banquet space would only experience 33 percent of its peak demand.

Each shared parking analysis measured the parking demand on a weekday as well as on a Saturday. The primary variation on weekday versus weekend parking demand occurs because of the slightly higher restaurant and entertainment demand on weekend nights.

(2) Project Design Features

The Project would provide a total of approximately 5,305 parking spaces in subterranean and above-grade parking garages at various locations on the Project site. These spaces would be distributed across the Project and/or by covenant in the vicinity of the Project, as shown in Table 49 on page 287. In addition, the Project would provide off-site employee parking. Employees would be connected to the Project site by a shuttle bus system, similar to the system currently used by STAPLES Center employees. During peak demand times, approximately 775 employee parking spaces would be provided.

A total of 2,200 of the 3,249 existing parking spaces on the Project site would be replaced by the parking structure on the Olympic West parcel. These will be independent of, and not included in the Project parking supply. During events at STAPLES Center, these 2,200 parking spaces would be reserved for the exclusive use of STAPLES Center patrons (premier/season ticket holders). At other times, these spaces would be available for general public use. The remaining 1,049 existing STAPLES Center parking spaces would not be replaced on the Project site. STAPLES Center patrons currently parking in those spaces would in the future park in one of the many other STAPLES Center parking lots or public parking lots to the east and north of STAPLES Center.

Table 49

PROJECT PARKING

Project Area	Number of Spaces	Configuration
Olympic West	805	Above ground
Olympic East	1,710	Below ground
Olympic North	600	Above/below ground
Figueroa North	150	Below ground
Figueroa Central	1,340	Above/below ground
Figueroa South	700	Above/below ground
Total	5,305	

Source: *The Mobility Group/Kaku Associates, December 2000.*

The Project would provide on-site parking generally in accordance with *Zoning Code* requirements, although to meet 100 percent of the anticipated peak parking demand, additional private and public parking supply in the vicinity of the Project would be utilized through covenants per standard City procedures. This dispersed approach to peak parking avoids the need to build an oversupply of Project-related parking and enhances pedestrian linkages by spreading peak parking demand among off-site parking lots to encourage walking into the Project site.

The Project proposes a parking strategy comprised of the following components:

- Coordinate the Project's parking supply with the management program already in place as part of the *South Park Event Parking and Circulation Management Plan (PCMP)*.
- Provide employee parking off-site connected to the Project by a shuttle bus system.
- Provide enough parking on-site to accommodate the visitor parking demand generated by the Project on a typical day.
- Arrange enough off-site parking to accommodate the overflow visitor parking demand on peak days.

This strategy has been successful in providing the parking for STAPLES Center in that a portion of the parking demand is met on-site and a portion is met in leased and private spaces off-site. As a result of the increased activity generated by STAPLES Center, many of these commercial spaces are open to the public for nighttime and weekend parking. It is expected that the private parking entrepreneurs would continue to market their supply to the visitors of the Project.

This strategy has resulted in increased pedestrian activity in the South Park Area of downtown Los Angeles, especially in the Figueroa Corridor between STAPLES Center and the Financial District to the north. The pedestrian activity has led to longer restaurant hours and increased business activity in the area.

(3) Analysis of Project Impacts

(a) Construction

Construction impacts would typically include the need to provide parking for construction workers, temporary parking for visitors to the site (i.e., constructors, inspectors) and parking/staging for delivery/haul trucks. This demand is expected to be easily met by available space within the construction areas, and in various nearby lots owned by the Project Applicant that are empty during the day because STAPLES Center parking is typically not used during the daytime when construction activity will occur, and that could be made available for parking. It is considered unlikely that current STAPLES Center parking areas would be used for construction staging, unless those areas are no longer needed for replacement by structured or other parking facilities. Construction staging is expected to occur either on-site, or in areas vacated by replacement parking.

During construction, certain areas of parking for STAPLES Center will be removed from the overall supply. These will be primarily spaces for premier seat and season ticket holders. STAPLES Center will maintain adequate replacement of parking spaces prior to construction. For example, the first anticipated construction activity on the Olympic West Properties would be the parking garage, which will provide replacement parking for the existing surface lots on both the Olympic West and Olympic East Properties. As construction proceeds on the remainder of these properties, the surface parking will no longer be needed. Other than the removal and replacement of parking for STAPLES Center, no parking spaces in general public use will be removed by the Project. No parking impacts are therefore expected to either STAPLES Center or the Convention Center during construction.

(b) Operation

The *Zoning Code* sets forth requirements for parking by land use for development projects. The *Zoning Code* would require the Project to provide a total of 6,257 parking spaces, as shown in Table 51 on page 289.

Separate analyses of potential Project-related parking impacts were conducted for conditions with and without concurrent events at STAPLES Center and/or Convention Center. The Project-related parking demand under these two scenarios is summarized in Table 53 on page 290. With concurrent events, some of the visitors to the Project will also be people visiting either STAPLES

Table 51

PROJECT ZONING CODE REQUIREMENTS

Land Use	Size	Units	Zoning Code Requirements	
			Rate	Number of Spaces
Hotel Rooms	1,800	Rooms	*	316
Hotel Banquet	150,000	GSF	1sp/100 sf	1,500
Restaurants	215,000	GSF	1sp/1000 sf	213 ^a
Retail	415,000	GSF	1sp/1000 sf	409 ^b
Health Club	125,000	GSF	1sp/1000 sf	125
Office	165,000	GSF	1sp/1000 sf	129 ^c
Medical Office	135,000	GSF	1sp/1000 sf ^a	135 ^d
Residential	800	DU	1.25 sp/DU	1,000
Entertainment:				
Live Theater	7,000	Seats	1sp/10 seats	700
Night Club/Sports				
Bar/Museum	165,000	GSF	1sp/100 sf	1,650
Other	80,000	GSF	1sp/1000 sf	80
Project Total				6,257

GSF=Gross Square Feet

DU=Dwelling Unit

* Hotel parking rate requirement is one-half space per room for first 20 rooms, one-quarter space for next 20 rooms, one-sixth space per room for remaining rooms.

^a Includes 5,000 sq.ft. in the CBD Traffic Impact Zone. See Note 1 below.

^b Includes 15,000 sq.ft. in the CBD Traffic Impact Zone. See Note 1 below.

^c Includes 90,000 sq.ft. in the CBD Traffic Impact Zone. See Note 1 below.

^d Includes 135,000 sq.ft. in the CBD Traffic Impact Zone. See Note 1 below.

¹ The City Parking Code establishes the following parking rates for development within the CBD Traffic Impact Zone: 0.6sp/1000 sq.ft. maximum on-site plus 0.4spaces/1000 sq.ft. maximum off-site.

Source: The Mobility Group/Kaku Associates, December 2000.

Center and/or the Los Angeles Convention and Exhibition Center, and who will already be parked in STAPLES Center/Convention Center parking lots. These people will not need to park (again) in the Project and will walk to Project land uses. Without concurrent events, all visitors will come only for Project land uses and so the parking demand for the Project will be higher.

As can be seen in Table 53, if no concurrent events are underway, the peak parking demand at the Project site would be approximately 500 to 600 spaces higher. However, if no event was underway at STAPLES Center, an additional parking supply of 2,200 spaces would be available to Project visitors. These spaces to be located in a parking structure on the Olympic West block, would usually be reserved for visitors to STAPLES Center. However, if there were no events at STAPLES Center, these spaces would be available for the visitors to the Project. Therefore, the key time for the parking analysis is with concurrent events and without Project access to the 2,200

Table 53

PEAK PARKING DEMAND ESTIMATE

Scenario	Peak Parking Demand	
	Weekday (8-9 P.M.)	Saturday (8-9 P.M.)
With Concurrent Events	7,713 spaces	7,788 spaces
No Concurrent Events	8,295 spaces	8,295 spaces

Source: *The Mobility Group/Kaku Associates, December 2000.*

STAPLES Center spaces on the Olympic West block. Therefore, the analysis focuses on this scenario.

As shown in Table 53, the peak Project-related parking demand would occur during the evening hours when 7,713 vehicles would park in the Project site on a weeknight from 8:00 P.M. to 9:00 P.M., and 7,788 vehicles would park on a Saturday night from 8:00 P.M. to 9:00 P.M. The parking demand for a typical day at the Project would range between 5,533 and 5,474 spaces, on a Friday and Saturday evening between 8:00 P.M. to 9:00 P.M., respectively. This represents a reduced parking demand of approximately 2,300 when compared to peak day conditions.

The parking program for the Project would also include an off-site employee parking program (similar to that currently operated for STAPLES Center) capable of accommodating 775 employee vehicles at peak times. These spaces would be connected to the site by a shuttle bus system to the extent that the spaces are located beyond a reasonable walking distance.

The remaining Project-related parking demand would be generated by visitors to the site. With visitor parking, it is necessary to provide a supply slightly in excess of the actual demand so that visitor search patterns do not become too frustrating for the customer. Assuming a five percent “oversupply” is provided to accommodate this search need, the Project would need to supply approximately 7,365 spaces if all visitor demand was to be met on-site for a peak day. For a typical day, the peak visitor supply would need to be approximately 5,200 spaces to fully accommodate visitor parking demand on-site.

The parking analysis is summarized in Table 55 on page 291, which shows the *Zoning Code* requirements, Project parking supply, peak parking demand, and typical parking demand. The analysis shows the parking numbers for the weekday and Saturday peak hours separately.

The overall Project parking supply of 6,260 spaces would meet the overall *Zoning Code* requirement of 6,257 spaces. Of this *Zoning Code* requirement, 5,305 spaces would be provided on-site and 955 spaces would be provided off-site by covenant per standard City procedures. These

Table 55

PROJECT PARKING AND DEMAND SUMMARY

	Weekday (8 P.M. to 9 P.M.)	Saturday (8 P.M. to 9 P.M.)
Zoning Code Requirement:	6,257	6,257
Project Parking Supply:		
On-site supply	5,310	5,310
Off-site supply	950	950
Total Project Supply:	6,260	6,260
Typical Day Parking Need:		
Visitors	5,212	5,153
Employees	569	566
Total Project Need:	5,781	5,719
Supply/Need Difference:		
Total	+ 479	+ 541
On-Site	+ 98	+ 157
Peak Day Parking Need:		
Visitors ^a	7,294	7,363
Employees	767	775
Total Project Need:	8,061	8,138
Supply/Need Difference:		
Total	- 1,801	- 1,878
On-site	- 1,984	- 2,053

^a Includes five percent excess for visitor search patterns.

Source: The Mobility Group/Kaku Associates, December 2000.

procedures for off-site spaces require that they are located within 1,500 feet to the north and/or east of the Project. The off-site spaces would be used primarily by employees. The parking need for the Project would be very similar between weekdays and Saturdays, with the peak time of demand occurring between 8:00 P.M. to 9:00 P.M. in both cases.

For a typical day, the total peak parking need of 5,781 spaces on a weekday would be accommodated by the total Project supply of 6,260 spaces with a slight surplus of 479 spaces. The on-site visitor need of 5,212 spaces would be accommodated by the on-site supply of 5,310 spaces.

For a peak day, the total peak parking need of 8,138 spaces on a Saturday would exceed the total Project parking supply of 6,260 spaces, a shortfall of 1,878 spaces. The on-site visitor need of 7,363 spaces would exceed the on-site supply of 5,310 spaces, a shortfall of 2,053 spaces. This excess of parking need would park off-site in the adjacent areas to the north and to the east, and

utilize the existing abundance of off-site parking supply in both public and private lots. This parking demand would most likely be met in leased or public spaces to the north and east of the Project site. Since the peak parking demand occurs at night, the office spaces to the north of the Project site are prime candidates for shared parking opportunities.

The Project parking supply when available would be added to the *South Park Event Parking and Circulation Management Plan* so that visitors to any of the area venues would be offered the greatest opportunity to find parking on the busiest event days.

During the first year of operation of STAPLES Center, the Applicant owned or leased approximately 8,900 spaces in the vicinity of the Project site. These spaces were built/leased to support STAPLES Center visitors. However, even on the night of a sellout sporting event (the highest parking demand condition for the venue), these 8,900 spaces are only about half full. Many STAPLES Center visitors are choosing to park off-site; in their reserved office spaces a few blocks from the Center; in less expensive private lots to the north and east of the site; or in on-street spaces within a few blocks to the north and east of the venue. Several of these lots are no longer provided due to lack of use. Currently STAPLES Center provides parking in 16 separate off-street lots that supply approximately 5,165 spaces. With the available parking supply at STAPLES Center, the Applicant controls more than enough parking spaces to meet the demand of the Project even on the peak days of demand. There is also substantial independently controlled additional parking supply to the north and east of the Project site.

It should also be noted that the analysis conservatively (worst case) assumed that the Convention Center parking supply would not be used, although this supply could be a resource if so desired. The Project parking plan is such that, as described above, the Project parking is separate to and independent of, the parking for STAPLES Center and the Convention Center. The Project Applicant anticipates operating the Project parking with a pricing structure that is affordable to visitors (to the restaurants, retail shops, etc.) through validations, but that discourages longer stay use by STAPLES Center visitors, who will park in separate designated lots. Those visitors who will park off-site will do so in the plentiful public parking supply that exists to the north and east of the Project, in a similar manner to current STAPLES Center patrons. For all of these reasons significant, off-site parking impacts are not anticipated. It is therefore concluded that the Project would conform to the requirements of the *Zoning Code* and that parking impacts would be less than significant.

The principal vehicular circulation to access/egress the Project will take place via the surrounding public street system. There will be no internal surface-level vehicular circulation, with one exception: a service road looping through the northwest corner of the Olympic East Properties from Francisco Street to Georgia Street, which would serve as passenger drop-off and loading for taxis, shuttle busses, and other private/tour busses; provide service access to the plaza retail, and restaurant uses; and create an intimate urban retail setting. Otherwise, vehicular circulation would

occur via the public street system to parking garages that would be integrated throughout the Project site to serve the various land uses.

The principal access routes to the Project site are expected to be Olympic Boulevard from the west (as well as 8th Street, Pico Boulevard, and Venice Boulevard); Figueroa Street, Flower Street, Hope Street, Grand Avenue, and Olive Street from the north and from the south; and Olympic Boulevard, 11th Street, 12th Street, and Pico Boulevard from the east.

Driveway access is proposed for parking for each project block/parcel, as follows:

- For the Olympic West parcel, access/egress would be provided on Cherry Street (right-in, right-out only), on Olympic Boulevard (right-in, right-out only), and on Georgia Street (full movement access).
- For the Olympic East parcel, access/egress would be provided on Olympic Boulevard opposite Francisco Street (full movement access), and on Georgia Street (full movement access).
- For the Olympic North parcel, access/egress would occur on both Georgia Street and Francisco Street (both full movement access).
- For the Figueroa North parcel, access/egress would occur on both Figueroa Street and Flower Street (both right-in, right-out only).
- For the Figueroa Central parcel, access/egress would be provided at 11th Street, Flower Street, and 12th Street (all right-in, right-out only).
- For the Figueroa South parcel, access/egress would be provided on both Figueroa Street and Flower Street (both right-in, right-out only).

These access locations have been identified to facilitate vehicular access to the Project from the main surface streets, and to minimize conflicts with pedestrians. For example, vehicular access to the Olympic East parcel would not be provided from 11th Street or from Figueroa Street, in order that the high pedestrian volumes on these block faces, both using the Project and utilizing STAPLES Center and the Convention Center, would not be disrupted. Similarly, no vehicular access would be provided to the Figueroa Central parcel from Figueroa Street, again so that anticipated high volumes of pedestrians would not be disrupted.

c. MITIGATION MEASURES

Although no significant impacts are anticipated to occur, the following mitigation measures are recommended.

(1) Construction

1. The Applicant shall develop a Construction Management Plan, which shall provide for the coordination of construction areas and the replacement of STAPLES Center parking prior to commencing construction. During Project utility relocation, existing street parking shall be retained wherever possible.
2. As part of the Construction Management Plan, measures to minimize parking impacts to STAPLES Center and other land uses in the area shall be developed, (for example, the provision of permanent or temporary replacement parking). Delays in construction of the Project shall be avoided to the fullest possible extent.

(2) Operation

3. The Applicant shall provide employee parking off-site to the northeast or south of the Project site in leased and/or owned spaces. The employees would be transported to the Project site by a shuttle bus system similar to that currently used for STAPLES Center employees. The off-site employee parking program would accommodate approximately 550 daytime employee spaces and 775 nighttime employee spaces.
4. The Project shall participate in the South Park Event Coordinating Committee, to coordinate parking management issues.

d. ADVERSE EFFECTS

The Project would provide parking, both on-site and off-site by covenant as per standard City procedures, in accordance with the *Zoning Code*. Although no adverse effects to parking would occur, any potential impacts would be reduced further with the incorporation of recommended mitigation measures.

e. CUMULATIVE IMPACTS

The Project in combination with related projects would not result in any adverse impacts to parking. The related projects would be required, through *Los Angeles Municipal Code* requirements and mitigation measures required by environmental clearances, to include sufficient parking to accommodate their own parking demand. Although in some instances existing parking may be displaced by development, this is likely to be counterbalanced by the parking required for the proposed developments. In addition, some of the related project developments would include uses which might be economically influenced to open their parking facilities on nights and weekends to accommodate additional parking demand. No significant cumulative impacts to parking are anticipated.

IV. ENVIRONMENTAL IMPACT ANALYSIS
F. TRANSPORTATION/CIRCULATION
3. PEDESTRIAN SAFETY

This section is based upon the technical report, *L.A. Sports & Entertainment District EIR Traffic Study*, prepared by The Mobility Group with Kaku Associates, dated December 2000, which analyzes the potential impact of the Project on pedestrian safety. This study is provided in Appendix E of this Draft EIR.

a. ENVIRONMENTAL SETTING

Extensive pedestrian facilities exist in the vicinity of the Project site. Sidewalks are available on both sides of all of the public streets in the area, generally ranging in width from 10 feet to as much as 30 feet. Marked crosswalks are provided at all signalized intersections in the vicinity of the Project site. In addition, pedestrian controls (i.e., illuminated “Walk/Don’t Walk” signs) are provided at the signalized locations. The sidewalks on Figueroa Street between 9th Street (James Wood Boulevard) and Venice Boulevard range in widths from 10 feet to 30 feet. The sidewalks on 11th Street between Cherry Street and Flower Street range in widths from 10 feet to 20 feet. The Olympic Street sidewalks between Georgia Street and Flower Street range in widths from 13 feet to 15 feet. The sidewalks on Flower Street between 9th Street (James Wood Boulevard) and Venice Boulevard range in widths from nine feet to 22 feet.

During events at STAPLES Center and the Los Angeles Convention and Exhibition Center there is often high pedestrian activity in the Project area. Based on the location of the parking facilities there are a number of key pedestrian crossing locations. These are shown in Figure 41 on page 296 and include the intersections of Figueroa Street/11th Street, Figueroa Street/12th Street, and Figueroa Street/Pico Boulevard. The *South Park Event Parking and Circulation Management Plan (PCMP)* identifies several locations of high pedestrian activity throughout the Project area. As part of the implementation of the *PCMP*, some of the crosswalks close to the site have been widened. In addition, during an evening event at STAPLES Center, 11th Street is typically closed to vehicular traffic between Figueroa Street and Georgia Street at about 9:00 P.M. in order to facilitate exiting pedestrian flows. Also, LADOT traffic control officers are often utilized to assist in the safe movement of pedestrians during events. During very large events, LAPD personnel are also on duty to help manage pedestrian flow. The number of existing pedestrians using the sidewalk system adjacent to the Project blocks with no event underway at STAPLES Center or at the Los Angeles Convention and Exhibition Center was calculated for approximately 6:30 P.M. to 7:30 P.M. on a summer Saturday evening (“Background Conditions”).

Figure 41 Principal Locations of Pedestrian Street Crossing Activity

As shown in Table 57 on page 298, the existing sidewalk system accommodates the Background pedestrian volumes at level of service (LOS) A (the Background pedestrian volumes are identical for both Peak and Typical Day Conditions) This sidewalk system is able to accommodate Background Condition pedestrian levels as the sidewalk system was designed to handle crowds from STAPLES Center and the Convention Center. On an event day, Table 57 shows that the sidewalk system serving the venues operates at acceptable levels of service. The north-south streets all operate at LOS A or B. Most sections of the east-west sidewalk system operate at similar levels. Only the sections of 11th Street and 12th Street between Figueroa and Flower Streets operate at LOS C during the one-hour before an event.

b. ENVIRONMENTAL IMPACT

(1) Significance Thresholds/Methodology

The City of Los Angeles has not established a performance standard for sidewalk operation, nor has it adopted a definition of “significant impact” in the event that a project affects the performance of a sidewalk. If the City had a sidewalk performance standard similar to its standards for street and intersection performance, the sidewalk should operate at least in the Level of Service C to D range to be considered acceptable operation.

The capacity of the sidewalk system is evaluated under two conditions:

- Typical Day -- a condition that occurs when most of the Project parking can be accommodated on-site.
- Peak Day -- representing the busiest weekend days of the year when up to 2,000 Project vehicles park off-site.

In both cases, the conditions are measured on a Saturday evening peak hour during the one-hour time period before a STAPLES Center event, which is the time period of highest pedestrian activity.⁴¹

⁴¹ *It is unlikely that the Convention Center would produce pedestrian volumes during the Saturday evening peak hour that would be comparable to the pedestrian flows to/from STAPLES Center during the pre-event hour. Therefore, STAPLES Center pedestrian flows would dictate the peak conditions generated by STAPLES Center and the Convention Center.*

Table 57

PEDESTRIAN PLATOON LEVEL OF SERVICE RESULTS

Street	Sidewalk Side	Background		STAPLES/ Convention Center Event		Project (Peak)		Project (Average)		Combined Venues (Peak)		Combined Venues (Average)	
		Flow Rate (ped/min/ft)	LOS	Flow Rate (ped/min/ft)	LOS	Flow Rate (ped/min/ft)	LOS	Flow Rate (ped/min/ft)	LOS	Flow Rate (ped/min/ft)	LOS	Flow Rate (ped/min/ft)	LOS
Cherry (Olympic to 11 th)	East	4.02	A	6.49	B	4.28	A	4.16	A	6.78	B	6.65	B
	West ^a												
Georgia (Olympic to 11 th)	East	4.03	A	5.51	A	5.06	A	4.69	A	6.57	B	6.20	B
	West	4.03	A	5.02	A	5.06	A	4.69	A	6.08	B	5.71	A
Figueroa (9 th to Olympic)	East	4.12	A	9.06	B	5.49	A	4.25	A	10.55	B	9.31	B
	West	4.10	A	10.40	B	7.60	B	4.45	A	14.00	C	10.85	B
Figueroa (Olympic to 11 th)	East	4.12	A	9.06	B	5.05	A	4.43	A	10.11	B	9.49	B
	West	4.08	A	10.54	B	5.78	A	4.97	A	12.32	C	11.51	C
Figueroa (11 th to 12 th)	East	4.08	A	5.69	A	5.65	A	5.32	A	7.34	B	7.02	B
	West	4.04	A	5.62	A	5.27	A	4.87	A	6.89	B	6.50	B
Figueroa (12 th to Pico)	East	4.08	A	4.72	A	5.92	A	5.35	A	6.64	B	6.07	B
	West	4.06	A	6.77	B	5.46	A	5.12	A	8.23	B	7.89	B
Figueroa (Pico to Venice)	East	4.08	A	4.42	A	4.45	A	4.12	A	4.87	A	4.53	A
	West	4.12	A	6.59	B	4.25	A	4.13	A	6.84	B	6.72	B
Flower (9 th to Olympic)	East	4.05	A	4.94	A	4.30	A	4.08	A	5.24	A	5.01	A
	West	4.06	A	5.54	A	5.55	A	4.32	A	7.10	B	5.86	A
Flower (Olympic to 11 th)	East	4.04	A	4.77	A	4.14	A	4.05	A	4.92	A	4.83	A
	West	4.03	A	4.71	A	4.27	A	4.10	A	4.98	A	4.81	A
Flower (11 th to 12 th)	East	4.06	A	6.39	B	5.07	A	4.37	A	7.46	B	6.76	B
	West	4.08	A	7.31	B	7.15	B	5.69	A	10.45	B	9.00	B
Flower (12 th to Pico)	East	4.08	A	10.54	B	6.73	B	4.63	A	13.27	C	11.17	C
	West	4.06	A	6.69	B	5.70	A	5.17	A	8.38	B	7.86	B
Flower (Pico to Venice)	East	4.08	A	4.78	A	4.47	A	4.12	A	5.26	A	4.91	A
	West	4.08	A	5.37	A	4.44	A	4.11	A	5.81	A	5.48	A
Olympic (Georgia to Figueroa)	North	4.04	A	5.87	A	5.51	A	4.60	A	7.38	B	6.47	B
	South	4.04	A	7.27	B	5.91	A	5.10	A	9.17	B	8.37	B
Olympic (Figueroa to Flower)	North	4.08	A	4.72	A	4.42	A	4.26	A	5.14	A	4.98	A
	South	4.11	A	8.53	B	4.82	A	4.38	A	9.34	B	8.90	B
11 th (Cherry to Georgia)	North	4.04	A	5.33	A	4.21	A	4.13	A	5.54	A	5.46	A
	South	4.06	A	4.59	A	4.34	A	4.21	A	4.93	A	4.80	A
11 th (Georgia to Figueroa)	North	4.08	A	7.31	B	6.63	B	5.42	A	9.94	B	8.73	B
	South	4.06	A	9.15	B	4.73	A	4.41	A	9.88	B	9.57	B
11 th (Figueroa to Flower)	North	4.13	A	8.33	B	6.34	B	5.29	A	10.67	B	9.62	B
	South	4.15	A	11.91	C	6.54	B	5.41	A	14.45	D	13.32	C
12 th (Figueroa to Flower)	North	4.04	A	5.65	A	5.29	A	4.89	A	6.95	B	6.54	B
	South	4.06	A	11.47	C	5.98	A	5.36	A	13.45	C	12.83	C
Pico (Figueroa to Flower)	North	4.06	A	5.02	A	4.89	A	4.41	A	5.91	A	5.43	A
	South	4.13	A	4.65	A	4.42	A	4.15	A	5.07	A	4.80	A

^a There is no sidewalk on the west side of Cherry Street between Olympic Boulevard and 11th Street.

Source: The Mobility Group/Kaku Associates, December 2000.

The analysis is based on the methodology presented in the *Highway Capacity Manual*, Chapter 13 – Pedestrians.⁴² The expected number of pedestrians in the peak hour is compared to the effective width of the sidewalk available to accommodate that pedestrian volume. The effective width of the sidewalk is calculated by reducing the actual width of the sidewalk by the effects of landscaping, utility poles, fences, adjacent buildings, and other considerations.

For this analysis, a sold-out sporting event was used as the design condition. A total of 20,000 visitors to STAPLES Center were assumed and it was assumed that, for worst-case analysis, 90 percent of the crowd would arrive in the one hour prior to the event. The *Highway Capacity Manual* requires that an estimate be made to determine the peak 15-minute pedestrian flow within the peak hour. This analysis assumes that 35 percent of the peak hour pedestrian flow would occur within the peak 15 minutes.

The Pedestrian Flow Rate (number of pedestrians per minute per foot of effective sidewalk) is calculated and compared in Table 59 on page 300 to determine the level of service of the sidewalk. This calculation measures the quality of the pedestrian flow along the sidewalk system. The *Highway Capacity Manual* also suggests that the effects of pedestrian platoons be calculated to measure this effect on pedestrian level of service. The platoon measurement takes into account the effects of traffic signals, transit facilities and other short-term fluctuations in the flow of pedestrians. Thus the analysis addressed both peak day and typical day conditions.

(2) Analysis of Project Impact

(a) Project Design Features

The Pedestrian Circulation Plan is discussed in Section II.C., Project Characteristics, of this Draft EIR.

(b) Construction

Construction of the Project could have the potential to impact pedestrian movement in the immediate vicinity of the construction sites. Construction activities could result in temporary closure of sidewalks and disruption of existing pedestrian flow patterns from movement and parking of construction vehicles, primarily along Olympic Boulevard, 11th Street, 12th Street, Figueroa Street and Flower Street. Project-related construction could require temporary lane closures on surrounding streets, particularly during utility relocation activity, although no complete closure of any major streets is anticipated. These closures could temporarily reroute pedestrian access to

⁴² *Transportation Research Board, Highway Capacity Manual, Washington, D.C., 1985.*

Table 59

PEDESTRIAN LEVEL OF SERVICE

Level of Service	Pedestrian Flow Rate (peds/min/ft)
A	≥ 2
B	≥ 7
C	≥ 10
D	≥ 15
E	≥ 25
F	> 25

Source: Highway Capacity Manual, Chapter 13 – Pedestrians.

STAPLES Center and the Convention Center from the parking facilities, constituting a temporary, but significant, impact to pedestrian circulation.

Potential impacts to pedestrian safety could also occur from the movements of construction vehicles. Daily truck trips would be expected to occur on a given construction day associated with hauling activities, removing demolition debris and excavated earth from the site and returning empty for additional loads. Trips by construction workers to and from the site and miscellaneous deliveries, and support services, such as catering, inspections, would account for additional temporary vehicle trips during construction. Demolition and excavation activities generally occur during the early stages of construction. Although varying with the specific nature of the construction activity (e.g., demolition, excavation or concrete pouring), the truck activity is generally expected to be distributed fairly evenly throughout the work day. During certain activities (e.g., excavation), the truck traffic would be focused on the earlier portions of the work day, with a number of trucks arriving prior to the actual start of work.

It is anticipated that construction-related traffic would be largely freeway-oriented and would use the shortest routes from the Project site to minimize travel time and maximize ease of ingress and egress for the trucks. The movement of construction vehicles would have the potential to affect pedestrians living and working near the Project site, STAPLES Center, and the Convention Center. Haul trucks would also create noise impacts, which are discussed in Section IV.H, Noise, and are related to impacts on solid waste disposal facilities, which are discussed in Section IV.I.3, Solid Waste.

Since numerous alternative routes exist for pedestrians to access the Project site, STAPLES Center, and the Convention Center, and for residents adjacent to the Project site, and since any

disruptions to pedestrian movement would be temporary, potential impacts to these groups of people would be less than significant.

However, in addition to construction worker and truck traffic, construction activity associated with the Project could require temporary lane closures on West 11th, South Figueroa, Cherry, and Georgia Streets and Olympic Boulevard adjacent to the proposed Project site, particularly during utility relocation activity. These closures could temporarily disrupt traffic flow in this area and could affect some patrons attempting to access STAPLES Center and Convention Center parking facilities (see Section IV.F.1, Traffic). This would be a temporary, but less than significant impact upon those patrons who park to the north and east of STAPLES Center and the Convention Center and walk to the STAPLES Center and the Convention Center by way of 11th Street and Figueroa Street. After utility relocation is complete, complete lane closures are not expected to be required. However, short-term closures may be required on occasion throughout the remainder of the construction period.

(c) Operation

Pedestrian volumes for the Project were broken into two segments. The first involves the Project visitors who park off-site and then walk to the venue. During peak day conditions, it was assumed that approximately 2,000 vehicles would park off-site. This estimate is consistent with the analysis presented in Section IV.F.2, Parking of this Draft EIR. At average auto occupancy of 2.5 persons per vehicle, a total of 5,000 people would travel on the sidewalk system between the Project and the off-site parking areas. The trip generation assumptions for the Project suggest that the peak turnover of the parking supply would be 50 percent (i.e. no more than 50 percent of the parking supply would enter or leave the site during one hour). Therefore, the peak pedestrian flow would be 2,500 pedestrians from the Project to the off-site parking spaces and another 2,500 people from the parking to the Project.

The second component of the Project pedestrian flow involves those Project visitors who park on one of the Project blocks and then visit the land uses on another of the Project blocks. It was assumed that 50 percent of the Project visitors would visit land uses on more than one block and that these 50 percent would be moving on the sidewalk system during the peak hour. This would mean that approximately 4,500 Project-generated pedestrians would be moving from block to block within the Project. The geographic distribution of the intra-Project pedestrian flow was based on the amount of parking and the amount of activity on each block of the Project.

During peak day conditions with a sold-out event at STAPLES Center (or a major consumer show at the Los Angeles Convention and Exhibition Center) and substantial off-site parking occurring for Project visitors, all of the north-south segments of the sidewalk system would operate at Level of Service C or better. All segments of the east-west system would operate at LOS A or B,

except the south sidewalk along 11th Street between Figueroa and Flower which would operate at LOS D and the same segment of 12th Street which would operate at LOS C. Average Day conditions would see the entire system operating at LOS C or better. As all of the intersections under both typical and peak day conditions would operate at acceptable levels of service, the pedestrian system is expected to accommodate the expected pedestrian volumes and no significant impact would occur.

All of the major intersections along the key pedestrian routes serving the Project are controlled by traffic signals. Given the good pedestrian levels of service described above, the pedestrian system should have no difficulty accommodating the pedestrian volumes safely through the traffic signals.

The current operation of STAPLES Center parking areas includes the provision of fences along the boundaries of the lots with openings in these fences directing people toward the signalized crosswalks. This strategy has been effective at reducing mid-block crossings, thus increasing pedestrian safety. A mitigation measure has been provided to ensure that, as these parking lots are replaced by Project development, the doors/entries to the buildings should orient pedestrian flow toward the crosswalks.

When Project visitors are added to STAPLES Center visitors, the pedestrian volumes increase and the temptation to “ignore the signal” may also increase. The most difficult auto/pedestrian conflict at a traffic signal occurs when right turning vehicles attempt to turn through a flow of pedestrians crossing on the “Walk” indication. During the peak event times at STAPLES Center and the Los Angeles Convention and Exhibition Center, the key intersections are controlled by LADOT Traffic Control Officers and by LAPD Police Officers. Figure 43 on page 303 shows the deployment of these personnel for large events at either of the venues. While the actual deployment may vary by event, or even by time period prior to or after the event, the presence of the Traffic Control Officers and the Police Officers serves to increase the safety of the pedestrians moving to/from the venues. This traffic control will be available to Project visitors during the busy hours before and after the events at STAPLES Center and the Los Angeles Convention and Exhibition Center.

The project description for the construction of STAPLES Center anticipated that the section of 11th Street from Georgia Street to Figueroa Street would be closed to traffic prior to and after an event at STAPLES Center. This closing would occur primarily to enhance pedestrian safety in accommodating the large volumes of pedestrians moving to/from the parking spaces to the north of the venue. Actual experience at STAPLES Center has shown that the street closure is needed only for about 20 to 30 minutes after an event. The flow of pedestrians prior to the event is spread out enough to allow the traffic signals to be able to adequately accommodate the pedestrian flow.

Figure 43 LADOT Traffic Control Officer and LAPD Police Officer Deployment

It is likely that the increase in pedestrian flow that would accompany the operation of the Project will result in the closure of the 11th Street section both prior to and after the events at STAPLES Center as discussed in Section II.C., Project Characteristics, of this Draft EIR. The orientation of the pedestrian flow (from the parking garage on the Olympic West Properties lot to STAPLES Center) and the increased pedestrian levels (Project visitors added to STAPLES Center and Convention Center visitors) could result in the need to increase the frequency and the duration of the 11th Street closure outside of regular peak periods.

The pedestrian mitigation program implemented by STAPLES Center has resulted in a pedestrian system that has enough capacity to accommodate the addition of the Project visitors at an acceptable level of service. Even on nights when the Project visitors are added to STAPLES Center visitors, the pedestrian system would have sufficient capacity to accommodate the expected pedestrian volumes.

From a safety standpoint, the signalized intersections controlling the key pedestrian corridors would provide safe intersection crossings. During the time periods prior to and after events at STAPLES Center and/or the Convention Center, LADOT Traffic Control Officers and LAPD Officers would control traffic and pedestrian flows to/from the event venues. Project visitors would be able to benefit from these traffic control personnel.

c. MITIGATION MEASURES

Although no significant impacts are anticipated to occur, the following mitigation measures are recommended.

1. The Applicant shall develop a Construction Management Plan, which shall provide for the coordination of construction areas and safe pedestrian movement throughout the Project area such that adequate and safe pedestrian access is maintained to STAPLES Center, the Convention Center and surrounding land uses during construction.

d. ADVERSE EFFECTS

A less than significant impact would occur prior to consideration of the recommended mitigation measures. With the application of the above mitigation measure, impacts relative to pedestrian safety during construction would be reduced further.

IV. ENVIRONMENTAL IMPACT ANALYSIS

G. HAZARDOUS MATERIALS

This section assesses potential environmental impacts associated with existing soil and/or groundwater contamination at the Project site. The analysis summarizes the findings and conclusions provided in an updated Phase I environmental assessment report (*Updated EA Report*) prepared by SCS Engineers (SCS) for six discrete areas of the Project site in general accordance with American Society of Testing and Materials (ASTM) standards. The report is provided in Appendix F of this Draft EIR.

The six development areas are referred to in the *Updated EA Report* as Olympic West Properties (Block 1), Olympic East Properties (Block 2), Olympic North Properties (Block 3), Figueroa North Properties (Block 4), Figueroa Central Properties (Block 5), and Figueroa South Properties (Block 6).⁴³ The Project Site has been paved and currently is used for surface parking activities, with the exception of two warehouse-related buildings located on the Figueroa Central Properties, as described in Section IV. A., Land Use.

1. ENVIRONMENTAL SETTING

(a) General Soil and Groundwater Conditions

The Project site is located within the Downey Plain of the Los Angeles Coastal Plain. It is situated at an elevation of approximately 240 feet above mean sea level. The regional topography of the area slopes gently to the south-southwest. Soils beneath the site consist primarily of Quaternary alluvial sediments (clay, silt, sand, and gravel) to a depth of approximately 80 feet below ground surface (bgs).

The Project site is located in the Los Angeles Forebay Area of the Central Groundwater Basin. Groundwater in this area is estimated to be at approximately 80 to 100 feet bgs, although perched groundwater conditions may exist at shallower depths. Previous investigations at the Project site encountered groundwater at depths as shallow as 60 feet bgs. However, soil borings advanced in other areas of the Project site to depths of 150 feet bgs did not encounter groundwater. Based upon regional topography, general groundwater flow direction in the vicinity of the site is to the south.

The Figueroa Central and Figueroa South properties lie within an area broadly defined as the Los Angeles Downtown Oil Field. According to Division of Oil and Gas maps, oil exploration in areas closest to the site did not produce oil and holes were not completed as wells. The only oil producing area in the Los Angeles Downtown Oil Field is at 14th and Hill Streets, approximately 1,800 feet southeast of the property.⁴⁴

Elevated concentrations of methane gas can be associated with oil fields. The lower explosive limit for methane in air is five percent by volume (equivalent to 50,000 parts per million by volume or ppmv). The action level typically used for methane gas in air is 20 percent of the lower explosive limit or one percent by volume (10,000 ppmv).

To understand the extent of potential methane issues related to Project development, soil vapor samples were collected at 16 locations within the Figueroa Central and Figueroa South properties. Locations were selected to provide an adequate sampling program throughout the potentially affected portions of the Project site. Samples were collected at representative depths below the ground surface (i.e., ranging from shallow samples at two and ten feet below the surface to deep samples at 40 feet below the surface). At a depth of ten feet below the surface, methane was detected in six samples at concentrations between 10 and 74 ppmv. No methane was detected in the two 40-foot samples at a detection limit of 10 ppmv. Thus, the highest methane concentration level detected during the sampling program was 74 ppmv. This concentration level is far below the lower explosive limit for methane in air of 50,000 ppmv and below the typical action level of 10,000 ppmv. Based on these results, subsurface methane accumulations do not appear to be a concern at the Figueroa Central and Figueroa South properties. Furthermore, concentrations of carbon dioxide detected as part of this investigation were also low, indicating no aerobic decomposition of organics is occurring.

(b) Updated Phase I Environmental Assessment Report

The scope of work for the *Updated EA Report* included the review and compilation of findings from three separate Phase I Environmental Site Assessment (ESAs) performed by Bryan A. Stirrat & Associates and SCS. Previous ESA efforts are documented in three separate reports: Bryan A. Stirrat & Associates' *Phase I Environmental Site Assessment, Sports Arena and Entertainment Complex Support Site, Los Angeles, California*, dated October 4, 1996; SCS' *Phase I Environmental Assessment Report, Olympic Properties North, Los Angeles, California*, dated

⁴³ Reference to "Block 1 ... Block 6" in the *Updated Report* are consistent with "development areas" 1 through 6 provided in Section II. B., *Project Location*, of this Draft EIR.

⁴⁴ "Subsurface Methane Gas Survey Report, LA Sports and Entertainment District, Figueroa Central and South Parcels, Los Angeles, California", SCS Engineers, November 3, 2000.

September 8, 1997; and SCS' *Phase I Environmental Assessment Report, Figueroa Properties North, Los Angeles, California*, dated August 6, 1997.⁴⁵

The *Updated EA Report* also involved the following work efforts at the Project site: (1) review of regulatory agency files (2) review of federal, State, and local environmental databases; (3) physical site inspections of the six areas of the Project site and adjacent properties; (4) interviews with available on-site personnel and property owners regarding current and past land uses that may have impacted the site; and (5) review of historical records including aerial photographs, fire insurance maps, and hydrogeologic and topographic maps.

(1) Regulatory Agency Database Review

A records search of Federal, State, and local environmental databases was performed for the Project site and surrounding area.⁴⁶ The following databases were searched:

- **United States Environmental Protection Agency's (USEPA's) National Priority List (NPL)/Superfund Sites.** The NPL Report, also known as the Superfund List, is an USEPA listing of uncontrolled or abandoned hazardous waste facilities. Listed facilities are targeted for possible long-term remedial action under the Superfund Act of 1980.
- **The Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS).** The CERCLIS database is a comprehensive listing of known or suspected uncontrolled or abandoned hazardous waste facilities. Once a facility is placed in CERCLIS, it may be subjected to several levels of review and evaluation and ultimately placed on the NPL.
- **Resource Conservation and Recovery Information System (RCRIS).** The RCRIS Report contains information pertaining to facilities that treat, store, or dispose of USEPA regulated hazardous wastes. The RCRIS list includes both small and large quantity generators of Resources Conservation and Recovery Act (RCRA) wastes, as well as hazardous waste treatment, storage, and disposal facilities.
- **No Further Remedial Action Planned (NFRAP) Sites.** The NFRAP Report, also known as the CERCLIS Archive, contains information pertaining to facilities that have been removed from the CERCLIS database. NFRAP facilities may be properties where, following an initial investigation, either no contamination was found, contamination was removed quickly without the need to place the property on

⁴⁵ Reports referenced here are summarized in the *Updated EA Report* provided in Appendix F.

⁴⁶ The search areas for each database are in accordance with ASTM Standard E1527 (i.e., the industry standard).

the NPL, or the contamination was not found to be serious enough to warrant NPL consideration.⁴⁷

- **Emergency Response Notification System (ERNS) List.** ERNS is a national computer database system that contains information concerning the sudden and/or accidental release of hazardous substances, including petroleum, into the environment.
- **Registered Storage Tank (RST) List.** The California Underground Storage Tank (UST) Report, commonly known as the SWEEPS Report, is a comprehensive listing of all registered USTs in California.
- **California Leaking Underground Storage Tank (LUST)⁴⁸ List.** The LUST lists of the Regional Water Quality Control Boards (RWQCBs) contain information regarding reported LUSTs.
- **Hazardous Waste Sites (HWS).** Potentially contaminated hazardous waste properties in California are listed in the California CalSites Report.
- **Solid Waste Facilities (SWF) List.** The California Solid Waste Information System Report, commonly known as the SWIS Report, contains information pertaining to all permitted and unpermitted active and inactive solid waste landfills, proposed disposal sites, transfer stations, and material recovery facilities in the state.
- **California Cortese (Cortese) List.** The Cortese list, also known as the Hazardous Waste and Substances list, contains summary information pertaining to contaminated facilities in the State of California, including contaminated wells, leaking USTs and sanitary landfills.
- **California Oil & Gas Well Report (OGW).** The OGW contains location and production information for all regulated oil and gas wells located within the State of California.

The results of the database search revealed that one of the addresses within the Project site (Olympic East Properties) was identified: Mix and Match, 769 West 10th Place. This property was identified as a small-quantity hazardous waste generator.⁴⁹ The database report included no mention

⁴⁷ A site located upgradient from known contaminated sites would be of greater concern, since subsurface gradual migration of soil and groundwater contaminants might directly affect the Project site.

⁴⁸ The "LUST" nomenclature refers to sites listed in the California Leaking Underground Storage Tank database as leaking USTs.

⁴⁹ Small quantity generators are generators who consistently produce less than 1,000 kg of hazardous waste in a given calendar month, in 22 CCR §66262.34.

of any violations or citations relative to this classification. This business has been demolished and is now a parking lot. Based on the available information, this property has not affected the existing environmental conditions at the Project site.

Ninety-six properties (several listed under more than one database) within a 0.25-mile radius of the Project site are included in the database report. These properties include:

- 69 UST properties;
- Five leaking underground storage tank LUST properties;
- 25 hazardous waste generators;
- Three Cortese properties;
- Two ERNS properties;
- Three County oversight properties; and
- One State CERCLIS/CERCLIS-NFRAP property.

Of these 96 properties, 86 of the properties are solely UST or generator properties. The properties with the greatest potential for contamination adjacent to the Project site, or with known contamination within 0.25 miles of the Project site, include the following:

Family Ford, 1248 South Figueroa Street (UST and generator) – This facility maintained one waste oil UST and generated hazardous wastes from auto repair. The facility is currently vacant. Based on the available information, this facility has not affected the existing environmental conditions at the Project site.

Los Angeles Convention and Exhibition Center, 1201 South Figueroa (LUST, Cortese, UST, and generator) - A gasoline release from UST piping was reported in 1988. The piping was replaced and the case is currently closed. Based on the case status, this leak has not affected the existing environmental conditions at the Project site.

Chevron Station, 801-811 West Olympic Boulevard (LUST, UST, and generator) – Tank monitoring systems detected a fuel release from USTs at this facility in 1999. The facility is currently being investigated, and the extent of contamination has not been defined.

Unocal Station, 730 West Olympic Boulevard (LUST, UST, and Cortese) - A fuel release from an UST was reported at this facility in 1994. Only on-site soils were impacted and the

case is currently closed. Based on the extent of contamination and the current case status, this release has not affected the existing environmental conditions at the Project site.

Del Prado, 511 Olympic Boulevard (County oversight) - The nature of the problem at this facility was not readily apparent from the available information. However, given the distance and cross-gradient groundwater flow direction relative to the Project site, this property has not affected the existing environmental conditions at the Project site.

Chevron Station, 1312 West 11th Street (LUST, Cortese, UST, generator) - A potential leak was detected at this facility in 1994 during a routine tank test. However, no additional actions appear to have been taken at this property. As the property lies in a cross-gradient groundwater flow direction relative to the Project site and on the other side of the Harbor Freeway, this property has not affected the existing environmental conditions at the Project site.

801 Tower Building, 845 South Figueroa (LUST) - A gasoline release from an UST was reported at this facility in 1993. Contaminated soils were excavated and removed from the property. The case is currently closed. Reportedly, groundwater was also impacted. The property lies in an upgradient groundwater flow direction from the Project site. However, the closed status of the case suggests that no significant off-site migration of contamination was detected. Based on the available information, this property has not affected the existing environmental conditions at the Project site.

American Banknote, 701 South Grand Avenue (State CERCLIS, CERCLIS-NFRAP, County oversight, and generator) - This facility was originally listed on Federal and State CERCLIS lists in 1981. Subsequent regulatory assessments yielded NFRAP (No Further Remedial Action Planned) classification. However, the property was referred to the County for additional assessment. American Banknote is no longer in business at this address. This property lies in a downgradient groundwater flow direction relative to the Project site. Based on the available information, this property has not affected the existing environmental conditions at the Project site.

Alameda Management, 701 South Grand Avenue (LUST) – An UST release was discovered at this facility during a tank test in 1987. The case is currently closed. Based on the case status and the distance from the Project site, this property has not affected the existing environmental conditions at the Project site.

California Medical Center, 1500 South Grand Avenue (County oversight) - The precise nature of the problem at this property was not readily available, although it appears to have been a single incident and not an ongoing concern. Based on the distance and downgradient groundwater flow direction relative to the Project site, this property has not affected existing environmental conditions at the Project site.

No federal or State Superfund sites were identified within one mile of the Project site. In addition, no landfills were identified within a one-mile radius of the Project site. Two abandoned dry wells were identified. Activities associated with the drilling of these wells have not affected existing environmental conditions at the Project site. No other wells were identified on or within 0.1 mile of the Project site.

(2) Previous Environmental Investigations⁵⁰

(i) Olympic West Properties (Block 1)

This area is bounded to the north by Olympic Boulevard, to the east by Georgia Street, to the south by 11th Street, and to the west by Cherry Street and the Harbor Freeway. This area was included in the ESA completed by Bryan A. Stirrat & Associates (BAS) dated October 4, 1996 titled *Phase I Environmental Site Assessment, Sports Arena and Entertainment Complex Support Site, Los Angeles, California*, and was identified as "Area 1." At the time of the assessment, Area 1 consisted of 40 lots bounded by Olympic Boulevard on the north, Georgia Street on the east, West 11th Street on the south, and the Harbor Freeway on the west. Two north-south streets, Byram Street and South Bixel Street divided the area into three parts. Property uses included vacant lots (6 lots), parking (10 lots), residential (7 lots), a day care center (1 lot), medical/dental clinics (3 lots), office buildings (3 lots), warehouses (3 lots), and commercial (7 lots).

In 1997, SCS conducted another ESA and the results of that assessment are provided in a report titled *Los Angeles Sports Arena and Entertainment Complex Support Site, Phase I Environmental Assessment Second Party Review*, dated April 11, 1997. SCS recommended subsurface investigations for six properties. Phase II investigations were performed and the results are provided below.

1106 West Olympic Boulevard - A Phase II investigation was completed by SCS, which consisted of collecting and analyzing soil vapor and soil samples in the vicinity of a former spray booth. Volatile organic compounds (VOCs) were not detected. No further investigations were recommended. Results of this investigation are provided in the report titled, *Phase II Investigation Report, Sports Arena Complex Site, Lees 328 Limited Partnership, 1106 West Olympic Boulevard, Los Angeles, California (APN 5138-007-002)*, dated December 19, 1997.

1054 Byram Street - A Phase II investigation was completed by SCS, which consisted of collecting and analyzing soil vapor and soil samples. VOCs were not detected in the soil vapor samples. Metal concentrations in the soil samples were consistent with typical background concentrations. Trace concentrations of petroleum hydrocarbons (less than 53

⁵⁰ Reports referenced below are summarized in SCS Engineers' Updated EA Report provided in Appendix F.

mg/kg) were detected in soil; these concentrations are not a significant concern. No further investigations were recommended. Results of this investigation are provided in the report titled, *Phase II Investigation Report, Sports Arena Complex Site, 1054 Byram Street, Los Angeles, California (APN 5138-007-035)*, dated December 23, 1997.

1011 West 11th Street - A Phase II investigation was completed by SCS, which consisted of collecting and analyzing soil vapor and soil samples. VOCs were not detected in the soil vapor samples. Metal concentrations in the soil samples were consistent with typical background concentrations. Trace concentrations of petroleum hydrocarbons (less than 70 mg/kg) were detected in soil; these concentrations are not a significant concern. No PCBs were detected. No further investigations were recommended. Results of this investigation are provided in the report titled, *Phase II Investigation Report, Sports Arena Complex Site, 1011 West 11th Street, Los Angeles, California (APN 5138-007-905)*, dated January 13, 1998.

1025-27 South Georgia Street - A Phase II investigation was completed by SCS, which consisted of collecting and analyzing soil vapor and soil samples. VOCs were not detected in the soil vapor samples. Metal concentrations in the soil samples were consistent with typical background concentrations. No further investigations were recommended. Results of this investigation are provided in the report titled, *Phase II Investigation Report, Sports Arena Complex Site, 1025-1027 South Georgia Street, Los Angeles, California (APN 5138-008-013)*, dated December 22, 1997.

1035-37 South Georgia Street - A Phase II investigation was completed by SCS, which consisted of collecting and analyzing soil vapor and soil samples. Trace concentrations of VOCs (less than 2.5 µg/l of TCE) were detected in the soil vapor samples. VOC concentrations below 50 µg/l are generally considered insignificant. Metal concentrations in the soil samples were consistent with typical background concentrations. Trace concentrations of petroleum hydrocarbons (less than 30 mg/kg) were detected in the soil samples; these concentrations are not a significant concern. No further investigations were recommended. Results of this investigation are provided in the report titled, *Phase II Investigation Report, Sports Arena Complex Site, 1035-1037 South Georgia Street, Los Angeles, California (APN 5138-008-019)*, dated December 24, 1997.

955 West 11th Street - A Phase II investigation was completed by SCS, which consisted of collecting and analyzing soil vapor and soil samples. VOCs were not detected in soil vapor samples. With one exception, metal concentrations were consistent with typical background concentrations. One soil sample revealed a lead concentration of 130 mg/kg. A deeper sample collected from the same boring contained only trace concentrations. No further investigations were recommended. Results of this investigation are provided in the report titled, *Phase II Investigation Report, Sports Arena Complex Site, 955 West 11th Street, Los Angeles, California (APN 5138-008-900 & -902)*, dated January 13, 1998.

(ii) Olympic East Properties (Block 2)

This area is bounded to the north by Olympic Boulevard, to the east by Figueroa Street, to the south by 11th Street and to the west by Georgia Street. This area was included in the Phase I Assessment completed by BAS dated October 4, 1996 titled *Phase I Environmental Site Assessment, Sports Arena and Entertainment Complex Support Site, Los Angeles, California*, (identified as "Area 2"). At the time of BAS' assessment, the area was characterized as consisting of a mixture of manufacturing facilities, commercial businesses, parking lots, and residences.

In 1997, SCS conducted another ESA and the results of that assessment are provided in a report titled *Los Angeles Sports Arena and Entertainment Complex Support Site, Phase I Environmental Assessment Second Party Review* dated April 11, 1997. SCS recommended subsurface investigations for thirteen properties. Phase II investigations were performed and the results are provided below.

1024 South Georgia Street – A Phase II Investigation was completed by SCS, which consisted of collecting and analyzing soil vapor and soil samples. VOCs were not detected in soil vapor samples. Low concentrations (less than 105 mg/kg) of petroleum hydrocarbons were detected on the property. Metals concentrations in the soil samples were at concentrations indicative of typical background levels. An UST and clarifier were identified within the sidewalk on the west side of the property. SCS recommended that the UST and clarifier be removed in accordance with regulatory requirements. Results of this investigation are provided in the report titled *Phase II Investigation Report, Sports Arena Complex Site, 1024 South Georgia Street, Los Angeles, California (APN 5138-009-019)*, dated January 15, 1998.

The UST and clarifier were removed from the property on March 18, 1999 with the oversight of the RWQCB and the Los Angeles Fire Department (LAFD). During the removal, stained soils observed in the excavation were removed and stockpiled on the property. Concentrations of petroleum hydrocarbons in soil samples collected from the base and sidewalls of the excavation following removal were below the limits of detection. Based on these data, SCS recommended closure of the UST. Information pertaining to the closure of the tank is provided in the report titled *Underground Storage Tank Closure Report, Staples Arena Complex Site, 1024 Georgia Street, Los Angeles, California (LAFD Closure Permit No. 7782)*, dated April 23, 1999. On August 18, 2000, the LAFD issued a no further action letter for the UST on the property.

846 West Olympic Boulevard – A Phase II investigation was completed by SCS in December 1997, which consisted of collecting and analyzing soil vapor and soil samples. Elevated concentrations of petroleum hydrocarbons (up to 1,580 mg/kg) and lead (up to 3,890 mg/kg) were identified in soil samples. SCS recommended that additional

investigation be completed to further characterize the contaminants. Results of that investigation as described in the SCS report titled *Phase II Investigation Report, Sports Arena Complex Site, 846-900 West Olympic Boulevard, Los Angeles, California (APN 5138-009-025)*, dated January 8, 1998.

A second phase of investigation was completed in February 1998 by SCS, which consisted of additional soil sampling and analysis activities. Results of this investigation are summarized in the SCS report titled *Supplemental Investigation Report, Sports Arena Complex Site, 846-900 West Olympic Boulevard, Los Angeles, California (APN 5138-009-025)*, dated February 27, 1998. The supplemental investigation indicated that the elevated concentrations of petroleum hydrocarbons and lead previously detected on the site were limited in area. However, SCS recommended that the petroleum hydrocarbon and lead-impacted soil identified on the site be remediated.

In January 1999, soil remediation activities were conducted, which consisted of removing approximately 83 cubic yards of soil. Remedial activities were completed with the oversight of the RWQCB and in accordance with the work plan titled *Remedial Investigation/Remedial Action Plan for Soil and Groundwater, Staples Arena Complex Site, Los Angeles, California*, dated December 30, 1998. Contaminated soil was transported under manifest to an appropriate disposal facility. A summary of remedial action activities is provided in the SCS report titled *Report of Soil Remediation, 1001-1005 and 1015 South Figueroa Street and 846-900 West Olympic Boulevard, Los Angeles, California*, dated January 28, 1999.

844 West Olympic Boulevard – A Phase II investigation was completed in December 1997, which consisted of collecting and analyzing soil vapor and soil samples. As indicated in the report titled *Phase II Investigation Report, Sports Arena Complex Site, 838-840 West Olympic Boulevard, Los Angeles, California (APN 5138-009-002)* January 8, 1998), no detectable concentrations of VOCs were detected in the soil vapor samples. Laboratory analysis of soil samples indicated low concentrations of petroleum hydrocarbons (36 to 227 mg/kg), and soils with a pH range of 7.48 to 11.74. Based on these results, further site investigation was not recommended.

During demolition activities on the site in mid-March 1999, the demolition contractor noted strong gasoline odors in surface soils. Subsequently, several phases of investigation were conducted by SCS to assess the nature and extent of fuel hydrocarbons within soil and a thin zone of groundwater beneath the property. Fuel hydrocarbons, characterized as consisting of gasoline, were detected on the site at concentrations up to 7,300 mg/kg. The investigations indicated an area approximately 50- by 90-foot area and extending in depth from 20 to 60 feet bgs contained concentrations of gasoline in soil greater than 100 mg/kg. Groundwater, present in a thin-perched zone at approximately 60 feet bgs had also been impacted, with fuel hydrocarbon concentrations up to 4,700 mg/l. However, the data

indicated that the groundwater impacts were limited in area to less than approximately 200 feet in diameter.

On May 4, 1999, with the approval of the RWQCB and in accordance with a letter work plan dated April 22, 1999 prepared by SCS, soil from the upper 5 feet within the impacted area was excavated and subsequently removed from the site as an "interim" remedial action. Following excavation, 277 tons of material was transported off-site for disposal. Results of the investigations and interim remedial action are provided in the report titled *Remedial Investigation/Remedial Action Report, Staples Arena Support Zone, 834-840 West Olympic Boulevard, Los Angeles, California*, dated June 24, 1999. Based on the information in this report, closure of surface soil on this site was granted by the RWQCB in August 1999.

A work plan (*Soil Vapor Extraction System Installation Work plan, Staples Arena Support Zone, 834-840 West Olympic Boulevard, Los Angeles, California*) for installation of a vapor extraction system to mitigate soil contamination was approved by the RWQCB in July 1999. The system has operated since May 2000. It is anticipated that the system will operate through approximately April 2001 at which time a confirmation investigation will be completed to verify that gasoline concentrations have been appropriately mitigated. A groundwater assessment will also be completed at that time.

751-755 10th Place – A machine shop and piston ring warehouse had historically been operated on this property. SCS conducted a Phase II investigation, which consisted of collecting and analyzing soil vapor and soil samples. Results of the analysis [refer to SCS report titled *Phase II Investigation Report, Sports Arena Complex Site, 751-755 10th Place, Los Angeles, California (APN 5138-009-028)*, dated January 1998] indicated trace to non-detectable concentrations of VOCs in the soil vapor samples. Low concentrations (less than 505 mg/kg) of petroleum hydrocarbons were detected in the soil samples and metals were detected at typical background concentrations. PCBs were not identified in soil samples. SCS recommended no further investigations.

1001 South Figueroa Street – SCS conducted a Phase II investigation, which consisted of the collection and analysis of soil and soil vapor samples. The results of the soil vapor survey revealed non-detectable concentrations of VOCs. Metal concentrations were detected at concentrations, which do not represent significant potential impacts to human health or the environment. However, petroleum hydrocarbons were detected in soil matrix samples at concentrations ranging from 17 to 1,170 mg/kg. Additional investigation was recommended by SCS to further characterize the petroleum hydrocarbons. A summary of the initial investigation is contained in the report titled *Phase II Investigation Report, Sports Arena Complex Site, 1001 through 1005 South Figueroa Street, Los Angeles, California (APN 5138-010-009)*, dated January 6, 1998.

An additional investigation was conducted by SCS in February 1998. This additional investigation is contained in the report titled *Supplemental Soil Investigation Sports Arena*

Complex Site, 1001 through 1005 South Figueroa Street, Los Angeles, California (APN 5138-010-009). The data indicated that the elevated concentrations of petroleum hydrocarbons previously detected at the site were limited in depth to soils less than 15 feet in depth. Remediation of the petroleum-impacted soil was recommended.

Remediation of impacted soil was conducted in January 1999, which consisted of removal of approximately 52 cubic yards of soil. Remedial activities were completed with the oversight of the RWQCB and in accordance with the work plan titled *Remedial Investigation/Remedial Action Plan for Soil and Groundwater, Staples Arena Complex Site, Los Angeles, California*, dated December 30, 1998. Excavated soil was transported off-site for disposal. A summary of remedial action activities is provided in the SCS report titled *Report of Soil Remediation, 1001-1005 and 1015 South Figueroa Street and 846-900 West Olympic Boulevard, Los Angeles, California*, dated January 28, 1999.

1007 through 1013 South Figueroa Street – A Phase II investigation was conducted by SCS as described in the report titled *Phase II Investigation Report, Sports Arena Complex Site, 1001 through 1005 South Figueroa Street, Los Angeles, California (APN 5138-010-009)*, dated January 6, 1998. The results of the soil vapor survey indicated no VOCs were detected. Low concentrations (less than 600 mg/kg) of petroleum hydrocarbons were detected in soil matrix samples from the site. Metals were detected at concentrations typical of soils in southern California. Based on these data, no additional investigation was recommended by SCS.

1015 South Figueroa Street – As summarized in SCS' *Phase II Investigation Report, Sports Arena Complex Site, 1015 South Figueroa Street, Los Angeles, California (APN 5138-010-019)*, dated December 31, 1997, a three-point soil vapor study was completed. No detectable concentrations of VOCs were identified. Two samples of sediments from the bottom of a small sump within the building were collected and analyzed. Cadmium and lead were detected at elevated concentrations, up to 2,480 mg/kg and 3,240 mg/kg, respectively. In addition, PCE was detected at concentrations up to 310 µg/kg. Further investigation was recommended to characterize the contaminants.

A second phase of investigation was conducted and the results of this investigation are provided in the report titled *Supplemental Soil Investigation Report, Sports Arena Complex Site, 1015 South Figueroa Street, Los Angeles, California (APN 5138-010-019)*. The supplemental investigation identified the presence of VOCs. However the concentrations did not warrant further investigation. Cadmium was detected in soil samples at background levels. Lead was detected within one sample at an elevated (1,400 mg/kg) concentration. Based on these data, SCS recommended that remediation of the sump and impacted soil be conducted.

Soil remediation activities were conducted in January 1999 to remove cadmium-, lead-, and PCE-impacted soil from the vicinity of the sump. Approximately 67 cubic yards of soil

were excavated from the site with the oversight of the RWQCB and in accordance with the work plan titled *Remedial Investigation/Remedial Action Plan for Soil and Groundwater, Staples Arena Complex Site, Los Angeles, California*, dated December 30, 1998. Excavated soil was transported to an appropriate disposal facility. A summary of remedial action activities is provided in the SCS report titled *Report of Soil Remediation, 1001-1005 and 1015 South Figueroa Street and 846-900 West Olympic Boulevard, Los Angeles, California*, dated January 28, 1999.

1017-1025 South Figueroa Street – A Phase II investigation was completed, which consisted of collecting soil vapor and soil samples from three locations. Results of the investigation are provided in the SCS report titled *Phase II Investigation Report, Sports Arena Complex Site, 1017 South Figueroa Street, Los Angeles, California (A.P.N. 5138-010-012)* dated January 6, 1998. VOCs were not detected in soil vapor samples. Petroleum hydrocarbons were detected at low concentrations, ranging up to 70 mg/kg. Most metals were detected at background concentrations typical of soils in southern California, and soil pH values were within the range anticipated for soils in this area. Based on this information, no further investigation was recommended for the property.

1021-1037 South Figueroa Street – In October 1997, a Phase II investigation was completed which consisted of collecting soil vapor and soil samples. The results of the investigation are summarized in the report prepared by SCS titled *Phase II Investigation Report, Sports Arena Complex Site, 1021-1037 South Figueroa Street, Los Angeles, California (APN 5138-010-020)*, dated December 17, 1997. Results of the soil vapor survey indicated the presence of trace concentrations (less than 0.5 µg/l) of several VOC constituents, none of which were present at concentrations that would be of concern. Low concentrations (less than 292 milligrams per kilograms) of total recoverable petroleum hydrocarbons were detected in soil matrix samples from the site. Most metals were detected at concentrations typical of southern California soils. Lead was present at concentrations less than 100 mg/kg in all but one sample, which had a lead concentration of 295 mg/kg. None of these concentrations are anticipated to represent a significant health risk, therefore, no further investigation was recommended for the property.

740-750 West 10th Place – As summarized in SCS' *Phase II Investigation Report, Sports Arena Complex Site, 740-750 West 10th Place, Los Angeles, California (APN 5138-011-018 & -019)*, dated December 31, 1997, soil vapor and soil samples were collected from 15 locations. The results of the soil vapor survey did not indicate the presence of detectable concentrations of VOCs. Most metals were detected at concentrations typical of soils in southern California. Elevated concentrations of copper (up to 3,980 mg/kg) and lead (up to 1,360 mg/kg) were detected in soil samples. SCS recommended additional investigation in the vicinity of these locations to further characterize the extent of copper and/or lead-impacted soils.

A second phase of investigation was completed in February 1998 as described in the report titled *Supplemental Soil Investigation Report, Sports Arena Complex Site, 746-750 West 10th Place, Los Angeles, California (APN 5138-011-018)*, dated February 27, 1998. As part of this supplemental investigation, soil samples were analyzed for total copper, lead, nickel, zinc and pH. Copper, lead, nickel, and zinc were detected in all 18 analyzed samples: copper concentrations ranged from 21 to 250 mg/kg; lead concentrations ranged from 5.3 to 2,300 mg/kg; nickel concentrations ranged from 12 to 130 mg/kg; and, zinc concentrations ranged from 72 to 3,900 mg/kg. Soil pH values for the 18 soil samples were between 6.7 and 8.2. Based on the data from the two investigations, elevated concentrations of copper, lead, and zinc were present on the property. Remediation was recommended for the site.

Soil remediation activities were conducted in May and June 1999. Remediation consisted of excavation of approximately 620 tons of soil as described in *Report of Soil Remediation, Staples Arena Support Zone, Former Ready Property, 748 West 10th Place, (APN 5138-011-018), Los Angeles, California*, dated July 8, 1999. Impacted soil was excavated from the site with the oversight of the RWQCB and in accordance with the work plan titled *Remedial Investigation/Remedial Action Plan for Soil and Groundwater, Staples Arena Complex Site, Los Angeles, California* dated December 30, 1998. Contaminant levels in final confirmation samples were below clean up goals established for the site. Excavated soil was transported to an off-site disposal facility under manifest.

Northeast Corner of 11th and Georgia Street – A review of records maintained by the City of Los Angeles Department of Public Works by SCS indicated the presence of an UST in the sidewalk adjacent to the western extent of the property. An investigation was recommended to assess potential releases of petroleum hydrocarbons from the UST. One boring was drilled at the location of the UST as indicated in the report titled *Phase II Investigation Report, Sports Arena Complex Site, NEC West 11th Street and South Georgia Street, Los Angeles, California (APN 5138-011-903)*, dated January 15, 1998. No detectable concentrations of petroleum hydrocarbons or volatile aromatic hydrocarbons (benzene, toluene, ethylbenzene, and xylenes; BTXE) were detected in the sample. Based on these data, no further investigation was recommended.

737-825 West 11th Street – As indicated in the report *Phase II Investigation Report, Sports Arena Complex Site, 737-825 West 11th Street, Los Angeles, California (APN 5138-011-901 and -905)*, dated January 13, 1998, trace concentrations of VOCs (less than 3.5 µg/l) were detected during the soil vapor survey. Low concentrations (less than 725 mg/kg) of petroleum hydrocarbons were detected in soil matrix samples. With the exception of lead, metals were present in samples at concentrations, which are typical for soils in southern California. Lead was detected at concentrations ranging from 1.4 to 195 mg/kg. Although the highest concentrations of lead detected are above typical values, these concentrations are not anticipated to represent a significant health risk. Therefore, no further investigation was recommended.

Area-wide Soil Sampling and Groundwater Investigation – As required in the work plan titled *Remedial Investigation/Remedial Action Plan for Soil and Groundwater, Staples Arena Complex Site, Los Angeles, California* dated December 30, 1998, near-surface soil samples were collected at various locations throughout the Block 2 (Olympic East Properties; also referred to as the "A" Phase in regulatory correspondence).

The results of near-surface soil sampling is provided in a letter report to the RWQCB titled *Site Confirmation Analytical Results and Request For Closure, Staples Arena Support Zone, "A" Phase, Los Angeles, California* dated July 14, 1999. SCS and RWQCB staff collected a total of 8 soil samples at locations throughout the area. Soil samples were analyzed for petroleum hydrocarbons, volatile organic compounds and California-regulated metals. Concentrations of these constituents were below established cleanup goals for the site.

Groundwater investigations were conducted within the Block 2 area as summarized in reports titled *Groundwater Sampling, Staples Arena Complex Site, Los Angeles, California* dated May 10, 1999 and *Groundwater Investigation, Staples Arena Support Zone, "A" Phase, Former Ready Property, 748 West 10th Place, Los Angeles, California* dated July 14, 1999. Groundwater samples were collected at three locations on the northern portion of the block in February 1999 at locations where remedial action had previously been completed. Groundwater was encountered at a depth of approximately 120 feet bgs. Samples were analyzed for total petroleum hydrocarbons, VOCs, pH, and selected metals. Results of the analyses indicated concentrations below Maximum Concentrations Levels for drinking water.

In June 1999, one additional borehole was drilled on the south side of Block 2, within the parcel where remediation had been completed (748 West 10th Place - APN 513 8-011-018). During the investigation, no groundwater was encountered in a boring drilled to a depth of 150 feet bgs. At the direction of the RWQCB, a soil sample was collected at the 150-foot depth and analyzed for California-regulated metals, total petroleum hydrocarbons, VOCs, and pH. Results indicated no detectable concentrations of petroleum hydrocarbons, trace concentrations of VOCs and metal concentrations, and pH within normal background levels. On August 6, 1999, the RWQCB issued closure for the surface soils. Within the letter, the RWQCB stated that contaminated soil within the area had been properly remediated. Final closure of deeper soil will be granted upon completion of vapor extraction activities

(iii) Olympic North Properties (Block 3)

On September 8, 1997, SCS prepared a Phase I Assessment for the subject property titled *Phase I Environmental Assessment Report, Olympic Properties North, Los Angeles, California*. At the time of the inspection in 1997, two motels, an automobile service station, and parking lots occupied the property. The results of that assessment indicated the potential for environmental concern on two properties. In December 1998, SCS conducted a Phase II investigation of the

property, the results of which are contained in the report titled *Phase II Investigation, Olympic Properties North, 901 and 931 West Olympic Boulevard, Los Angeles, California* dated January 22, 1999. The investigation consisted of collecting soil vapor samples at 17 locations and soil samples at 14 locations on parcels of concern. Analytical results of that investigation indicated the following:

- Lead concentrations in shallow soil exceeded the 50-mg/kg-cleanup goal established for the Project. Remediation of lead-contaminated soil was recommended.
- VOCs were not detected in soil vapor or soil samples collected during the investigation.
- Petroleum hydrocarbons were detected at concentrations below clean-up goals established for the Project. Remediation was not recommended.

Based on the results of the Phase II Investigation, remediation of lead-impacted soil was recommended. Remediation activities and removal of subsurface structures were conducted in July and August 1999. As part of the remediation, approximately 126 tons of soil were excavated and disposed off-site. Remediation activities are summarized in a report titled *Report of Soil Remediation, Staples Arena Support Zone, Former Yu's Auto Repair, 931 West Olympic Boulevard, Los Angeles, California (APN 5138-005-018 and 5138-005-019)*, dated August 17, 1999.

Shallow soil samples collected from the site on August 2, 1999 as requested by the RWQCB did not indicate the presence of petroleum hydrocarbons and volatile organics at concentrations above the limits of detection. Concentrations of heavy metals were within the range anticipated for background soils in southern California. Results of shallow soil sampling were presented in a letter report to the RWQCB from SCS dated August 17, 1999.

A groundwater sample was collected from the site on July 19, 1999 and analyzed as approved by the RWQCB. Groundwater was encountered at a depth of approximately 100 feet bgs. The results of the analysis indicated the presence of gasoline and diesel at 2.3 mg/l and 0.9 mg/l, respectively. BTEX were the only volatile organics detected in the groundwater at concentrations of 14, 7.2, 0.8, and 69 µg/l, respectively. Results of the groundwater investigation were summarized in a letter report submitted to the RWQCB on August 19, 1999.

On the basis of the reports submitted to the RWQCB, a letter approving soil closure was issued by the RWQCB dated September 13, 1999. On November 8, 1999, the RWQCB issued a letter, which requested that another round of groundwater sampling be conducted at a later date as a condition of issuing groundwater closure for the site. In accordance with the RWQCB letter, this sampling will be conducted at completion of vapor extraction, which is presently underway within Block 2.

(iv) **Figueroa North Properties (Block 4)**

This area is bounded to the north by the Variety Arts Center and parking lots, to the east by Flower Street, to the south by Olympic Boulevard, and to the west by Figueroa Street. In 1997, SCS completed a Phase I Environmental Assessment of this area titled *Phase I Environmental Report Figueroa Properties North, Los Angeles, California*, dated August 6, 1997. The Figueroa Properties North under discussion in this report consists of APN 5138-002-007, -020, and -024.

At the time of the 1997 assessment, these parcels were being used as parking lots for the Variety Arts Center. No items of environmental concern were noted on the subject parcels. Two UST fill ports, however, were noted in front of the Variety Arts Center just to the northwest of parcel APN 5138-002-020. Prior uses identified for the subject parcels included residences, office buildings, a hotel, stores, restaurants, and parking lots. No potential environmental concerns were noted in the prior property uses.

No further investigations were recommended for the subject parcels, although an investigation was recommended relative to the UST fill ports on the adjacent parcel. No investigation has been performed to date. This adjacent parcel is not part of the subject Property.

(v) **Figueroa Central Properties (Block 5)**

This area is bounded by 11th Street on the north, South Flower Street on the east, 12th Street on the south, and South Figueroa Street on the west. This area was included in the Phase I Assessment completed by BAS dated October 4, 1996 titled *Phase I Environmental Site Assessment, Sports Arena and Entertainment Complex Support Site, Los Angeles, California* and was identified as "Area 4." At the time of the assessment, the property consisted of four lots, which included several buildings used by Bank of America as a case vault, underground vault structures, and parking areas.

In 1997, SCS conducted another ESA and the results of that assessment are provided in a report titled *Los Angeles Sports Arena and Entertainment Complex Support Site, Phase I Environmental Assessment Second Party Review* dated April 11, 1997. SCS recommended subsurface investigations for six properties. Phase II investigations were performed and the results are provided below.

1150-1160 South Figueroa Street – In December 1997, SCS conducted a Phase II investigation of the property, the results of which are contained in the report titled *Phase II Investigation, Staples Arena Complex Site, 1150-1160 South Figueroa Street, Los Angeles, California (APN 5138-015-001)* dated December 31, 1997. The investigation consisted of collecting soil vapor and soil samples at nine locations. No VOCs were detected in the soil

vapor samples. Petroleum hydrocarbons were detected in concentrations ranging up to 120 mg/kg. All metal concentrations were below clean up goals established for the Project. No further investigation was recommended.

1153-1157 South Flower Street – A review of the LAFD files for this address revealed that USTs were removed in 1978 and petroleum contamination was identified during a subsurface investigation completed in 1995. Pacific Environmental Group (PEG) identified gasoline-range hydrocarbons to a maximum concentration of 6,743 mg/kg on this lot. The VES remediation system utilizing three extraction wells was active from approximately October 1996 through March 10, 1997 when the system was shut down. In April 1997, PEG submitted a *Proposed Work plan for Confirmation Soil Borings* and received authorization to proceed from the LAFD.

Review of PEG's *Confirmation Soil Boring Results/Request for Case Closure* report dated May 26, 1997, revealed that three confirmation soil borings were drilled to a total depth of 45 feet bgs on April 7, 1997. These borings were placed in the area previously known to have the highest petroleum hydrocarbon concentrations. Results of PEG's soil testing found all samples except those at a sand and clay contact at approximately 35 to 40 feet bgs were non-detect for petroleum hydrocarbons as BTEX and methyl-tert-butyl ether (BTEX/MTBE). The highest concentrations of gasoline (up to 1,100 mg/kg), benzene (up to 330 µg/kg), toluene (up to 4,400 µg/kg), ethylbenzene (up to 15,000 µg/kg), and xylenes (up to 110,000 µg/kg) were detected at a depth of approximately 35 feet in each hole. The May 1997 report also included a discussion of the low potential for mobility of gasoline and BTEX constituents in site soils, and information on the proximity and depth of the closest drinking water aquifer source. In a letter dated June 9, 1997, the LAFD stated "Based upon the information provided to date, this Department has determined that no further action is required at this time."

SCS completed an additional Phase II investigation that included the collection and analysis of soil vapor samples at several locations to verify the effectiveness of the vapor extraction remediation and to more fully characterize the site. In addition, soil samples were collected from three locations where elevated concentrations of petroleum hydrocarbons were detected to more fully define the vertical extent of the above-discussed remaining hydrocarbon-impacted soils. These results are summarized in SCS' report titled *Phase II Investigation, Sports Arena Complex Site, 1153-1157 South Flower Street, Los Angeles, California (A.P.N. 5138-015-009)*, dated January 15, 1998. The findings of the Phase II investigation are summarized below:

- No VOCs were detected in soil vapor samples.
- Based on the findings of the Phase II investigation, gasoline and BTEX constituents seemed to be confined to a zone of soil between approximately 30 and 40 feet bgs.

These results appear similar to those previously reported for the site, upon which closure has been obtained by regulatory agencies.

The report concluded that petroleum hydrocarbons and volatile organic compounds were not detected at concentrations, which represent significant potential impacts to human health or the environment, and additional site investigation activities were not recommended.

1100 South Figueroa Street – In September 1999, SCS conducted a Phase II investigation of this lot, the results of which are contained in the report titled *Phase II Environmental Assessment Report, Bank of America Property, 1130 South Figueroa Street, Los Angeles, California (A.P.N. 5138-015-011 and 5138-015-016)*, dated September 15, 1999. At the time of the Phase II investigation, this parcel was occupied by a single Bank of America building and paved parking areas. The investigation consisted of collecting soil samples from three borings drilled to a total depth of 20 feet bgs. No petroleum hydrocarbons were detected in the seven soil samples analyzed. The five-foot sample collected from each boring was also analyzed for VOCs and lead, arsenic, cadmium, chromium, and nickel. VOCs were detected in trace concentrations in one of the three soil samples analyzed for VOCs. Based on these results, no further investigation was recommended.

1132-1140 South Figueroa Street – In September 1999, SCS conducted a Phase II investigation of the southwest portion of this parcel, the results of which are contained in the report titled *Phase II Environmental Assessment Report, Bank of America Property, 1130 South Figueroa Street, Los Angeles, California (A.P.N. 5138-015-011 and 5138-015-016)*, dated September 15, 1999. At the time of the Phase II investigation this area was being used as a paved parking area for Bank of America employees. The investigation consisted of collecting soil samples from six borings drilled to a total depth of 20 feet bgs. No petroleum hydrocarbons were detected in the 18 soil samples analyzed. No VOCs were detected in the soil samples collected, and metal concentrations were consistent with typical background concentrations. SCS concluded that there had been no significant subsurface releases of petroleum hydrocarbons, VOCs, or metals. No further investigation was recommended.

1101 South Flower Street – In September 1999, SCS conducted a Phase II investigation of the northeast portion of this parcel where a gasoline service station had previously been located, the results of which are contained in the report titled *Phase II Environmental Assessment Report, Bank of America Property, 1130 South Figueroa Street, Los Angeles, California (A.P.N. 5138-015-011 and 5138-015-016)*, dated September 15, 1999. At the time of the Phase II investigation this area was being used as a paved parking area for Bank of America employees. The investigation consisted of collecting and analyzing soil samples. No petroleum hydrocarbons or BTEX were detected in the soil samples analyzed. Metal concentrations were consistent with typical background concentrations. SCS concluded that no further investigations were warranted.

1145 South Flower Street – In September 1999, SCS conducted a Phase II investigation of the southeast portion of this parcel where a gasoline service station had previously been located. The results of the investigation are contained in the report titled *Phase II Environmental Assessment Report, Bank of America Property, 1130 South Figueroa Street, Los Angeles, California (A.P.N. 5138-015-011 and 5138-015-016)*, dated September 15, 1999. At the time of the Phase II investigation, this location contained an underground vault associated with Bank of America. Three borings were drilled to 40 feet bgs. Petroleum hydrocarbons and VOCs were not detected in soil samples analyzed. Metal concentrations were consistent with typical background concentrations. SCS concluded that no further investigation was warranted.

(vi) Figueroa South Properties (Block 6)

This area is bounded by 12th Street on the north, South Flower Street on the east, a vacant property formerly occupied by a Ford automobile dealership on the south, and South Figueroa Street on the west. This area was included in the Phase I Assessment completed by BAS dated October 4, 1996 titled *Phase I Environmental Site Assessment, Sports Arena and Entertainment Complex Support Site, Los Angeles, California* and was identified as "Area 5." At the time of the assessment, the Figueroa South Properties consisted of seven lots. Property uses included parking (4 lots) and vacant commercial/warehouse buildings (three lots). Under current conditions, the property has been consolidated under one ownership and the property consists of one subterranean warehouse, a mechanical building, and stairway access structures.

In 1997, SCS conducted another ESA and the results of that assessment are provided in a report titled *Los Angeles Sports Arena and Entertainment Complex Support Site, Phase I Environmental Assessment Second Party Review* dated April 11, 1997. SCS recommended subsurface investigations for six properties. Phase II investigations were performed and the results are provided below.

1200-1206 South Figueroa Street – In December 1997, SCS conducted a Phase II investigation of the property, the results of which are contained in the report titled *Phase II Investigation, Staples Arena Complex Site, 1200-1206 South Figueroa Street, Los Angeles, California (APN 5138-025-001)* dated January 14, 1998. At the time of the Phase II investigation the site contained an unoccupied multi-story concrete building. A geophysical survey of the site identified two USTs. Based on the results of the Phase II Investigation, petroleum hydrocarbons, VOCs, and selected metals were not detected at concentrations, which represent significant potential impacts to human health and the environment. SCS recommended removal of the two USTs.

In June 1999, SCS provided oversight for the removal of the two USTs, the results of which are contained in the report titled *Underground Storage Tank Closure Report, Staples Arena*

Support Zone, 1200 through 1206 South Figueroa Street, Los Angeles, California LAFD Permit No. 8108), dated July 8, 1999. The LAFD issued a letter on May 16, 2000, stating "contamination above the Department's action level exists at this site." However, concentrations detected beneath the tanks at 1200-1206 South Figueroa Street were below goals established by the RWQCB. On June 8, 2000, the RWQCB submitted a letter to the LAFD providing their interpretation of the soil data, concluding that the concentrations of total petroleum hydrocarbons, lead, BTEX, and MTBE were all below their guidelines. The LAFD has informed SCS that the LAFD will be issuing a revised letter consistent with that of the RWQCB in the near future.

1210-1216 South Figueroa Street – In December 1997, SCS conducted a Phase II investigation of the property to assess potential contaminants associated with former automotive service operations on the property. The results are contained in the report titled *Phase II Investigation, Staples Arena Complex Site, 1210-1216 South Figueroa Street, Los Angeles, California (A.P.N. 5138-025-002)*, dated January 12, 1998. The investigation consisted of collecting soil vapor and soil samples at seven locations. VOCs were not detected in the soil vapor samples. Petroleum hydrocarbons ranged as high as 512 mg/kg. Elevated lead levels were detected in one soil sample.

In June 1999, at the request of the RWQCB, the soil with the elevated lead was removed from the property. The results of this soil removal are contained in the report titled *Report of Soil Remediation, Staples Arena Support Zone, 1216 through 1220 South Figueroa Street, (A.P.N. 5138-025-002 and 5138-025-003); Los Angeles, California* dated July 13, 1999. No further remedial activities were recommended for this property.

1220-1230 South Figueroa Street – In December 1997, SCS conducted a Phase II investigation of the property, the results of which are contained in the report titled *Phase II Investigation, Staples Arena Complex Site, 1220 South Figueroa Street, Los Angeles, California (A.P.N. 5138-025-003)*, dated January 9, 1998. At the time of the Phase II investigation, the site contained two unoccupied single-story brick and wood-frame buildings. The investigation consisted of collecting soil vapor and soil samples. VOCs were not detected in the soil vapor samples. Petroleum hydrocarbons were detected in concentrations ranging as high as 1,250 mg/kg. Metal concentrations were typical of soils in southern California. Further investigation was recommended to further assess concentrations of petroleum hydrocarbons detected on the site.

In February 1998, SCS conducted a supplemental investigation of the area where petroleum hydrocarbons had been detected. The results of the additional investigation are contained in the report titled *Supplemental Soil Investigation, Staples Arena Complex Site, 1220 South Figueroa Street, Los Angeles, California (APN 5138-025-003)*, dated February 27, 1998. Three additional borings were completed to a maximum depth of 3.5 feet bgs. Petroleum hydrocarbon concentrations in the samples ranged as high as 185 mg/kg. A trace

concentration of PCE (6.6 µg/kg) was detected in one of the three soil samples analyzed for VOCs. Results of the investigation did not identify any soils that represented a significant threat to human health or the environment. Remediation was recommended for the elevated concentrations of petroleum hydrocarbons detected at the site.

In June 1999, SCS removed petroleum-impacted soil found during Phase II and Supplemental investigations. The results of this soil removal are contained in the report titled *Report of Soil Remediation, Staples Arena Support Zone, 1216 through 1220 South Figueroa Street, (APN 5138-025-002 and 5138-025-003); Los Angeles, California* dated July 13, 1999. Stockpiled soil was removed and disposed of offsite under disposal manifests. No further remedial activities were recommended for this property.

1215 South Flower Street – In December 1997, SCS conducted a Phase II investigation of the southern portion of this lot, the results of which are contained in the report titled *Phase II Investigation, Staples Arena Complex Site, 1215 South Flower Street, Los Angeles, California (APN 5138-025-015)*, dated January 12, 1998. At the time of the Phase II investigation, the southern portion of this lot was occupied by one single-story brick building with entrances obstructed due to four vertical feet of debris (including construction lumber, plastic, metal, ceiling panels, etc.). The investigation consisted of collecting soil vapor and soil samples at four locations immediately north and south of the outside of the building. No VOCs were detected in the soil vapor samples. Petroleum hydrocarbons were detected in concentrations ranging as high as 438 mg/kg. Metal concentrations were detected in site soils were typical of soils in southern California. All detected concentrations were not anticipated to represent a significant risk to human health or the environment. Based on these results, no further investigation was recommended.

1237 South Flower Street – In December 1997, SCS conducted a Phase II investigation of this lot, the results of which are contained in the report titled *Phase II Investigation, Staples Arena Complex Site, 1237 South Flower Street, Los Angeles, California (APN 5138-025-010)*, dated January 13, 1998. At the time of the Phase II investigation, this lot was used as a gravel and asphalt-paved parking area of Family Ford. The investigation consisted of collecting soil vapor and soil samples at four locations. No VOCs were detected in the soil vapor samples. Petroleum hydrocarbons were detected in concentrations ranging as high as 322 mg/kg. Metal concentrations were detected in site soils were background levels. All detected concentrations were not anticipated to represent a significant risk to human health or the environment. Based on these results, no further investigation was recommended.

Closure of Figueroa South Properties – As part of site closure agreed upon with RWQCB, SCS attempted to collect a groundwater sample from the Figueroa South Properties (at that time known as Phase "B" or Area "B"). On June 15, 1999, one soil boring was completed to 150 feet bgs. The soil boring was located on the eastern portion of 1220 South Figueroa

Street (APN 5138-025-003) lot. No groundwater was encountered. Drilling details are summarized in a letter titled *Groundwater Investigation, Staples Arena Support Zone, 1220 South Figueroa Street, (APN 5138-025-003); Los Angeles, California* dated July 27, 1999.

As part of the closure, SCS collected one "clearance" soil sample from 10 inches bgs in the 1220 South Figueroa Street (APN 5138-025-003) lot as requested by the RWQCB. This soil sample was analyzed for total lead. The sample contained 79 mg/kg of lead. To further assess potential impacts to the lot from lead, the sample was analyzed for soluble lead. The Soluble Threshold Limit Concentration (STLC) result was 1.1 mg/kg of soluble lead. It was concluded that lead in surface soils at the site does not represent a potential threat to groundwater. This information is summarized in SCS' letter titled *Request for Site Closure, Staples Arena Support Zone, Area "B", 12th Street and South Figueroa Street, Los Angeles, California*, dated August 23, 1999. Area B is defined as APNs 5138-025-001, -002, -003, -008, -010, -011, and -015. These parcel numbers correlate to 1200 through 1220 South Figueroa Street and 1201 through 1251 South Flower Street, Los Angeles.

On September 3, 1999, the RWQCB issued a letter titled "Approval of Site Closure, Staples Arena Support Zone, Phase B Area, Los Angeles California (File No. 99-007)." This letter states that no further remedial action is required for Phase B (Figueroa South Properties).

The *Updated EA Report* identified numerous subsurface investigations and soil remediation projects that have been performed throughout the six areas of the Project site. Phase II investigations were performed in six potential properties of concern in the Olympic West Properties (Block 1) area and in 13 properties of concern in the Olympic East Properties (Block 2) area. Soil remediation was performed in Olympic North Properties (Block 3) area. A Phase II subsurface investigation in the Figueroa North Properties (Block 4) area revealed no risk to human health or the environment. Phase II investigations were performed in six potential properties of concern in the Figueroa Central Properties (Block 5) area, and six Phase II investigations were performed in potential properties of concern in the Figueroa South Properties (Block 6) area.

In summary, all six areas of the Project site were evaluated during the performance of the *Updated EA Report*. Phase II investigations were performed on those properties that required further evaluation. On those parcels where significant concentrations of contaminants were detected, further investigations and/or remedial activities were conducted under the oversight of the RWQCB and LAFD. To date, closures have been granted for all of these properties with the exception of three remaining properties. These three potential properties of concern are shown on Figure 40 on page 330.

- **Figueroa South Properties (Block 6), 1240 South Figueroa Street** (APN 5138-025-004). Historical information for one parcel at the southwest corner of Figueroa South indicates past use for automobile sales and repair. A Phase II investigation

was performed for this property.⁵¹ This investigation focused on the potential for subsurface releases of petroleum hydrocarbons and volatile aromatic compounds and the presence of metals associated with past site operations. A total of five borings were drilled throughout the Project site. The laboratory analysis of the borings concluded that arsenic, cadmium, chromium, lead and nickel are within background concentrations anticipated for soils in this area. Petroleum hydrocarbons and MTBE were not detected above laboratory detection limits in any of the soil samples analyzed. In summary, low levels of gasoline related constituents were detected in samples taken at this location. Based on the results of the investigation, there are no indications of significant subsurface releases of petroleum hydrocarbons or volatile hydrocarbons associated with automobile sales, repair, or the garages, which previously occupied this portion of the Project site. Furthermore, concentrations of metals and pH values for the soil beneath this location are generally within background levels anticipated for this area.

- **Olympic East Properties (Block 2), 844 West Olympic Boulevard** (APN 5138-009-002). Gasoline-impacted soil was identified on one parcel on the north side of Olympic East Properties. Soil remediation via a vapor extraction system currently is in operation under the auspices of the RWQCB. The system will operate until approximately April 2001, at which time a confirmatory investigation of soil and groundwater will be completed as approved by the RWQCB.
- **Olympic North Properties (Block 3), 931 West Olympic Boulevard** (APN 5138-005-018 and 5138-005-019). Due to the presence of detectable concentrations of gasoline-related constituents in a groundwater sample collected from the southwest corner of Olympic North, the RWQCB has requested that a groundwater investigation be conducted. This would be concurrent with the confirmatory investigation to be completed for the vapor extraction system in the Olympic East Properties.

2. PROJECT IMPACTS

(a) Significance Thresholds/Methodologies

Impacts related to soil contamination are significant if Project construction would occur prior to remediation of listed hazardous material/waste sites, sites of potential concern, or sites,

⁵¹ "Phase II Environmental Assessment Report, LA Sports and Entertainment District, 1240 South Figueroa Street, Los Angeles, California (A.P.N. 5138-025-004)", SCS Engineers, December 2000.

Figure 40 Properties With Ongoing Remedial Investigations

which exceed maximum regulatory requirements for hazardous materials.⁵² Groundwater contamination would be significant if caused by the on-site release of hazardous materials, or if contaminated groundwater were encountered during excavation/construction of the project and not remediated in accordance with applicable regulations. Impacts related to asbestos or lead-based paint in existing buildings on-site would be significant if demolition of any structures found to contain such materials would occur prior to appropriate stabilization and/or removal of the materials in accordance with applicable regulations.

(b) Analysis of Project Impacts

(i) Construction

Additional excavation and ground clearing on any of the potential properties of concern identified above and shown in Figure 40 may have the potential to disturb soil and/or groundwater contaminants. Such disturbance and potential release of such contaminants to the air could pose potential health risks and thus a significant impact to construction workers and employees, residents and visitors adjacent to the Project site. A mitigation measure has been included to reduce this potentially significant impact to a level of insignificance.

Based on the results of the methane sampling program, no further investigation of subsurface methane accumulations is recommended or warranted. As such, potential impacts attributable to subsurface methane accumulations are concluded to be less than significant.

The demolition of the two remaining structures in the Figueroa Central Properties with asbestos containing materials or lead-based paint would have the potential to release these substances into the atmosphere if these substances are not properly stabilized or removed prior to demolition activity. This could result in a significant impact. A mitigation measure has been included to reduce this potentially significant impact to a level of insignificance.

(ii) Operation

Operation of the Project and ancillary facilities would involve the use of small quantities of such potentially hazardous materials as solvents, detergents, and petroleum products. All potentially hazardous materials would be stored, handled, and disposed of in accordance with all applicable federal, state, and local regulations. Consequently, the Project operation would not be expected to pose any significant risks related to the accidental release of hazardous materials. Based on the

⁵² These "maximum regulatory requirements" are not defined here because they are site specific (i.e., determined during the "further investigations" required by mitigation in this section).

results of the methane sampling program, no further investigation of subsurface methane accumulations is recommended or warranted. Operational impacts would be less than significant.

3. MITIGATION MEASURES

The following mitigation measures shall be employed during construction of the proposed Project:

1. Further investigation by a registered environmental professional of the potential soil and/or groundwater contamination on 1240 South Figueroa Street (APN 5138-025-004), 844 West Olympic Boulevard (APN 5138-009-002), and 931 West Olympic Boulevard (APN 5138-005-018) shall be conducted in accordance with the RWQCB, where applicable. Any required remedial action recommended by the registered environmental professional and approved by the RWQCB for any contamination discovered during these investigations shall be fully implemented and documented.
2. Coordination of ongoing remediation activities with proposed Project construction shall be performed to ensure that soil cleanup is not stopped or impeded.
3. Removal of any asbestos-containing materials found in the only two site structures (Figueroa Central Properties) shall be conducted in accordance with the requirements of South Coast Air Quality Management District Rule 1403. Specific requirements of Rule 1403 include:
 - a. Implementation of a thorough survey of the affected facility prior to issuance of permits for any demolition or renovation activity, including inspection, identification, and quantification of all friable and certain non-friable asbestos-containing materials.
 - b. Surveys which include collection and analyses of representative asbestos building material samples, and quantification of these materials for asbestos abatement purposes prior to or during demolition.
 - c. Notification of the SCAQMD of the intent to demolish or renovate any facility at least ten days prior to commencing with the activity.
 - d. Removal of all asbestos-containing materials prior to any demolition or renovation activity that would break up, dislodge, or similarly disturb the material.
 - e. Use of prescribed procedures when removing asbestos-containing materials.
 - f. Placement of all collected asbestos-containing materials in leak-tight containers or wrapping.

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- g. Transportation and disposal of asbestos-containing materials as required by applicable regulations.
 4. Lead-based paint assessments of the only two remaining structures on the Project Site (Figueroa Central Properties) shall be conducted prior to issuance of permits for any demolition activity involving a particular structure. These assessments will include use of x-ray fluorescent technology to identify buildings with lead-based paint. Lead-based paint found in any buildings shall be removed and disposed of as a hazardous waste in accordance with all applicable regulations.
 5. In the event that previously undiscovered contaminated soil or hazardous materials are encountered at the Project site during construction, identification and remediation procedures shall be developed in accordance with applicable federal, State and City regulations to ensure that the potential for the risk of upset would be below a level of significance.

4. ADVERSE EFFECTS

After the incorporation of mitigation measures, no adverse impacts from hazardous materials would occur.

5. CUMULATIVE IMPACTS

For related projects, remediation of any significant soil or groundwater contamination on previously or currently developed sites in the downtown area would generally be required prior to development of the sites. This remediation activity would be expected to result in a long-term improvement in the condition of soils and groundwater in the area, with a consequent reduction in potential health hazards. No significant cumulative impacts are anticipated.

Asbestos and lead-based paint is likely to be present in older buildings in the downtown area. As with the proposed Project, all demolition and renovation activity associated with the related projects would be conducted in full compliance with the requirements of SCAQMD Rule 1403. Compliance with these regulatory requirements would minimize the potential for an accidental release of asbestos. If lead-based paint is suspected to be present in any structures targeted for demolition associated with related project development, appropriate evaluation and, if necessary, remediation would be conducted to provide for the abatement of dust and the safety of workers. The potential for cumulative impacts related to accidental releases of asbestos or lead-based paint would therefore be less than significant.

IV. ENVIRONMENTAL IMPACT ANALYSIS

H. NOISE

1. ENVIRONMENTAL SETTING

a. BACKGROUND

(1) Noise Characteristics

Noise is most often defined as unwanted sound. Although sound can be easily measured, the perceptibility of sound is subjective and the physical response to sound complicates the analysis of its impact on people. People judge the relative magnitude of sound sensation in subjective terms such as "noisiness" or "loudness." Sound pressure magnitude is measured and quantified using a logarithmic ratio of pressures, the scale of which gives the level of sound in decibels (dB).

The human hearing system is not equally sensitive to sound at all frequencies. Therefore, to approximate this human, frequency-dependent response, the A-weighting filter system is used to adjust measured sound levels. The A-weighted sound level is expressed in "dBA" or "dB(A)." Figure 41 on page 335 provides typical A-weighted sound levels measured for various sources, as well as people's responses to these levels.

When sound is measured for distinct time intervals, the statistical distribution of the overall sound level can be obtained during that period. The energy-equivalent sound level (L_{eq}) is the most common parameter associated with such measurements. The L_{eq} metric is a single-number noise descriptor which represents the average sound level over a given period of time, where the actual sound level varies with time. L_{max} , L_{min} , and L_{xx} are also common noise descriptors. L_{max} and L_{min} are the maximum and minimum noise levels, respectively, over a given period of time and L_{xx} , known as a statistical sound level, is the time-varying noise level which would be exceeded xx percent of the time.

Although the A-weighted scale accounts for people's spectral response and, therefore, is commonly used to quantify individual event or general community sound levels, the degree of annoyance or other response effects also depends on several other perceptibility factors. These factors include:

Figure 41 A-Weighted Noise Levels

- Ambient (background) sound level;
- Magnitude of the event sound level with respect to the background;
- Duration of the sound event;
- Number of event occurrences and their repetitiveness; and
- Time of day that the event occurs.

Several methods have been devised to relate noise exposure over time to community response. A commonly used noise metric for this type of study is the Community Noise Equivalent Level (CNEL). The CNEL, which was originally developed for use in the California Airport Noise Regulation, has a 5 dB penalty added to noise occurring during evening hours from 7:00 P.M. to 10:00 P.M., and a 10 dB penalty added for any sounds occurring between the hours of 10:00 P.M. to 7:00 A.M. Thus, the CNEL noise metric provides a 24-hour average of A-weighted noise levels at a particular location, with an evening and a nighttime adjustment, which reflects increased sensitivity to noise during these times of the day.

(2) Noise Regulation

(a) City of Los Angeles

The Los Angeles Municipal Code (LAMC) establishes regulations regarding allowable increases in noise levels, in terms of established noise criteria, and construction activities. Supplementing these LAMC regulations, the City has also established noise guidelines, which are used for planning purposes only, and which categorize noise levels occurring over a 24-hour period.

(i) City of Los Angeles Noise Ordinance

The LAMC (Chapter XI, Articles 1 through 6) establishes acceptable ambient sound levels for specific land use zones. In accordance with the City's Municipal Code limits, a noise level increase of 5 dB over the existing average ambient noise level at an adjacent property line is considered a noise violation. This standard applies to all sources except vehicles traveling on public streets. Further, for purposes of determining whether or not a violation of the Municipal Code is occurring, sound level measurements of an offending noise can be reduced by 5 dB if the noise event occurs 15 minutes or less in any 60-minute period. In cases where the actual measured ambient level is not known or is less than 50 dBA, the presumed daytime (7:00 A.M. to 10:00 P.M.) minimum ambient noise is 50 dBA and the nighttime (10:00 P.M. to 7:00 A.M.) minimum ambient noise is 40 dBA for residential land use.

Section 112 of the LAMC also limits noise from construction equipment within 500 feet of a residential zone to 75 dBA, measured at a distance of 50 feet from the source, unless compliance with this limitation is technically infeasible. The LAMC also prohibits construction between the hours of 9:00 P.M. and 7:00 A.M. Monday through Friday, 6:00 P.M. and 8:00 A.M. on Saturday, and at any time on Sunday.

(ii) City of Los Angeles CNEL Guidelines

In addition to the previously described LAMC provisions, the City has also established noise guidelines which are solely used for planning purposes (i.e., no regulatory enforcement). These guidelines are based in part on the community noise compatibility guidelines established by the State Department of Health Services. The guidelines are intended for use in assessing the compatibility of various land use types with a range of noise levels. CNEL noise levels for specific land uses are classified into four categories: (1) “clearly acceptable,” (2) “normally acceptable,” (3) “normally unacceptable,” and (4) “clearly unacceptable.” A CNEL value of 70 dBA is considered the dividing line between a “normally acceptable” and “normally unacceptable” noise environment for noise sensitive land uses, including parks, schools, and playgrounds.

CNEL increases of less than 3 dB are not considered an adverse change in the environment, while an increase of between 3 and 5 dB is generally considered to be an adverse impact and a CNEL increase of greater than 5 dB is considered a significant impact.

(b) LAUSD Noise Guidelines

In September of 1997, the LAUSD released guidelines for noise-related environmental documents. The guidelines identify what the LAUSD considers acceptable noise levels for exterior school spaces. According to the guideline, the acceptable exterior L_{eq} is 67 dBA.

The guideline further states that in those cases where the existing ambient noise levels equal or exceed District Noise Standards, a 2 dB increase above ambient noise levels will be the maximum permitted. A noise level increase of 3 dB or more over ambient levels is considered significant and will require mitigation to within 2 dB of pre-Project ambient levels.

b. EXISTING LOCAL NOISE CONDITIONS

(1) Ambient Noise Levels

Noise measurements were conducted at four locations in the vicinity of the Project site. The noise measurements were conducted between September 18, 2000 and September 20, 2000 to quantify existing baseline noise levels in the vicinity of the Project. Twenty-four hour noise

measurements were conducted at three locations that are representative of noise sensitive land uses adjacent to the Project site. Limited 15-minute noise measurements were conducted at 10th Street Elementary School during the morning, mid-day, and evening hours. Measured noise levels are shown in Table 36 on page 339. Figure 42 on page 340 shows the location of the measurement locations relative to the Project boundaries.

Measured daytime noise levels (L_{eq}) along major roadways in the area (Olympic Boulevard and Flower Street) ranged from 51.9 to 70.3 dBA, which is typical for major arterial roadways. The CNEL ranged from 65.7 to 72.1 dBA along these same roadways. At the 10th Street Elementary School, the L_{eq} ranged from 68.4 to 71.8 dBA at the school's northeast boundary located adjacent to Olympic Boulevard and Valencia Street. A 24-hour noise measurement was not possible at this location because permission could not be obtained from LAUSD within the monitoring period; therefore the existing CNEL was not measured.

(2) Traffic Noise

Traffic noise in the vicinity of the Project site is attributed to vehicle movements on the surrounding arterial system. The CNEL generated by existing traffic on these roadways has been estimated using the FHWA traffic noise prediction model, and traffic data provided in the Traffic study provided in Appendix E of this Draft EIR. Table 37 on page 341 provides the predicted existing traffic noise levels along the selected roadway segments around the Project site.

The predicted existing CNEL along portions of the roadway right-of-way of Francisco Street and Hope Street are currently between 56.8 to 68.1 dBA. These noise levels are within the City of Los Angeles' CNEL guideline of 70 dBA for residential land uses.

The existing CNEL along portions of 9th Street (James Wood Boulevard), 11th Street, Figueroa Street, Flower Street, Olympic Boulevard, and Pico Boulevard currently ranges from 72.8 to 75.9 dBA. Sensitive land uses (e.g., residences, hotels, and parks) located along portions of these roadways currently experience CNEL greater than 70 dBA that exceed the conditionally acceptable limits established by the City of Los Angeles.

In addition to analyzing the surrounding roadway segments, the analysis includes the 10th Street Elementary School site, which is the nearest public school in the vicinity of the Project site. The 10th Street Elementary School is located approximately 1,300 feet northwest of the Project site, along Olympic Boulevard, west of the Harbor Freeway. The existing peak hour L_{eq} from traffic on Olympic Boulevard is approximately 74.1 dBA at the property line. This exceeds LAUSD's noise guideline of 67 dBA. However, at the playground areas located further away from Olympic Boulevard, the traffic noise is lower due to distance and barrier attenuation.

Table 36

MEASURED NOISE LEVELS ALONG MAJOR ROADWAYS IN THE PROJECT SITE VICINITY

Location	Measured Peak Hour Noise Level (dBA Leq)	CNEL (dBA)	Major Noise Sources
1. 835 West Olympic Boulevard (apartments)	70.3	72.1	Traffic on Olympic Boulevard
2. 950 South Flower Street (apartments)	66.1	65.7	Traffic on Flower Street
3. 1324 South Flower Street (apartments)	67.4	66.7	Traffic on Flower Street
4. 10th Elementary Street School, Olympic Boulevard & Valencia Street	71.8	--	Traffic on Olympic Boulevard and Valencia Street

Source: PCR Services Corporation, December 2000

On Saturdays, the predicted existing CNEL along portions of the roadway right-of-way of Francisco Street, Hope Street, Figueroa Street, and Flower Street are currently between 60.5 to 69.7 dBA. These noise levels are within the City of Los Angeles' CNEL guideline of 70 dBA for residential land uses.

The existing CNEL along portions of 9th Street (James Wood Boulevard), 11th Street, Figueroa Street, Flower Street, Olympic Boulevard, and Pico Boulevard currently ranges from 70.3 to 75.2 dBA on Saturdays. Sensitive land uses (e.g., residences, hotels, and parks) located along portions of these roadways currently experience CNEL greater than 70 dBA that exceed the conditionally acceptable limits established by the City of Los Angeles.

(3) Rail Noise

The Los Angeles County Metropolitan Transit Authority (MTA) Blue Line passes near the eastern edge of portions of the Project site (Figueroa South and Central Properties), along the east side of Flower Street. The Blue Line operates daily from 5:00 A.M. to 11:00 P.M. During morning and afternoon peak periods, trains run every ten minutes. During non-peak times, trains run every twelve minutes. Based upon this schedule, the CNEL associated with train operations is approximately 74 dBA at a distance of 100 feet from the tracks, while the CNEL at 250 feet (the approximate distance from the track to the Project) is estimated at 68 dBA.

Figure 42 Noise Receptor Locations

Table 37

PREDICTED EXISTING TRAFFIC NOISE LEVELS

Roadway	Segment	Predicted Existing CNEL at the Roadway Right-of- way (dBA)	Predicted Saturday Existing CNEL at the Roadway Right-of-way (dBA)
11 th Street	West of Figueroa Street	75.1	74.9
	East of Figueroa Street	74.9	74.0
9th Street (James Wood Boulevard)	West of Figueroa Street	75.5	75.2
	East of Figueroa Street	75.0	74.6
	West of Flower Street	74.4	74.3
	East of Flower Street	74.0	71.1
Figueroa Street	North of 9 th (James Woods)	73.3	70.6
	South of 9 th (James Woods)	73.0	69.7
	North of Olympic Boulevard	72.8	70.3
	South of Olympic Boulevard	73.9	71.4
	North of 11th	74.1	72.0
	South of 11th	74.0	72.5
Flower Street	North of 9 th (James Woods)	73.1	67.6
	South of 9 th (James Woods)	73.3	70.9
	North of Olympic Boulevard	73.1	71.2
	South of Olympic Boulevard	73.0	70.3
	North of Pico Boulevard	72.8	68.6
	South of Pico Boulevard	73.0	68.2
Francisco Street Hope Street	North of Olympic Boulevard	56.8	60.5
	North of Pico Boulevard	68.1	66.0
	South of Pico Boulevard	67.1	65.9
Olympic Boulevard	West of Figueroa Street	75.8	74.3
	East of Figueroa Street	75.5	73.9
	West of Flower Street	75.9	74.0
	East of Flower Street	75.3	72.6
	East of Blaine Street	75.9	74.1
	West of Blaine Street	75.9 (L _{eq} =74.1)	74.0 (L _{eq} =72.2)
	West of Francisco Street	75.9	75.0
	East of Francisco Street	75.9	74.3
Pico Boulevard	East of Flower Street	73.5	72.6
	West of Flower Street	74.3	74.4
	East of Hope Street	73.4	72.1
	West of Hope Street	73.6	72.6

Source: PCR Services Corporation, December 2000.

(4) Sensitive Receptors

Uses that are typically considered noise sensitive include residences, schools, hospitals, and convalescent care facilities. Most uses adjacent to the Project site are commercial and light industrial, which generally are not considered noise sensitive. An apartment building is, however, located adjacent to the north end of the Olympic North Properties, along the north side of Olympic Boulevard. There is a multi-family residential building located at the northeast corner of Flower Street and Olympic Boulevard and an apartment hotel located at the southwest corner of Flower Street and Pico Boulevard. The 10th Street Elementary School, located west of the Harbor Freeway, approximately 1,300 feet northwest of the Project site on the northwest corner of Valencia Street and Olympic Boulevard, is considered a sensitive receptor. The Downtown Holiday Inn hotel is located between the Figueroa Central and Figueroa North Properties, at the southeast corner of Figueroa Street and Olympic Boulevard. However, this is not considered a sensitive receptor because of the transient nature of hotel guests. No other noise sensitive uses are directly adjacent to the Project site. The locations of sensitive noise receptors in the vicinity of the Project site are shown on Figure 42.

2. PROJECT IMPACTS

a. SIGNIFICANCE THRESHOLDS/METHODOLOGIES

(1) Construction

Construction-related impacts would be significant if, as indicated in the City Noise Ordinance (No. 156,363), a noise sensitive use is located within 500 feet of the Project site and on-site construction noise levels exceed 75 dBA, measured 50 feet from the source. This threshold is more conservative than the standard set forth within the City's Noise Ordinance since applicability under the Noise Ordinance is limited to residential uses or residentially zoned land rather than the broader applicability used in this analysis (i.e., any noise sensitive use).

(2) Operation

A significant impact would occur if any of the operational significance thresholds listed below are exceeded:

- Project traffic increases the CNEL along any roadway segment by an audible amount (3 dBA or more) and causes the noise levels to move from acceptable range to unacceptable range as shown on the City's Community Compatibility Matrix.

- Project traffic causes a 5 dBA or greater noise level increase on any roadway link adjacent to a sensitive receptor location during any single hour.
- Project-related operational (i.e., non-roadway) noise sources increase ambient noise by 5 dBA thus causing a violation of the City Noise Ordinance.

Noise levels associated with Project generated and cumulative traffic were estimated using a version of the FHWA traffic noise prediction methodology, FHWA RD-77-108, and based upon the projected traffic levels reported in Section IV.F.1., Traffic, of this Draft EIR.

The roadway segments were selected for study based upon two factors: (1) the volume of Project-generated traffic; and (2) the presence of sensitive receptors. In general, study segments are those that are proximal to the Project site and a sensitive noise receptor such as a residence, or school. These include 33 segments in the immediate vicinity of the Project site. Noise levels were modeled for existing conditions, future conditions without the Project, and future conditions with the Project. In addition, each of these conditions were evaluated for a weekend Saturday.

b. ANALYSIS OF PROJECT IMPACTS

(1) Construction

Project construction is anticipated to take place in four fairly distinct phases: (1) ground clearing/excavation; (2) foundation construction; (3) building construction; and (4) finishing and cleanup. Each phase involves the use of different kinds of construction equipment and, therefore, has its own distinct noise characteristics. Clearing and excavation typically involve the use of earth moving equipment such as heavy duty trucks, scrapers, backhoes and front-end loaders. Foundation construction generally entails the use of concrete trucks, cranes, and pneumatic tools. Building construction typically involves the use of hammers, generators, compressors, and light trucks, while noise sources associated with finishing and site cleanup generally include trucks, landscape rollers, and compactors. Construction of the proposed Project would entail each of the four construction phases. Parking facility construction would entail the demolition, grading, and construction (including site clean-up) phases.

Typical noise level ranges associated with each construction phase at a distance of 50 feet from the noise source are presented in Table 38 on page 344. All four phases would have the potential to generate noise levels exceeding the 75 dBA City standard for construction equipment at that distance. The highest and generally most sustained noise levels typically occur during the ground clearing and excavation phases.

Table 38

TYPICAL NOISE LEVELS AT CONSTRUCTION SITES

Construction Phase	Noise Level (dBA) at 50 Feet	
	Minimum Required Equipment in Use	All Pertinent Equipment in Use
Clearing/Excavation	79	89
Foundation Construction	78	78
Building Construction	76	85
Finishing and Site Cleanup	76	89

Source: Bolt, Beranek and Newman, "Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances," prepared for the U.S. Environmental Protection Agency, December 31, 1971.

Construction activity on the Olympic Properties could be as close as 50 feet from the existing apartments located directly north of Olympic Boulevard. During the heaviest periods of construction activity, the construction noise could potentially be as high as 89 dBA during short instances. At the apartment building located north of Olympic Boulevard and east of Flower Street, the construction noise would range from 75 to 86 dBA. The construction noise would range from 71 to 82 dBA at the apartment hotel located south of Pico Boulevard and West of Flower Street. During periods of less intensive activity, the construction noise would be lower. Construction on portions of the Olympic and Figueroa Properties would have the potential to exceed 75 dBA within 500 feet of the existing residential areas. Therefore, impacts to these residential receptors associated with construction on the Olympic and Figueroa Properties would be significant. Table 39 on page 345 lists the estimated construction noise levels at the nearest receptor locations.

The 10th Street Elementary School is located approximately 1,300 feet northwest of the Project site. Construction noise would attenuate by approximately 31 dB from distance and intervening structures, including the Harbor Freeway. Construction-related noise levels would be reduced to 58 dBA or lower at the school site. The construction noise levels would be below the LAUSD noise guideline of 67 dBA and would therefore be less than significant.

(2) Operation

(a) Future Weekday Traffic Noise

The CNEL generated by future traffic on local roadway segments has been estimated using the FHWA traffic noise prediction model and forecasted traffic data provided in Appendix E, of this Draft EIR. The traffic noise analysis considered the roadway configuration, grade, percentage of

Table 39

CONSTRUCTION NOISE LEVELS AT RECEPTOR LOCATIONS

Receptor No. and Location	Distance to Construction Site (feet)	Distance Attenuation (dB)	Barrier Attenuation (dB)	A-Weighted Sound Level Construction Stage (dBA)				Noise Level Range	
				Clearing/ Excavation	Foundation	Building	Finish	Low	High
1. 835 West Olympic Blvd. (apartments) (North of Olympic East Properties and East of Olympic North Properties)	50	0	0	89	78	85	89	78	89
2. 950 South Flower Street (apartments) (East of Figueroa North Properties)	80	-3	0	86	75	82	86	75	86
3. 1324 South Flower Street (apartments) (South of Figueroa South Properties)	150	-7	0	82	71	78	82	71	82
4. 10 th Street Elementary School (1,300' West of Olympic West Properties)	1,300	-21	-10	58	47	54	58	47	58

Source: PCR Services Corporation, December 2000

2-axle and 3-axle trucks, posted vehicle speeds, and right-of-way distances to calculate future traffic noise levels. Table 40 on page 347 and Table 41 on page 349 provide the predicted CNEL for the analyzed roadway segments for the following scenarios: existing conditions, future without development of the Project; future with development of the Project; the increase attributed to Project-generated traffic, and the cumulative increase above existing baseline noise levels.

The predicted future year CNEL without the Project would range from 57.2 to 77.4 dBA along the considered roadway segments. Sensitive land uses located along portions of Francisco Street and Hope Street would experience future traffic noise levels that are below the City of Los Angeles' "conditionally acceptable" CNEL guideline of 70 dBA. Sensitive land uses located along portions of 9th Street (James Wood Boulevard), 11th Street, Figueroa Street, Flower Street, Olympic Boulevard, and Pico Boulevard would experience future traffic noise levels that exceed the City's CNEL guideline of 70 dBA.

The predicted future CNEL with the Project would range from 64.1 to 77.8 dBA along the same roadway segments. Sensitive land uses along portions of Francisco Street and Hope Street would continue to experience future traffic noise levels below the City's CNEL guideline of 70 dBA. Along portions of 9th Street (James Wood Boulevard), 11th Street, Figueroa Street, Flower Street, Olympic Boulevard, and Pico Boulevard the CNEL would continue to exceed the City's CNEL guideline of 70 dBA. When compared to the future without Project condition, the Project would generate increases in future CNEL ranging from 0.2 to 6.9 dBA. Except for Francisco Street, increases in traffic noise would be less than 3 dB, and would not be perceptible within the context of a community noise environment. Consistent with the established thresholds, future traffic noise levels associated with the Project would be less than significant along 9th Street (James Wood Boulevard), 11th Street, Figueroa Street, Flower Street, Hope Street, Olympic Boulevard, and Pico Boulevard. The CNEL along Francisco Street would increase by 6.9 dB above the future without Project conditions. This increase would be perceptible and would result in a significant impact.

In addition, the analysis includes the 10th Street Elementary School, which is the nearest public school in the vicinity of the Project site. At the elementary school, the future peak hour L_{eq} without the Project would be approximately 74.9 dBA. The L_{eq} at the school would continue exceed the LAUSD's guideline of 67 dBA. The future year L_{eq} with the Project would be approximately 75.2 dBA at the elementary school. As such, the L_{eq} would continue to exceed LAUSD's guideline of 67 dBA. While the guideline would still be exceeded, there would be a net increase of 0.3 dBA that is less than the maximum 2 dB increase allowed by the guideline. Future traffic noise at 10th Street Elementary School with the Project would be within LAUSD's noise guidelines.

Table 40

PREDICTED FUTURE WEEKDAY TRAFFIC NOISE LEVELS

Roadway	Segment	Predicted Existing CNEL (dBA)	Predicted Future without Project ^a CNEL (dBA)	Predicted Future with Project CNEL (dBA)	Project ^b Increase, dB	Cumulative Increase above Existing ^c Baseline, dB
11 th Street	West of Figueroa Street	75.1	75.7	76.5	0.8	1.4
	East of Figueroa Street	74.9	75.5	76.3	0.8	1.4
9 th Street (James Woods)	West of Figueroa Street	75.5	77.4	77.8	0.4	2.3
	East of Figueroa Street	75.0	76.5	76.8	0.3	1.8
	West of Flower Street	74.4	76.0	76.4	0.4	2.0
Figueroa Street	East of Flower Street	74.0	75.4	75.5	0.1	1.5
	North of 9 th (James Woods)	73.3	74.6	75.0	0.4	1.7
	South of 9 th (James Woods)	73.0	73.8	74.2	0.4	1.2
	North of Olympic Boulevard	72.8	73.6	74.1	0.5	1.3
	South of Olympic Boulevard	73.9	74.5	74.8	0.3	0.9
	North of 11 th	74.1	74.8	75.0	0.2	0.9
Flower Street	South of 11 th	74.0	74.7	75.1	0.4	1.1
	North of 9 th (James Woods)	73.1	73.8	74.2	0.4	1.1
	South of 9 th (James Woods)	73.3	74.2	74.8	0.6	1.5
	North of Olympic Boulevard	73.1	74.0	74.6	0.6	1.5
	South of Olympic Boulevard	73.0	73.9	74.3	0.4	1.3
	North of Pico Boulevard	72.8	73.8	74.1	0.3	1.3
Francisco Street	South of Pico Boulevard	73.0	73.9	74.1	0.2	1.1
	North of Olympic Boulevard	56.8	57.2	64.1	6.9	7.3
Hope Street	North of Pico Boulevard	68.1	69.2	69.3	0.1	1.2
	South of Pico Boulevard	67.1	68.1	68.1	0.0	1.0
Olympic Boulevard	West of Figueroa Street	75.8	76.6	77.6	1.0	1.8
	East of Figueroa Street	75.5	76.2	77.1	0.9	1.6
	West of Flower Street	75.9	76.6	77.4	0.8	1.5
	East of Flower Street	75.3	75.9	76.5	0.6	1.2
	East of Blaine Street	75.9	76.7	77.3	0.6	1.4
	West of Blaine Street	75.9 (L _{eq} =74.1)	76.7 (L _{eq} =74.9)	77.0 (L _{eq} =75.2)	0.3	1.1
	West of Francisco Street	75.9	76.7	77.3	0.6	1.4
	East of Francisco Street	75.9	76.7	77.7	1.0	1.8
Pico Boulevard	East of Flower Street	73.5	74.2	74.5	0.3	1.0
	West of Flower Street	74.3	75.0	75.3	0.3	1.0

Table 44 (Continued)

PREDICTED FUTURE WEEKDAY TRAFFIC NOISE LEVELS

Roadway	Segment	Predicted Existing CNEL (dBA)	Predicted Future without Project ^a CNEL (dBA)	Predicted Future with Project CNEL (dBA)	Project ^b Increase, dB	Cumulative Increase above Existing ^c Baseline, dB
	East of Hope Street	73.4	74.1	74.3	0.2	0.9
	West of Hope Street	73.6	74.3	74.6	0.3	1.0

^a Includes ambient traffic growth.

^b Increase relative to traffic noise levels associated with ambient growth without the Project.

^c Cumulative increase relative to existing traffic noise levels, resulting from ambient growth plus Project development.

Source: PCR Services Corporation, December 2000.

Table 41

PREDICTED FUTURE SATURDAY TRAFFIC NOISE LEVELS

Roadway	Segment	Predicted Existing CNEL (dBA)	Predicted Future without Project ^a CNEL (dBA)	Predicted Future with Project CNEL (dBA)	Project ^b Increase, dB	Cumulative Increase above Existing ^c Baseline, dB
11 th Street	West of Figueroa Street	74.9	75.4	76.7	1.3	1.8
	East of Figueroa Street	74.0	74.6	75.9	1.3	1.9
9 th Street (James Woods)	West of Figueroa Street	75.2	76.4	76.9	0.5	1.7
	East of Figueroa Street	74.6	75.5	76.0	0.5	1.4
	West of Flower Street	74.3	75.3	75.8	0.5	1.5
Figueroa Street	East of Flower Street	71.1	72.3	73.1	0.8	2.0
	North of 9 th (James Woods)	70.6	71.8	72.6	0.8	2.0
	South of 9 th (James Woods)	69.7	70.7	71.5	0.8	1.8
	North of Olympic Boulevard	70.3	71.2	71.9	0.7	1.6
	South of Olympic Boulevard	71.4	72.1	72.5	0.4	1.1
	North of 11 th	72.0	72.6	72.9	0.3	0.9
Flower Street	South of 11 th	72.5	73.0	73.6	0.6	1.1
	North of 9 th (James Woods)	67.6	68.4	70.1	1.7	2.5
	South of 9 th (James Woods)	70.9	71.7	72.8	1.1	1.9
	North of Olympic Boulevard	71.2	71.9	73.0	1.1	1.8
Francisco Street	South of Olympic Boulevard	70.3	71.1	71.9	0.8	1.6
	North of Pico Boulevard	68.6	69.6	70.2	0.6	1.6
	South of Pico Boulevard	68.2	69.3	69.8	0.5	1.6
Hope Street	North of Olympic Boulevard	60.5	60.8	66.1	5.3	5.6
	South of Olympic Boulevard	68.6	69.0	70.7	1.7	2.1
Olympic Boulevard	North of Pico Boulevard	66.0	66.9	67.0	0.1	1.0
	South of Pico Boulevard	65.9	66.9	66.9	0.0	1.0
Pico Boulevard	West of Figueroa Street	74.3	75.1	76.3	1.2	2.0
	East of Figueroa Street	73.9	74.5	75.8	1.3	1.9
	West of Flower Street	74.0	74.6	75.8	1.2	1.8
	East of Flower Street	72.6	73.3	74.2	0.9	1.6
	East of Blaine Street	74.1	74.9	75.9	1.0	1.8
	West of Blaine Street	74.0 (L _{eq} =72.2)	74.8 (L _{eq} =73.0)	75.4 (L _{eq} =73.6)	0.6	1.4
	West of Francisco Street	75.0	75.8	76.2	0.4	1.2
	East of Francisco Street	74.3	75.0	76.3	1.3	2.0
	East of Flower Street	72.6	73.1	73.6	0.5	1.0

Table 46 (Continued)

PREDICTED FUTURE SATURDAY TRAFFIC NOISE LEVELS

Roadway	Segment	Predicted Existing CNEL (dBA)	Predicted Future without Project ^a CNEL (dBA)	Predicted Future with Project CNEL (dBA)	Project ^b Increase, dB	Cumulative Increase above Existing ^c Baseline, dB
	West of Flower Street	74.4	74.9	75.3	0.4	0.9
	East of Hope Street	72.1	72.6	73.1	0.5	1.0
	West of Hope Street	72.6	73.2	73.6	0.4	1.0

^a Includes ambient traffic growth.

^b Increase relative to traffic noise levels associated with ambient growth without the Project.

^c Cumulative increase relative to existing traffic noise levels, resulting from ambient growth plus Project development.

Source: PCR Services Corporation, December 2000.

(b) Future Saturday Traffic Noise

Table 41 provides the predicted CNEL for the analyzed roadway segments for the following weekend Saturday scenarios: existing conditions, future buildout without the Project; future buildout with the Project; the increase attributed to Project generated traffic, and the cumulative increase above existing baseline noise levels.

The predicted future CNEL without the Project would range from 60.8 to 76.4 dBA along the considered roadway segments. Sensitive land uses located along portions of Francisco Street and Hope Street would experience future traffic noise levels that are within the City of Los Angeles' "conditionally acceptable" CNEL guideline of 70 dBA. The future CNEL along portions of 9th Street (James Wood Boulevard), 11th Street, Figueroa Street, Flower Street, Olympic Boulevard, and Pico Boulevard would experience future traffic noise levels that exceed the City's CNEL guideline of 70 dBA.

The predicted future CNEL with the Project would range from 66.1 to 76.9 dBA along the same roadway segments. Sensitive land uses along portions of Francisco Street and Hope Street would continue to be below the City's CNEL guideline of 70 dBA. Along the roadway segments of 9th Street, 11th Street, Figueroa Street, Flower Street, Olympic Boulevard, and Pico Boulevard, the future CNEL would exceed the City of Los Angeles' "conditionally acceptable" CNEL guideline of 70 dBA. When compared to the future without Project condition, the Project would generate increases in future CNEL ranging from 0.1 to 5.3 dBA. Except for Francisco Street, the increases in traffic noise would be less than 3 dB and would not be perceptible within the context of a community noise environment. Consistent with the established thresholds, future Saturday traffic noise levels associated with the Project would be less than significant along 9th Street (James Wood Boulevard), 11th Street, Figueroa Street, Flower Street, Hope Street, Olympic Boulevard, and Pico Boulevard. The Saturday CNEL along Francisco Street would increase by 5.3 dB above the future without Project conditions. This increase would be perceptible and would result in a significant impact.

In addition to analyzing Project traffic along the surrounding roadway segments, the analysis includes 10th Street Elementary School which is the nearest public school in the vicinity of the Project site. At the elementary school the future L_{eq} without the Project would be approximately 73.0 dBA. The L_{eq} at the school would continue to exceed the LAUSD's exterior guideline of 67 dBA. The future L_{eq} with the Project would be approximately 73.6 dBA at the elementary school site. As such, the L_{eq} at the school would continue to exceed the LAUSD's exterior guideline of 70 dBA. Changes in future traffic conditions would result in a slight increase in noise levels at this location by as much as 0.6 dB, which is within the noise increase guideline of 2 dB. Future traffic noise at 10th Street Elementary School with the Project would be within LAUSD's noise guidelines.

(c) Event Noise

Outdoor shows and events have the potential to generate significant noise levels during staged special events and operations at the Central Plaza. These events would potentially include amplified speech and music. Noise measurements conducted during the Los Angeles Lakers' 1999-2000 NBA Championship victory parade and celebration indicate that noise levels typically range from 75 to 87 dBA during a parade and a staged outdoor celebration. This type of activity is representative of a heavily attended outdoor event that could be staged at the Project site's Central Plaza.

The noise generated by an outdoor event would be partially attenuated by the shielding provided by proposed structures on the Project site and existing structures surrounding the Project site. The future L_{eq} would be approximately 44 dBA at the nearest apartments located north of Olympic Boulevard, 38 dBA at the apartment building located north of Olympic Boulevard and east of Flower Street, and 55 dBA at the apartment hotel located south of Pico Boulevard and west of Flower Street. These future noise levels would be less than existing ambient traffic noise levels and would be less than significant. However, because of the characteristics of amplified speech and crowd cheering, the noise generated during these events may be occasionally discernible at the nearby sensitive receptors.

Large scale events staged at the Central Plaza would be expected to include police security, helicopter coverage, and crowd control measures. Noise produced by police sirens, helicopter flyovers, car horns, and bullhorns would not be expected to cause significant noise impacts, but because of their intrusive nature, the noise may be a potential source of annoyance to residences. These temporary noise sources would be considered adverse, but not significant.

The 10th Street Elementary School is located approximately 2,200 feet northeast of the Central Plaza. Because of distance attenuation and shielding provided by intervening structures, noise produced during outdoor shows and events at the Central Plaza would be expected to be approximately 25 dBA or less at the school's eastern property line. The event noise would clearly be less than ambient noise levels and would be expected to be within LAUSD's noise guidelines.

(d) Parking Structure Noise

Noise generated by future parking operations in parking structures located at the Olympic West and Olympic North Properties has been estimated based on preliminary conceptual information regarding the expected number of vehicles and number of parking levels above ground for each parking structure.

The preliminary design of the parking structure located at the Olympic West Properties includes five levels above grade designated for guest parking. Guests would enter the structure on the north side via Olympic Boulevard and would utilize the internal ramps which connect the various levels of the structure with the first level. This parking structure would be expected to include two to three parking levels above grade for guest parking. Guests would enter the structure on either Georgia or Francisco Streets.

Future parking structure operations at the Olympic West Properties has been evaluated to predict the future L_{eq} from vehicular movements. During peak visitor hours, the L_{eq} would be approximately 40 dBA at the nearest apartment building located directly north of Olympic Boulevard and east of Francisco Street. Although this receptor is located nearest to the Olympic West parking structure, parking structure noise levels are anticipated to be less than the City's noise ordinance standard of 50 dBA, as well as below existing ambient noise levels, and would be less than significant. The L_{eq} generated by vehicular operations at the Olympic North structure would be as high as 49 dBA directly north and west of the parking structure. These future noise levels would also be less than the City's noise ordinance standard and would be less than significant. During simultaneous operations, the noise from both the Olympic North and West structures would be 49.1 dBA at the nearest apartment building located north of Olympic Boulevard and east of Francisco Street, and would be less than significant. Receptors located further away from these structures would experience even lower noise levels and would also be considered less than significant.

Parking structure noise would not be significant at the 10th Street Elementary School because the school is located approximately 2,200 feet northeast of the parking sites. The attenuation provided by distance (33 dB) and intervening structures, would reduce parking structure noise to below ambient noise levels.

(e) **Parking Lot Noise**

Various sounds, including automobile movement, car alarms, car horns, door slams, and tire squeals, may occur on the parking facilities on both the Figueroa and Olympic Properties. Future noise levels associated with each of these individual noise events at the nearest receptor locations would be expected to be similar to the noise levels currently generated within the existing parking lots. The predicted future noise levels from parking facility operations are shown in Table 42 on page 354. As indicated, the activation of car alarms and sounding of car horns would cause the highest noise levels at the nearest receptor locations of about 71 dBA. These maximum noise levels would occur periodically and may occasionally be audible during periods with lower ambient noise levels such as during the evening hours. Because the maximum level from parking lot activity at the nearest location (69 dBA at a distance of 50 feet, as identified on Table 42) is within the range of ambient noise levels, parking facility noise would not be expected to increase noise levels by 5 dB or more at any off-site location.

Table 42

NOISE LEVELS FROM INDIVIDUAL PARKING-RELATED NOISE EVENTS

Source	Reference Sound Level ^a	Reference Distance	Sound Level at 50 Feet
Automobile at 14 mph	50 dBA	50' ^b	46 dBA
Car Alarm	75 dBA	25'	71 dBA
Car Horn	75 dBA	25'	71 dBA
Door Slam	70 dBA	25'	66 dBA
Tire Squeal	80 dBA	10'	70 dBA

^a All reference sound levels are from actual measurements taken at various times.

^b Sound levels at 50 feet assume an attenuation rate of 4.5 dBA per doubling of distance.

Source: PCR Services Corporation.

Consequently, parking lot noise events would not be expected to violate the City Noise Ordinance, nor would they be expected to significantly affect the overall community noise environment. Impacts related to parking lot activity would therefore be less than significant. However, noise from the parking facilities even though intermittent and short-term in nature, may be intermittently audible to the nearest apartment and hotel receptors located north, east, and south of the Project sites, and would be considered an adverse but less than significant impact.

Similar to parking structure noise, parking lot noise at the 10th Street Elementary School would be less than significant because of the distance attenuation and shielding provided by intervening structures.

(f) Hotel/Retail/Office

The Project would include hotel, retail, and office uses in proximity to sensitive receptors. Aside from parking and mechanical operations, these Project components typically do not involve operations that generate noise levels that can result in significant impacts. Recreational facilities such as outdoor pools, spas, and potentially tennis courts would be expected to be shielded from direct line of sight from external premises. As such, noise from future hotel, retail, and office operations would not be expected to generate significant noise levels at nearby sensitive receptors and would be considered less than significant.

(g) Residential

Residential development as part of the Project would cause increases in traffic noise and parking noise, as well as noise from mechanical equipment operations. These increases are addressed in the Traffic, Parking, and Mechanical Equipment Noise sections of the analysis. Residential operations would not be expected to generate significant noise levels from outdoor activities such as a pool, spa, recreational facility, and club house. Typical high-rise residential developments include walls and barriers to shield these common outdoor areas. As such, noise generated by these facilities would not be expected to result in significant noise increases at the nearest sensitive receptors. Residential noise is therefore considered less than significant.

In addition, the impact of external noise sources onto the proposed residential development should be evaluated as part of the engineering and design process. A noise study would be required to be submitted to the City of Los Angeles Building Department during the design process to demonstrate that the Project would meet the City of Los Angeles Noise Standards and Guidelines, as well as the State of California Noise Insulation Standards.

(h) Mechanical Equipment

Project development would include mechanical equipment which could generate noise levels which are audible at off-site noise sensitive locations. Such equipment could include, but not be limited to, air conditioners, fans, blowers, compressors, and pumps that would be used to support the basic functioning of the facility. However, most of this mechanical equipment would be expected to be located within enclosures or behind new buildings or otherwise shielded from the nearby noise receptor locations. In addition to this physical shielding, proper engineering during the detailed design phases, including noise control engineering of the mechanical equipment, should ensure that the noise generated by mechanical equipment operations does not exceed the noise standards at the nearest noise receptor locations.

(i) Rail Noise

The Project is not anticipated to generate any new rail traffic on the Metro Blue Line or any other rail line. Future train noise levels would be expected to be similar to existing conditions and would not result in significant impacts as a result of the Project.

3. MITIGATION MEASURES

The following mitigation measures are recommended for proposed development on the Project site.

a. Construction

Because noise associated with on-site construction activity would have the potential to exceed the level normally allowed under the City Noise Ordinance, the following measures are recommended to minimize construction-related noise impacts:

1. On-site construction activity that generates noise in excess of 75 dBA at a distance of 50 feet shall be limited to between 7:00 A.M. and 9:00 P.M. Monday through Friday and 8:00 A.M. and 6:00 P.M. on Saturdays, unless the City extends such hours.
2. The Los Angeles Unified School District shall be provided with a construction schedule.
3. All construction equipment shall be in proper operating condition and fitted with standard factory silencing features.
4. Sound blankets shall be used on all construction equipment for which use of sound blankets is technically feasible.
5. If noise levels from construction activity are found to exceed 75 dBA at the property line of an adjacent property and construction equipment is left stationary and continuously operating for more than one day, a temporary noise barrier shall be erected between the noise source and receptor.
6. All construction truck traffic shall be restricted to truck routes approved by the City of Los Angeles Department of Building and Safety, which shall avoid residential areas and other sensitive receptors to the extent feasible.

b. Operation

The following mitigation measures are recommended to address significant noise impacts occurring during the event and during the post-event hour and from the bus staging area.

7. Entrances and exits from parking lots in the Olympic and Figueroa Properties parking areas shall be located to minimize impact on residential, motel, or hotel units.
8. As part of the *South Park Area Parking and Circulation Management Plan (PCMP)*, an operational traffic plan shall be implemented which minimizes the amount of Project generated traffic passing by sensitive receptors by providing traffic control personnel to direct departing vehicles along corridors that will have the least impact on sensitive receptors in the area.

9. All events in the Central Plaza that would involve the use of public address systems shall be required to obtain a permit from the City for operating amplified sound and speech equipment.

4. ADVERSE EFFECTS

a. Construction

With the recommended mitigation measures, noise associated with construction activity would be reduced to the degree technically feasible. Nevertheless, impacts are likely to occur on the sensitive receptors located nearest to the Project site. Apartments located north, east, and south of the Project Site would occasionally experience high construction noise levels. This construction-related noise would constitute a significant unavoidable adverse impact of the Project.

b. Operation

Noise increases on Francisco Street north of Olympic Boulevard would be significant because of the increased vehicle traffic associated with the Project. This impact would be addressed by routing traffic onto Olympic Boulevard away from Francisco Street; however, this is not consistent with the Project's traffic analysis as reviewed and approved by LADOT. No other feasible mitigation measures are available to reduce this impact to less than significant. This impact is also expected to occur during weekend operations. This would be a significant and unavoidable adverse impact.

5. CUMULATIVE IMPACTS

a. Construction Noise

Construction noise events associated with future development projects would potentially generate noise levels of about 89 dBA at a distance of 50 feet from construction equipment without mitigation. Although noise from construction activity would increase community noise levels in the immediate vicinity of each individual development site, construction-related noise would be localized and short-term in nature. Consequently, it would not contribute to cumulative impacts at more distant locales. Even though all construction activity in the downtown area would be expected to be reduced to the extent feasible through compliance with the City Noise Ordinance, cumulative impacts related to construction noise would likely exceed the 75 dBA threshold and would therefore be considered significant.

b. Traffic Noise

Project-generated traffic would contribute to increased noise levels along all of the study roadway segments in the vicinity of the Project site. The cumulative increase in future CNEL above the existing condition, as shown in Table 41, would range from 0.9 to 7.3 dB. Cumulative increases along 9th Street, 11th Street, Figueroa Street, Flower Street, Hope Street, Olympic Boulevard, and Pico Boulevard would be less than 3 dB above existing conditions. Increases in traffic noise levels of less than 3 dBA are considered imperceptible and less than significant. Traffic on Francisco Street north of Olympic Boulevard would generate a cumulative increase of approximately 7.3 dBA above existing conditions. Increases above 5 dBA would be perceptible and are considered significant.

During a weekend Saturday, the cumulative increase in future CNEL along the same roadways would range from 0.9 to 5.6 dBA. Cumulative increases along 9th Street, 11th Street, Figueroa Street, Flower Street, Hope Street, Olympic Boulevard, and Pico Boulevard would be less than 3 dB above existing conditions. As such, the increases would be considered imperceptible and less than significant. Traffic on Francisco Street north of Olympic Boulevard would generate a cumulative increase of approximately 5.6 dBA above existing conditions. Increases above 5 dBA would be perceptible and are considered significant.

IV. ENVIRONMENTAL IMPACT ANALYSIS
I. PUBLIC SERVICES
1. FIRE

a. ENVIRONMENTAL SETTING

Fire prevention, fire suppression, and life safety services are provided throughout the City of Los Angeles (City) by the Los Angeles Fire Department (LAFD), as governed by the *Fire Protection and Prevention Plan* (Plan), an element of the City's General Plan, as well as the Fire Code section of the Los Angeles Municipal Code. The Plan and the Fire Code serve as guides to City departments, government offices, developers, and the public for the construction, maintenance, and operation of fire protection facilities located within the City of Los Angeles. Policies and programs addressed in these documents include the following: fire station distribution and location, required fire flow (i.e., water supply), fire hydrant standards and locations, access provision, and emergency ambulance service.⁵³ These issues, as they pertain to the proposed Project, are discussed below.

The Project site is located within the Central City area of the LAFD's jurisdiction. The LAFD operates three fire stations that have response duties for the Project site. All three stations are Task Force Stations, as opposed to Single Engine Stations. A Single Engine Station normally has a Single Engine Company while a Task Force Station has a Truck Company and two engines assigned. These facilities, Station Nos. 3, 9, and 10, are identified on Figure 43 on page 360. In addition, backup support is provided through mutual aid agreements between the LAFD and the Los Angeles County Fire Department.

Fire Station No. 10 is located approximately 0.7 miles from the Project site⁵⁴ at 1335 South Olive Street and would have primary response duties (the proposed Project is located within the Station No. 10 first-in district, thus Station No. 10 would be the first unit responding to a call at the Project site). This Task Force Station is comprised of a truck and an engine company, a paramedic and an EMT rescue ambulance⁵⁵, and is staffed by 14 LAFD personnel. The average response time from

⁵³ *Fire Protection and Prevention Plan, a part of the General Plan of the City of Los Angeles, adopted January 1979.*

⁵⁴ *All response distances were computed to the intersection of West Olympic Boulevard and South Figueroa Street.*

⁵⁵ *LAFD Fire Station and Equipment Directory, <http://www.cityofla.org/lafd/vehicles.htm>, September 15, 2000.*

Figure 43 City of Los Angeles Fire Stations Serving the Project Site

Fire Station No. 10 throughout its first-in district is approximately 4.4 minutes. The citywide average, by comparison, is approximately 5.5 minutes.⁵⁶

Fire Station No. 3 is located approximately 1.1 miles from the Project site at 108 North Fremont Avenue. The largest of the three stations in terms of equipment and personnel, this Task Force Station is furnished with a truck and an engine company, a paramedic and an EMT rescue ambulance, a hazardous materials response unit, a bus, emergency lighting⁵⁷, and is staffed by 15 LAFD personnel. This facility serves as Division One Headquarters. The average response time from Fire Station No. 3 throughout its first-in district is approximately 4.4 minutes.⁵⁸

Fire Station No. 9 is located approximately 1.1 miles from the Project site at 430 East 7th Street. This Task Force Station is equipped with a truck company, an engine company, and a paramedic rescue ambulance⁵⁹, and is staffed by 13 LAFD personnel. This station serves as Battalion One Headquarters. The average response time from Fire Station No. 9 throughout its first-in district is approximately 3.8 minutes.⁶⁰

Currently, the project site consists primarily of surface parking lots. Therefore, the current need for fire and emergency medical services at the project site is minimal.

In addition to facility equipment, personnel, and location, fire flow is an important factor in fire suppression activities. Fire flow is defined as the quantity of water available or needed for fire protection in a given area and is normally measured in gallons per minute (gpm), as well as duration of flow. The quantity of water necessary for fire protection varies by land use type, life hazard, occupancy, and the degree of fire hazard. Based on these factors, the LAFD requires flows ranging from 2,000 gpm from three adjacent fire hydrants flowing simultaneously in low density residential areas, to 12,000 gpm available to any city block in high density commercial or industrial areas. High density areas in which simultaneous fires might occur, such as high occupancy mixed use districts, may require fire flows above these standards. A minimum residual water pressure of 20 pounds per square inch (psi) is required to remain in the water system, while the necessary gpm is flowing, in order to be considered adequate by Fire Code standards.⁶¹

⁵⁶ Telephone conversation with Inspector Kevin Hamilton, LAFD, Construction Services, Hydrant Unit, September 18, 2000.

⁵⁷ LAFD Fire Station and Equipment Directory, <http://www.cityofla.org/lafd/vehicles.htm>, September 15, 2000.

⁵⁸ Telephone conversation with Inspector Kevin Hamilton, LAFD, Construction Services, Hydrant Unit, September 18, 2000.

⁵⁹ LAFD Fire Station and Equipment Directory, <http://www.cityofla.org/lafd/vehicles.htm>, September 15, 2000.

⁶⁰ Telephone conversation with Inspector Kevin Hamilton, LAFD, Construction Services, Hydrant Unit, September 18, 2000.

⁶¹ Fire Code of the Los Angeles Municipal Code, Section 57.09.06.

Fire hydrants and building fire water service systems connect directly to local water mains. The fire service system for each building or structure, however, has water lines, vaults, etc., for fire water flows that are separate from their respective domestic water systems.⁶² Fire flows are only required intermittently, and usage is therefore not monitored.

Fire hydrant type and spacing is dependent upon land use. In high density commercial areas, such as the Project site, fire service systems must be connected to double hydrants measuring 4-inches by 4-inches, located a maximum distance of 300 feet apart. The net land area served by each hydrant is limited to approximately 40,000 square feet for high density commercial uses.⁶³ Uses such as the proposed Project are likely to require conservative hydrant type, spacing and service area limitations reflected by the hydrant requirements for high density commercial uses, although specific hydrant requirements are determined during plot plan review.

The City of Los Angeles Fire Code specifies maximum response distances allowed between specific sites and engine and truck companies, based upon land use and fire flow requirements. As described in Section IV.A, Land Use, of this document, the Project site locale is considered part of the Downtown Center, with the site designated as downtown commercial and mixed land use. For high density commercial land uses, the Fire Code indicates a maximum response distance of 0.75 mile to the nearest engine company and 1.0 mile to the nearest truck company. Where response distances exceed these requirements, all structures must be equipped with automatic fire sprinkler systems and any other fire protection devices deemed necessary by the Fire Chief (e.g., fire signaling systems, fire extinguishers, smoke removal systems, etc.).

b. PROJECT IMPACTS

(1) Significance Thresholds/Methodologies

A significant impact to LAFD fire prevention and suppression services and/or emergency medical services would occur if the proposed Project: (1) generates demand for additional fire protection service that exceeds the staff and equipment capabilities of the LAFD to serve the Project site; (2) does not comply with all applicable LAFD code and ordinance requirements for construction, fire flow, water mains, fire hydrants, and access; or (3) generates construction activity or traffic levels that would substantially increase emergency response time to the Project site or neighboring properties.

⁶² *Community Redevelopment Agency of the City of Los Angeles, Los Angeles Sports and Entertainment Complex Draft EIR, March 26, 1997.*

⁶³ *Fire Code of the Los Angeles Municipal Code, Section 57.09.06*

(2) Analysis of Project Impacts

(i) Construction

Although construction of the Project would contribute to traffic levels in the area, both construction worker and truck trips would be predominantly freeway-oriented and would generally occur during off-peak hours. Given the proximity of regional freeways and the generally acceptable levels of service (LOS) at intersections in the vicinity of the Project site during off-peak hours, impacts on area surface streets would be minimal. Although minor traffic delays may result, particularly on freeway ramps, these impacts would be temporary in nature and therefore not significant. (See Section IV.F.1, Traffic, for further discussion.) As shown on Figure 43 on page 360, the Project site is in close proximity to LAFD Fire Stations 3, 9, and 10 (1.1, 1.1, and 0.7 miles, respectively), and are within allowable response time distances. Fire and emergency medical vehicles can generally respond to the Project site area without the use of nearby freeways. LAFD emergency response times would not be significantly impacted by construction traffic associated with the Sports and Entertainment District. No significant impacts would occur.

Construction of the proposed Project may result in temporary lane closures in the immediate area of the Project. The LAFD shall be notified of all construction scheduling in order to plan appropriate alternative response routes. Public detour routes would be established where required to divert traffic from the affected street segments. Due to the temporary and limited nature of the closures along roadways and the wide selection of alternative routes to and through the Project site, street and/or lane closures would not be expected to significantly affect emergency access or emergency response times. Project construction will comply with all LAFD code and ordinance requirements. Further, no additional demand for fire protection services beyond current capabilities would be expected to occur during construction. Mitigation measures have been developed to reduce potentially significant impacts during construction to less than significant levels.

(ii) Operation

The proposed Project shall comply with all applicable State and local codes and ordinances, and the guidelines found in the *Fire Protection and Fire Prevention Plan Element*, as well as the *Safety Element*, both of which are elements of the *General Plan of the City of Los Angeles*.

(1) Demand

The adequacy of fire protection for a given area is based on required fire flow, response distance from existing fire stations, and the LAFD's judgment for needs in the area. In general, the

required fire flow is closely related to land use. The quantity of water necessary for fire protection varies with the type of development, life hazard, occupancy, and the degree of fire hazard.⁶⁴

Project uses shall include approximately 1,590,000 square feet of hotel, 1,115,000 square feet of retail/entertainment/restaurant, 425,000 square feet of office/commercial, and 870,000 square feet of residential development. Implementation of the proposed Project would increase the need for LAFD fire protection and emergency medical services at the Project site. Mitigation measures have been developed to reduce this potentially significant impact to a level of insignificance.

The Project site is located approximately 0.6 miles from the nearest engine and truck companies (both at Fire Station No. 10). Since this response distance is within City Fire Code requirements pertaining to engine and truck companies, impacts with respect to distance criteria are considered less than significant.

Because major sports and entertainment structures associated with the proposed Project generally accommodate high-density/high-occupancy loads on an intermittent basis, the LAFD has developed aggressive deployment standards for similar uses. The typical deployment for such structures includes two Task Forces and an additional engine company, and may potentially include an emergency medical technician (EMT) unit if any of the responding stations is so equipped. Thus, in general, five engines (i.e., pump vehicles) and two trucks (i.e., aerial ladder vehicles) respond to emergency calls originating from major sports and entertainment developments.⁶⁵ Because there are three LAFD fire stations located within close proximity to the Project site, no significant impacts to LAFD staff and equipment capabilities are anticipated.

(2) Emergency Vehicle Access and Response Times

Emergency vehicle access to the proposed Project would continue to be provided from local public roadways such as Figueroa Street, 11th Street, and Pico Boulevard. Major roadways traversing and adjacent to the Project site would continue to provide public and emergency access. During the post-event period of events at the STAPLES Center and the Los Angeles Convention and Exhibition Center, traffic could result in considerable congestion at many area streets and intersections in the vicinity of the Project site. This traffic congestion could potentially cause significant delays in LAFD emergency response times for responses within or through the project site, thereby creating delays for other occupants and residents in the area. Mitigation measures have been developed to reduce this potentially significant impact to a less than significant level. Fire

⁶⁴ Correspondence from Richard A. Warford, Assistant Fire Marshal, LAFD, Bureau of Fire Prevention and Public Safety, September 20, 2000.

⁶⁵ Community Redevelopment Agency of the City of Los Angeles, Los Angeles Sports and Entertainment Complex Final EIR, June 9, 1997.

lanes would be developed for secondary emergency access, as required by the Fire Code and the LAFD.

(3) Fire Flow

Water service for fire fighting purposes would continue to be provided by the City of Los Angeles Department of Water and Power (DWP). The existing water system, in conjunction with proposed realignments, would serve both domestic and fire water needs. There are two pressure zones that supply the section of downtown that includes the Project site. The first zone extends as far south as Olympic Boulevard. This zone has a static water pressure of approximately 90 psi at the Project site. The second zone includes the area from Olympic Boulevard south and encompasses most of the Project site. The southern zone has a static water pressure of approximately 63 psi at the Project site.⁶⁶ Therefore, the adjacent water lines currently maintain a water pressure well in excess of the required 20 psi residual pressure.

Exact fire flow requirements cannot be exactly determined at this time, because flow requirements are based on the final configuration of the project. When the final site plan is submitted, the LAFD will dictate fire flow requirements in terms of flow and pressure required. The fire flow required for the LAFD for the proposed Project is 4,000 gpm (i.e., 1,000 gpm from 4 fire hydrants flowing simultaneously)⁶⁷, although the Project could necessitate fire flow as high as 9,000 to 15,000 gpm. In order to determine if the existing water system is adequate to meet fire flow demand, the Water Operations Division of DWP will conduct a flow study prior to issuance of any building permits. In order to ensure adequate fire flows are provided to the proposed Project, a related mitigation measure is provided below.

Based on the results of the flow study and LAFD requirements, further expansion to the existing system and site-specific fire suppression improvements may be required. The size and location of the laterals cannot be determined at this time. In order to meet fire flow requirements, the project is expected to require upsizing of approximately 900 feet of the 8-inch water line in Olympic Boulevard to a 12-inch water line, and the construction of an 8-inch water line in Cherry Street, between 11th Street and Olympic Boulevard.

Hydrants shall be installed per Fire Code and LAFD requirements for the hotel, retail/entertainment/restaurant, office/commercial, and residential development uses associated with the proposed Project. It is expected that additional fire hydrants will be required both on public right-of-way and possibly on private property. Installation of automatic fire sprinklers would be

⁶⁶ *Psomas, Los Angeles Sports and Entertainment District, Preliminary Water, Sewer and Storm Drain Infrastructure Report, September 13, 2000.*

⁶⁷ *Correspondence from Richard A. Warford, Assistant Fire Marshal, LAFD, Bureau of Fire Prevention and Public Safety, September 20, 2000.*

undertaken in coordination with the LAFD. Supplemental fire protection devices (e.g., fire alarms, fire extinguishers, emergency exits, etc.) would also be incorporated into new Project structures, as required by LAFD. Mitigation measures have been developed to reduce the potentially significant impact to fire flow service to a level of insignificance.

c. MITIGATION MEASURES

The following mitigation measures for fire protection and emergency medical service shall be employed during the construction and operation of the proposed Project:

i. Construction

1. The Applicant shall ensure that during construction, LAFD access will remain clear and unobstructed.
2. Proposed roadway modifications shall be reviewed by the LAFD to assure adequate access to the Project site and adjacent uses.
3. The DWP shall conduct a flow test prior to the issuance of certificates of occupancy to determine whether the existing water system meets fire flow requirements imposed by the Fire Department for the Project. The Applicant shall undertake and complete those required improvements identified by the DWP as a result of findings of the flow test.

ii. Operations

4. The proposed Project shall comply with all applicable State and local codes and ordinances, and the guidelines found in the *Fire Protection and Fire Prevention Plan Element*, as well as the *Safety Element*, both of which are elements of the General Plan of the City of Los Angeles.
5. The Applicant shall submit definitive plans and specifications to the LAFD and requirements for necessary permits shall be satisfied prior to commencement of construction on any portion of the proposed Project.
6. The Project shall provide access for LAFD apparatus and personnel to and into all structures shall be required. At least two different ingress/egress roads for each area, which will accommodate major fire apparatus and provide for major evacuation during emergency situations, shall be required. Additional vehicular access may be required by the LAFD where buildings exceed 28 feet in height.

7. The Applicant shall submit plans that show proposed access road(s) and turning area(s) for LAFD approval.
8. Project development shall conform to the standard street dimensions shown on Department of Public Works Standard Plan D-22549.
9. Project design shall use standard cut-corners on all street corners to permit easy turning access for LAFD vehicles.
10. Fire lane width shall not be less than 20 feet. When a fire lane must accommodate the operation of an LAFD aerial ladder apparatus or where fire hydrants are installed, those portions shall not be less than 28 feet in width.
11. Fire lanes, where required, and dead ending streets shall terminate in a cul-de-sac or other approved turning area. No fire lane or dead ending street shall be greater than 700 feet in length or secondary access shall be required.
12. All access roads, including fire lanes, shall be maintained in an unobstructed manner, and removal of obstructions shall be at the owner's expense. The entrance to all required fire lanes or required private driveways shall be posted with a sign no less than three square feet in area in accordance with Section 57.09.05. of the *Los Angeles Municipal Code*.
13. Where above ground floors are used for residential purposes, the access requirement shall be interpreted as being the horizontal travel distance from the street, driveway, alley, or designated fire lane to the main entrance, or exit of individual units.
14. To accommodate an LAFD apparatus, if necessary, the minimum outside radius of paved surface shall be 35 feet. An additional six feet of clear space must be maintained beyond the outside radius to a vertical point 13 feet 6 inches above the paved surface of the roadway.
15. Where access for a given development requires accommodation of Fire Department apparatus, overhead clearance shall not be less than 14 feet.
16. No building shall be constructed more than 150 feet from the edge of a roadway of an improved street, access road, or designated fire lane.
17. Adequate off-site public and on-site private fire hydrants may be required. Their number and location are to be determined after the LAFD's review of the Project's plot plan. The maximum distance between fire hydrants on roads and fire lanes in a regional commercial area is 300 feet.
18. A new or modified Parking and Circulation Management Plan, which addresses vehicle and pedestrian flows for Project-related events (see Section IV.F.1, Traffic), shall also identify measures for ensuring LAFD access to the Project site, parking lots, and the immediate vicinity during the post-event period.

d. ADVERSE EFFECTS

After the incorporation of mitigation measures, no adverse effects to fire and emergency medical services, response times or fire flow would occur.

e. CUMULATIVE IMPACTS

The proposed Project in combination with related projects would not result in any adverse impacts to fire/emergency medical services or response times. Related project applicants would be required to coordinate with the LAFD to ensure that related project construction and operations would not significantly impact LAFD response times. In addition, related project applicants would be required to design and operate their facilities to ensure sufficient fire flow. No significant cumulative impacts are anticipated.

IV. ENVIRONMENTAL IMPACT ANALYSIS
I. PUBLIC SERVICES
2. POLICE

a. ENVIRONMENTAL SETTING

Police protection services for the Central City area are provided by the Los Angeles Police Department (LAPD), which operates 18 service areas citywide. The Project site is located within the LAPD's Central Bureau - Central Area, a triangle-shaped area of approximately 5.1 square miles, bounded roughly by Lilac Terrace, Stadium Way, Elysian Park Avenue, Lookout Drive, and the Harbor/Pasadena Freeway to the north, the Los Angeles River to the east, Sunset Boulevard and the Harbor Freeway to the west, and West Washington Boulevard, Maple Street, and West 7th Street to the south.⁶⁸ The Central Area is further subdivided into 52 reporting districts, which are small geographic units used for resource deployment purposes and statistical analysis.⁶⁹ The Project site falls within two reporting districts, Reporting Districts 171 and 182, and is adjacent to Reporting District 181, collectively defined by the Harbor Freeway, West 9th Street, South Hill Street, and West Pico Boulevard.

The Central Community Police Station is located at 251 East 6th Street in Los Angeles, approximately 1.4 miles east of the site. The Central Community Police Station is staffed by approximately 328 sworn and 32 civilian members of the LAPD and is responsible for all police operations in downtown Los Angeles. The average response time to emergency calls in the Central Area is 5.6 minutes which compares favorably with the citywide average of 6.6 minutes.⁷⁰ The Central Community Police Station, Reporting Districts 171, 181 and 182, and the project site are shown on Figure 44 on page 370.

Numbers of selected crimes and attempts by crime category for January through June 2000 were obtained for Reporting Districts 171, 181 and 182 from the LAPD⁷¹, and are shown in Table 43 on page 372. In addition, the average number of selected crimes and attempts by crime category

⁶⁸ *Written response to Los Angeles Sports and Entertainment District Notice of Preparation from Commander Sharon Papa, Community Affairs Group, Community Relations Section, October 27, 2000.*

⁶⁹ *Draft City of Los Angeles Citywide CEQA Technical Guide, August 1996.*

⁷⁰ *Telephone communication with Officer Tanya Hanamakai, Community Relations Section, Crime Prevention Unit, September 14, 2000 and response to Los Angeles Sports and Entertainment District Notice of Preparation from Commander Sharon Papa, Community Affairs Group, Community Relations Section, October 27, 2000.*

⁷¹ *Facsimile from Officer Tanya Hanamakai, Community Relations Section, Crime Prevention Unit, September 14, 2000.*

Figure 44 City of Los Angeles Police Department Central Area and Reporting Districts

for all 52 Reporting Districts included in the Central Area is also provided. Crime statistics for Reporting District 171 accurately represent existing crime conditions at the project site. Crime statistics for Reporting District 182 may not accurately represent existing crime conditions for that portion of the project site that falls within Reporting District 182. This is because Reporting District 182 encompasses a much larger geographic area than just the project site. In addition, existing land uses on the project site that fall within Reporting District 182 are primarily surface parking lots, which are different than the commercial, industrial and residential land uses that characterize the majority of Reporting District 182.

As shown in Table 43, Reporting District 171 is currently at or below the average for the 52 Reporting Districts for almost all categories of selected crimes. For Reporting District 181, crimes and attempts that are noticeably higher than the 52 Reporting District average include breaking and entering into automobiles, and theft.

There is an existing command staff post located in the STAPLES Center. The post is staffed by the LAPD during STAPLES Center events.

b. PROJECT IMPACTS

(1) Significance Thresholds/Methodologies

The LAPD makes determinations regarding the adequacy of police protection services for each service area and the City as a whole, based upon evaluation of area conditions. A project would result in a significant impact to police protection services if it: (1) generates demand for additional police protection services that exceeds the capability of the LAPD to serve the Project site; or (2) causes a substantial increase in emergency response times as a result of increased traffic congestion, during either construction or operation of the project.

(2) Analysis of Project Impacts

(a) Construction

Although construction of the proposed Project would contribute to traffic levels in the area, both construction worker and truck trips would be predominantly freeway-oriented and would generally occur during off-peak hours. Given the proximity of regional freeways and the generally acceptable levels of service (LOS) at intersections in the vicinity of the Project site during off-peak hours, impacts on area surface streets would be minimal. Although minor traffic delays may result, particularly on freeway ramps, these impacts would be temporary in nature and therefore not significant. See Section IV.F.1, Traffic, for further discussion. As shown on Figure 44 on page 370, the Central Area Community Police Station is centrally located within its service area. Police

Table 43

**LAPD SELECTED CRIMES AND ATTEMPTS BY REPORTING DISTRICT
JANUARY – JUNE 2000**

	RD 171	RD 181	RD 182	Average for 52 RDs in Central Area
Breaking and Entering	5	2	18	5
Robbery	1	5	15	8
Murder	0	0	0	0
Rape	0	1	4	1
Aggravated Assault	6	7	31	11
Breaking and Entering into Automobile	7	48	60	14
Theft	13	102	41	31
Auto Theft	6	11	18	5
Total	38	176	187	75

Source: LAPD, September 2000.

vehicles can generally respond to sites throughout the Central Area without the use of nearby freeways. LAPD emergency response times would not be significantly impacted by construction traffic associated with the Sports and Entertainment District. No significant impacts would occur.

Construction of the proposed Project may result in temporary lane closures in the immediate area and the portion of 12th Street between Flower Street and Figueroa Street shall be realigned to facilitate traffic flow. The LAPD would be notified of all construction scheduling in order to plan appropriate alternative response routes. Public detour routes would be established where required to divert traffic from the affected street segments. Due to the temporary and limited nature of the closures along roadways and the wide selection of alternative routes to and through the Project site, street and/or lane closures would not be expected to significantly affect emergency access or emergency response times. However, mitigation measures have been developed to reduce this potentially significant impact during construction to a less than significant level.

During construction, the on-site storage of construction equipment and building materials could result in theft. This may potentially necessitate police involvement unless adequate safety and security measures are implemented. A mitigation measure has been developed to reduce this potentially significant impact during construction to a less than significant level.

(b) Operation

The proposed Project is anticipated to accommodate high density/high occupancy events on an intermittent basis. Event-related population increases of this nature would initially generate demand for additional security officers during events at the Project site and at STAPLES Center,

especially for crowd and traffic control. The extent of additional protection needed would vary in accordance with the type of event and expected number of spectators. Project uses include approximately 1,590,000 square feet of hotel, 1,115,000 square feet of retail/entertainment/restaurant, 425,000 square feet of office/commercial, and 870,000 square feet of residential development. Additional police services would be needed to serve these proposed uses. The need for additional police services could extend off-site during events at the Project site and at STAPLES Center when peak usage generates off-site parking and associated pedestrian traffic. Mitigation measures have been developed to reduce this potentially significant impact to a less than significant level.

Reporting Districts for portions of the Project site currently have a higher than average crime rate (in comparison with the average for all 52 Reporting Districts in the Central Area) for breaking and entering into automobiles and theft. With the development of additional entertainment uses, and parking and pedestrians associated with these uses, these types of crimes could increase on-site and off-site when the Project generates off-site parking during peak-usage. This could place an increased demand on police protection services. Mitigation measures have been developed to reduce this potentially significant impact to a less than significant level.

The proposed Project would include security features that would attempt to minimize the potential for crime on-site and demand for additional police protection service. These features would include the provision of a private on-site security force during events at the proposed Project and STAPLES Center, and regular patrols when events are not taking place, appropriate security and parking lot lighting, and development of an Emergency Procedures Plan to facilitate security response by proposed Project personnel. Additional systems in place to further enhance security in the vicinity of the Project site, during regular as well as special events, include regular patrols by the LAPD and foot and bicycle patrols by uniformed security officers, which are funded via an existing Business Improvement District. In addition, most of the off-site parking lots that could be potentially used during peak Project activity periods have their own security personnel. Furthermore, additional appropriate security measures would be implemented by the Applicant in coordination with the LAPD. As an example of how this will be implemented, the Applicant will complete an annual assessment of off-site Project related crime, in coordination with the LAPD, subject to the approval of the City Planning Department, and in response develop and implement additional security measures. These security measures, in addition to the mitigation measures that have been developed, reduce this potentially significant impact to a less than significant level.

Emergency access to the proposed Project would continue to be provided from local public roadways. Major roadways traversing and adjacent to the Project site would continue to provide public and emergency access. During events at the STAPLES Center and the Los Angeles Convention and Exhibition Center, and during the post-event period, traffic could result in considerable congestion at many area streets and intersections in the vicinity of the project site. This traffic congestion could potentially cause significant delays in LAPD emergency response times for

responses within or through the project site, thereby creating delays for other occupants and residents in the area. Mitigation measures have been developed to reduce this potentially significant impact to a less than significant level.

c. MITIGATION MEASURES

The following mitigation measures would be employed to provide adequate on-site security and minimize on-site demand for police protection service during the construction and operation of the proposed Project:

(1) Construction

1. The Applicant shall ensure that during construction, LAPD access will remain clear and unobstructed.
2. Proposed roadway modifications shall be reviewed by the LAPD to assure adequate access to the proposed Project and adjacent uses.
3. The Applicant shall provide security features on the construction site(s), such as guards, fencing, and locked entrances.

(2) Operations

4. The Applicant shall submit plot plans for all proposed development to the Los Angeles Police Department's Crime Prevention Section for review and comment. Security features subsequently recommended by the LAPD shall be implemented to the extent feasible.
5. The Applicant shall file building plans with the LAPD Central Area Commanding Officer. Plans shall include access routes, floor plans, and any additional information that might facilitate prompt and efficient police response.
6. Alarms and/or locked gates shall be installed on doorways providing public access to commercial facilities.
7. Landscaping shall not be planted in a way that could provide cover for persons tampering with doors or windows of commercial facilities, or for persons lying in wait for pedestrians or parking garage users.
8. Additional lighting shall be installed where appropriate, including on the Project site and in parking garages, as determined in consultation with the LAPD.

9. Safety features shall be incorporated into project design to assure pedestrian safety, assist in controlling pedestrian traffic flows, and avoid pedestrian/vehicular conflicts on-site. Safety measures may include provision of security and traffic control personnel; approved street closures for special events or peak pedestrian activity; clearly designated, well-lighted pedestrian walkways on-site; special street and pedestrian-level lighting; physical barriers (e.g., low walls, landscaping), particularly around the perimeter of the parking garages, to direct pedestrians to specific exit locations that correspond to designated crosswalk locations on adjacent streets; guide signs for Project site-bound pedestrians approaching the site from the Pico Blue Line Metro station; and provision of an on-site bus passenger drop-off facility.
10. The Applicant shall develop and implement a new or modified Security Plan to minimize the potential for on-site crime and the need for LAPD services. The plan would outline the security services and features to be implemented, as determined in consultation with the LAPD. The following shall be included in the plan:
 - a. Provision of an on-site security force that would monitor and patrol the Project site. During operational hours, security officers shall perform pedestrian, vehicular, and/or bicycle patrols.
 - b. Implementation of a video camera surveillance system and/or a closed-circuit television system;
 - c. Additional security features shall be incorporated into the design of proposed parking facilities, including “spotters” for parking areas, and ensuring the availability of sufficient parking either on- or off-site for all building employees and anticipated patrons and visitors;
 - d. Security lighting incorporating good illumination and minimum dead space in the design of entryways, seating areas, lobbies, elevators, service areas, and parking areas to eliminate areas of concealment. Security lighting shall incorporate full cutoff fixtures which minimize glare from the light source and provide light downward and inward to structures to maximize visibility;
 - e. Provision of lockable doors at appropriate Project entryways, offices, retail stores, and restaurants;
 - f. Installation of alarms at appropriate Project entryways and ancillary commercial structures;
 - g. The City shall approve of all businesses desiring to sell or allow consumption of alcoholic beverages through specific plan regulation or issuance of one or more Conditional Use Permits;
 - h. Accessibility for emergency service personnel and vehicles into each structure, and provision to the Central Area Commanding Officer of detailed diagram(s) of the Project site, including access routes, unit numbers, and any information that would facilitate police response.

- i. In addition, security procedures regarding initial response, investigation, detainment of crime suspects, LAPD notification, crowd and traffic control, and general public assistance shall be outlined in the Security Plan. The plan would be subject to review by the LAPD, and any provisions pertaining to access would be subject to approval by the City of Los Angeles Department of Transportation.
11. The Applicant shall develop and implement a Emergency Procedures Plan to address emergency concerns and practices. The plan shall be subject to review by the LAPD, and any provisions pertaining to access would be subject to approval by the City of Los Angeles Department of Transportation.
12. A new or modified Parking and Circulation Management Plan which addresses vehicle and pedestrian flows for Project-related events (see Section IV.F.1, Traffic) shall also identify measures for ensuring Police Department access to the Project site, parking lots, and the immediate vicinity during the post-event period. Traffic control personnel may be provided on adjacent roadways and in parking areas during Project-related events and immediately preceding and following events to help prevent vehicles and pedestrians from obstructing emergency access.
13. The Applicant shall complete an annual assessment of off-site Project related crime, in coordination with the LAPD, subject to the approval of the City Planning Department, and in response develop and implement additional security measures.

d. ADVERSE EFFECTS

After the incorporation of mitigation measures, no adverse effects to police protection services or response times would occur.

e. CUMULATIVE IMPACTS

The proposed Project, in combination with the related projects and background growth identified in Section III.B, Cumulative Development, would result in an increased demand for police services. As for the proposed Project, any future projects would likely include specific features designed to reduce impacts on police services. Future projects would be evaluated individually to determine appropriate measures to address new demand. Applicants for related projects would be required to coordinate the design and operation of their facilities with the LAPD. In addition, the need for additional police officers, staffing, and/or facilities generated by cumulative growth and demand for police services may be addressed through the City's annual budgeting process and capital improvement programs, should the City determine that service improvements are necessary. As these measures are beyond the scope and control of the proposed Project, impacts to police services are determined to be cumulatively significant.

IV. ENVIRONMENTAL IMPACT ANALYSIS
I. PUBLIC SERVICES
3. SCHOOLS

Project impacts upon schools are related to direct increases in population resulting from the housing supply created by The Los Angeles Sports and Entertainment District (the Project), and indirect increases in population due to employment at the Project site. Please refer to Section IV.C, Population, Housing, and Employment for additional information regarding population, housing, and employment increases.

The supply of schools can also be affected by development activities. An effect on the supply of schools would typically result from a project involving school construction or school relocation.

a. Environmental Setting

The Project site is located within the Los Angeles Unified School District (LAUSD), which provides both primary and secondary educational services for both the City and County of Los Angeles. The LAUSD is the second largest school district in the United States, with a total enrollment of over 700,000 students. The LAUSD serves students living in an area of over 700 square miles with 645 schools, including 440 elementary, 71 middle, 52 high, 43 continuation, 18 alternative, 18 special education, 2 K-12, and one community day school. The City of Los Angeles makes up the majority of LAUSD, with all but a very small portion of the City within its boundaries. Eight other cities – Cudahy, Gardena, Huntington Park, Lomita, Maywood, San Fernando, Vernon, and West Hollywood – also lay completely within the boundary of LAUSD. Additionally, LAUSD serves portions of 16 other nearby cities and unincorporated areas of Los Angeles County⁷².

The Southern California Association of Governments (SCAG), the region's federally-designated metropolitan planning organization, is responsible for preparing the *Regional Transportation Plan* (RTP). Adopted in May 1998, the RTP contains a set of baseline socioeconomic projections including projections of total population, households, and employment at the regional, county, subregional, jurisdictional and census tract levels. The RTP uses 1994 as the base year with projections for the years 2000, 2005, 2010, 2015, and 2020. Because 2000 Census data is not yet available, SCAG RTP projections are currently the most useful set of population, household, and employment forecasts for the type of analysis contained in this EIR. SCAG

⁷² *Los Angeles Unified School District, School Facilities Fee Plan, March 2000, page 3-3*

forecasts were used to make the projections of housing growth used in LAUSD's *School Facilities Fee Plan* and the *School Facilities Needs Analysis*.

Table 44 on page 379, shows the projected number of housing units and the growth in housing units for 1999 and 2010 for the LAUSD service area, based on forecasted number of households within the boundaries of LAUSD.

Housing units within LAUSD are projected to increase to nearly 2 million by 2010. Housing vacancy rate for the LAUSD, the percentage of unoccupied housing units, is approximately 5 and one-half percent, and is expected to remain stable in the future. Likewise, the occupancy rate, the average number of persons occupying a unit, is anticipated to remain stable, insofar as the economy continues its current strength⁷³

(1) Current and Recent Historical Enrollment from Existing Housing

The LAUSD is presently experiencing its highest total enrollment in history. After enduring a small decrease in total enrollment in the early 1990's, enrollment has rebounded sharply, increasing nearly 10 percent during the past five years. Table 45 on page 380 displays the total enrollment in LAUSD over the past 10 years.

(2) Projected Future Enrollment from Existing Housing

Enrollment in LAUSD schools from existing housing is forecasted to decrease slightly in the next decade. Current forecasts call for an enrollment decrease of slightly over nine percent over the next 10 years. This is in obvious contrast with the enrollment growth realized by LAUSD in the previous decade. This expected reduction is attributed to declining birth rates and the resultant decrease in student generation rates⁷⁴. Table 46 on page 381 shows the projected decrease in student enrollment from the existing housing supply.

(3) Projected Future Enrollment from New Housing Construction

Although enrollment in LAUSD schools from existing housing is forecasted to decrease slightly over the next decade, total enrollment is expected to increase slightly, due to a total of 97,800 students generated from anticipated new housing development in the LAUSD area. Total future enrollment is expected to rise from 711,200 in 1999-2000 to 742,700 in 2010. This increase in total enrollment, 4.4 percent, is forecasted to be slightly under one-third of the 13.8 percent enrollment increase seen in the previous decade.

⁷³ *Ibid*, page 3-4.

⁷⁴ *Ibid*, page 3-6.

Table 44

PROJECTED HOUSING SUPPLY LOS ANGELES UNIFIED SCHOOL DISTRICT

	Housing Units in District 1999 ^a	Increase 1999-2009	Housing Units 2010 ^a
City of Los Angeles	1,331,400	194,600	1,526,000
Unincorporated Los Angeles County	268,600	39,300	307,900
Other Cities	125,000	18,300	143,300
Total LAUSD	1,725,000	252,200	1,977,200

^a January 1, 1999 and January 1, 2010

Sources: Los Angeles Unified School District School Facilities Fee Plan, March 2000.

(4) Open Enrollment

LAUSD utilizes a State-mandated open enrollment policy that enables students anywhere within the district to apply to any regular, grade-appropriate Los Angeles public school with designated “open enrollment” seats. Open enrollment is designed to help relieve school overcrowding by affording students the opportunity to transfer to a school of their choice, subject to space availability. LAUSD does not supply school bus transportation for the open enrollment program. There were 22,000 students attending schools other than their neighborhood area schools through the open enrollment option in 1999, and anticipate approximately 6,000 seats available for 2000.⁷⁵

(5) Portable Classrooms

LAUSD employs the use of portable classrooms to assist in the relief of school overcrowding. These facilities are designed to accommodate 25 students per portable unit for elementary schools and 30 students per portable unit for junior high and senior high schools. Utilization of portable classrooms is subject to an open space requirement.

(6) Regulatory Framework

Senate Bill 50 (SB 50) was enacted in August 1998, and represents the most comprehensive school facility finance and developer fee reform legislation since the adoption of the 1986 School Facilities Act. SB 50 provides for a program of comprehensive school facilities financing and reform by authorizing a \$9.2 billion school facilities construction and modernization bond, and by establishing a new program to provide state funding for school facilities. The legislation states that local agencies are restricted, with but a few exceptions, from exacting fees or other requirements to mitigate the effects of new land development on school facilities beyond the fee amounts authorized

⁷⁵ Los Angeles Unified School District, Press Release of April 22, 1999

Table 45**TOTAL LAUSD ENROLLMENT**

Year	Total Enrollment
1999-2000	711,187
1998-1999	691,143
1997-1998	681,505
1996-1997	667,627
1995-1996	649,054
1994-1995	636,416
1993-1994	639,687
1992-1993	641,206
1991-1992	639,699
1990-1991	625,461

Sources: Los Angeles Unified School District School Facilities Fee Plan, March 2000.

by SB 50. SB 50 states that the maximum fee amounts allowed by the bill are “deemed to provide full and complete school facilities mitigation” for purposes of CEQA⁷⁶. Pursuant to the bill, initial, or “Level 1” fees that can currently be charged by a school district are \$2.05 per square foot of residential construction and \$0.33 per square foot of commercial construction. These rates were amended by the State Allocation Board, a specialized board within the California Department of General Services in January 2000. The State Allocation Board is responsible for determining the allocation of State resources used for the construction and modernization of local public school facilities.

b. PROJECT IMPACTS

(1) Significance Threshold/Methodologies

A project would have a significant impact on school facilities if it would generate an amount of new students that would exceed the capacity of the schools designated to serve the project site.

(2) Analysis of Supply of School Facilities

The Project does not contain any school construction, so there is no impact on the supply of school facilities available to students generated at the Project site.

⁷⁶ *Government Code, Section 65996(b)*

Table 46

PROJECTED ENROLLMENT FROM EXISTING HOUSING

Grade Level	1999-2000 Enrollment	2010-2011 Enrollment	Change in Enrollment
Elementary (K-5)	381,200	324,600	-56,600
Middle (6-8)	153,300	141,000	-12,300
High (9-12)	176,700	179,300	2,600
Total	711,200	644,900	-66,300

Source: Los Angeles Unified School District School Facilities Fee Plan, March 2000.

(3) Analysis of Demand for School Facilities

The Project includes the construction of 800 new residential dwellings. These dwellings are all located in adjacent structures, and therefore it is assumed that all of the students in each age group would attend the same school. The schools designated by LAUSD to serve the Project site are shown below and on Figure 45 on page 382:

Elementary School:

- 10th Street School, 1000 Grattan St., Los Angeles

Middle School:

- Berendo Middle School, 1157 S. Berendo St., Los Angeles

High School:

- Belmont High School, 1575 W. 2nd St., Los Angeles

The School Facilities Fee Plan, updated in March 2000, presents LAUSD methodology for forecasting student generation. The student generation rate (SGR) for new development is determined empirically, and is based on LAUSD enrollment of students who reside in housing constructed in the past five years. Different types of housing units have been found to have great disparity in generating students, therefore the housing type of a proposed development plays a key role in determining the number of students a project is anticipated to generate. The LAUSD has developed student generation rates for a variety of housing types (i.e., owner vs. renter, single-family vs. condominium vs. rental units and by the number of bedrooms within a unit) as well as income characteristics. As specifics regarding this level of detail is currently unknown for the Project's housing component, it is conservatively estimated, and for planning purposes only, that the Project's housing would be rental units and evenly split between two- and three-bedroom units. These assumptions were made as they reflect the types of housing which have the highest student generation rates and thus providing a conservatively high estimate of the students that would be

Figure 45 Project-Designated Schools

generated by the Project. It is also reasonable to assume that the actual student generation from the Project would be less than that forecasted in this analysis due to potential that some of the housing units would be developed as condominiums and/or housing units with fewer bedrooms.

Utilizing the most recent SGRs for the LAUSD area, it is anticipated the new housing supply and employment associated with the Project will generate a total of 1,619 new students, consisting of 829 elementary school students, 333 middle school students, and 457 high school students.

Adding 829 new students to the 10th Street Elementary School's forecasted future enrollment of 1,880 would exceed the school's forecasted future capacity. There is not sufficient open space to provide a suitable amount of portable classrooms to accommodate the excess demand for classroom facilities, and therefore the additional students would be considered a significant impact. It is important to note that the capacity of the 10th Street Elementary School would be exceeded prior to the addition of any Project students.

Adding 333 new students to the Berendo Middle School's forecasted future enrollment of 4,550 would exceed the school's forecasted future capacity. There is not sufficient open space to provide a suitable amount of portable classrooms to accommodate the excess demand for classroom facilities, and therefore the additional students would be considered a significant impact. It is important to note that the capacity of Berendo Middle School would be exceeded prior to the addition of any Project students.

Adding 457 new students to the Belmont High School's forecasted future enrollment of 7,680 would exceed the school's forecasted future capacity. There is not sufficient open space to provide a suitable amount of portable classrooms to accommodate the excess demand for classroom facilities, and therefore the additional students would be considered a significant impact. It is important to note that the capacity of Belmont High School would be exceeded prior to the addition of any Project students.

(4) LAUSD Fees for Commercial and Residential Construction

Development fees payable to the LAUSD are calculated by applying the maximum construction fees specified by the State Allocation Board, \$2.05 per square foot of residential construction and \$0.33 per square foot of commercial construction.

c. MITIGATION MEASURES

SB 50 states that the maximum fee amounts allowed by the bill are "deemed to provide full and complete school facilities mitigation" for purposes of CEQA. No further mitigation beyond the fees described in Section b.(4), above, are required or recommended.

d. ADVERSE EFFECTS

The Project does/does not generate students in excess of the forecasted capacity of schools designated to serve the Project site. This significant impact is fully mitigated to a less than significant level by payment of development fees to LAUSD.

e. CUMULATIVE IMPACTS

As shown in Table 47 on page 385, the Project is anticipated to directly generate 1,619 new students within LAUSD's service area. Related residential projects (see Section III. B, Cumulative Development, for a comprehensive list of related projects) are scheduled to add an additional 1,303 housing units, which are projected to generate an additional 508 students residing within LAUSD's service area.

A total of 13,047 new jobs are estimated to be created by related commercial projects, as shown in Section III. B. Using LAUSD's student generation parameters, related projects are estimated to generate an additional 2,540 new students in the LAUSD service area by 2008.

Any significant impacts on the demand for schools within LAUSD attributable to residential construction are considered mitigated by the development fees payable to LAUSD.

Table 47

ESTIMATED STUDENT GENERATED BY THE PROJECT

A. Housing

School Level	Student Generation Rates for Apartments		Number of Proposed Housing Units		Forecasted Student Generation		
	Two-Bedroom	Three Bedroom	Two-Bedroom	Three Bedroom	Two-Bedroom	Three Bedroom	Total
Elementary	0.22	0.52	400	400	88	208	296
Middle	0.10	0.20	400	400	40	80	120
High	0.14	0.27	400	400	56	108	164
Total					184	396	580

B. Employment

School Level	Student Generation Rate	Project Employment	Forecasted Student Generation
Elementary	0.20	5,343	533
Middle	0.08	5,343	213
High	0.11	5,343	293
Total			1,039

C. Total Student Generation

School Level	Residential	Employment	Total
Elementary	296	533	829
Middle	120	213	333
High	164	293	457
Total	580	1,039	1,619

Source: LAUSD Student Generation Rates applied to Project characteristics.

IV. ENVIRONMENTAL IMPACT ANALYSIS
I. PUBLIC SERVICES
4. PARKS AND RECREATION

a. ENVIRONMENTAL SETTING

The City of Los Angeles Department of Recreation and Parks maintains and operates more than 375 sites for recreational use. The Department operates 123 recreation centers, 58 swimming pools, seven lakes, seven camps both in and out of town, 13 golf courses, more than a dozen museums and historic sites, and hundreds of programs for youth, seniors, the physically disabled and volunteers. The Department administers more than 15,600 acres of parkland, including 4,217 acres in Griffith Park, one of the largest municipal parks within the boundaries of an American city. Other large parks in the City of Los Angeles are Elysian Park and Exposition Park, which are close to downtown, MacArthur Park, Echo Park and Harbor Regional Park in Harbor City.⁷⁷

The City's *General Plan Framework* sets forth a citywide comprehensive long-range growth strategy and defines and identifies policies that will be implemented through subsequent amendments of the City's community plans, zoning ordinance, and other pertinent programs. Parks are also noted as an essential component of the greater urban forest infrastructure. One of the primary recreation and parks goals is to provide sufficient and accessible parkland and recreational opportunities in every neighborhood of the City that would give all residents the opportunity to enjoy green spaces, athletic activities, social activities, and passive recreation. The corresponding objective for achieving this goal is to monitor and forecast demand for existing and projected recreation and park facilities and programs. Policy 9.23.5 of the *General Plan Framework* states that the City shall re-evaluate the current park standards and develop modified standards which recognize urban parks, including multi-level facilities, smaller sites, more intense use of land, public/private partnerships and so on.⁷⁸

The *Public Recreation Plan*, Section 1, which is a portion of the *Service Systems Element* of the *City of Los Angeles General Plan*, provides guidelines for neighborhood and community recreation sites, community buildings, gymnasiums, swimming pools, and tennis courts. The *Public Recreation Plan* sets forth recreational standards for satisfying the needs of neighborhood and community recreational sites. The objectives of *Public Recreation Plan* are based on recognized planning principles and the extent and nature of deficiencies in the City's recreational facilities.

⁷⁷ *City of Los Angeles Department of Parks and Recreation Website*, <http://www.laparks.org/dept.htm>, October 6, 2000.

⁷⁸ *Los Angeles Citywide General Plan Framework*, July 1996.

The *Public Recreation Plan* also provides: 1) a guide for orderly development of the City's public recreational facilities; 2) long-range standards for use in connection with new subdivisions; 3) intensification of existing residential development or redevelopment of blighted residential areas as described under general local recreation standards; 4) developing and locating public facilities for the greatest number of people at the least cost and environmental impact; 5) priorities for the acquisition and development of public recreational facilities; and 6) refining and implementing goals and objectives set forth in the *Concept and Citywide Plan for Recreation*.⁷⁹

The *Public Recreation Plan* also categorizes City park sites as neighborhood, community, or regional. A neighborhood recreational site generally provides space and facilities for outdoor and indoor recreational activities. This type of park site is intended to serve residents of all ages within an immediate neighborhood. Facilities typically provided at these sites include the following activities: softball, basketball, volleyball, handball, soccer, football, shuffleboard, table games, handicrafts, lawn games, and small children play area. These sites generally provide, at a minimum, two acres per 1,000 persons and have a service radius of approximately 0.5 mile. The minimum desirable acreage for this type of site is five acres.

A community recreational site is designed to serve residents of all ages in several surrounding neighborhoods. These facilities serve a much wider interest range than do those of a neighborhood site. A typical community recreational site offers recreational amenities such as baseball diamonds, combined football and soccer fields, tennis and handball courts, a swimming pool, or other community recreational uses. These sites provide a minimum two acres per 1,000 persons and serve a radius of approximately two miles. The minimum desirable acreage for this type of park site is 15 acres. A regional park site is generally over 50 acres and usually provides specialized recreational facilities such as lakes, golf courses, campgrounds, wilderness areas, and museums. These sites normally serve regional areas within the Los Angeles Basin and may include or emphasize exceptional scenic attractions. These park sites also contain similar facilities provided in neighborhood and community recreational sites.⁸⁰ Neighborhood and community recreational sites should each be provided at a minimum of two acres per 1,000 persons. The Local recreation standards are long range and may not be reached during the life of the City's *Public Recreation Plan*. Therefore, the following standards have been used for most of the adopted community plans and are included in the *Public Recreation Plan* as short and intermediate standards for future park acreage:

- For neighborhood parks – 1 acre per 1,000 persons; service radius of 1 mile

⁷⁹ *City of Los Angeles Public Recreation Plan, Section 1, October 1980.*

⁸⁰ *Ibid.*

- For community parks – 1 acre per 1,000 persons; service radius of 2 miles.⁸¹

The *General Plan Framework EIR* reveals that, based on the 0.5 mile service radius, the distribution and number of neighborhood parks are inadequate, particularly in the central San Fernando Valley, South Central Los Angeles, and Harbor Gateway. Most areas of the City are within the two-mile service radius of a community park except for the central portion of the San Fernando Valley and Harbor Gateway. Consequently, although virtually the entire City is covered by either a neighborhood or community park, there are two areas of the City that are not served by either of these park categories. Currently, the City does not have sufficient neighborhood and community parkland to meet the current population demand. Of the 11 City subregions, only the Metrocenter, Northeast Valley, and Southwest Valley subregions contain adequate acreage of regional parks to serve the local population. On a citywide scale, the City is deficient by 11,404 acres of neighborhood and community parkland, and 8,481 acres of regional parkland.⁸² Existing parks located in the *Central City Community Plan Area* include: neighborhood parks, such as Terrace Park, Toberman Playground, James Park, Grand Hope Park, 6th & Gladys Avenue Park, City Hall Park, Pershing Square, Macarthur Park, and Gilbert Lindsay Park; community parks like the Hoover Recreation Center and Central Library Park; and regional parks such as El Pueblo de Los Angeles, Exposition Park, and Echo Park. These parks are shown on Figure 46 on page 389.

Grand Hope Park, a passive neighborhood park located one block from the Project site, adjacent to the Fashion Design and Merchandising Institute (FIDM), occupies 2.3 acres south of 9th Street, between Hope and Grand Avenues. Grand Hope Park is the closest neighborhood park to the Project site and include amenities include benches, a walking path, a fountain, -and landscaping. This park is operated by a non-profit corporation affiliated with FIDM and is open to the public during daylight hours. Located adjacent to the Project site, Gilbert Lindsay Plaza is a 5-acre landscaped pedestrian plaza along Figueroa Street, immediately east of the Convention Center-West Hall and immediately south of STAPLES Center. This Plaza serves as a gathering place and an occasional picnic location for visitors to the Convention Center or STAPLES Center. However, it primarily serves as a pedestrian entry to the Convention Center-West Hall and as a staging and drop-off area for busses serving STAPLES Center and the Convention Center.

Pershing Square, a five-acre passive neighborhood park, is located approximately ½ mile northeast of the Project site. Approximately 500,000 people pass through Pershing Square Park per year. Pershing Square is accessed primarily by walking or by public transportation, although there is a multi-storied parking garage below the park. The Metro Red Line stops directly beneath Pershing Square and several bus lines run along adjacent streets. Pedestrians crisscross the park

⁸¹ *Ibid.*

⁸² *City of Los Angeles, Draft Environmental Impact Report, Los Angeles Citywide General Plan Framework, January 1995.*

Figure 46 City Parks in Proximity to Project Site

from all adjacent streets, including Olive Street, Hill Street, 5th Street, and 6th Street. In addition, there is a park-like setting located north of the Central Library on 5th Street, near Flower Street, that provides seating for resting and viewing.⁸³ The existing parkland deficiency for the *Central City Community Plan Area* is approximately 40 acres for neighborhood parks and approximately 40 acres for community parks. The Central Los Angeles Planning Area has a regional parkland deficiency estimated at approximately 880 acres.⁸⁴

Chapter 3, Article 10.5, Section 65560(b) of the California Government Code states that open space can be defined as any parcel, or area of land or water which is essentially unimproved and devoted to: preservation of natural resources, managed production of resources, outdoor recreation or public health and safety. According to the *Open Space and Conservation Element* of the City's *General Plan*, there are three categories of open space within the City: publicly owned open space; private, "open space"-designated lands; and vacant, non-"open space"-designated areas where open space characteristics should be protected. All lands zoned "A1", "A2" and "RA Suburban" are considered to be private open space lands under the *Open Space and Conservation Element* (but not under the adopted Open Space Ordinances). The *Open Space and Conservation Element* further states that at least 10 percent of all land area in the City should be park or open space land. However, in terms of State law, open space should only include those areas which are currently, or proposed to be, zoned as open space.⁸⁵ The Department of Recreation and Parks has established a planning standard of four acres of open space per 1,000 persons.

Other than neighborhood and community parks, major, publicly-owned open space in the City includes: the 650 acres of public beach; the remaining 210 acres of the Ballona Wetlands; the two natural lakes (six-acre Del Rey Lagoon and 40-acre Machado Lake); the Rio Hondo, San Gabriel and Los Angeles Rivers; Griffith Park; Sepulveda Dam Recreational Area; Hansen Dam Recreational Area; the Santa Monica Mountains National Recreation Area; and the Angeles National Forest. Landscaped medians along major highways, railroad right of ways, water reservoirs, and neighborhood storm channels are other valuable components of public open space.

Private, open-space designated lands are found primarily in the Tujunga Wash area and in the northwest San Fernando Valley. Major areas of remaining private, non-open space zoned lands within the City include parcels within the Santa Monica Recreation Area, portions of Playa Del Rey, Porter Ranch and Shadow Hills. Many of these areas have been identified by the City as areas where open space characteristics should be preserved. Currently, 24 of the City's 35 Community

⁸³ Correspondence received from Alonzo A. Carmichael, Planning Officer, City of Los Angeles Department of Recreation and Parks, October 3, 2000.

⁸⁴ *Ibid.*

⁸⁵ *Ibid.*

Planning Areas are currently lacking adequate open space zoned lands. The *Central City Community Plan* Area has a deficiency estimated at 216.4 acres.⁸⁶

Applicable parks and open space policies are also contained in the *Central City Community Plan*. The Project site is located within the South Park Area of the *Central City Community Plan*. The *Central City Community Plan* states that a regional park or park system is important to achieving the revitalization of the South Park Planning Area. Ample open space and recreation areas should be provided. The provision of housing and open space is to be accomplished as a first priority. Residential uses should be located adjacent to open space, with apartment buildings carefully placed to preserve their views.⁸⁷

The Quimby Act, *California Government Code* Section 66477, allows the legislative body of a city or county, by ordinance, to require the dedication of land or impose a requirement of the payment of fees in lieu thereof, or a combination of both, for park and recreational purposes as a condition to the approval of a tentative map or parcel map.

As provided in the *City of Los Angeles Municipal Code*, Section 17.12, Park and Recreation Site Acquisition and Development Provisions, no final subdivision map shall be approved nor shall it be recorded unless, in connection therewith, land within the subdivision has been dedicated to the City of Los Angeles for park and recreational purposes, as may be determined by the advisory agency in accordance with the standards and in the manner set forth, or a fee in lieu thereof has been paid or guaranteed to be paid within one year after the City Council approves the final map, or a combination of dedication and payment or guarantee of fees has occurred. The guarantee of payment of fees is to be to the satisfaction of the Department of Recreation and Parks. The lands required to be dedicated and the fees required to be paid pursuant to this section in connection with a particular subdivision may be used only for the purpose of providing park or recreational sites and facilities which will serve such subdivision and the future residents therein. Such sites and facilities shall comply with the principles and standards set forth in the Recreational Element of the *General Plan*, and the location of land to be dedicated shall bear a reasonable relationship to the use of the proposed park and recreational facilities by future inhabitants of the subdivision.⁸⁸

b. PROJECT IMPACT

(1) Significance Thresholds/Methodologies

A significant impact to parks and recreation would occur if, based upon the service standards established by the City, the following resulted: (1) Project development would exceed the capacity

⁸⁶ *Ibid.*

⁸⁷ *Los Angeles Central City Community Plan, April 1989.*

⁸⁸ *City of Los Angeles Municipal Code, July 2000.*

of a park or recreational facility, which currently adequately serves the existing population, or (2) project development substantially increases the demand for park and recreational facilities for which current demand exceeds the ability of a facility to adequately serve the population.

(2) Analysis of Project Impacts

(a) Construction

Implementation of the proposed Project is not anticipated to result in construction-related impacts to parks and recreational facilities. Construction workers are highly transient in their work location and would not likely utilize off-site park and recreational facilities in proximity to a job site. Further, Project construction is not anticipated to result in significant impacts to existing parks and recreational facilities identified above due to the distance between these facilities and the Project site.

(b) Operation

The existing parkland deficiency for the *Central City Community Plan Area* is approximately 40 acres for neighborhood parks and approximately 40 acres for community parks. The Central Los Angeles Planning Area has a regional parkland deficiency estimated at approximately 880 acres. By 2010, the parkland deficiency for the *Central City Community Plan Area* is estimated to be approximately 50 acres for neighborhood parks and approximately 50 acres for community parks. It is also estimated that the Central Los Angeles Planning Area shall have a regional parkland deficiency estimated at 1,127 acres by 2010.⁸⁹ The development of 800 new dwelling units within the proposed Project would add an estimated 2,272 residents to the South Park Area, resulting in the increased use of existing neighborhood, community and regional parks in the *Central City Community Plan Area*, where parkland deficiencies have been identified. Therefore, the proposed Project would result in a potentially significant impact to the delivery of parks and recreation services. A mitigation measure has been included to reduce this potentially significant impact to a level of less than significant.

The proposed Project is based on design concepts which emphasize pedestrian utilization of integrated land uses that features plazas and paseos that extend the urban grid internally and that promote use by patrons, guests and residents of the Project. This open and connective pedestrian realm would emphasize the project's public character. This atmosphere is most clearly demonstrated in the design of the central plaza that will function as a major gathering place linking STAPLES Center and the Convention Center with the proposed convention hotel and entertainment uses across and along 11th and Figueroa Streets. Situated where pedestrian traffic from all uses

⁸⁹ *City of Los Angeles, Draft Environmental Impact Report, Los Angeles Citywide General Plan Framework, January 1995.*

converge, the central plaza would provide a unique identity for the district, and is intended for use by a wide variety of gatherings and special events. The proposed Project would also feature an extensive streetscape element that would utilize a hierarchy of private open spaces that includes entry forecourts, paseos, plazas/courtyards, and roofscapes, in addition to the central plaza. As shown on page 395, all of these on-site open space areas would be accessible to the public on a limited basis, providing a total of approximately 6.9 acres of active and passive open space. In addition to the open space areas described above, the proposed Project includes a redesign of 11th Street between Figueroa and Georgia Streets to be closed during non-peak periods. Eleventh Street would function as an extension of the central plaza to provide increased pedestrian circulation areas during special events. Enhanced streetscape linkages to the north, south, and east would also serve to emphasize Figueroa Street as an important pedestrian corridor linking the Project with the existing community.

The *Central City Community Plan Area* has an existing open space zoned lands deficiency estimated at 216.4 acres. This open space deficiency is anticipated to become worse in the future. As part of the proposed project, 800 dwelling units would be developed. This would increase the density of the area by an estimated 2,272 people. The Project would satisfy the open space requirements as dictated in the City's Municipal Code for multi-family dwellings.⁹⁰ The open space provided by the Project would be landscaped in accordance with a landscape plan approved by the City's Department of Planning.⁹¹ However, the Department of Recreation and Parks has also stated that in-lieu park fees (i.e., Quimby Act) that are assessed to the proposed Project would not meet the demand for open space considering the value of real estate in the downtown area.⁹² However, due to the proposed Project's design features and intent, it would be infeasible to dedicate additional acreage for parks and/or open space. Therefore, the proposed Project would result in a potentially significant impact by creating an unusual hardship to provide open space.

c. MITIGATION MEASURES

In order to mitigate the proposed Project's impacts on the Central City area's existing and future deficiency of parkland and open space, the following mitigation measures are recommended:

⁹⁰ *City of Los Angeles Municipal Code, Sections 12.11C and 12.21G, July 2000.*

⁹¹ *Correspondence received from Alonzo A. Carmichael, Planning Officer, City of Los Angeles Department of Recreation and Parks, October 3, 2000. The Department projects future population at a rate of 3.0 persons per household on a citywide basis. The 1990 Census indicates that the average household size for dwelling units within one mile of the Project site is 2.84 persons per household. (Refer to Section IV.C., Population, Housing and Employment, of this Draft EIR.*

⁹² *Correspondence received from Alonzo A. Carmichael, Planning Officer, City of Los Angeles Department of Recreation and Parks, October 3, 2000.*

1. The Project shall incorporate project design features such as plazas, terraces and paseos that encourage access to a variety of open space uses for residents and visitors to the Project site (see Figure 47 on page 395).
2. The Applicant shall pay required fees to the City of Los Angeles Recreation and Parks Department for the purpose of providing future parks and open space in the Central City area, subject to a credit for publically available open space uses provided by the project.

d. ADVERSE EFFECTS

The Project would satisfy the open space requirements of the City's Municipal Code for multi-family housing. However, the Project would not meet the Department of Recreation and Parks planning standard of four acres per 1,000 residents. Therefore, the Project would have a significant impact on parks and recreation facilities.

e. CUMULATIVE IMPACTS

The proposed Project, in combination with related projects and background growth, would result in an increased demand for parks and recreational facilities. Related projects would be required to dedicate parkland/open space and/or pay in-lieu fees as mitigation, per the requirements of the City of Los Angeles Municipal Code, the City of Los Angeles *Public Recreation Plan*, and the requirements of the City of Los Angeles Department of Recreation and Parks. However, payment of in-lieu fees may not meet the demand for open space considering the value of real estate in the downtown area. Therefore, impacts to parks and recreational facilities would be cumulatively significant.

Figure 47 On-Site Open Space Areas

IV. ENVIRONMENTAL IMPACT ANALYSIS
J. UTILITIES
1. WATER

The analysis presented in this section is based on the *Water, Sewer, and Storm Drain Infrastructure Report* prepared by Psomas Associates, Inc., dated September 13, 2000. The technical report is provided in Appendix G of this Draft EIR.

a. ENVIRONMENTAL SETTING

The City of Los Angeles Department of Water and Power (DWP) currently supplies water to the Project area. The DWP is responsible for ensuring that water demand is met by available water supplies and that State and federal water quality standards are achieved. DWP obtains its water supplies from three major sources: (1) the Owens Valley and Mono Basin via the Los Angeles Aqueduct; (2) northern California and Colorado River imports from the Metropolitan Water District of Southern California (MWD); and (3) local groundwater basins. In addition to these sources, some wastewater within the DWP service area is reclaimed for reuse as irrigation or industrial water, or for use in seawater intrusion barriers used to protect groundwater supplies.

MWD imports water from the Colorado River Aqueduct and the State Water Project (SWP) in the Sacramento-San Joaquin Deltas and distributes it to member agencies. MWD serves no retail customers directly, but provides water to its member agencies throughout San Diego, Orange, and Los Angeles Counties. DWP is one of these member agencies. Based on projected growth, MWD expects that water demands in the MWD service area will rise from 3.5 million acre-feet per year (AF/yr) to 4.9 million AF/yr in the next twenty years.⁹³

MWD's Integrated Water Resources Plan (IRP), which was approved by its Board in 1996 to plan for this projected growth, proposes that the preferred resource mix for future MWD supply includes local production (groundwater pumping and surface water diversion), water recycling, groundwater recovery, the Colorado River Aqueduct, the SWP, storage, and water transfers. MWD believes that implementation of the IRP will allow it to provide for all the firm wholesale water demands of its member agencies in 98 out of 100 years, with the remaining years requiring a shortage allocation plan.

The City of Los Angeles is responsible for planning for locally developed water supply sources to supplement the regional supplies that are ensured by the IRP. The need for such planning

⁹³ *Metropolitan Water District of Southern California, Conservation Efforts, 2000.*

is recognized in the City of Los Angeles *General Plan Framework*, which includes policies pertaining to the development of local water supplies. These plans are documented periodically in the Los Angeles Urban Water Management Plan (UWMP).⁹⁴ The UWMP accounts for the portion of projected demands that are not expected to be met by MWD, and includes planning for supply from sources including the Los Angeles Aqueduct, local groundwater, conservation, and reclamation. The development and use of reclaimed water resources is central to DWP's plan for meeting growing water demands through 2020, and is being examined in detail as part of the DWP's Integrated Plan for the Wastewater Program (IPWP), which is currently underway. One of the purposes of the IPWP is to develop a plan to ensure that the city's goals for reclaimed water use are met. In addition, DWP implements water conservation measures wherever possible. The City is currently implementing Best Management Practices for water conservation, such as ordinances, incentives, and water efficient fixture installation and retrofitting. The City also has conservation education and infrastructure replacement programs, and provides technical assistance to industry for conservation implementation.

Los Angeles citywide water use was 626,200 acre-feet (AF) in the 1998-1999 fiscal year.⁹⁵ Water use for 2015 is projected to be 749,900 AF⁹⁶. In its UWMP, DWP has designated a plan for supplying all of this demand. UWMP projections are based on regional growth projections prepared by the Southern California Association of Governments (SCAG). The UWMP projections take into account the water conservation programs that DWP implements wherever possible. Current City planning indicates that supply will be sufficient to meet projected demands.⁹⁷

The Project site is located within the DWP's Central Water Service Area. DWP currently has a system of interconnected domestic water lines varying in size from 8-inch to 20-inch diameter surrounding the project. Please refer to Figure 48 on page 398 for an illustration of existing local water lines. The water system provides both domestic (drinking) water and fire flows. There are two pressure zones that supply this section of downtown. The first zone extends as far south as Olympic Boulevard. This area is known as Zone 448 and has a static water pressure of approximately 90 psi at the project site. The second zone includes the area from Olympic Boulevard south and encompasses most of the project site. The southern zone has a static water pressure of approximately 63 psi at the project site. There are no reclaimed water lines currently on or adjacent to the site.

⁹⁴ City of Los Angeles, Department of Water and Power, *Urban Water Management Plan*, July 1995.

⁹⁵ City of Los Angeles, Department of Water and Power, *UWMP Annual Update, 1998-1999*.

⁹⁶ City of Los Angeles, Department of Water and Power, *Integrated Plan for the Wastewater Program Baseline Needs Technical Memorandum*, April 2000.

⁹⁷ *Ibid.*

Figure 48 Domestic Water Infrastructure

The water treatment facility serving the project area is the Los Angeles Aqueduct Filtration Plant located in Sylmar, that is owned and operated by DWP. This facility uses a combination of ozonation, filtration and chlorination to produce water that meets or exceeds all drinking water standards. The facility has a maximum treatment capacity of 600 million gallons per day.⁹⁸ The current average treatment is estimated at 450 million gallons per day.

Currently, the majority of the Project site is utilized as surface parking lots and has minimal water usage (i.e., irrigation for landscaping). Water demand at the Project site, associated with the previous land uses prior to the development of the STAPLES Center was estimated at 85,550 gallons per day. Current water usage would be considerably less than this total.

b. PROJECT IMPACT

(1) Significance Thresholds/Methodologies

A project would result in a significant impact on water service if any of the following occurs:

- Demand generated by the project exceeds the ability of the DWP to service the site based on anticipated water supplies.
- Demand generated by the project requires or results in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- Water demand generated by the project exceeds the capacity of existing or planned water distribution systems, resulting in an unmet need for additional infrastructure in order to provide adequate levels of service.

(2) Analysis of Project Impacts

(a) Construction

During construction of the proposed Project, water would be required primarily for dampening fill material and for dust control. Daily water demand during construction would be considerably less than the historical water usage at the Project site (i.e., prior to the development of the STAPLES Center), which was estimated at 85,550 gallons per day. It is not anticipated that

⁹⁸ *City of Los Angeles, Water Services, Water Supply Fact Sheet, <http://www.ladwp.com/water/supply/facts/index.htm>, September 12, 2000.*

water demand during construction would result in any impact to existing service, water lines, or facilities. No significant impacts are anticipated.

As discussed in Section V.I.1, Fire, of this Draft EIR, exact fire flow requirements cannot be exactly determined at this time, because fire flow requirements are based on the final configuration of the project. When the final site plan is submitted, the Los Angeles Fire Department (LAFD) will dictate fire flow requirements in terms of flow and pressure required. The fire flow required by the LAFD for the proposed Project is 4,000 gpm (i.e., 1,000 gpm from 4 fire hydrants flowing simultaneously)⁹⁹, although the Project could necessitate fire flow as high as 9,000 to 15,000 gpm. In order to determine if the existing water system is adequate to meet fire flow demand, the Water Operations Division of DWP will conduct a flow study prior to issuance of any building permits. In order to ensure adequate fire flows are provided to the proposed Project, a related mitigation measure is provided below.

In order to meet fire flow requirements, the project is anticipated to require upsizing of approximately 900 feet of the 8-inch water line in Olympic Boulevard, between Georgia Street and Figueroa Street, to a 12-inch water line. The Project would also require the construction of an 8-inch water line in Cherry Street, between 11th Street and Olympic Boulevard. The existing 24-inch water line located in 12th Street will be abandoned and re-aligned with a new 24-inch water line, as shown on Figure 48.¹⁰⁰

Impacts to air quality, transportation/circulation and noise from the proposed project, that include water line construction, are analyzed in IV.E., Air Quality; IV.F., Transportation/Circulation; and IV.H., Noise, within this document.

Based on the results of the flow study and LAFD requirements, further expansion to the existing system and site-specific fire suppression improvements may be required. The size and location of the laterals cannot be determined at this time. It is expected that additional fire hydrants will be required both on public right-of-way and possibly on private property.

(b) Operation

Estimated water demand for the proposed project during operation is shown in Table 48 on page 401. As indicated in Table 48, the proposed Project is estimated to have a buildout water demand of approximately 1,660,000 gallons per day. This represents a substantial increase in water demand when compared with existing conditions. As discussed above, the City of Los Angeles is

⁹⁹ Correspondence from Richard A. Warford, Assistant Fire Marshal, LAFD, Bureau of Fire Prevention and Public Safety, September 20, 2000.

¹⁰⁰ *Ibid.*

Table 48

LOS ANGELES SPORTS AND ENTERTAINMENT DISTRICT WATER DEMAND

Use	Size/Units	Water Demand (Peak) (gpm) ^a	Water Demand (Non-Peak) (gpd) ^b
OLYMPIC PROPERTIES			
Retail	110,000 sq. ft.	7 gpm	10,560 gpd
Dining	85,000 sq. ft.	238 gpm	204,000 gpd
Entertainment	125,000 sq. ft.	228 gpm	195,000 gpd
Entertainment—Live Theater/Cinema	7,000 seats	33 gpm	42,000 gpd
Entertainment— Museums	75,000 sq. ft.	1 gpm	1,800 gpd
Health Club	125,000 sq. ft.	147 gpm	120,000 gpd
Office	75,000 sq. ft.	11 gpm	16,200 gpd
Hotel	1,200 rooms	220 gpm	187,200 gpd
Hotel—Meeting/Ball Rooms	100,000 sq. ft.	59 gpm	<u>85,200 gpd</u>
Subtotal:			861,960 gpd
FIGUEROA PROPERTIES			
Residential	800 DU	184 gpm	153,600 gpd
Retail	315,000 sq. ft.	21 gpm	30,240 gpd
Dining	140,000 sq. ft.	373 gpm	336,000 gpd
Entertainment	80,000 sq. ft.	152 gpm	124,800 gpd
Office/Sports Medicine Center	135,000 sq. ft.	28 gpm	40,500 gpd
Office	90,000 sq. ft.	14 gpm	19,440 gpd
Hotel	600 rooms	117 gpm	<u>93,600 gpd</u>
Subtotal:			<u>798,180 gpd</u>
Total:			<u>1,660,140 gpd</u>

^a Peak water demand is based on the largest sewer peak demand. Please see Section IV.J.2, Sewer.

^b Water demand is based on 120 percent of the sewer load at highest demand. Please see Section IV.J.2., Sewer.

Source: Psomas Associates, Inc., September 2000.

largely dependent on external water sources and, as such, there is no certainty that long-term water supplies will be available on a regional basis. Therefore, although Project-related water demand constitutes an extremely small portion of the regional water demand, the increase in Project-related water demand over existing conditions would be significant.

The DWP has indicated that the existing local water infrastructure system, as shown in Figure 1, would be adequate to provide for the Project-related increase in water demand, based on

review of the demand and flow calculations for the Project.¹⁰¹ Furthermore, the Los Angeles Aqueduct Filtration Plant would have adequate capacity to serve the Project. Impacts to local water distribution or treatment facilities would be less than significant.

c. MITIGATION MEASURES

The proposed Project shall comply with all applicable sections of the City of Los Angeles Water Conservation Ordinances (Ordinance Nos. 163,532; 164,093; 165,004; 166,080; and subsequent amendments). Specifically, no hose washing of roadways, paved parking areas, plaza areas, or walkways shall be allowed. Low flow toilets and plumbing fixtures that prevent water loss shall be installed, decorative fountains shall use recycled water, water leaks shall be repaired in a timely manner, and drinking water shall be served only upon request. In adherence to the City's Landscape Ordinance No. 170,978, plants selected for landscaping shall comply with xeriscape (drought-resistant, low maintenance) requirements. Finally, the Project shall comply with any additional mandatory City-imposed water use restrictions required as a result of drought conditions.

The following measures will ensure that water resources will be conserved to the extent feasible:

1. The Project and occupants shall adhere to all applicable DWP rules and regulations. The DWP shall be consulted regarding feasible water conservation features, including xeriscape practices (e.g., use of drought-tolerant landscaping and drip irrigation systems), which can be incorporated into the design of the project. All necessary infrastructure improvements shall be constructed to meet the requirements of the DWP.
2. Automatic sprinkler systems shall be set to irrigate landscaping during morning or evening hours to reduce water losses from evaporation. Sprinklers shall be reset to water less often in cooler months and during the rainfall season so that water is not wasted by excessive landscape irrigation.
3. The DWP shall conduct a flow test prior to the issuance of certificates of occupancy to determine whether the existing water system meets fire flow requirements imposed by the Fire Department for the Project. The Applicant shall undertake and complete those required improvements identified by the DWP as a result of findings of the flow test.
4. The Applicant shall obtain a DWP Letter of Service prior to issuance of building permits.

¹⁰¹ Psomas, *Preliminary Water, Sewer, and Storm Drain Infrastructure Report*, September 13, 2000.

d. ADVERSE EFFECTS

The City of Los Angeles is largely dependent on external water sources and, as such, there is no certainty that long-term water supplies will be available on a regional basis. Therefore, although Project-related water demand constitutes a small portion of the regional water demand, impacts due to the increase in Project-related water demand over existing conditions would be significant.

With adherence to all applicable regulations and implementation of the mitigation measures recommended above, Project-related impacts to fire flows and water supply infrastructure would be less than significant.

e. CUMULATIVE IMPACTS

The cumulative development analysis of this Draft EIR is based on the growth associated with the related projects and background growth as discussed in Section III.B., Cumulative Development. Estimated cumulative water demand for the proposed Project in combination with related projects is shown in Table 49 on page 404.

Based on Table 49 on page 404, the proposed Project in combination with related projects is estimated to have a cumulative buildout water demand of approximately 3,629,105 gallons per day. As for the proposed Project, this increase represents an increase over existing conditions. As discussed above, the City of Los Angeles is largely dependent on external water sources and, as such, there is no certainty that long-term water supplies will be available on a regional basis. Therefore, although the increase in water demand constitutes an extremely small portion of the regional water demand, cumulative impacts would be significant. Individual projects would be responsible for determining impacts upon main water lines and local water lines affected by those individual projects.

Table 49

**LOS ANGELES SPORTS AND ENTERTAINMENT DISTRICT
CUMULATIVE WATER DEMAND**

Use ^a	Size/Units	Water (Non-Peak) (gpd) ^b
Retail	1,495,661 sq.ft.	143,582
Restaurant(s)	76,937 sq.ft.	184,649
Entertainment	146,297 sq.ft.	228,223
Live Theater	3,435 seats	20,610
Cathedral	3,000 sq.ft.	648
Warehouse/Storage	11,900 sq.ft.	2570
Office	2,621,424 sq. ft.	566,227
Multiple Family Residential	1,303 units	250,176
Child Care	5,000 sq.ft.	4,800
Hotel	825 rooms	128,700
Hotel Meeting Rooms	515,000 sq.ft.	<u>438,780</u>
Subtotal Related Projects:		1,968,965
Subtotal Proposed Project:		<u>1,660,140</u>
Total:		<u>3,629,105</u>

^a Cumulative water demand estimates are conservative. In many instances, existing uses are already consuming water.

^b Water demand is based on 120 percent of the sewer load at highest demand period. Please see Section IV.J.2, Sewer.

Source: Psomas Associates, Inc., September 2000

IV. ENVIRONMENTAL IMPACT ANALYSIS
J. UTILITIES
2. SEWER

The analysis presented in this section is based on the *Water, Sewer, and Storm Drain Infrastructure Report* prepared by Psomas Associates, Inc., dated September 13, 2000. The technical report is provided in Appendix G of this Draft EIR.

a. ENVIRONMENTAL SETTING

Wastewater generated at the Project site is currently conveyed by a wastewater infrastructure system administered by the City of Los Angeles Bureau of Engineering and treated by facilities operated by the City of Los Angeles Bureau of Sanitation. Wastewater disposal service is dependent upon conveyance infrastructure and treatment plant capacity and is based on existing discharge allocations. Because sewage flows are directly proportional to water usage, citywide water conservation efforts have immediate beneficial effects upon wastewater generation.

The existing sewer infrastructure in the vicinity of the Project site includes a 66-inch diameter trunk sewer built in 1972 at the time of construction of the Los Angeles Convention and Exhibition Center. The line runs easterly along 11th Street, turning south at the intersection with Georgia Street. From there, the line travels between STAPLES Center and the Los Angeles Convention and Exhibition Center, making several turns until it reaches the intersection of 12th Street and Figueroa Street. At the intersection of 12th Street and Figueroa Street, there is a diversion structure that is connected to a 48-inch sewer line that continues east to connect with a 20-inch sewer line in Flower Street.

The existing Project site has no sewer connections; however, the main lines adjoining the project site were sized to accommodate major development. Besides the 66-inch sewer there are several existing local sewer mains ranging in size from 8-inches to 15-inches in diameter that serve the Project site. They are located in Olympic Boulevard, Pico Boulevard, 11th Street, 12th Street, Flower Street and Figueroa Street as shown on Figure 49 on page 406.

Currently, the majority of the Project site is utilized as surface parking lots and has little or no sewage generation. Sewage generation at the Project site, associated with the previous land uses prior to the development of the STAPLES Center was estimated at 68,428 gallons per day.

Figure 49 Sanitary Sewer Infrastructure

Surface parking is a recent and temporary land use created in connection with construction of STAPLES Center and completed in 1999. Prior land uses included a range of commercial and residential uses, as noted in STAPLES Center EIR.¹⁰²

Sewage treatment for the proposed Project will be provided by the Hyperion Wastewater Treatment Plant, owned and operated by the City of Los Angeles Bureau of Sanitation, which is located near the coastline at the southern extremity of Playa Del Rey, directly south of the Los Angeles International Airport. This plant presently treats an average of approximately 362 million gallons of sewage per day and has the capacity to treat 450 million gallons per day under existing operating conditions.¹⁰³ The plant treats wastewater from almost all of the City of Los Angeles, as well as sewage from the cities of Beverly Hills, Burbank, Culver City, El Segundo, Glendale, San Fernando, Santa Monica, and portions of the unincorporated territory of Los Angeles County.

b. PROJECT IMPACTS

(1) Significance Thresholds/Methodologies

A significant impact on sanitary sewer systems would occur if a project were to result in the following:

- Wastewater generation that exceeds the capacity of existing or planned wastewater conveyance systems or wastewater treatment facilities that serve the site, resulting in an unmet need for additional facilities in order to provide adequate levels of service.
- Wastewater generation that requires or results in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

(2) Analysis of Project Impacts

(a) Construction

The existing sewer infrastructure surrounding the Project site would be adequate to provide for the proposed Project. This is due to the existing 66-inch diameter trunk sewer traversing adjacent to the site, a 42-inch/66-inch relief sewer and the availability of local sewers for lateral

¹⁰² Los Angeles Community Redevelopment Agency, *LA Sports and Entertainment Complex EIR*, PCR Services Corporation 1997.

¹⁰³ City of Los Angeles, Bureau of Sanitation, *Major Activities*, <http://www.lacity.org/SAN/sanmact.htm> September 22, 2000.

connections. For the proposed Project, it is not anticipated that any upsizing of the existing 8-inch to 15-inch existing sewer lines currently serving the project site would be required. However, prior to the acceptance of plans and specifications, the City of Los Angeles Department of Building and Safety and the Bureau of Sanitation will determine if there is available sewer capacity.

The existing 48-inch sewer line and 33-inch sewer line located in 12th Street will be abandoned and re-aligned with a new 48-inch sewer line and a new 33-inch sewer line, as shown on Figure 49. This will be accomplished as part of the realignment of 12th Street due to the Project.

Impacts to air quality, transportation/circulation and noise from the proposed project, that include potential storm drain and utility line relocation, are analyzed in IV.E Air Quality, IV.F. Transportation/Circulation and IV.H. Noise within this document. The storm drain realignment discussed above could require temporary traffic lane closures and sidewalk closures during construction. Such lane closures could have temporary significant impacts on traffic circulation. The extent of potential impacts should be minimized by the fact that most of the streets in the Project vicinity currently provide substantial traffic carrying capacity and will be able to accommodate traffic management for temporary lane closures.

Portable septic units would be provided for workers during the construction phase of the Project. A contracted private vendor would maintain and replace the septic units as required throughout the Project construction period. No significant impacts are anticipated.

(b) Operation

During operations, estimated sewage generation for the proposed Project is shown in Table 50 on page 409. As indicated in Table 50, the proposed Project is estimated to have a buildout sewage generation estimated at 1,383,450 gallons per day. This represents a substantial increase over existing conditions (i.e., surface parking lots with little or no sewage generation). However, this would not result in a significant impact. The existing 8-inch to 15-inch sewer lines surrounding the Project site are already sufficiently sized to accommodate the proposed Project. In addition, the 66-inch trunk sewer has available capacity to serve the proposed Project. The existing peak daily capacity for this 66-inch trunk sewer at the intersection of 11th Street and Georgia Street is estimated at 32 percent of total available capacity.

An increase of 1,383,450 gallons of sewage per day associated with the proposed Project would not result in significant impacts to the Hyperion Wastewater Treatment Plant. This plant presently treats an average of approximately 362 million gallons of sewage per day and has the capacity to treat 450 million gallons per day under existing operational conditions. No significant impacts are anticipated. In fact, the Project Applicant would seek service connection fee credits

Table 50

PROJECT-RELATED SEWAGE GENERATION

Use	Size/Units	Sewage Generation Factor (gpd/unit) ^a	Sewer Generation (gpd)
Olympic Properties			
Retail	110,000 sq.ft.	0.080	8,800
Dining	85,000 sq.ft.	2.000 ^b	170,000
Entertainment	125,000 sq.ft.	1.300	162,500
Entertainment—Live Theater/Cinema	7,000 seats	5.000	35,000
Entertainment—Museums	75,000 sq.ft.	0.020	1,400
Health Club	125,000 sq.ft.	0.800	100,000
Office	75,000 sq.ft.	0.180	13,500
Hotel	1,200 rooms	130.000	156,000
Hotel—Meeting/Ball Rooms	100,000 sq.ft.	0.710	<u>71,000</u>
Subtotal			718,300
Figueroa Properties			
Residential	800 DU	160.000	128,000
Retail	315,000 sq.ft.	0.080	25,200
Dining	140,000 sq.ft.	2.000	280,000
Entertainment	80,000 sq.ft.	1.300	104,000
Office/Sports Medicine Center	135,000 sq.ft.	0.250	33,750
Office	90,000 sq.ft.	0.180	16,200
Hotel	600 rooms	130.000	<u>78,000</u>
Subtotal			<u>665,150</u>
Total			<u>1,383,450</u>

du = dwelling unit

^a Generation factor source: City of Los Angeles Bureau of Sanitation.

^b Restaurant sewer generation factor is for a "Full Service/Indoor Seat".

Source: Psomas Associates, Inc., September 2000

based upon the uses that were present on the Project site prior to removal for creation of surface parking.

c. MITIGATION MEASURES

The Project is not expected to produce significant impacts to sewer service; however, compliance with City and State codes, ordinances, and permit requirements will ensure that wastewater generation will be reduced to the maximum extent feasible. Specifically, the Project shall comply with the following:

1. The Applicant shall comply with procedural requirements of City ordinances regulating connections to the City sewer system (e.g., Ordinance No. 166,060).
2. All necessary infrastructure improvements shall be constructed to meet the requirements of the Department of Public Works.
3. The Applicant shall comply with all provisions of Ordinance No. 162,532, which reduces water consumption levels, thereby restricting wastewater flows. Water saving devices to be installed shall include low flow toilets and plumbing fixtures that prevent water loss.
4. The Applicant shall develop and implement a construction management plan for any temporary lane closures that may be necessary (including temporary coning, signing, road striping, signalization, etc.), to assist in the orderly flow of vehicular and pedestrian traffic in the project area, and to ensure the maintenance of adequate access to STAPLES Center and the Convention Center.

d. ADVERSE EFFECTS

With adherence to all applicable regulations and implementation of the measures outlined above, the Project impacts to sanitary sewer service and the sewage infrastructure system would be less than significant.

e. CUMULATIVE IMPACTS

The cumulative development analysis of this Draft EIR is based on the growth associated with the related projects identified in Section III.B., Cumulative Development, and an additional eight percent growth (one percent per year from 2000 to 2008). Estimated cumulative sewage generation for the proposed Project in combination with related projects is shown in Table 51 on page 411.

Table 51

CUMULATIVE SEWAGE GENERATION

Use	Size/Units	Sewage Generation Factor (gpd/unit) ^a	Sewer (gpd)
Retail	1,495,661 sq. ft.	0.080	119,652
Restaurant(s)	76,937 sq. ft.	2.000	153,874
Entertainment	146,297 sq. ft.	1.300	190,186
Live Theater	3,435 seats	5.000	17,175
Cathedral	3,000 sq. ft.	0.180	540
Warehouse/Storage	11,900 sq. ft.	0.180	2,142
Office	2,621,424 sq. ft.	0.180	471,856
Multiple Family Residential	1,303 units	160.000	208,480
Child Care	5,000 sq. ft.	0.800	4,000
Hotel	825 rooms	130.000	107,250
Hotel Meeting Rooms	515,000 sq. ft.	0.710	365,650
Subtotal Related Projects:			1,640,805^b
Subtotal Proposed Project:			1,383,450
Total:			3,024,255

^a Generation factor source: City of Los Angeles Bureau of Sanitation

^b Cumulative sewage generation estimates are conservative. In many instances, existing uses are already generating sewage.

Source: Psomas Associates, Inc., September 2000

Based on Table 51 above, the proposed Project, in combination with related projects, is estimated to have a cumulative buildout sewage generation of approximately 3,024,255 gallons per day. This increase in sewage generation associated with the proposed Project, in combination with related projects, would not result in significant impacts to wastewater treatment plants. The Hyperion Wastewater Treatment Plant presently treats an average of approximately 362 million gallons of sewage per day and has the capacity to treat 450 million gallons per day under existing operational conditions. Individual projects would be responsible for determining impacts upon trunk sewers and local sewer lines affected by those individual projects. No significant cumulative impacts to sewage treatment capacity or service are anticipated.

IV. ENVIRONMENTAL IMPACT ANALYSIS
J. UTILITIES
3. SOLID WASTE

a. ENVIRONMENTAL SETTING

Within the City of Los Angeles, various public agencies and private companies administer solid waste management, including collection and disposal services and landfill operation. Single family residential and some multiple family residential refuse is collected by the City of Los Angeles Bureau of Sanitation; waste generated by most multiple family residential sources and all commercial and industrial sources is collected by private contractors. An estimated 3.6 million tons of solid waste are generated by the City of Los Angeles annually and disposed of daily at major landfills in the region.¹⁰⁴ The Bureau currently disposes of about 3,400 tons per day of solid waste from those single family residential and multiple family residential uses from which it collects, down from 5,500 tons per day in 1990 due to recycling efforts.

The Bureau currently disposes of solid waste in three landfills, two operated by private companies and one operated by the County of Los Angeles. However, landfill capacity throughout the County is limited by several factors, including the following: (1) restrictions to accepting waste generated only within a landfill's particular jurisdiction and/or watershed boundary;¹⁰⁵ (2) tonnage permit limitations; (3) operational constraints; and (4) the closure of solid waste landfills located in the City and County of Los Angeles. Existing facilities in the County include two transformation (i.e., waste-to-energy) facilities and 12 major permitted Class III landfills.¹⁰⁶ Table 52 on page 413 indicates the permitted capacity and the remaining capacity of solid waste landfills available to public and private waste haulers collecting refuse in the City of Los Angeles. In addition, there are several existing solid waste transfer stations located within the Los Angeles metropolitan area.

To address solid waste disposal solutions, the City of Los Angeles, the Los Angeles County Department of Public Works, and the Sanitation Districts of Los Angeles County (SDLAC) jointly developed the County Solid Waste Management Action Plan (MAP), which was adopted in April 1988. As an integrated regional approach to managing solid waste, the MAP incorporates source reduction, recycling, and composting programs, along with public education awareness programs, in

¹⁰⁴ *California Integrated Waste Management Board, California Waste Stream Profiles, April 18, 2000.*

¹⁰⁵ *The area from which a landfill draws its waste to be disposed.*

¹⁰⁶ *Class III landfills are permitted to accept only non-hazardous wastes. Major landfills are defined as those capable of receiving more than 250,000 tons of solid waste per year, or an average daily rate (6 days per week) of 800 tons.*

Table 52

**EXISTING MAJOR CLASS III LANDFILLS
CURRENTLY RECEIVING WASTE FROM THE CITY OF LOS ANGELES**

Site	Location	Owner/Operator	Permitted Capacity (millions of tons)	Remaining Capacity (millions of tons)
Azusa Land Reclamation ^a	Azusa	Allied Waste Industries, Inc.	66.7	34.1
Bradley	Sun Valley	Waste Management, Inc.	14.6	9.8
Calabasas	Calabasas	L.A. County Sanitation District	69.7	22.7
Chiquita Canyon	Valencia	Republic Services	63.9	45.9
Lancaster	Lancaster	Waste Management, Inc.	4.6	0.4
Puente Hills	Whittier	L.A. County Sanitation District	106.4	33.9
Scholl Canyon	Glendale	L.A. County Sanitation District	69.2	16.4
Sunshine Canyon	Sylmar	BFI, Inc.	23.7	17.2

^a Permitted to accept inert wastes and asbestos waste only.

Source: California Integrated Waste Management Board, *California Waste Stream Profiles*, April 18, 2000.

order to meet the requirements of the California Integrated Waste Management Act of 1989 (AB 939). AB 939 mandated 25% diversion of all solid waste from landfill disposal by 1995 through the implementation of waste reduction, reuse, and recycling programs, and required 50% diversion by 2000. With the passage of AB 939, the responsibility for managing solid waste and meeting the State's mandates was placed directly with local agencies. AB 939 also required each city to prepare a Source Reduction and Recycling Element (SRRE) to describe how it will reach its local goals to reduce and recycle solid waste. As of 1998, the City of Los Angeles had achieved a 46% diversion rate.

As part of the effort to attain the AB 939-mandated and MAP goal of a countywide 15-year disposal capacity, the SDLAC is currently examining the feasibility of new and expanded landfill sites and the implementation of waste-by-rail. The SDLAC is examining a waste-by-rail system that would transport residual waste from the Puente Hills Landfill to remote landfills located outside of Los Angeles County.¹⁰⁷

Current Project site land uses generate a relatively small amount of solid waste from parking lot and mechanical building operations. As shown in Table 53 on page 414, an estimated 200 pounds per day of solid waste or 30.7 tons per year is generated on the site and collected and hauled to landfills by private contractors. Currently, the Applicant's contracted waste hauler for the

¹⁰⁷ Los Angeles County Department of Public Works, Environmental Programs Division, *Los Angeles County Countywide Siting Element*, June 1997.

Table 53

SOLID WASTE GENERATION—EXISTING USES

Land Use	Estimated Number of Units/Sq.Ft.	Generation Factor ^a	Daily Generation (lbs/day)	Annual Generation (tons/yr) ^b
Olympic Properties				
Parking	2,040 spaces	0	0.0	0.0
Figueroa Properties				
Parking	1,220 spaces	0	0.0	0.0
Warehouse/Mechanical ^c	40,000 sq.ft.	5 lbs/1,000 sq.ft./day	200.0	30.7
TOTAL			200.0	30.7

^a Generation factor source: City of Los Angeles Bureau of Sanitation. "Solid Waste Generation."

^b Calculation of annual generation assumes the following operation schedules: Warehouse—six days per week.

^c Waste generation reflects rate for a storage use.

Source: PCR Services Corporation.

STAPLES Center is Athens Services, which is a private contractor located in the City of Industry. Solid waste originating in downtown Los Angeles is hauled for disposal at a variety of area landfills. Depending upon the nature of existing waste collection contracts, the choice of landfill is consistently a function of cost effectiveness, including tipping fees at the receiving landfills, travel distance, and available landfill capacity. Given these factors, the most likely destinations for solid waste generated at the Project site would be the Bradley Landfill and Recycling Center, Sunshine Canyon Landfill, or the Chiquita Canyon Landfill.

b. PROJECT IMPACTS

(1) Significance Thresholds/Methodologies

A significant impact on solid waste disposal facilities would occur if waste generated by a project (after implementation of diversion methods) would exacerbate the existing shortage of solid waste landfill capacity in the Southern California region by substantially altering the projected timeline for these landfills to reach capacity.

(2) Analysis of Project Impacts**(a) Construction**

Solid waste to be generated by the proposed Project was calculated using generation rates from the City of Los Angeles Bureau of Sanitation. Construction of the Project would involve the demolition of approximately 40,000 square feet of warehouse and mechanical buildings. It is anticipated that the warehouse and mechanical buildings would be demolished during initial project construction. Therefore, short-term hauling and disposal of demolition debris would therefore be required during construction, pursuant to approval of the proposed haul routes by the City Department of Building and Safety. In addition, any earth moved off-site during grading would require one-time hauling and disposal, pursuant to approval of the proposed haul routes.

Demolition and construction building debris wastes would be generated during construction. These may include inert solids such as rock, concrete, brick, sand, soil, asphalt and sheetrock. In addition, wood, metal, drywall and cardboard wastes would also be generated. The Applicant shall minimize the amount of construction and demolition waste to the extent possible and shall implement on-site source separation of these materials for recycling, including the practice of on-site grinding of concrete and asphalt paving for use as new base material throughout the Project site. No significant impacts to solid waste landfill disposal capacity from project construction activities are anticipated.

(b) Operation

As shown in Table 54 on page 416, operation of the Project is estimated to generate approximately 31,170 pounds of solid waste per day. This translates to an estimated 5,414 tons per year prior to diversion. Solid waste generated by the proposed Project would be collected by any of the private waste hauling companies that service the downtown area.

Source reduction, recycling, and diversion measures that would be implemented as part of the proposed Project would serve to reduce the amount of waste disposed of at area landfills.

The most likely destinations for solid waste generated by the proposed Project would be the Sunshine Canyon Landfill and the Chiquita Canyon Landfill. The Sunshine Canyon Landfill was recently approved by the City of Los Angeles for expansion. If permitted, the landfill would accept solid wastes until 2026. The Chiquita Canyon Landfill has a closure date estimated to occur in 2019. In August 2000, the Sanitation Districts purchased two distant solid waste landfills for waste-by-rail in the future. These facilities are the Eagle Mountain Landfill located in eastern Riverside County and the Mesquite Regional Landfill located in eastern Imperial County. These two facilities are fully permitted but have not yet undergone initial construction. The Eagle Mountain Landfill

Table 54

**PROJECTED SOLID WASTE GENERATION
LOS ANGELES SPORTS AND ENTERTAINMENT DISTRICT**

Site Use	Units/ Square Footage	Generation Factor^a	Daily Generation (lbs/day)	Annual Generation^b (tons/yr)
Olympic Properties				
Retail	110,000 sq.ft.	5 lbs./1,000 sq.ft.	550	100.1
Restaurant(s)	85,000 sq.ft.	50 lbs./1,000 sq.ft.	4,250	773.5
Entertainment	125,000 sq.ft.	5 lbs./1,000 sq.ft.	625	113.8
Live Theater/Cinema	7,000 Seats	1 lb./customer	7,000	1,092.0
Museums	75,000 sq.ft.	5 lbs./1,000 sq.ft.	375	68.2
Health Club	125,000 sq.ft.	5 lbs./1,000 sq.ft.	625	113.8
Office	75,000 sq.ft.	6 lbs./1,000 sq.ft.	450	58.5
Hotel	1,200 Rooms	2 lbs./room	2,400	436.8
Hotel Meeting Rooms	100,000 sq.ft.	5 lbs./1,000 sq.ft.	<u>500</u>	<u>91.0</u>
Olympic Properties Total			16,775	2847.7
Figueroa Properties				
Residential	800 DU	4 lbs./unit	3,200	582.4
Retail	315,000 sq.ft.	5 lbs./1,000 sq.ft.	1,575	286.6
Restaurant(s)	140,000 sq.ft.	50 lbs./1,000 sq.ft.	7,000	1,274.0
Entertainment	80,000 sq.ft.	5 lbs./1,000 sq.ft.	400	72.8
Office/Sports Medicine	85,000 sq.ft.	6 lbs./1,000 sq.ft.	510	66.3
Office	85,000 sq.ft.	6 lbs./1,000 sq.ft.	510	66.3
Hotel	600 Rooms	2 lbs./room	<u>1,200</u>	<u>218.4</u>
Figueroa Total			14,395	2,566.8
Project Total			<u>31,170</u>	<u>5,414.5</u>

^a Generation factor source: City of Los Angeles Bureau of Sanitation, "Solid Waste Generation."

^b Calculation of annual generation assumes the following operation schedules: Live Theater—six days per week; Office—five days per week; all others—seven days per week.

Source: PCR Services Corporation, November 2000.

has an estimated airspace capacity of 700 million tons and an estimated site life of 100 years. The Mesquite Regional Landfill has an estimated airspace capacity of 600 million tons and an estimated site life of 100 years.

The Project would not result in significant impacts to the remaining disposal capacity of these facilities or their anticipated closure dates. Therefore, operation of the proposed Project would result in a less than significant impact. Solid waste generated by the proposed Project would be collected by any of the private waste hauling companies which service the downtown area.

c. MITIGATION MEASURES

The Project shall comply with all applicable City, County, and State requirements regulating solid waste disposal, including the California Solid Waste Reuse and Recycling Access Act of 1991 (AB 939), which requires that adequate waste storage facilities be provided for the collection and storage of recyclable and green waste materials.

The Project is not expected to produce significant impacts to landfill capacity. Waste management practices shall be implemented during both construction and operation in order to reduce the quantity of solid waste generated. The following measures have been established to achieve waste reduction goals:

1. Prior to the issuance of building permits, a Recycling and Resource Recovery Plan shall be prepared to coordinate resource conservation and recycling for the Project. Prior to implementing this plan, it shall be reviewed and approved by the City of Los Angeles Department of Public Works, Solid Resources Citywide Recycling Division. The plan shall include the following:
 - a. A recycling program shall be designed to reduce the amount of solid waste going to landfills, in line with the City's goals and continued efforts towards a Citywide 50 percent waste reduction rate over 1990 waste diversion levels.¹⁰⁸
 - b. Measures for maximizing the recycling of demolition and construction debris, including a proposed layout for source separation of materials and recycling bins at the Project site and utilization of prospective contractor(s) specializing in demolition and construction waste management shall be implemented, to the extent feasible.
 - c. Recycling bins and chutes shall be provided at appropriate locations to promote the recycling of paper, metal, glass, and other recyclable materials.
 - d. An education/outreach program for all Project employees shall be instituted to reduce the output of solid waste through recycling and reduction of waste at the source.
 - e. Promotion of recycling to patrons.
2. Trash compaction facilities shall be provided in all occupied structures, where deemed feasible.

¹⁰⁸ *The California Integrated Waste Management Act of 1989 (see Public Resources Code PRC Section 40000 et seq.) establishes 1990 as the base year for comparison against future waste diversion levels.*

3. Yard waste management techniques shall be incorporated into the maintenance of the Project, including use of drought tolerant plants and mulching or composting of regular landscape maintenance waste where appropriate.

d. ADVERSE EFFECTS

No significant adverse effects with respect to solid waste would result from development of the proposed Project.

e. CUMULATIVE IMPACTS

The cumulative development analysis of this Draft EIR is based on the growth associated with the related projects identified in Section III.B., Cumulative Development, and an additional eight percent growth (one percent per year from 2000 to 2008). Table 55 on page 419 provides an estimate of solid waste generation from various types of uses within the cited related projects, in combination with the Proposed Project.

As shown in Table 55 on page 419, the Project, in combination with related projects, is estimated to have a cumulative buildout solid waste generation of 74,921 pounds per day or 12,466.6 tons per year. An increase of 74,921 pounds per day of solid waste associated with the proposed Project, in combination with related projects, would not result in any adverse impacts to regional solid waste disposal capacity. Individual projects would be responsible for reducing solid waste generation to the extent possible and implementing solid waste reduction and diversion programs in compliance with City mandates. No significant cumulative impacts to solid waste are anticipated.

Table 55

**PROJECTED CUMULATIVE SOLID WASTE GENERATION
LOS ANGELES SPORTS AND ENTERTAINMENT DISTRICT**

Site Use	Units/ Square Footage	Generation Factor^a	Daily Generation (lbs/day)	Annual Generation^b (tons/yr)
Retail	1,495,661 sq.ft.	5 lbs./1,000 sq.ft.	7,478	1,360.9
Restaurant(s)	76,937 sq.ft.	50 lbs./1,000 sq.ft.	3,847	700.1
Entertainment	146,297 sq.ft.	5 lbs./1,000 sq.ft.	731	133.0
Live Theater	3,435 seats	1 lb./customer	3,435	535.9
Cathedral	3,000 sq.ft.	1 lb./attendee	3,000	546.0
Warehouse/Storage	11,900 sq.ft.	5 lbs./1,000 sq.ft.	60	9.4
Office	2,621,424 sq.ft.	6 lbs./1,000 sq.ft.	15,728	2,044.7
Multiple Family Residential	1,303 units	4 lbs/unit	5,212	948.6
Child Care	5,000 sq.ft.	7 lbs/1,000 sq.ft.	35	4.6
Hotel	825 rooms	2 lbs./room	1,650	300.3
Hotel Meeting Rooms	515,000 sq.ft	5 lbs./1,000 sq.ft.	<u>2,575</u>	<u>468.6</u>
Related Projects Total			43,751	7,052.1
Proposed Project			<u>31,170</u>	<u>5,414.5</u>
Total			<u>74,921</u>	<u>12,466.6</u>

^a Generation factor source: City of Los Angeles Bureau of Sanitation, "Solid Waste Generation."

^b Calculation of annual generation assumes the following operation schedules: Live Theater, Warehouse—six days per week; Office, Child Care—five days per week; All Others—seven days per week.

Source: PCR Services Corporation, September 2000.

IV. ENVIRONMENTAL IMPACT ANALYSIS

K. GEOLOGIC AND SEISMIC HAZARDS

1. ENVIRONMENTAL SETTING

This section provides an analysis of seismic hazards such as fault rupture, ground shaking, land sliding, and liquefaction. The implications of former local oil fields and potential subsidence are also analyzed, although they are not seismic-related hazards.

For planning purposes, the City of Los Angeles was divided into eleven subregions for many of the issues addressed in the *General Plan Framework Draft EIR*,¹⁰⁹ including the issues of geologic and seismic impacts. The South Park area of the Central Business District in which the Project site is located is within the *Central City Community Plan* area (Central City area) of downtown Los Angeles. Therefore, much of this analysis is based on information regarding the Central City area provided in the *General Plan Framework* documentation.

a. Topography and Geologic Conditions

The Project site is located in the northern portion of the Central Block of the Los Angeles Structural Basin. The Central Block is a fault-bounded basin characterized by an alluviated lowland plain that is bounded on the west by the Santa Monica Mountains and associated Santa Monica Fault, on the north by the Elysian and Repetto Hills and Elysian Park Fault, on the northeast by the Puente Hills and Whittier Fault, on the east by the Santa Ana Mountains, on the southeast by the San Joaquin Hills, and on the southwest by the Newport-Inglewood Fault zone.

The Project site is located in a relatively level area. Soil beneath the site consists primarily of Quaternary alluvial sediments that includes clay, silt, sand, and gravel, which in turn is underlain by marine and non-marine sedimentary deposits that extend to considerable depths. Holocene age alluvial deposits consisting of interlayered sand, silt, and clay with some gravel underlie the STAPLES Center site. These alluvial deposits extend to a depth of approximately 65 feet beneath the project site and are underlain by Pleistocene age alluvial deposits consisting of clay, silt, sandy silt, sand and gravel. The Pleistocene age alluvial deposits are approximately 80 feet thick and are underlain by approximately 12,000 feet of Tertiary age sedimentary rocks. The Tertiary age rocks

¹⁰⁹ *Los Angeles Citywide General Plan Framework Draft EIR, January 1995*

are underlain by igneous and metamorphic basement rocks (Yerkes et al., 1965).¹¹⁰ It is likely that similar deposits and rocks underlie the Project site.

Regarding groundwater, the closest groundwater monitoring well is Los Angeles County Well No. 2735A, located about 400 feet south-southeast of the STAPLES Center. Water level measurements for this well indicate the depth to groundwater was 137.2 feet in April 1994. This depth corresponds to a water surface elevation of approximately 97.8 feet above mean sea level. Groundwater was not encountered during borings drilled for the STAPLES Center project in May and June 1997. These borings were drilled to a maximum depth of 51 feet.¹¹¹

b. Seismic Hazards

(1) Seismicity

The seismicity of the region surrounding the site was determined from research of a computer catalog of seismic data. This catalog includes earthquake data compiled by the California Institute of Technology (CalTech) for 1932 to 1997 and data for 1812 to 1931 compiled by Richter and the U.S. National Oceanic Atmospheric Administration (NOAA). The search for earthquakes that occurred within 100 kilometers (62 miles) of the STAPLES Center site indicates that 393 earthquakes of Richter magnitude 4.0 and greater occurred between 1932 and 1997, two earthquakes of magnitude 6.0 or greater occurred between 1906 and 1931; and one earthquake of magnitude 7.0 or greater occurred between 1812 and 1905. Several earthquakes of moderate to large magnitude have occurred in the Southern California area within the last 60 years. A list of these earthquakes is included in Table 56 on page 422.¹¹²

(2) Fault Rupture Potential

Numerous active and potentially active faults with surface expressions, also known as fault traces, have been mapped adjacent to, within, and beneath the City of Los Angeles. Potentially active faults include those faults that may be possible earthquake sources but for which there is no known data that conclusively demonstrate fault movement since the Holocene era, that is, within the past 10,000 to 12,000 years. Active faults are of the most relevance for analyzing earthquake generation and fault rupture potential because there is either documented evidence of movement on these faults since the Holocene era or they are clearly associated with historic seismicity.

¹¹⁰ Law/Crandall, *Report of Geotechnical Investigation, Proposed Los Angeles Sports and Entertainment Center, July 1997.*

¹¹¹ *Ibid.*

¹¹² *Ibid.*

Table 56

LIST OF HISTORIC EARTHQUAKES

Earthquake (Oldest to Youngest)	Date of Earthquake	Magnitude	Distance to Epicenter (Kilometers)	Direction to Epicenter
Long Beach	1933	6.4	34	SSE
San Fernando	1971	6.6	27	NNW
Whittier Narrows	1987	5.9	11	E
Sierra Madre	1991	5.8	22	NE
Landers	1992	7.3	100	E
Big Bear	1992	6.4	81	ENE
Northridge	1994	6.7	19	NW

Source: PCR Services Corporation, December 2000.

The active and potentially active faults in the City which are deemed capable of producing fault rupture due to seismic activity are found on Figure 50 on page 423, and include in decreasing order of concern for City planning purposes: Newport-Inglewood, Hollywood, Elysian Park, Santa Monica, San Fernando, Raymond, Sierra Madre, Verdugo, Northridge, and Palos Verdes.¹¹³ These faults have ground rupture potential and may be expected to generate movement at the surface ranging from a few inches to about six feet. The maximum credible and probable earthquake from each of these faults is shown on Table 57 on page 424.

The State provides maps to city and county agencies designating Alquist-Priolo Earthquake Fault Zones for purposes of planning, zoning, and building regulation functions.¹¹⁴ The *City of Los Angeles General Plan Seismic Safety Plan Element* also identifies Fault Rupture Study Zones (referred to as Alquist-Priolo Earthquake Fault Zones) based on known or assumed active or potentially active faults.¹¹⁵ Regulations for Alquist-Priolo Earthquake Fault Zones include requirements designed to minimize potential impacts during seismic events including prohibiting the location of most structures for human occupancy across the traces of active faults. None of the City-designated Fault Rupture Study Zones¹¹⁶ or State-designated Alquist-Priolo Earthquake Fault Zones crosses the Project site. Two Fault Zones are located with a five-mile radius of the site, also shown

¹¹³ *City of Los Angeles, Los Angeles Citywide General Plan Framework Draft EIR, January 1995.*

¹¹⁴ *In compliance with the Alquist-Priolo Special Study Zones Act, PR 26622(a), the State Geologist has mapped special study zones adjacent to "faults considered to have been active during Holocene time (within 11,000 years to the present) and to have a relatively high potential for surface rupture."*

¹¹⁵ *Approximately one-eighth mile zones on each side of potentially active and active faults to establish hazard potential.*

¹¹⁶ *City of Los Angeles Planning Department, Los Angeles Citywide General Plan Framework, GIS Maps, March 1994.*

Figure 50 Regional Major Faults

Table 57

ESTIMATED PROBABLE EARTHQUAKE MAGNITUDES

Fault Name	Maximum Credible Event ^a	Maximum Probable Event ^b
Elysian Park	7.00+	6.00
Newport-Inglewood	7.50	6.00
Palos Verdes	7.50	6.75
San Gabriel	7.00	5.75
Santa Monica-Hollywood	7.50	5.50
Santa Susana	7.00	6.00
San Fernando-Sierra Madre	7.50	6.00
Raymond	7.00	5.00
Sierra Madre	7.50	6.00
Northridge Hills	6.50	5.00
Verdugo	6.75	5.00

^a The maximum credible event is defined as the theoretical maximum event which could occur along a fault.

^b The maximum probable event is defined as the maximum earthquake that may reasonably be expected within a 100-year period.

Source: *Los Angeles General Plan Framework Draft EIR, January 1995.*

on Figure 50. These two fault zones include the Malibu-Santa Monica-Raymond Fault Zone and Newport-Inglewood Fault Zone and are both City-designated Fault Rupture Zones and Alquist-Priolo Earthquake Fault Zones. The nearest known fault to the site is the Elysian Park-Wilshire Thrust Zone, located approximately 3.5 miles northeast of the Project site. A segment of this Zone, the Elysian Park Fault, has not been designated as a Fault Rupture Zone or an Alquist-Priolo Earthquake Fault Zone.

A second type of fault that is not exposed at the surface, known as “blind or buried thrust,” has been the focus of study since the 1987 Whittier Narrows earthquake. These faults typically do not offset surface deposits; however, they do generate coseismic uplift and very likely cause coseismic movement on fault traces that may be linked to the blind thrust at substantial depth. Few published maps exist which attempt to delineate the precise subsurface boundaries of these blind thrusts; however, it seems probable that nearly all of the City is underlain by some form of near horizontal or shallow dipping blind thrust.¹¹⁷

¹¹⁷ *Ibid.*

An example of a major earthquake that occurred on a blind thrust fault was the Northridge earthquake that occurred on January 17, 1994. The surface magnitude of the earthquake measured magnitude 6.7 on the Richter scale as determined by Caltech. The earthquake's epicenter was located approximately 30 kilometers (km) west-northwest of downtown Los Angeles. This event was the largest to have occurred in the Los Angeles region during the 20th Century. Damages resulting from the earthquake were widespread and included the collapse of six sections of highway structures, thousands of damaged or destroyed residential and commercial structures, widespread disruption of utilities and other lifeline facilities in the epicentral region, and a number of soil embankment failures and numerous landslides.¹¹⁸ The blind or buried thrust faults located beneath the City which are deemed capable of seismic activity include the Elysian Park-Wilshire (the Elysian Park Fault discussed above is one segment of this thrust zone), Santa Susana, Compton-Los Alamitos, Torrance-Wilmington, and San Fernando Ramp Thrusts. Of these, the Elysian Park-Wilshire Thrust Zone has the greatest potential to impact the Project site, as the entire Central City area of the City is believed to be underlain by this Zone. This Thrust Zone was responsible for the 1987 Whittier Narrows earthquake that had a Richter Magnitude of 5.9, and has the potential capability of producing a maximum probable earthquake between magnitude 5.5 and 6.0 and a maximum credible earthquake of greater than magnitude 7.0.¹¹⁹

(3) Ground Shaking

The most widespread, damaging effects of earthquakes are caused by strong ground shaking. The intensity of ground shaking at a given location depends on several factors, but primarily on the earthquake magnitude, the distance of the site from the earthquake's epicenter, and the response characteristics of the soil or bedrock units underlying the area. Strong ground shaking can catastrophically damage structures.

The two most consistent databases that assess the City's ground shaking hazard potential are the California Division of Mines and Geology (CDMG) (1988) planning scenario study for a major earthquake (i.e., magnitude greater than 7.0) on the Newport-Inglewood Fault Zone (NIFZ) and the Caltrans (1992) estimates of peak horizontal acceleration from maximum credible earthquakes for rock and stiff-soil sites.¹²⁰ The CDMG scenario utilizes the Modified Mercalli Intensity (MMI) scale standard, a modeled seismic intensity distribution. The MMI intensity values are presented as VII, VIII, and IX, where IX is considered a high hazard, VIII is moderate, and VII is low. However, an episode of VII intensity could severely damage an unreinforced structure, cause parapets and building fronts to fall on to sidewalks, and tumble chimneys through roofs. According to the *General Plan Framework Draft EIR*, the Central City area could reach an intensity of VIII

¹¹⁸ *Preliminary Report on the Principal Geotechnical Aspects of the January 17, 1994 Northridge Earthquake*, University of California at Berkeley, College of Engineering, June 1994.

¹¹⁹ *Los Angeles Citywide General Plan Framework Draft EIR*, January 1995.

¹²⁰ *Ibid.*

(moderate) from the Newport Inglewood Fault Zone (NIFZ) scenario earthquake. Furthermore, according to the Caltrans scenario, the Central City area could experience peak ground acceleration (PGA) of greater than 0.5 to 0.6g from a large earthquake on any of the nearby faults. The term “g” is the force of acceleration that is due to gravity. A PGA of greater than 0.5 to 0.6g is considered a high hazard, since it is greater than minimum levels upon which building code standards are based.

The City of Los Angeles, in the *Citywide General Plan Framework Draft EIR*, evaluated the ground shaking hazard for parts of the City that are expected to accommodate the majority of future growth. The entire Project site is located in Targeted Growth Area (TGA)¹²¹, Central City-2 (CC-2), which encompasses part of the Central City Subregion. The City’s analysis concluded that this area has a moderate potential impact from ground shaking.

(4) Land sliding

Land sliding can occur from static slope instability of soil or bedrock or from earthquake-induced ground shaking. Land sliding is perhaps the leading cause of property damage and personal danger related to earthquakes. Usually associated with steep canyons and hillsides, earthquake-induced land sliding can originate on or move down slopes as gentle as one degree in areas underlain by saturated, sandy materials. There are no designated hillside areas (greater than 15 percent slope) or areas of landslide potential located in or around the Project site.¹²²

(5) Liquefaction

Liquefaction is essentially the transformation of soil to a liquid state, resulting in lateral spreading, ground settlement, sand boils, and soil falls. In areas of low slopes and low topographic relief, seismically induced ground failure is commonly related to the liquefaction of sediments, particularly saturated cohesionless soils. Flatly bedded strata of poor cohesion may also slip relative to adjacent strata. Earthquake-induced liquefaction does not affect bedrock; however, it does affect certain types of alluvium under conditions of water saturation. Water-saturated, cohesionless, granular sediment situated at depths of less than 30 feet below the surface constitutes the ideal condition for the liquefaction process. Water levels encountered at depths of 30 to 50 feet present a low susceptibility to failure from liquefaction. Water levels below 50 feet indicate a very low risk of

¹²¹ *Targeted growth areas are those districts, centers, and boulevards identified within the General Plan Framework where new development is encouraged and within which incentives are provided by the policies of the specific Framework Element.*

¹²² *Los Angeles County General Plan, Safety Element (Landslide Inventory - Plate 5), December 1990.*

failure.¹²³ As discussed above, groundwater level measurements and borings in the area indicate the depth to groundwater exceeds 50 feet.

Municipal/building codes, grading codes, and engineering investigation report requirements generally provide the means to identify and mitigate against unsafe conditions and construction practices regarding seismic risks prior to approval of building permits.

c. Oil Fields

Subsidence is the downward settling of the earth's surface with little or no horizontal motion. One cause of land subsidence is the withdrawal of fluids such as oil, gas, or water from deep geologic formations leaving void spaces at depths. Unless these voids, between the ground surface and the pumped geologic units, are refilled with fluids by re-pressurization techniques, they may collapse or settle, causing subsidence in the shallower earth layers. Land subsidence can result in varying degrees of distress to foundations and other engineered structures built above or within these subsiding earth layers caused by settling of the earth.

The southerly portion of the Project site (Figueroa South and Figueroa Central) is located within the boundary of the State-designated Los Angeles Downtown Oil Field. Currently, only a portion of the oil field is active, with many historic wells that are inactive and abandoned. No active oil, gas, or geothermal wells are located in the Project site area. In addition, no previously plugged or abandoned oil, gas, or geothermal wells are located in the Project site area. The closest previously plugged or abandoned oil, gas, or geothermal wells are the "Standard-Occidental Albany Core Hole 1," located under the Los Angeles Convention and Exhibition Center's West Hall Parking Garage, and the Chevron USA Inc., "Salvation Army Core Hole 1," located at the corner of Francisco Street and 9th Street.¹²⁴

2. PROJECT IMPACT

a. Significance Thresholds and Methodology

A geotechnical impact assessment evaluates the effect of the geotechnical environment on proposed land use changes, rather than how land use changes will impact the environment. For purposes of this EIR, a significant geologic or seismic impact would occur if the Project posed an unacceptable threat to public safety or property through exposure of people, property, or

¹²³ *Fault-Rupture Hazard Zones in California, Department of Conservation, Division of Mines and Geology Special Publication 42, 1988.*

¹²⁴ *Community Redevelopment Agency of the City of Los Angeles, Los Angeles Sports and Entertainment Complex Draft EIR, March 26, 1997.*

infrastructure to seismically-induced or oil field-induced hazards or oil field-related conditions by failure to comply with geotechnical engineering design criteria specified for and required of the Project through the building permit process.

Measurement of risk for geologic hazards is based on knowledge and geologic principles. Acceptability of risk is based on subjective criteria (public policy) and is a function of social, political, and economic factors. Evaluation of a geologic hazard impact is accomplished using engineering data (risk measurement) and by determination of the degree of acceptable risk (subjective criteria, including public policy, professional judgment and experience). Some level of risk is inherent on nearly every project and is typically evaluated on a site-specific basis. The level of risk is controlled by implementing project-specified engineering design and is a function of the potential hazard occurrence and magnitude.

b. Analysis of Project Impact

(1) Construction

Minor grading will be required for paved and hardscaped areas on the project site. Excavation of existing fill and unsuitable natural soils and replacement with properly compacted fill will be required to provide good support for paving and hardscape. In addition, excavation will be required for Project areas where subterranean parking will be required and for building foundations.

No exceptional difficulties are anticipated in excavating materials at the site. Groundwater is not anticipated to affect proposed construction activities. No significant impacts to geology and soils are anticipated during construction of the proposed project.

(2) Operation

In determining the overall impacts associated with seismic activity, the following topics are evaluated: fault rupture potential, ground shaking (e.g., peak horizontal ground acceleration in “g” and Modified Mercalli Intensity [MMI]), land sliding, and liquefaction. In addition, the potential risk of subsidence on the Project site is also evaluated.

c. Seismic Hazards

(1) Fault Rupture Potential

For those faults with surface expressions, ground rupture potential may be expected to generate movements at the surface ranging from a few inches to about six feet. This surface rupture would be concentrated along the mapped trace of the fault; however, collateral ground breakage

with several inches of displacement may occur in proximity to these ruptures. A few inches of surface slip along a fault plane can severely damage structures built across a fault. Although blind thrusts are a much lower risk for fault rupture, they may generate localized uplift. Based on the data presently available, no faults with surface expressions are located on the Project site. The Elysian Park-Wilshire Thrust Zone is located potentially below the entire Central City Subregion. A mitigation measure has been included to reduce this potentially significant impact to a level of less than significant.

(2) Ground Shaking

The City of Los Angeles, in the *Citywide General Plan Framework Draft EIR*, evaluated the ground shaking hazard for all targeted growth areas (TGA) within the City. The Project is located within TGA CC-2, which has a moderate potential impact from ground shaking according to the City's analysis. Therefore, the introduction of employees, visitors, and residents onto the proposed Project site would increase the potential for on-site exposure to possible hazards associated with ground shaking. However, the location of the Project site in relation to known active faults indicates that it is not expected to be exposed to any greater seismic risk from ground shaking than found in other locations within the majority of the City and, in particular, downtown Los Angeles.

The potential hazards associated with ground shaking are addressed in the City's *Seismic Safety Plan* and by the Grading Standards that are incorporated within the *City of Los Angeles Building Code, Engineering Investigation Reports Standard*, and policies/programs contained in the City's Geologic Evaluation, Existing Development, New Development, and Critical Facilities publications. These documents establish standards for earthquake design features in Project buildings. The Project would increase the potential for on-site exposure to possible hazards associated with ground shaking. However, the Project site would not be exposed to any greater risk from ground shaking than any other site in the Central City area. The Project shall be designed to withstand ground shaking associated with a major earthquake event occurring on the Malibu-Santa Monica-Raymond Fault Zone, Newport-Inglewood Fault Zone, or the Elysian Park-Wilshire Thrust Zone. As ground shaking has the potential to affect all structures within the City of Los Angeles, this hazard would pose a potentially significant, but mitigable, impact associated with the Project site. A mitigation measure has been included to reduce this potentially significant impact to a less than significant level.

(3) Landsliding

No portions of the Project site are located in a designated hillside area. There are no known areas of landslide potential located on the Project site. Therefore, the potential for this hazard does not exist.

(4) Liquefaction

A 1993 City of Los Angeles Department of Public Works subsurface investigation conducted adjacent to the Project site did not encounter groundwater above 40 feet below ground surface.¹²⁵ Therefore, the risk of liquefaction is very low in the area. No portions of the Project site are located in areas susceptible to liquefaction. Therefore, the potential for this hazard would not be significant.

d. Oil Fields (Subsidence)

A portion of the Project site is located inside the boundary of the State-designated Los Angeles Downtown Oil Field. Although not well-defined, the portion of the Project site located north of Pico Boulevard and east of South Figueroa Street (Figueroa South/Figueroa Central development areas) is located within what was the major oil drilling area for this former oil field. This area would be considered a potential hazard for subsidence. However, no active or inactive oil, gas, or geothermal wells are located within the Project site, therefore indicating a reduced potential for subsidence. State and federal regulations are in place to prevent significant long-term subsidence due to historical oil and gas extraction. Subsidence would be controlled through proper engineering design for Project buildings and structures and adherence to the *City Seismic Safety Plan*, *City Building Code*, and Department of Building and Safety standards. The hazard associated with subsidence would pose a potentially significant, but mitigable, impact associated with the Project site. A mitigation measure has been included to reduce this potentially significant impact to a less than significant level.

3. MITIGATION MEASURES

The proposed Project must comply with all applicable City of Los Angeles Building Code regulations with regard to seismic safety requirements and shall be approved by the City Department of Building and Safety prior to the issuance of building permits. Geotechnical investigations shall be performed by a registered geotechnical engineer. In addition, the following mitigation measures have been established for potential seismic and subsidence hazards potentially impacting future development on the Project site.

a. Construction

1. A State-certified geologist shall review all excavations for evidence indicative of faulting, or seismically-induced ground deformation. If during grading, an active

¹²⁵ *Phase I Environmental Site Assessment, Sports Arena and Entertainment Complex Support Site, Los Angeles, California. Prepared by Bryan A. Stirrat & Associates, Inc., October 1996.*

fault is determined to extend through the area, appropriate building setbacks from the fault line shall be established.

b. Operation

2. An assessment of the potential for subsidence at the Project site shall be conducted as part of the geotechnical evaluation.
3. To assist in response to a seismic event, an emergency response and building-specific evacuation plan for Project structures shall be developed in coordination with the Los Angeles Fire Department prior to the Certificate of Occupancy being granted by the City of Los Angeles. Such information shall be disseminated to employees to reduce the potential for human injury.
4. To assist in response to a seismic event, an emergency response and building-specific evacuation diagram for Project structures shall be posted in each on-site building. Such signage shall be posted in appropriate locations to reduce the potential for injury to visitors and employees.

4. ADVERSE EFFECTS

The proposed Project would potentially expose both employees and visitors to on-site seismic hazards. However, the proposed Project would be designed so that there would be no increased threat of exposing people, property, or infrastructure to geotechnical or seismic hazards. In addition, the Project is not subject to any greater seismic risk than any other site within the Central City subregion of the City of Los Angeles. Therefore, with implementation of the recommended mitigation measures, any potential geologic or seismic impacts would be reduced to less than significant levels.

5. CUMULATIVE IMPACTS

Project impacts related to geologic and seismic issues are localized on-site and do not affect any off-site areas associated with the related projects or the ambient growth. Cumulative development in the area would, however, increase the overall potential for exposure to seismic hazards by bringing more people into the area, thus increasing the number of people potentially exposed. Nevertheless, with adherence to applicable State and federal regulations, Building Codes and good engineering practices, these impacts would be less than significant. No cumulative impacts would therefore be associated with the proposed Project and related projects with respect to geologic and seismic issues.

IV. ENVIRONMENTAL IMPACT ANALYSIS

L. ARCHITECTURAL/HISTORIC RESOURCES

The purpose of this section is to identify and evaluate historic resources that could be impacted by the implementation of the proposed Project, to analyze the nature of those impacts, and to propose mitigation measures for any adverse impacts.

1. ENVIRONMENTAL SETTING

A prehistoric archaeological resources record search of the Project area, conducted by the South Central Coastal Information Center (SCCIC) at California State University-Fullerton, indicates that no recorded prehistoric archaeological resources exist on the Project site and the likelihood of discovering such resources is remote. No archaeological resources were identified during this survey. The records search indicated that the Project area has a low sensitivity for prehistoric and historic archaeological resources. A paleontological resources record search of the Project area was conducted by the Natural History Museum of Los Angeles County. A review of the record search data indicates that no recorded paleontological resources exist within the project area and that the likelihood of discovering such resources is remote. As no significant impacts to paleontological or archaeological resources are expected, no further analysis is warranted. However, a mitigation measure is provided for unanticipated discoveries that may occur.

a. Regulatory Framework

The evaluation and treatment of historic resources falls within the purview of several levels of government. Federal laws provide a primary regulatory framework for the evaluation of historic resources. However, the State of California and its local jurisdictions play active roles in the identification and documentation of such resources within their communities. Numerous laws and regulations require federal, State, and local agencies to consider the effects of a proposed project on historic resources. These laws and regulations stipulate a process for compliance, define the responsibilities of the various agencies proposing the action, and prescribe the relationship among other involved agencies. The National Historic Preservation Act of 1966, as amended (NHPA), the California Environmental Quality Act (CEQA), the California Register of Historical Resources, and Public Resources Code (PRC) Section 5024 et seq. are the primary federal and State laws governing and/or affecting preservation of historic resources of national, State, regional, and local significance.¹²⁶ At the local level, the City of Los Angeles provides for designation and protection of

¹²⁶ *The California Register was established by Assembly Bill 2881.*

local historic resources under the Cultural Heritage Ordinance. A discussion of these laws and regulations is provided below.

(1) National Register of Historic Places

First authorized by the Historic Sites Act of 1935, the National Register of Historic Places (National Register) was established by the National Historic Preservation Act of 1966 as "an authoritative guide to be used by Federal, State, and local governments, private groups and citizens to identify the Nation's historic resources and to indicate what properties should be considered for protection from destruction or impairment."¹²⁷ The National Register recognizes properties that are significant at the national, State and local levels.

To be eligible for listing in the National Register, a resource must be significant in American history, architecture, archaeology, engineering, or culture. Districts, sites, buildings, structures, and objects of potential significance must meet one or more of the following four established criteria:¹²⁸

- Are associated with events that have made a significant contribution to the broad patterns of our history;
- Are associated with the lives of persons significant in our past;
- Embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- Have yielded, or may be likely to yield, information important in prehistory or history.

Unless the property possesses exceptional significance, it must be at least 50 years old to be eligible for National Register listing.

In addition to meeting the criteria of significance, a property must have integrity. Integrity is understood as "the ability of a property to convey its significance."¹²⁹ The National Register

¹²⁷ *Code of Federal Regulations (CFR), 36 Section 60.2.*

¹²⁸ *Guidelines for Completing National Register Forms, National Register Bulletin 16, U.S. Department of the Interior, National Park Service, September 30, 1986 ("National Register Bulletin 16"). This bulletin contains technical information on comprehensive planning, survey of cultural resources and registration in the National Register of Historic Places.*

¹²⁹ *National Register Bulletin 15, p. 44.*

recognizes seven qualities that, in various combinations, define integrity. To retain historic integrity a property must possess several, and usually most, of these seven aspects. Thus, the retention of the specific aspects of integrity is paramount for a property to convey its significance.¹³⁰ The seven factors that define integrity are location, design, setting, materials, workmanship, feeling, and association.

(2) California Environmental Quality Act (CEQA)

Under CEQA, a “project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment.”¹³¹ This statutory standard involves a two-part inquiry. The first involves a determination of whether the project involves a historical resource. If so, the second part involves determining whether the project may involve a “substantial adverse change in the significance” of the historical resource. To address these issues, guidelines that implement the 1992 statutory amendments relating to historical resources were adopted in final form on October 26, 1998 with the addition of State CEQA Guideline Section 15064.5. The new State CEQA Guidelines specify that for purposes of CEQA compliance, the term "historical resources" shall include the following:¹³²

- A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources.
- A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in a historical resource survey meeting the requirements in section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources.

¹³⁰ *Ibid.*

¹³¹ *California Public Resources Code Section 21084.1 - Added in 1992 by AB 2881.*

¹³² *State CEQA Guidelines, 14 CCR Section 15064.5(a).*

- The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in a historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be a historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1.

(3) California Register of Historical Resources

The California Register of Historical Resources (California Register) was established to be a comprehensive listing of California's historic resources, including those of national, State, and local significance. Created by Assembly Bill 2881 which was signed into law on September 27, 1992, the California Register is "an authoritative listing and guide to be used by State and local agencies, private groups, and citizens in identifying the existing historical resources of the State and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change."¹³³ The criteria for eligibility for the California Register are based upon National Register criteria.¹³⁴

A resource must meet one or more of the following criteria for listing on the California Register of Historical Resources:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Is associated with the lives of persons important in our past;
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- Has yielded, or may be likely to yield, information important in prehistory or history.

¹³³ *California Public Resources Code Section 5024.1(a).*

¹³⁴ *See Code § 5024.1(b).*

In addition, certain resources are determined by the statute to be automatically included in the California Register, including California properties formally determined eligible for, or listed in, the National Register of Historic Places.¹³⁵

(4) State Office of Historic Preservation Survey

The State Office of Historic Preservation (OHP) utilizes a three-digit evaluation code consisting of seven categories to specify National Register eligibility. The evaluation instructions and classification system used by OHP are provided in its Instructions for Recording Historical Resources. Properties that are studied for historic significance in California are evaluated and classified according to OHP's instructions in order to assign a three-digit classification code. The first digit indicates one of the following general evaluation categories for use in conducting historical resource surveys:¹³⁶

1. Listed on the National Register of Historic Places
2. Determined eligible for listing in the National Register of Historic Places
3. Appears eligible for the National Register of Historic Places
4. May become eligible for the National Register of Historic Places
5. Not eligible for the National Register of Historic Places, but of local interest
6. None of the above
7. Undetermined

The second digit is a letter code indicating whether the resource is separately eligible (S), eligible as part of a district (D), or both (B). The third digit is a number that is used to further specify significance and refine the relationship of the property to the National Register. Under this system categories 1 through 4 pertain to various levels of National Register eligibility. The California Register, however, may include surveyed resources through level 5 (e.g., properties ineligible for listing in the National Register, but of local interest). In addition, properties found ineligible for listing in the National Register and of no local interest are given an evaluation rating of 6.

¹³⁵ *California Public Resources Code Section 5024.1(d).*

¹³⁶ *California Register Regulation 14 CCR and § 4852(e)(1).*

(5) Los Angeles Historic - Cultural Monuments

The City of Los Angeles enacted a Cultural Heritage Ordinance in April 1962, which defines Los Angeles Historic - Cultural Monuments (LAHCMs) for the City. According to the ordinance, LAHCMs are sites, buildings, or structures of particular historic or cultural significance to the City of Los Angeles in which the broad cultural, political, or social history of the nation, State, or City is reflected or exemplified, including sites and buildings associated with important personages, or which embody distinguishing characteristics of an architectural type, style, or method of construction, or are associated with a notable architect. These LAHCMs are regulated by the Cultural Heritage Commission, which reviews permits to alter, relocate, or demolish these landmarks.

b. Historic Context

Residential development in the area surrounding the Project site began during the last few decades of the nineteenth century as the City began to grow along horse car, cable car, and electrified streetcar lines that were initiated in 1874, 1885, and 1887 respectively. Electric streetcar lines wove their way through the area along Figueroa Street, 11th Street, and Pico Boulevard. In contrast to the wealthier suburbs being developed further south in West Adams, the area surrounding the Project site was settled by more middle class residents who built modest single-family dwellings. However, during the first few decades of the twentieth century, multi-family dwellings were constructed among the single-family stock, changing the character of the area.

As early as 1906, commercial activity began to appear on Figueroa and Flower Streets. By the 1920s, Figueroa Street between Olympic and Adams Boulevards began to emerge as "Automobile Row." As the automobile grew in popularity, showrooms and related businesses became more specialized and consolidated geographically. Although many automobile dealers continued to service the cars they sold, the functions of shipping, storing, and repairing cars were increasingly performed by other businesses specifically created to meet these needs. It was at this point that the automobile show and sales room came into its own. To keep pace with the public's demand for automobiles, a relatively large number of showrooms were constructed along Figueroa Street. The automobile-related resources from this period, which vary from commercial garages to high-style automobile showrooms, serve as evidence of the important role the automobile played in the historical development of Los Angeles. Oil companies also made their headquarters in this area as evidenced by J.P. Getty's Petroleum Building and the Standard Oil Building, both located on Olympic Boulevard between Figueroa and Hope Streets.

c. Existing Conditions

The Project site and the areas directly adjacent to the Project site have been previously surveyed three times to identify potential historic resources. The first was a two-phased comprehensive survey of the Central Business District, conducted by Roger Hathaway and Associates for the Community Redevelopment Agency in 1981 and 1983 (photograph, research, and assignment of numerical evaluation using California Office of Historic Preservation survey methodology in 1981, and Determination of Eligibility in 1983). The second survey was an update of the first survey, conducted in 1990 by the Los Angeles Conservancy. These surveys identified (and assigned evaluation codes for) twenty-one properties on, and adjacent to, the Project site. Based upon further field inspection of the area and additional research, conducted by Historic Resources Group (HRG) for the Environmental Impact Report, Los Angeles Sports and Entertainment Complex, 1997 (STAPLES Center EIR), the properties were re-evaluated and new evaluation rating codes were assigned. In analyzing the historic significance of properties in the project area, HRG utilized the criteria for designation under federal, State, and local programs. The OHP survey methodology was used to rank the relative significance of properties. A total of 24 properties were identified in the STAPLES Center EIR as having some potential historic significance. Of these twenty-four properties, twenty of the properties were demolished during construction of the STAPLES Center project and one property, the former 1043 S. Bixel property, was relocated to a site in the Adams Normandie 4321 Redevelopment Project Area..

There are no historic resources located within the Project site that are currently listed in or eligible for federal, state, and/or local designation. The Project site consists primarily of paved surface parking lots. However, four properties identified in the previous surveys discussed above are located directly adjacent to the Project site, and are shown in Table 58 on page 439. Two additional properties have been added as a result of a site assessment performed for the proposed Project in September 2000. These two properties are the Figueroa Hotel located at 939 South Figueroa Street and the Petroleum Building located at 714 West Olympic Boulevard. Though not directly impacted by the project, these six properties are discussed below to address potential indirect impacts on historic resources.

940 S. Figueroa Street

The five-story Variety Arts Center of Los Angeles building, located at 940 South Figueroa Street, is listed in the National Register of Historic Places (Category 1S). As a result, it is also listed in the California Register. The Variety Arts Center is also designated as a City of Los Angeles Historic-Cultural Monument (Monument No. 196). The location of this property is shown on Figure 51 on page 440 and a photograph of the property is shown on Figure 53 on page 441. The Variety Arts Center building was designed by the architectural firm of Allison & Allison. The Italian Renaissance Revival designed theatre and clubhouse was built in 1924 for the Friday

Table 58

HISTORIC RESOURCES ADJACENT TO THE PROJECT SITE

Address	Description	1981 Survey	1990 Survey	1997 ^a Survey	OHP ^b Database
1. 939 S. Figueroa (Hotel Figueroa)	12-story Italian Renaissance Revival (1925)	-	-	-	3S
2. 940 S. Figueroa (Variety Arts Center)	5-story Italian Renaissance Revival (1924)	3	3	1S	1S
3. 1037 S. Flower	1-story Spanish Colonial Revival (1930)	5	5	5S3	-
4. 1100 S. Flower (former Toy Center building)	3-story Classical Revival Warehouse (1919)	-	5	5S3	-
5. 1140 S. Flower	3-story Streamline Warehouse (1936)	-	5	5S3	-
6. 714 W. Olympic (Petroleum Building)	10-story Italian Renaissance Revival (1925)	2S2	-	-	2S2

Legend:

1S *Properties listed on the National Register.*

3 *Properties appearing eligible for the National Register.*

5 *Properties not eligible for the National Register, but of local interest.*

2S2 *Determined eligible for separate listing in the National Register through a consensus determination.*

5S3 *Properties appearing ineligible for the National Register and for local designation under a local ordinance, but eligible for special consideration in the planning process.*

^a *HRG Consultants, Los Angeles Sports and Entertainment Complex, Historic Resources Survey, 1997.*

^b *California Office of Historic Preservation, Historic Resource Inventory Database, 1999.*

Source: PCR Services Corporation., December 2000.

Morning Club, a women's group established in 1891. The primary elevation of the building faces west and exhibits the visual characteristics of the Italian Renaissance Revival styling on its exterior. The north, south, and east elevations are utilitarian in design and are considered secondary features.

The secondary elevations are currently utilized as large commercial advertising space (i.e., advertising walls) with painted advertisements on them. The advertisements are frequently changed and are not considered historically significant.

1037 S. Flower Street

The property at 1037 South Flower is a one-story Spanish Colonial Revival building. The location of this property is shown on Figure 51. Its street facade has been modified and is

Figure 51 Location of Adjacent Historic Properties

Figure 53 **Variety Arts Center**

surrounded by surface parking lots to the north and south. With no other neighborhood commercial structures around it, the building has lost both its physical integrity and its context. Therefore, this property was assigned an evaluation rating code of 5S3, ineligible for the National Register, the California Register, and for local designation. Further, in accordance with Section 15064.5(a)(2-3) of the *CEQA Guidelines*, this property is not considered an historic resource for the purposes of CEQA.

1100 S. Flower Street

The 1100 South Flower building is the work of architects Morgan, Walls, and Morgan. The location of this property is shown on Figure 51. This building was a former toy wholesale and distribution center. The third floor cornice along the north and west façade retains the classical detailing of its original design from 1919, however, substantial modifications were previously made to the lower two floors in window treatment and ground floor opening. These alterations have been largely restored to previous conditions through extensive renovation work by the current owner, Flower Holdings, LLC. The interior ground floor space also retains several decorated column capitals. Because of lack of sufficient architectural integrity and historical associations this property was assigned an evaluation rating code of 5S3. In addition, there are better examples of this architectural firm's work in downtown Los Angeles and southern California. Therefore, the property appears ineligible for the National Register, the California Register, and for local designation. Further, in accordance with Section 15064.5(a)(2-3) of the *CEQA Guidelines*, this property is not considered an historic resource for the purposes of CEQA.

1140 S. Flower Street

The 1140 South Flower (Bronson) building is the work of Earl Heitschmidt. The location of this property is shown on Figure 51. This warehouse was constructed in 1936 in a simple Streamline Moderne style. The upper two floors of the building appear relatively intact; however, substantial modification has been made to the ground floor. In addition, better examples of Heitschmidt's work exist both in downtown Los Angeles and throughout southern California. Because this property lacks sufficient architectural integrity and historic associations it appears ineligible for the National Register, the California Register, and for local designation. Further, in accordance with Section 15064.5(a)(2-3) of the *CEQA Guidelines*, this property is not considered an historic resource for the purposes of CEQA.

714 W. Olympic Boulevard

This structure was investigated during a site assessment performed for the proposed Project in September 2000. The 10-story Petroleum Building was designed in the Italian Renaissance Revival style by the local architectural firm of Meyer & Holler in 1925. The location of this

property is shown on Figure 51. Its overall design and style denotes the Florentine palaces of the early Renaissance period. This property was assigned an evaluation rating code of 2S2 which indicates that it has been formally determined eligible for the National Register of Historic Places. This building was designated as Los Angeles Historic-Cultural Monument No. 596 on April 26, 1994.¹³⁷ The building is currently utilized for commercial office space.

939 S. Figueroa Street

This structure was investigated during a site assessment performed for the proposed Project in September 2000. The location of this property is shown on Figure 51. Architects Stanton, Reed and Hibbard built the 12-story Hotel Figueroa in 1925. The architectural style is Italian Renaissance Revival with Beaux Arts influences. The Hotel Figueroa is an interpretation of northern Italian Renaissance town houses. This building still operates as a hotel and has 285 rooms. The trio of walls facing Olympic Boulevard is currently used for commercial advertising space. This building has not been designated as a Los Angeles Historic-Cultural Monument¹³⁸; however, a 1979 historic resource survey determined that this building appears to be eligible for the National Register (3S).

2. PROJECT IMPACT

(1) Significance Thresholds/Methodologies

The CEQA Guidelines state that a project involves a “substantial adverse change” when one or more of the following occurs:

- Substantial adverse change in the significance of a historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired.¹³⁹
- The significance of a historical resource is materially impaired when a project:¹⁴⁰
 - Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and

¹³⁷ Telephone Conversation with Margie Thayne, Commission Executive Assistant, City of Los Angeles Cultural Affairs Department, September 26, 2000.

¹³⁸ *Ibid.*

¹³⁹ State CEQA Guidelines, 14 CCR Section 15064.5(b)(1).

¹⁴⁰ State CEQA Guidelines, 14 CCR Section 15064.5(b)(2).

that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; or

- Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in a historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
- Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

(2) Analysis of Project Impacts

There are no historically significant resources located within the Project site. The Project site consists almost entirely of paved surface parking lots. However, there are six properties located directly adjacent to the Project site.

(a) Construction

940 South Figueroa Street

The Variety Arts Center building is listed on the National Register of Historic Resources and is also designated a Los Angeles Historic-Cultural Monument. No significant direct impacts to the Variety Arts Center during Project construction are anticipated. Compatibility would be ensured through Project design features that are sympathetic to the Variety Arts Center, and that provide a street wall design that will complement the unique Variety Arts Center façade that exists along Figueroa Street. Construction activities would not result in any significant impacts to this building. No mitigation measures are required to implement the proposed Project.

1037 S. Flower Street

This property appears ineligible for the National Register, California Register, and for local designation. The 1997 survey evaluated the building as an OHP rating of 5S3 (properties appearing ineligible for the National Register, California Register, or local register, but eligible for special consideration in the planning process). Construction activities would not result in any significant impacts to this building. No mitigation measures are required to implement the proposed Project.

1100 South Flower Street

This property appears ineligible for the National Register, California Register, and for local designation. It has been given an OHP rating of 5S3 (properties appearing ineligible for the National Register, California Register, or local register, but eligible for special consideration in the planning process). Construction activities would not result in any significant impacts to this building. No mitigation measures are required to implement the proposed Project.

1140 South Flower Street

This property appears ineligible for the National Register, California Register, and for local designation. It has been given an OHP rating of 5S3 (properties appearing ineligible for the National Register, California Register, or local register, but eligible for special consideration in the planning process). Construction activities would not result in any significant impacts to this building. No mitigation measures are required to implement the proposed Project.

714 W. Olympic Boulevard

The Petroleum Building is designated as a Los Angeles Historic-Cultural Monument and has been determined eligible for the National Register of Historic Places. The building is currently utilized for commercial office space. Construction activities would not result in any significant impacts to this building. No mitigation measures are required to implement the proposed Project.

939 S. Figueroa Street

The Hotel Figueroa at 939 S. Figueroa Street has not been designated as a Los Angeles Historic-Cultural Monument; however, a 1979 historic resource survey determined that this building appears to be eligible for the National Register (3S). The building is currently utilized as a hotel. Construction activities for the proposed Project would not result in any significant impacts to this building. No mitigation measures are required to implement the proposed Project.

(b) Operation**940 S. Figueroa Street**

The front façade of the Variety Arts Center that faces Figueroa Street is considered the most important building feature. The south and east faces of the building are currently utilized as advertising space (i.e., advertising walls) painted on architecturally unembellished facades. The advertisements are frequently changed. The proposed Project could include a office building

located immediately south and east of the Variety Arts Center. The Variety Arts Center building was built at a time when the height zones were dictated by the height of Los Angeles City Hall, as no building was to be taller than City Hall.

The proposed Project could result in an impact to the five-story Variety Arts Center if the proposed development were to tower above the Variety Arts Center, thereby resulting in a loss of visual access to the Variety Arts Center from the south and east. Even though a building podium and a building would be part of the same overall structure, only the podium could abut the Variety Arts Center. The potential building above the podium will be set back from the Variety Arts Center, thus minimizing any impact upon this historic five-story building. In addition, the front façade of the Variety Arts Center will not be blocked by the Project development or operation. The Variety Arts Center was originally designed to abut other buildings on all sides with the exception of the front façade facing Figueroa Street. In fact, until 1987, a hotel was located immediately south of the Variety Arts Center. Therefore, with the incorporation of Project design features, the loss of visual access to any of these three sides of the building, would not represent a significant impact to historic resources and no significant impacts are anticipated.

Potential development of the Figueroa North Properties would have a building architectural style and character shall be a contemporary style that is sympathetic to the Variety Arts Center building. The development of Figueroa Street as a “grand boulevard” will provide greater opportunities for pedestrians to view the Variety Arts Center in comparison with existing conditions. Although the proposed development will eliminate both commercial opportunities to advertise on the Variety Arts Center building walls and the visual interest generated by that advertising, the proposed development will recapture the original Variety Arts Center design approach and purpose by focusing views on the front façade of the building. The advertising, which is frequently changed, not only does not contribute to the historic context of the Variety Arts Center, but may actually detract or compromise the historic nature of this building. The proposed Project would not demolish or create incompatible uses that would result in a long-term loss of access to or substantial alteration of the Variety Arts Center during its operations. The design of the adjacent development would not result in buildings that are visually incompatible with the Variety Arts Center and, therefore, no significant impacts would occur. No mitigation measures are required to implement the proposed Project.

Other Properties

No significant impacts would occur during operations to the properties located at 1037 S. Flower Street, 1100 S. Flower Street, 1140 South Flower Street, 714 W. Olympic Boulevard (Petroleum Building) or 939 S. Figueroa Street (Hotel Figueroa). No mitigation measures are required.

3. MITIGATION MEASURES

No significant impacts upon historical resources have been identified, however, the following mitigation measures would apply to protect against destruction of paleontological resources that may be encountered during construction and to further protect historical resources:

1. If unknown paleontological, archaeological and/or cultural materials are discovered during any grading or construction activity, work will stop in the immediate area. Upon such discoveries the contractor shall immediately notify the client and the City of Los Angeles. A paleontologist and/or archaeologist shall be consulted to determine the discovery's significance and, if necessary, formulate a mitigation plan, including avoidance alternatives, to mitigate impacts. Work can only resume in that area with the approval of the City of Los Angeles and paleontologist and/or archaeologist.
2. New construction adjacent to the Variety Arts Center shall respect its historic character through conformance with the Secretary of the Interior's Standards for Treatment of Historic Properties.

4. ADVERSE EFFECTS

The proposed Project would not result in any adverse effects to historic resources. There are no historic resources located on the Project site. Those properties adjacent to the Project site, evaluated as 5S3 (i.e., 1037, 1100 and 1140 South Flower Street) are not eligible for federal, State, or local designation. In addition, they are not considered historic resources under CEQA. Therefore, the impact of the project on properties identified as 5S3 would be considered less than significant. In addition, the proposed Project would not result in significant impacts to the Variety Arts Center, Petroleum Building or Hotel Figueroa. No significant impacts to historical resources would occur.

5. CUMULATIVE IMPACTS

The proposed Project, in combination with related projects, would not substantially diminish the number of extant historical resources within the same or similar context or property type. No significant cumulative impacts to historic resources are anticipated.

e. CUMULATIVE IMPACTS

Cumulative development in the Project area would increase urban activity in the Project area and correspondingly increase pedestrian activity. Hotel expansion would be expected to attract some STAPLES Center and Convention Center patrons, thus to a certain extent the pedestrian demand would not be increased, but merely displaced from vehicle trips that would otherwise be made. The retail and restaurant components of the cumulative development are expected to have some level of attraction independent of STAPLES Center and Convention Center. This would increase pedestrian demands in the immediate area and would likely capture some of the general increase in urban activity in the CBD area projected for the future, particularly associated with residential and commercial development in the South Park area. As discussed in Section IV.F.1, Traffic, future background traffic conditions are already accounted for in the Project traffic analysis. Additionally, Project Design Guidelines, existing pedestrian facilities and pedestrian safety programs associated with STAPLES Center would accommodate this additional demand in the vicinity of the Project. Thus, there would be no cumulative impact to pedestrian safety would occur.